



Operated for the U.S. Department of Energy's  
National Nuclear Security Administration  
by Sandia Corporation

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**Michael W. Hazen**  
Vice President  
Infrastructure Operations  
Chief Security Officer

**OCT 29 2012**

Mr. Geoffrey Beausoleil  
Manager  
U. S. Department of Energy  
National Nuclear Security Administration  
Sandia Site Office, MS-0184  
P. O. Box 5400  
Albuquerque, NM 87185-0184

Dear Mr. Beausoleil:

Subject: *Comments on Draft Hazardous Waste Permit for Sandia National Laboratories/New Mexico (SNL/NM) and Proposed Granting of Corrective Action Complete Status for 24 Solid Waste Management Units/Areas of Concern at SNL/NM*

Enclosed please find comments on the draft Hazardous Waste Permit (Permit) for SNL/NM and proposed granting of corrective action complete status for 24 solid waste management units/areas of concern at SNL/NM issued by the New Mexico Environment Department (NMED). Sandia Corporation (Sandia) is requesting that the Department of Energy/National Nuclear Security Administration (DOE/NNSA) submit the enclosed comments to the NMED by 5:00 pm November 16, 2012.

We have carefully reviewed the draft Permit and proposed granting of corrective action complete status for 24 solid waste management units/areas of concern, and coordinated with David Rast of your staff. We have a number of specific concerns with the conditions of the draft Permit, as discussed in the enclosed comments. No comments address the proposed granting of corrective action complete status for 24 solid waste management units/areas of concern. Each comment on the Permit includes alternate language to address the specific issue. In addition, we are providing several updated figures related to the comments.

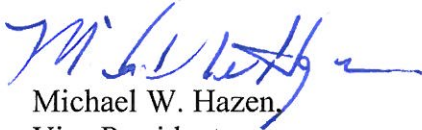
Because of the critical importance of an effective waste management program and facilities for SNL/NM, we oppose the issuance of the Permit in its present form. We also request comment resolution and a public hearing to address the issues in accordance with the regulatory process for hazardous waste permits. If comment resolution with NMED is accomplished in advance of a hearing, we will immediately withdraw the request for a hearing after consultation with your staff.



I have signed the certification to be sent to the NMED as the Operator at SNL/NM. If you agree, please sign the certification as the Owner.

If you have any questions regarding the comments and figures enclosed with this letter, please contact me at (505) 284-3191/[mwhazen@sandia.gov](mailto:mwhazen@sandia.gov), Terry Cooper, Senior Manager, at (505) 284-1831/[twcoope@sandia.gov](mailto:twcoope@sandia.gov) or Jeff Jarry, Manager, at (505) 284-3080/[jfjarry@sandia.gov](mailto:jfjarry@sandia.gov).

Sincerely,



Michael W. Hazen,  
Vice President

Enclosure: Draft Hazardous Waste Permit and Granting of Corrective Action Complete Status for Solid Waste Management Units/Areas of Concern, Sandia National Laboratories, NM5890110518, Comments and Attachments

Copy to (w/enclosure):

MS-0184 David Rast, NNSA/SSO

MS-0184 Cynthia Wimberly, NNSA/SSO

MS-0184 SSO Waste Management File, NNSA/SSO

Mr. Geoffrey Beausoleil

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OCT 29 2012

Blind copy to (w/enclosure):

MS-0141 Amy J. Blumberg, 11100

MS-0651 Customer Funded Records Center, 09532

MS-0729 Anita S. Reiser, 04144

Blind copy to (w/o enclosure):

MS-0725 Sidney M. Gutierrez, 04100

MS-0729 Terry W. Cooper, 04140

MS-1151 Jeff F. Jarry, 04144

MS-0143 Michael W. Hazen, 04000

**U. S. Department of Energy and Sandia Corporation  
Public Comments**

**Draft Hazardous Waste Permit  
Issued September 17, 2012**

**Sandia National Laboratories  
Albuquerque, New Mexico  
EPA ID No. NM5890110518**

**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.



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Michael W. Hazen, Vice-President  
Sandia Corporation  
Albuquerque, New Mexico  
Operator

29 of 2012

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Date signed

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Geoffrey L. Beausoleil, Manager  
U.S. Department of Energy  
National Nuclear Security Administration  
Sandia Site Office  
Owner

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Date signed

**Enclosure**

**Draft Hazardous Waste Permit and  
Granting of Corrective Action Complete Status for  
Solid Waste Management Units/Areas of Concern**

**Sandia National Laboratories  
NM5890110518**

**Comments and Attachments  
U.S. Department of Energy  
Sandia Corporation**

DOE/Sandia Comments on Draft Resource Conservation and Recovery Act Facility Operating Permit

1. Comments on Permit Parts 1 Through 8

No.	Draft Permit Section	Page	Existing Text	Requested Revision	Discussion
1	2.2.1	19	No wastes shall be managed at the CAMU except waste generated by post-closure care activities conducted at the CAMU and the CWL.	No wastes shall be managed at the CAMU except waste generated by post-closure care activities conducted at the CAMU and the <u>Chemical Waste Landfill</u> .	Please revise to provide the Unit name.
2	2.10	29	1. Generation of extreme heat, pressure, fire, explosions (except explosions that are a result of normal treatment operations at the TTU), or violent reactions;	1. Generation of extreme heat, pressure, fire, explosions (except <del>explosions that are as</del> a result of normal treatment operations at the TTU), or violent reactions;	Please revise to clarify that the listed conditions occur during normal operations at the TTU.
3	2.12.6	32-33	The Permittees shall maintain Coordination Agreements with the Kirtland Air Force Base, the New Mexico Department of Public Safety, and one or more area hospitals (such as the Albuquerque Regional Medical Center, Lovelace Medical Center, Presbyterian Health Care Services), and the U.S. Forest Service. The Coordination Agreements shall be in writing executed by Permittees and the local authorities, and shall include the requirements provided in 40 CFR § 264.37(a).	The Permittees shall maintain Coordination Agreements with the <u>police, fire department, State and local emergency response teams, and one or more local hospitals that would respond to emergencies at the Permitted Units</u> <del>Air Force Base, the New Mexico Department of Public Safety, and one or more area hospitals (such as the Albuquerque Regional Medical Center, Lovelace Medical Center, Presbyterian Health Care Services), and the U.S. Forest Service</del> . The Coordination Agreements shall be in writing executed by Permittees and the local authorities, and shall include the requirements provided in 40 CFR § 264.37(a). <u>Agreements are listed in the Attachment D (Contingency Plan).</u>	Please revise this requirement to reflect the regulations rather than listing the agreements. The current agreements and the type of services provided under each agreement are listed in Table D-1 in Attachment D. Table D-1 will be revised as needed to keep it current.  Additionally, the U.S. Forest Service and Kirtland Air Force Base maintain a cooperative firefighting arrangement (listed in Table D-1). This arrangement meets the requirements of 40 CFR 264.37(a)(2). Please see Comment 8 in Section 2 of these comments for additional discussion of this issue and a recommendation for a footnote to Table D-1 to clarify that the Permittees are not a direct party.
4	2.13.1	33	2. An explosion occurs; or 3. A fire occurs.	2. An explosion occurs ( <u>other than normal operations at the TTU</u> ); or 3. A fire occurs ( <u>other than normal operations at the TTU</u> ).	Please revise to clarify that fire and explosions that are part of normal operations at the TTU do not meet the definition of an emergency.
5	2.14.2	38	1. Inspection Schedule and all completed inspection records for that Unit for the last three years, as set forth in Attachment E (Inspection Plan), as required by 40 CFR § 264.15(b) and this Permit,	1. Inspection Schedule and all completed inspection records for that Unit for the <u>current calendar year</u> <del>last three years</del> , as set forth in Attachment E (Inspection Plan), as required by 40 CFR § 264.15(b) and this Permit,	Please revise the requirement as shown to provide consistency with: <ul style="list-style-type: none"> <li>Item 6 in the preceding list in Permit Part 2, Section 2.14.2; and</li> <li>Section E.2 in Permit Attachment E.</li> </ul>

DOE/Sandia Comments on Draft Resource Conservation and Recovery Act Facility Operating Permit

1. Comments on Permit Parts 1 Through 8

No.	Draft Permit Section	Page	Existing Text	Requested Revision	Discussion
6	2.14.2	38	2. Records of all training required by this Permit for current and past personnel at that Unit, except personnel training records for the MSB shall be maintained at the RMWMU, and the Contingency Plan (Permit Attachment D).	2. Records <u>for the current year</u> of all training required by this Permit for current <del>and past</del> personnel at that Unit, except personnel training records for the MSB shall be maintained at the RMWMU, 3. <u>The <del>and the</del> Contingency Plan for the Unit (consisting of the general Facility requirements and the applicable Unit-specific requirements in</u> Permit Attachment D).	Please revise the training records requirement as shown to provide consistency with: <ul style="list-style-type: none"> <li>Item 14 in the preceding list in Permit Part 2, Section 2.14.2;</li> <li>Section F.4 in Permit Attachment F; and</li> <li>The requirements of 40 CFR 264.16.</li> </ul> Please separate the Contingency Plan from the training records for clarity and revise to define the contents of a Unit-specific Contingency Plan.
7	3.6.2	42	1. The containers are stored in storage areas that are sloped or otherwise designed and operated to drain and remove liquid resulting from precipitation or other liquids (see 40 CFR § 264.175(c)(1)); or	1. The containers are stored in storage areas that are sloped or otherwise designed and operated to drain and remove liquid resulting from precipitation <del>or other liquids</del> (see 40 CFR § 264.175(c)(1)); or	Please revise to maintain consistency with the regulations that are cited as the basis for this requirement.
8	4.5	45	2. Placing the waste inside a commercially available container made of inert or noncorroding materials such as polyethylene or stainless steel and sealing the container to encapsulate the waste. This method may not be used to treat D008 radioactive lead solids. 3. Placing the waste in a container consisting of an outer shell with a liner of inert or noncorroding material such as polyethylene or stainless steel, along with inert void-filling materials, then sealing the liner to encapsulate the wastes.	3. Placing the waste, <u>along with inert void-filling materials as appropriate,</u> inside a commercially available container made of inert or noncorroding materials such as polyethylene or stainless steel and sealing the container to encapsulate the waste. This method may not be used to treat D008 radioactive lead solids. 4. Placing the waste in a container consisting of an outer shell with a liner of inert or noncorroding material such as polyethylene or stainless steel, along with inert void-filling materials <u>as appropriate, and</u> then sealing the liner to encapsulate the wastes.	Please revise these requirements for consistency. It is often (but not always) necessary to add void-filling materials to maximize treatment effectiveness and container properties, and to meet the requirements of the off-site disposal facility.

## 1. Comments on Permit Parts 1 Through 8

No.	Draft Permit Section	Page	Existing Text	Requested Revision	Discussion
9	5.5.2.1	49	5. A minimum of four hours shall elapse between burn events before reuse or inspection of the burn pan.	5. A minimum of four hours shall elapse between burn events before <del>reuse or</del> inspection of the burn pan <u>except in cases of multiple burn events on the same day. In the case of multiple burn events on the same day, a pretreatment inspection will be performed if at least four hours elapse between burn events. If less than four hours elapse between burn events, a pretreatment inspection will not be performed. The Permittees shall not conduct more than three burn events on a single day.</u>	<p>Please delete “reuse” as it is not clear in this context.</p> <p>Please revise to allow less than the stated four hours between burn events that occur in the same day.</p> <p>In order to maintain product quality, SASN is formulated in batches; this process may generate some excess SASN that requires treatment on the same day. The time between completing treatment of the wastes generated during SASN formulation and starting treatment of excess SASN may be less than four hours.</p> <p>If burn events occur less than four hours apart, Unit personnel will not be able to perform an inspection between the events, but will perform a pre-treatment inspection before the events and a post-treatment inspection after the events are completed.</p>
10	5.5.3	51	After the cool-down period of at least four hours, but within one business day, the Permittees shall perform a post-treatment inspection to check for any untreated waste in the burn pan and any contamination or untreated waste ejected from the burn pan during a burn event (“kick-out”).	After the cool-down period of at least four hours, but within one business day, the Permittees shall perform a post-treatment inspection to check for any untreated waste in the burn pan and any contamination or untreated waste ejected from the burn pan during a burn event (“kick-out”), <u>unless a subsequent burn event starts within the four hour cool down period.</u>	Please revise for consistency with revisions to Section 5.5.2.1 regarding the time required between burn events. Please note the post-treatment inspection would occur after the subsequent burn event in accordance with this Permit requirement.

## 1. Comments on Permit Parts 1 Through 8

No.	Draft Permit Section	Page	Existing Text	Requested Revision	Discussion
11	5.5.4	52	The Permittees shall clean the burn pan, lid and other waste containment devices of any treatment residues within one working day of a burn event unless another burn event is to take place within one day, or one or more adverse weather conditions as defined in Section 5.5.2.2 is present.	The Permittees shall <del>remove clean the burn pan, lid and other waste containment devices of</del> any treatment residues within one working day of a burn event unless another burn event is to take place within one day, or one or more adverse weather conditions as defined in Section 5.5.2.2 is present.	Please revise to clarify that the treatment residues are in the burn pan. The Permittees do not use other waste containment devices, and the lid does not contain treatment residues.
12	5.8	53	The Permittees shall inspect monthly and on the day of and prior to treatment operations, and maintain as necessary, the surface water run-on and run-off control features (e.g., all associated retention structures, retaining walls, covers, berms, ditches) associated with the TTU in accordance with Permit Attachment E (Inspection Plan).	The Permittees shall inspect <del>monthly and on the day of and prior to treatment operations,</del> and maintain as necessary, the surface water run-on and run-off control features (e.g., all associated retention structures, retaining walls, covers, berms, ditches) associated with the TTU in accordance with Permit Attachment E (Inspection Plan).	Please revise this requirement for consistency with the pre-burn inspection requirements in 5.5.1 and the Inspection Plan in Attachment E, and to clarify that multiple pre-burn inspections are not required.
13	6.2.1	58	2. Any release of a hazardous waste or hazardous constituent to environmental media at or from the Unit has been remediated, if necessary, to a concentration level that is protective of human health and the environment. Concentration levels shall be based on a residential land use scenario such that the risk of human exposure does not exceed $10^{-5}$ total excess cancers for carcinogenic substances and, for non-carcinogenic substances, a target Hazard Index of 1.0. Concentration levels shall also be in compliance with Permit Section 8.4.5; and such that the Ecological Screening Levels in accordance with Permit Section 8.5 are met.	2. Any release of a hazardous waste or hazardous constituent to environmental media at or from the Unit has been remediated, if necessary, to a concentration level that is protective of human health and the environment. <del>Concentration levels shall be based on a residential land use scenario such that the risk of human exposure does not exceed <math>10^{-5}</math> total excess cancers for carcinogenic substances and, for non-carcinogenic substances, a target Hazard Index of 1.0. Concentration levels shall also be in compliance with Permit Section 8.4.5; and such that the Ecological Screening Levels in accordance with Permit Section 8.5 are met.</del>	Please delete the last two sentences. The requirement to protect human health and the environment in accordance with the closure performance standard in 40 CFR 264.111 is clearly stated in the first sentence.  Furthermore, specifying particular risk levels is not consistent with NMED guidance "Risk Assessment Guidance for Investigation and Remediation" February 2012, updated June 2012.

## 1. Comments on Permit Parts 1 Through 8

No.	Draft Permit Section	Page	Existing Text	Requested Revision	Discussion
14	6.6	67	<p>If necessary, the Permittees shall amend a Permitted Unit's closure plan at closure to correctly and completely:</p> <ol style="list-style-type: none"> <li>1. Identify all constituents of concern as specified in Permit Section 6.5(1); and</li> <li>2. Identify the laboratory analytical method detection limits for all constituents of concern.</li> </ol>	<p>If necessary, the Permittees shall amend a Permitted Unit's closure plan at closure to correctly and completely:</p> <ol style="list-style-type: none"> <li><del>1. Identify all constituents of concern as specified in Permit Section 6.5(1); and</del></li> <li><del>2. Identify the laboratory analytical method detection limits for all constituents of concern.</del></li> </ol>	<p>Please delete the second item. It is redundant and unnecessary, because the analytical method detection limits (MDLs) are established through the analytical methods, and those analytical methods have already been specified in the sampling and analysis plan that is part of the closure plan being amended. The actual MDLs and practical quantitation limits that are achieved during closure will be included with the analytical data in the closure report.</p>
15	8.10.2.6	98	<p>Organic vapors (using a photo-ionization detector with an 11.7 eV (electron volt) lamp, a combustible vapor indicator or other method approved by the Department);</p>	<p>Organic vapors (using a photo-ionization detector with an <del>11.7</del> <u>10.6 or higher</u> eV (electron volt) lamp, a combustible vapor indicator or other method approved by the Department);</p>	<p>Please revise this for consistency with Section 8.10.2.4.v on page 96.</p>
16	8.10.2.8.ii	100	<p>All purged groundwater and decontamination water shall be temporarily stored at satellite accumulation areas or transfer stations in labeled 55-gallon drums, less-than-90-day storage areas or other containers approved by the Department until proper characterization and disposal can be arranged.</p>	<p>All purged groundwater and decontamination water shall be temporarily stored at satellite accumulation areas, <del>less-than-90-day storage areas,</del> or transfer stations in labeled 55-gallon drums, <del>less-than-90-day storage areas</del> or other containers approved by the Department until proper characterization and disposal can be arranged.</p>	<p>Please revise to clarify the elements of this sentence.</p>
17	8.10.2.8.iv	101	<p>Trip blanks shall be analyzed at a frequency of one for each shipping container of samples.</p>	<p>Trip blanks shall be analyzed <u>for VOCs</u> at a frequency of one for each shipping container of <u>VOC</u> samples.</p>	<p>Please revise to clarify that trip blanks need only accompany shipping containers of VOC samples and need only be analyzed for VOCs.</p>

## 2. Comments on Permit Attachments A Through M

No.	Draft Permit Section	Page	Existing Text	Requested Revision	Discussion
1	A.4.5.4	18	4. Placing the waste inside a commercially available container made of inert or non-corroding materials such as polyethylene or stainless steel. Alternatively, the container may consist of an outer shell with a liner of inert or non-corroding material such as polyethylene resin or stainless steel. After the wastes and inert void-filler materials are placed in the container, the resin is heated to seal the container and lid (e.g. using a resistance-heated wire system embedded in the container lid). Non-corroding materials such as stainless steel are also available as containers and liners; the stainless steel is welded closed to seal the container and encapsulate the wastes. The Permittees use containers of various sizes, depending on the volume and dimensions of waste items to be macroencapsulated.	4. Placing the waste, <u>along with inert void-filling materials as appropriate</u> , inside a commercially available container made of inert or non-corroding materials such as polyethylene or stainless steel <u>and sealing the container to encapsulate the waste. This method is not used to treat D008 radioactive lead solids.</u> 5. <u>Placing the waste in a</u> <del>Alternatively, the</del> container <del>may consist</del> <u>ing</u> of an outer shell with a liner of inert or non-corroding material such as polyethylene resin or stainless steel. After the wastes and inert void-fill <u>ing</u> <del>er</del> materials <u>as applicable</u> , are placed in the container, the resin is heated to seal the container and lid (e.g. using a resistance-heated wire system embedded in the container lid). Non-corroding materials such as stainless steel are also available as containers and liners; the stainless steel is welded closed to seal the container and encapsulate the wastes. The Permittees use containers of various sizes, depending on the volume and dimensions of waste items to be macroencapsulated.	Please revise these requirements for consistency with the requirements in Permit Part 4, Section 4.5. Please see Comment 8 in Section 1 of these comments for additional discussion.
2	A.4.6.1	19	3. Document check to determine whether treated waste is an oxidizer as defined in 40 CFR Part 173.	3. Document check to determine whether treated waste is an oxidizer as defined in 40 CFR <del>Part 173</del> <u>§ 261.21(a)(4)</u> .	Please update to keep current with changes to the regulatory requirements for the hazardous waste characteristic of ignitability.
3	A.6.5	25	Waste handling personnel work in pairs and maintain contact with each other.	<del>Waste handling P</del> ersonnel work in pairs and maintain contact with each other.	It is not necessary that both personnel be waste handlers. Please clarify this statement to minimize confusion with the job titles in Table F-2 in Permit Attachment F.

DOE/Sandia Comments on Draft Resource Conservation and Recovery Act Facility Operating Permit

2. Comments on Permit Attachments A Through M

No.	Draft Permit Section	Page	Existing Text	Requested Revision	Discussion
4	A.7.4	28	The LCRS sump shall be inspected on a quarterly basis for the presence of leachate in accordance with Permit Attachment Section E.9.4.	The LCRS sump shall be inspected on a quarterly basis for the presence of leachate in accordance with Permit Attachment Section E. <del>10</del> 9.4.	Please correct the reference.
5	B.3	33	Waste listed in Table B-2 that must be treated using a technology specified in the table of 40 C.F.R. §	<del>Waste listed in Table B-2 that must be treated using a technology specified in the table of 40 C.F.R. §</del>	Please delete this sentence fragment.
6	C.2.1	50	Laboratory chemical waste includes used commercial chemical products or manufacturing chemical intermediates (in solid, liquid, or contained gas forms) declared to be waste, such as reagents, metal powders, oxidizers, reactive metals, elemental mercury, elemental sodium, spent or discarded solvents and other materials.	Laboratory chemical waste includes <u>unused and</u> used commercial chemical products or manufacturing chemical intermediates (in solid, liquid, or contained gas forms) declared to be waste, such as reagents, metal powders, oxidizers, reactive metals, elemental mercury, elemental sodium, spent or discarded solvents and other materials.	Please add “unused” as an additional example in this description.
7	Table D-1, first row	80	The New Mexico Department of Public Safety  Mutual aid involving an actual or potential emergency, assistance in training and emergency response for local and tribal governments.	The New Mexico Department of <u>Homeland Security and Emergency Management</u> <del>Public Safety</del>  Mutual aid involving an actual or potential emergency, assistance in training and emergency response <del>for local and tribal governments.</del>	Please revise to reflect current information.
8	Table D-1 third row	80	The U.S. Forest Service	The U.S. Forest Service <sup>a</sup>  <i>New footnote at end of table: <u>a The Permittees are not a direct party.</u></i>	Please add this footnote to Table D-1 to clarify that the Permittees are not a direct party to the agreement between the USFS and KAFB, as discussed in Comment 3 in Section 1 of these comments.
9	Table D-5 first row	89	Primary David Castillo Home Phone (505) 269-1705	Primary David Castillo Home Phone (505) <del>269-1705</del> <u>899-1956</u>	Please update the contact information for this emergency coordinator.

## 2. Comments on Permit Attachments A Through M

No.	Draft Permit Section	Page	Existing Text	Requested Revision	Discussion
10	Table D-7 second row	90	First Alternate David Castillo (505) 284-4192 (office) (505) 951-6340 (pager) Home Phone (505) 269-1705	<i>none</i>	Please revise the list of emergency coordinators for the Thermal Treatment Unit.
11	Table D-7 third row	90	Second Alternate Daniel Dow	<del>Second</del> <del>First</del> Alternate Daniel Dow	Please revise the list of emergency coordinators for the Thermal Treatment Unit.
12	Table D-7 new row	90	<i>none</i>	<del>Second</del> <u>Alternate</u> <u>Marcus Chavez</u> <u>Sandia National Laboratories</u> <u>P.O. Box 5800</u> <u>Albuquerque, New Mexico</u> <u>(505) 284-1278 (office)</u> <u>(505) 283-1709 (pager)</u> <u>Home Phone</u> <u>(505) 974-8918</u>	Please revise the list of emergency coordinators for the Thermal Treatment Unit.
13	Table D-8, Building 6921, fourth section	92	Fire Extinguishers Portable (A-B-C) By north personnel door in electrical/mechanical room In hallway between assay area and north office area By northwest personnel door of assay area By east personnel door in southeast counting room	Fire Extinguishers Portable (A-B-C) By north personnel door in electrical/mechanical room In hallway <del>between assay area and north office area</del> <u>near restrooms</u> By northwest personnel door of assay area By east personnel door in southeast counting room	Please revise the location of one of the fire extinguishers in Building 6921. The new location will improve access for use and inspections.
14	Table D-10 first section	96	Spill Control and Decontamination Equipment Absorbent (sufficient absorbent for 55 gallons of liquid when liquid wastes are present) Near north entrance to Building 6597 high bay	Spill Control and Decontamination Equipment Absorbent (sufficient absorbent for 55 gallons of liquid when liquid wastes are present) <del>Near north entrance to Building 6597 high bay</del> <u>In equipment storage in Building 6597</u>	Please update the location to reflect current operations.

## 2. Comments on Permit Attachments A Through M

No.	Draft Permit Section	Page	Existing Text	Requested Revision	Discussion
15	Table D-10 first section	96	Spill Control and Decontamination Equipment Personal protective equipment (goggles and/or safety glasses, gloves) Near north entrance to Building 6597 high bay	Spill Control and Decontamination Equipment Personal protective equipment (goggles and/or safety glasses, gloves) <del>Near north entrance to Building 6597 high bay</del> <u>In equipment storage in Building 6597</u>	Please update the location to reflect current operations.
16	Table D-10 fourth section	96	Fire Extinguishers Portable (A-B-C) By personnel doors on the east, south, and west walls	Fire Extinguishers Portable (A-B-C) By personnel doors on the <del>north</del> , east, south, and west walls	Please update to add an additional fire extinguisher on the north wall to reflect current operations.
17	Table D-10 last section	96	Fire Suppression Branch line from the Building 6597 sprinkler system Temporary Room	Fire Suppression <del>Branch line from the Building 6597 sprinkler system</del> <u>Temporary Room</u>	Please update to remove this sprinkler; fire protection is provided by the additional extinguisher near the Temporary Room (see previous comment).
18	Table D-11 first row	97	Primary David Siddoway (505) 844-2713 (office) (505) 343-9316 (pager)	Primary David Siddoway (505) 844-2713 (office) <del>(505) 343-9316</del> <u>(800)-341-1137</u> (pager)	Please update contact information for the emergency coordinator.
19	Table D-11 new row	97	<i>none</i>	<u>Second Alternate</u> <u>Bryan Green</u> <u>Sandia National Laboratories</u> <u>P.O. Box 5800</u> <u>Albuquerque, New Mexico</u> <u>(505) 284-3161 (office)</u> <u>(505) 280-5118 (cell)</u> <u>(505) 897-6366</u>	Please add second alternate to the list of emergency coordinators for the Auxiliary Hot Cell Unit.
20	Table D-15 last row	99	Second Alternate Daneille Nieto	Second Alternate <del>Daneille</del> <u>Danielle</u> Nieto	Please revise the name of the emergency coordinator.
21	E.2	100	Inspection records shall be maintained at the Facility for the active life of the Facility, except as provided by 20.4.1.501.A(5) NMAC, Permit Section 7.2.2 and Permit Attachment H (Post-Closure Care Plans for the Corrective Action Management Unit ).	Inspection records <u>for each Unit</u> shall be maintained at the Facility for the active life of the <del>Unit</del> <u>Facility</u> , except as provided by 20.4.1.501.A(5) NMAC, Permit Section 7.2.2 and Permit Attachment H (Post-Closure Care Plans for the Corrective Action Management Unit ).	Please revise to clarify that the Unit-specific inspection records need only be maintained for the active life of the Unit.

## 2. Comments on Permit Attachments A Through M

No.	Draft Permit Section	Page	Existing Text	Requested Revision	Discussion
22	E.4.1	101	2. Treatment areas that were used, including treatment equipment and monitoring equipment.	2. Treatment areas that were used, including treatment equipment <del>and monitoring equipment.</del>	Please delete monitoring equipment from these inspection requirements as it is not applicable to the batch treatment operations conducted at the Permitted Units.
23	E.4.2	101	4. Treatment areas, including general conditions (floors, walls), treatment equipment and tools, and monitoring equipment.	4. Treatment areas, including general conditions (floors, walls), <del>and treatment equipment and tools, and monitoring equipment.</del>	Please delete monitoring equipment from these inspection requirements as it is not applicable to the batch treatment operations conducted at the Permitted Units.
24	Table E-1 second section	103	Monitoring equipment Instruments in good condition, operational, calibrated Daily when and where wastes are handled. Monthly otherwise.	<del>Monitoring equipment Instruments in good condition, operational, calibrated Daily when and where wastes are handled. Monthly otherwise.</del>	Please delete the requirement to inspect monitoring equipment, as monitoring is not applicable to the waste management operations at the HWHU.
25	Table E-2 second section	104	Steel-lined concrete pad No cracks and in good condition Monthly	Steel-lined concrete pad No cracks and in good condition <del>Prior to treatment. Monthly otherwise.</del>	Please revise for consistency with the pre-burn operation requirements in Permit Part 5, Section 5.5.1.
26	Table E-3 second section	106	Monitoring equipment Instruments in good condition, operational, calibrated Daily when and where wastes are handled. Monthly otherwise.	<del>Monitoring equipment Instruments in good condition, operational, calibrated Daily when and where wastes are handled. Monthly otherwise.</del>	Please delete the requirement to inspect monitoring equipment, as monitoring is not applicable to the batch treatment operations at the RMWMU.
27	Table E-6 fourth section	113	Inspection Frequency:  LCRS Leachate in sump Monthly/Quarterly <sup>c</sup>  Manually activate pump/inspect for leachate collection Monthly/Quarterly	Inspection Frequency:  LCRS Leachate in sump <del>Monthly/Quarterly<sup>c</sup></del>  Manually activate pump/inspect for leachate collection <del>Monthly/Quarterly</del>	Please delete the monthly inspection and activation of the pump for consistency with Section E.10.4 which requires quarterly inspection and activation of the pump.

## 2. Comments on Permit Attachments A Through M

No.	Draft Permit Section	Page	Existing Text	Requested Revision	Discussion
28	Table E-6 last section	113	Maintenance/Repair Frequency:  Safety and Emergency Equipment As soon as possible, but no later than 10 working days	Maintenance/Repair Frequency:  Safety and Emergency Equipment As soon as possible <u>in accordance with Section E.3 of this Permit Attachment</u> <del>but no later than 10 working days</del>	Please revise to require repair in accordance with the requirements in Section E.3, which are comprehensive and require timely corrective action to ensure the problem does not lead to an environmental or human health hazard. Requiring corrective action as discussed in Section E.3 is more comprehensive than the 10-day requirement, and it is also consistent with requirements for the other waste management units. Furthermore, Section 2.11.2 in Part 2 requires that "Maintenance, repair, and replacement of emergency equipment shall be performed as needed to ensure proper function and in a timely manner."
29	Figure G.1-1 in Attachment G	137	<i>Outdated office trailers at the Hazardous Waste Handling Unit (HWHU) are shown in Figure G.1-1</i>	<i>Current office trailers at the HWHU are shown in Figure 4 in Permit Attachment L</i>	Please revise Figure G.1-1 to incorporate the current office trailers as shown in Figure 4 in Permit Attachment L.
30	H.4.1	172	Cover damage that exceeds the limits described under "Inspection" shall be repaired within 60 days to a condition that meets or exceeds the original design.	Cover damage that exceeds the limits described <u>in Permit Attachment E, Section E.10.2 and Table E-6, under "Inspection"</u> shall be repaired within 60 days to a condition that meets or exceeds the original design.	Please insert a reference to the pertinent parts of Permit Attachment E.
31	H.4.2	172	Based upon the results of the storm-water diversion structure inspections, erosion or damage that exceeds the limits described under the preceding paragraph shall be repaired within 60 days to a condition that meets or exceeds the original design.	Based upon the results of the storm-water diversion structure inspections, erosion or damage that exceeds the limits described <u>in Permit Attachment E, Section E.10.3 and Table E-6 under the preceding paragraph</u> shall be repaired within 60 days to a condition that meets or exceeds the original design.	Please revise the reference to include the pertinent parts of Permit Attachment E.

## 2. Comments on Permit Attachments A Through M

No.	Draft Permit Section	Page	Existing Text	Requested Revision	Discussion
32	H.5.1	174	During the initial stages of the post-closure care period, the primary subliner (PSL), vertical sensor array (VSA), and chemical waste landfill and sanitary sewer line monitoring subsystems (CSS) of the vadose zone monitoring system (VZMS) were monitored on a quarterly and annual basis for one year.	During the initial stages of the post-closure care period, the primary subliner (PSL), vertical sensor array (VSA), and chemical waste landfill and sanitary sewer line monitoring subsystems (CSS) of the vadose zone monitoring system (VZMS) were monitored on a <del>monthly</del> <sup>quarterly</sup> and annual basis for one year.	Please revise to reflect the monitoring schedule that was followed during the first year following closure of the containment cell.
33	H.5.2.1	175	In the case of a soil moisture increase greater than 4 percent (expressed as gravimetric percent moisture content) at any monitoring location(s), the Permittees shall immediately confirm the result by collecting and analyzing additional samples.	In the case of a soil moisture increase greater than 4 percent <del>above baseline</del> (expressed as gravimetric percent moisture content <del>at CSS and PSL locations or expressed as volumetric percent moisture content at VSA locations</del> ) at any monitoring location(s), the Permittees shall immediately confirm the result by collecting and analyzing additional samples.	Please revise for consistency with the time-domain reflectometry used in the VSA monitoring system, which reports volumetric soil moisture data.
34	Table J-1.2 third row	184	TAV: Auxiliary Hot Cell Unit T04 55 gal/day, 6,000 gal/yr Macroencapsulation	TAV: Auxiliary Hot Cell Unit T04 <del>55</del> <sup>840</sup> gal/day, 6,000 gal/yr Macroencapsulation	Please revise the daily quantity to reflect the volume of larger containers that may be used for macroencapsulation at the AHCF.
35	Table K-1 Miscellaneous Sites	187	Tijeras Area Ground-Water (TAG) Investigation TA-V Area Ground-Water investigation Burn Site Area Ground-Water investigation	Tijeras <del>Area</del> <sup>Arroyo</sup> Ground-Water (TAG) Investigation TA-V <del>Area</del> Ground-Water investigation Burn Site <del>Area</del> Ground-Water investigation	Please revise the names of these Areas of Concern for consistency with current names.
36	Table K-3 fifth section	188	OU 1309: SWMU 96, Storm Drain System Outfall (for TA-II)	<i>none</i>	Please delete SWMU 96 from the group of SWMUs listed in OU 1309. SWMU 96 is already listed with its correct name under OU 1302 in the same table.

## 2. Comments on Permit Attachments A Through M

No.	Draft Permit Section	Page	Existing Text	Requested Revision	Discussion
37	List of Figures in Attachment L	197-198	<p>Figure 4: Hazardous Waste Handling Unit, Waste Management Areas</p> <p>Figure 27: Manzano Storage Bunker, Type B, Floor Plan, Bunker 37034</p> <p>Figure 28: Manzano Storage Bunker, Type C, Floor Plan, Bunker 37118</p> <p>Figure 29: Manzano Storage Bunker, Type D, Floor Plan, Bunkers 37045, 37055, and 37057</p> <p>Figure 32: Post-Closure Perimeter Boundary of the Corrective Action Management Unit</p> <p>Figure 34: Corrective Action Management Unit Containment Cell Liner Details 2</p> <p>Figure 35: Corrective Action Management Unit Containment Cell Liner Details 1</p> <p>Figure 40: Cross-Section View of Corrective Action Management Unit Containment Cell and Subliner Monitoring System</p> <p>Figure 51: Corrective Action Management Unit Evacuation Routes</p>	<p>Figure 4: Hazardous Waste Handling Unit, <u>Hazardous and Mixed</u> Waste Management Areas</p> <p>Figure 27: <u>Views</u>, Manzano Storage Bunker, Type B, <u>Floor Plan</u>, Bunker 37034</p> <p>Figure 28: <u>Views</u>, Manzano Storage Bunker, Type C, <u>Floor Plan</u>, Bunker 37118</p> <p>Figure 29: <u>Views</u>, Manzano Storage Bunker, Type D, <u>Floor Plan</u>, Bunkers 37045, 37055, and 37057</p> <p>Figure 32: Post-Closure Perimeter, <del>Boundary of the</del> Corrective Action Management Unit</p> <p>Figure 34: Corrective Action Management Unit <u>North-South Cross-Section of Leachate Collection and Removal System Sump Containment Cell Liner Details</u> +</p> <p>Figure 35: Corrective Action Management Unit <u>East-West Cross-Section of</u> Containment Cell <u>Liner Details 2</u></p> <p>Figure 40: Cross-Section View of Corrective Action Management Unit Containment Cell and <u>Primary</u> Subliner Monitoring <u>System</u><del>Subsystem</del></p> <p>Figure 51: <u>Local Area Map of</u> Corrective Action Management Unit <u>Containment Cell</u> Evacuation Routes</p>	Please revise the title of Figure 4 for clarity, and revise the other titles in the list as shown here to match the titles on the individual figures.

DOE/Sandia Comments on Draft Resource Conservation and Recovery Act Facility Operating Permit

2. Comments on Permit Attachments A Through M

No.	Draft Permit Section	Page	Existing Text	Requested Revision	Discussion
38	Figure 4 in Attachment L	After 198	<i>The title shown on Figure 4 is not consistent with the revised title discussed in the previous comment.</i>	<i>Please revise the title shown on Figure 4 for consistency with the revised title in the List of Figures on page 198. A revised figure is attached for inclusion.</i>	Please replace Figure 4 with the attached figure. Please see the previous comment for additional discussion of the revision to the title.
39	Figures 10, 17, 18, 19, and 22 in Attachment L	After 198	<i>The titles shown on Figures 10, 17, 18, 19, and 22 are not consistent with the titles listed on page 198.</i>	<i>Please revise the titles shown on Figures 10, 17, 18, 19, and 22 for consistency with the titles in the List of Figures on page 198. Revised figures are attached for inclusion.</i>	Please replace Figures 10, 17, 18, 19, and 22 with the attached figures.
40	Figures 7, 8, 43, and 44 in Attachment L	After 198	<i>Figures 7, 8, 43, and 44 do not reflect the upcoming changes to the HWHU access road.</i>	<i>Please update Figures 7, 8, 43, and 44 to indicate upcoming changes to the HWHU access road. Revised figures are attached for inclusion.</i>	Please replace Figures 7, 8, 43, and 44 with the attached figures. Please see the following comment for a discussion of additional changes to Figure 43.
41	Figure 43 in Attachment L	After 198	<i>Figure 43 does not indicate the future evacuation assembly point for the HWHU.</i>	<i>Figure 43 has been revised to show the upcoming changes in the access road and the future evacuation assembly point.</i>	Please replace Figure 43 with the attached figure which includes the changes discussed in this comment and the previous comment.
42	Figure 45 in Attachment L	After 198	<i>Figure 45 does not indicate the future evacuation assembly point for the TTU.</i>	<i>Figure 45 has been revised to show the future evacuation assembly point. A revised figure is attached for inclusion.</i>	Please replace Figure 45 with the attached figure.
43	M.1	199	Except for SWMUs 96 and 187, the SWMU/AOC locations are shown in Figures 1 through 7 of this Permit Attachment. The locations of SWMUs 96 and 187 could not be shown on Figures 1-7 due to their large spatial distribution.	Except for SWMUs 96 and 187, the SWMU/AOC locations are shown in Figures 1 through <del>6</del> 7 of this Permit Attachment. The locations of SWMUs 96 and 187 could not be shown on Figures 1- <del>6</del> 7 due to their large spatial distribution.	Please revise the Figure numbers for consistency with the SWMUs and AOCs listed in Table M-1.
44	M.2.2	200	Physical controls that shall be implemented for each SWMU/AOC are listed in Table 1.	Physical controls that shall be implemented for each SWMU/AOC are listed in Table <del>M-</del> 1.	Please correct the number of Table M-1.
45	Figures 2, 4, and 5 in Attachment M	208, 210, 211	<i>Figures 2, 4, and 5 are not consistent with Table M-1 or Table K-3</i>	<i>Corrected Figures 2, 4, and 5 are attached for inclusion.</i>	Please replace Figures 2, 4, and 5 with the attached figures.
46	Figure 7 in Attachment M	213	<i>Figure 7 is not consistent with Table M-1 or Table K-3</i>	<i>Mark Page 213 as Reserved.</i>	Please delete Figure 7 and mark the page as reserved.

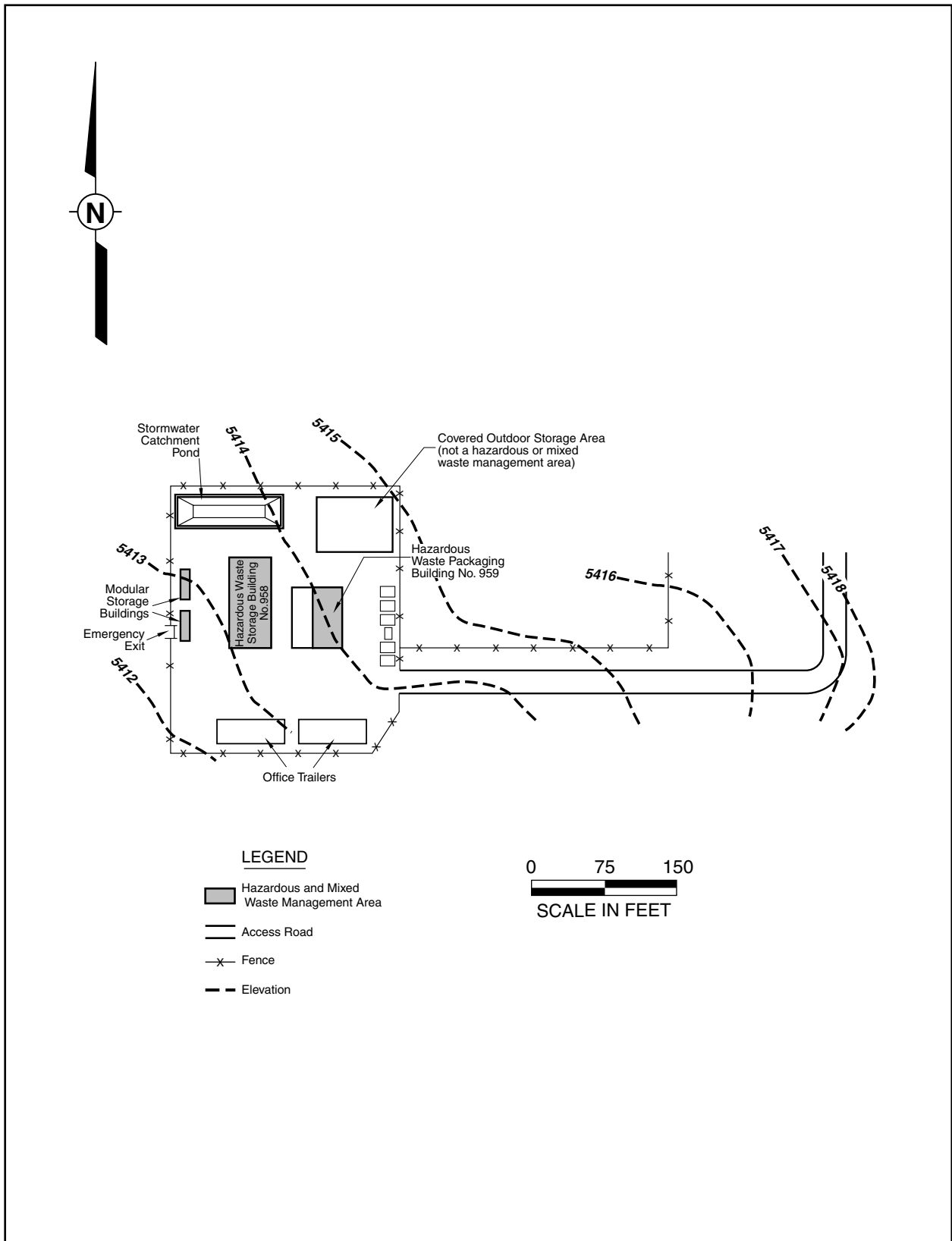
## 3. Editorial Comments on Permit Parts and Attachments

No.	Draft Permit Section	Page	Existing Text	Requested Revision	Discussion
1	1.17	13	6. Each report submitted pursuant to Section 1.9.9 of this Permit if such report is required to be submitted in writing. The Permittees shall establish the IR within 180 days of the effective date of this Permit or within 90 days of the Department's approval of the location, whichever is later.	6. Each report submitted pursuant to Section 1.9.9 of this Permit if such report is required to be submitted in writing.  The Permittees shall establish the IR within 180 days of the effective date of this Permit or within 90 days of the Department's approval of the location, whichever is later.	Please separate this requirement into two paragraphs to clarify the time requirement for establishing an information repository.
2	8.2.1	74	Attachment J, Tables J-1 through J-3 (Active Portion of the Facility), lists the hazardous waste management units at the Facility and their status (e.g., permitted operating, closed).	Attachment J, Tables J-1 through J-3 (Active Portion of the Facility), lists the hazardous waste management units at the Facility and their status (e.g., permitted, operating, closed).	Punctuation: please add comma.
3	8.11.1.2	116	The filter system shall be inspected regularly to insure that the system is functioning properly.	The filter system shall be inspected regularly to <del>insure</del> ensure that the system is functioning properly.	Please clarify by substituting a more applicable word that is consistent with the rest of the Permit Parts.
4	8.11.2.2.i	119	Teflon tape can be used to wrap the threads to insure a tight fit and minimize leakage.	Teflon tape can be used to wrap the threads to <del>insure</del> ensure a tight fit and minimize leakage.	Please clarify by substituting a more applicable word that is consistent with the rest of the Permit Parts.
5	8.11.5	124	After the grout has cured, the top two ft of the borehole shall be filled with concrete to insure a secure surface seal.	After the grout has cured, the top two ft of the borehole shall be filled with concrete to <del>insure</del> ensure a secure surface seal.	Please clarify by substituting a more applicable word that is consistent with the rest of the Permit Parts.
6	H.4.4	173	The VZMS components shall be maintained/repared within 60 days, as needed, to maintain them in good condition -- based upon inspection results.	The VZMS components shall be maintained/repared within 60 days, as needed, to maintain them in good condition - -based upon inspection results.	Please revise to delete the dash and clarify that the text is complete.
7	H.4.5	173	The fence, gates, and warning signs shall be maintained/repared within 60 days, as needed, to maintain them in good condition -- as indicated by quarterly inspections.	The fence, gates, and warning signs shall be maintained/repared within 60 days, as needed, to maintain them in good condition - -as indicated by quarterly inspections.	Please revise to delete the dash and clarify that the text is complete.
8	H.6.2	177	To insure the accuracy of the moisture measurement using the correlation formula the neutron probe must be recalibrated to account for source decay and drift of the electronic counting system.	To <del>ensure insure</del> the accuracy of the moisture measurement using the correlation formula the neutron probe must be recalibrated to account for source decay and drift of the electronic counting system.	Please clarify by substituting a more applicable word that is consistent with the rest of the Permit Attachments.

## **Figures**

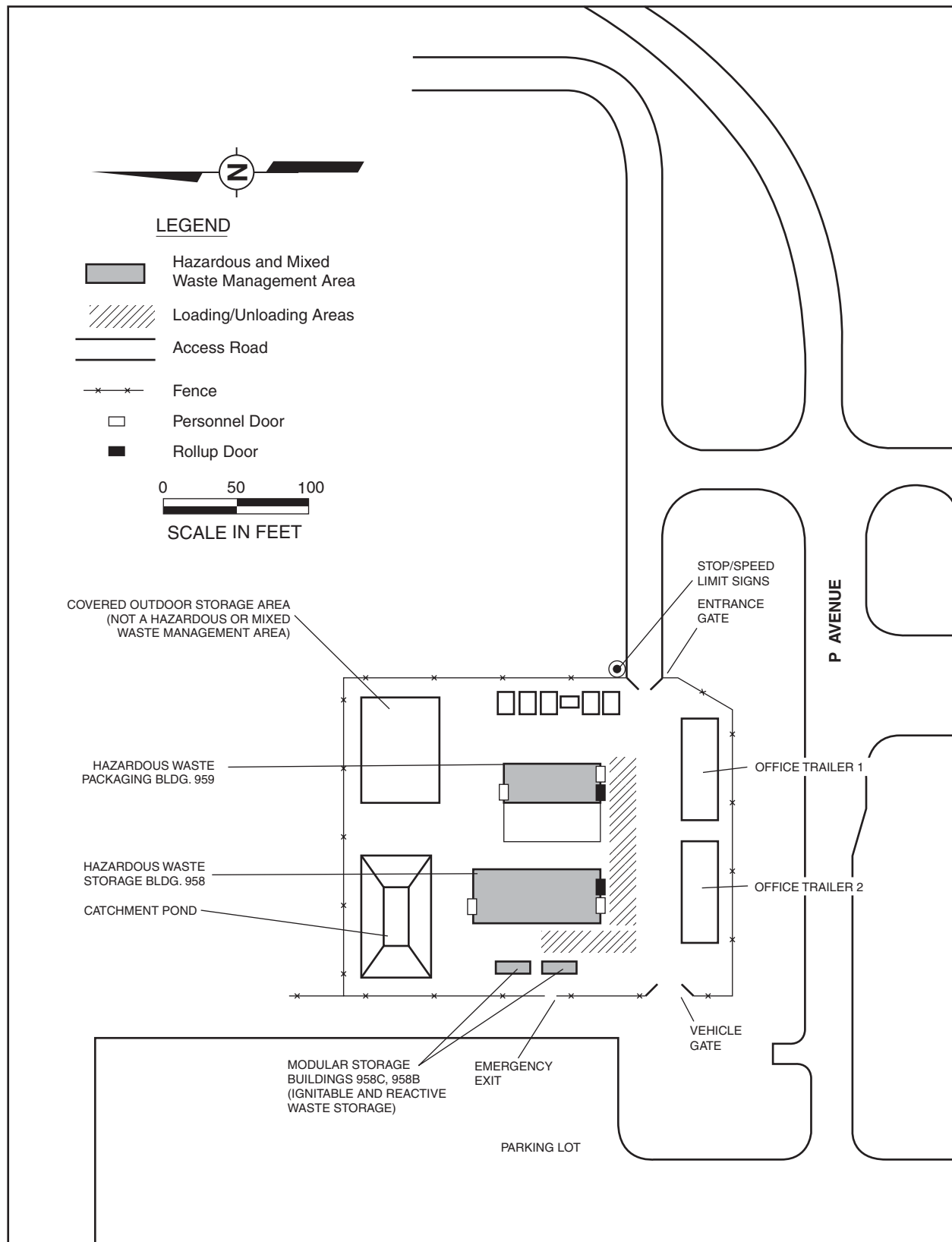
**Attachment L:  
Figures 4, 7, 8, 10, 17, 18, 19, 22, 43, 44, and 45  
(Comments 38 through 42 in Section 2)**

**Attachment M:  
Figures 2, 4, and 5  
(Comment 45 in Section 2)**



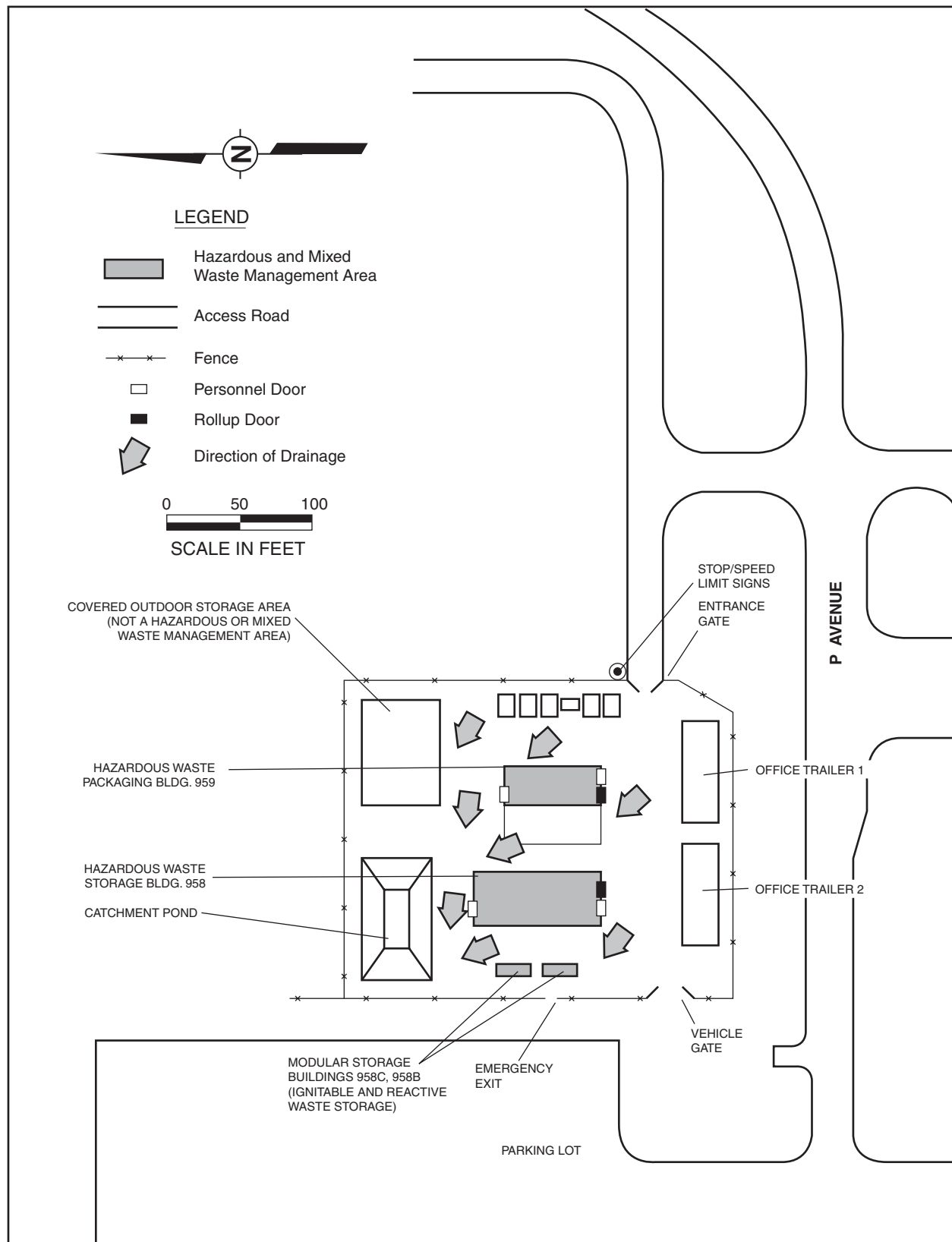
**Figure 4**

**Hazardous Waste Handling Unit, Hazardous and Mixed Waste Management Areas**

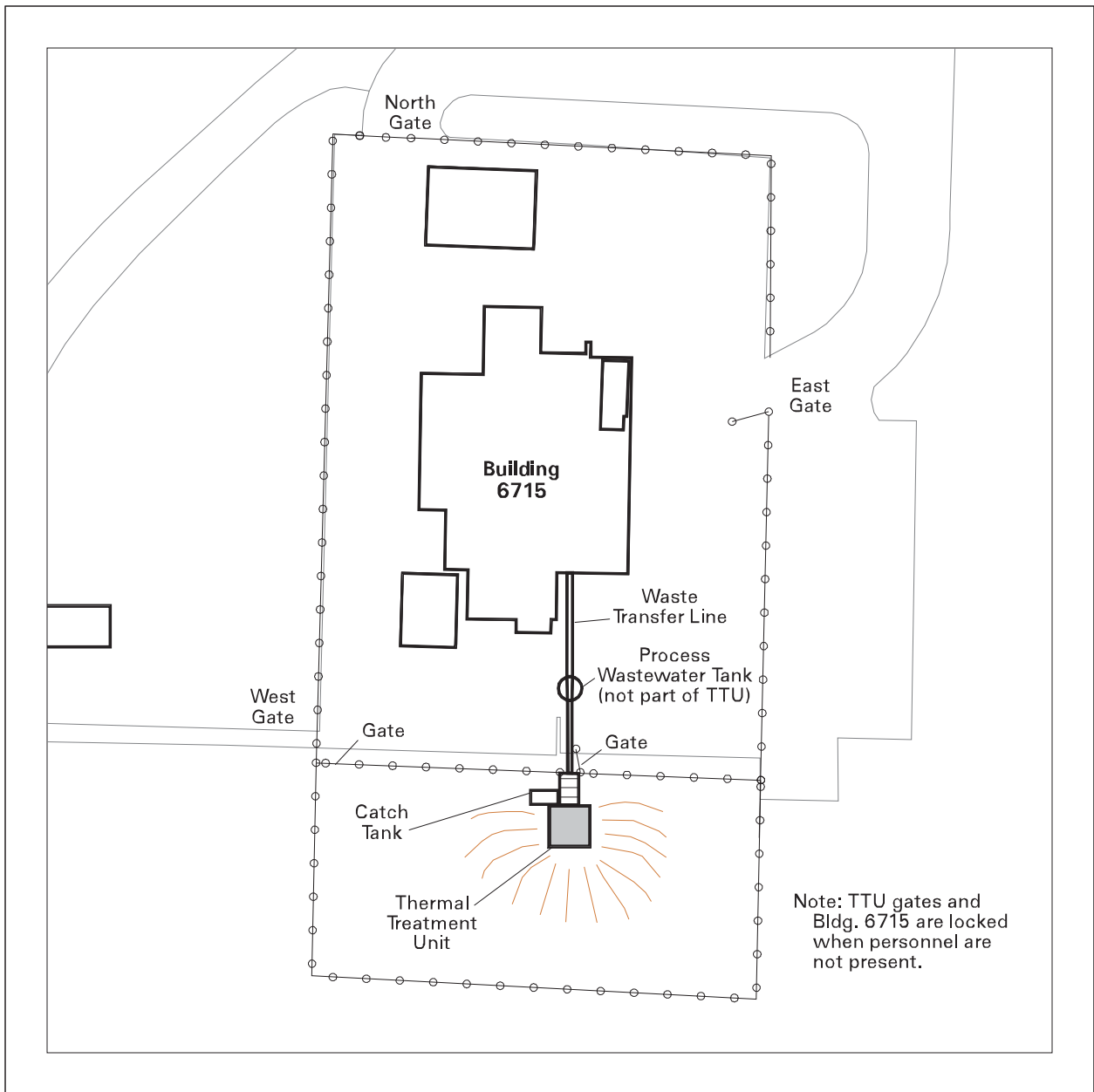


**Figure 7**







**Hazardous Waste Handling Unit Access Control Features and Loading/Unloading Areas**

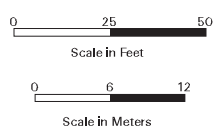


**Figure 8**  
**Hazardous Waste Handling Unit Drainage Control Features**

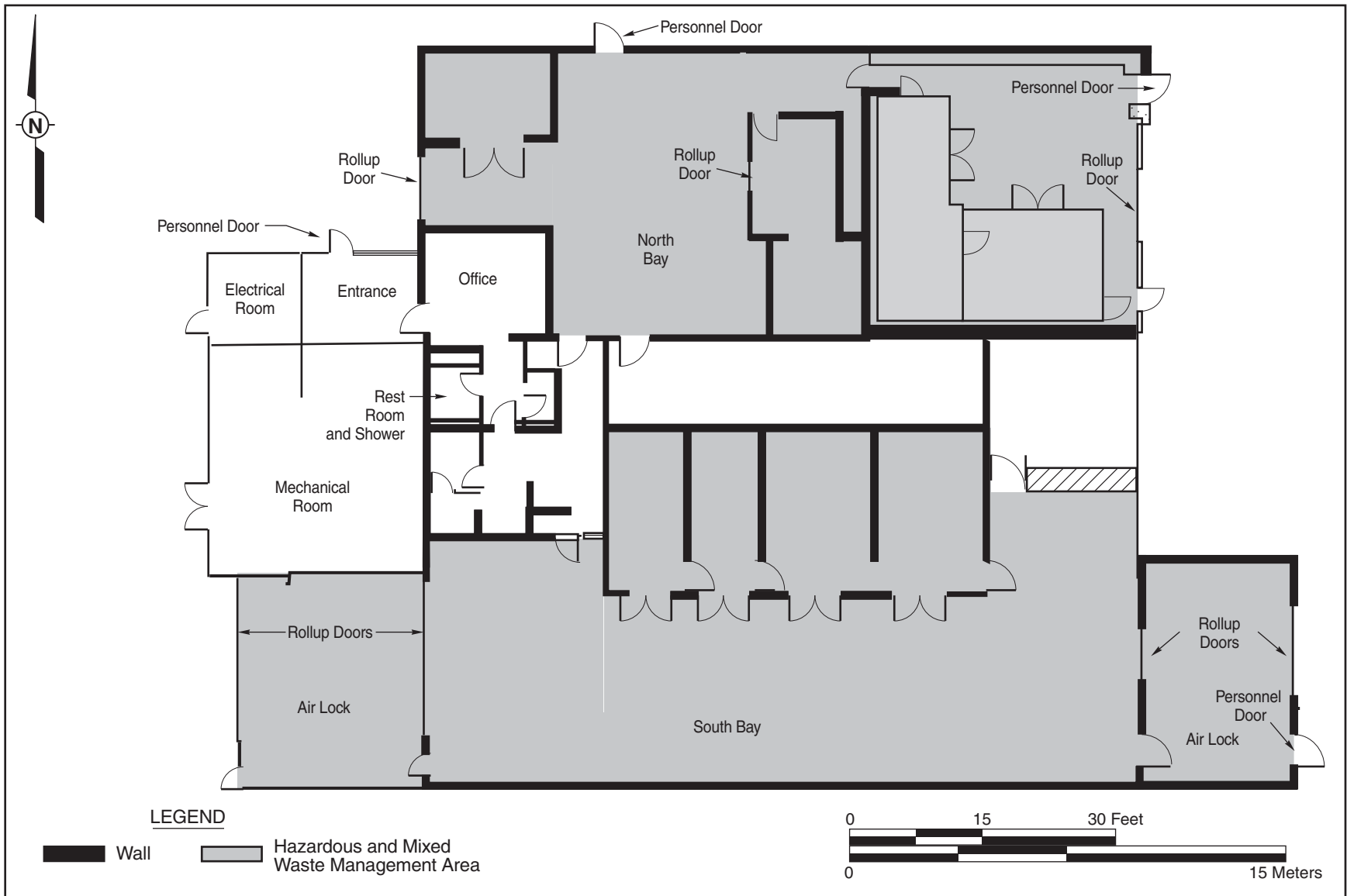


**Legend**

-  Earthen Berm
-  Road / Parking
-  Fence
-  Building / Structure
-  Hazardous Waste Management Area
-  Steps

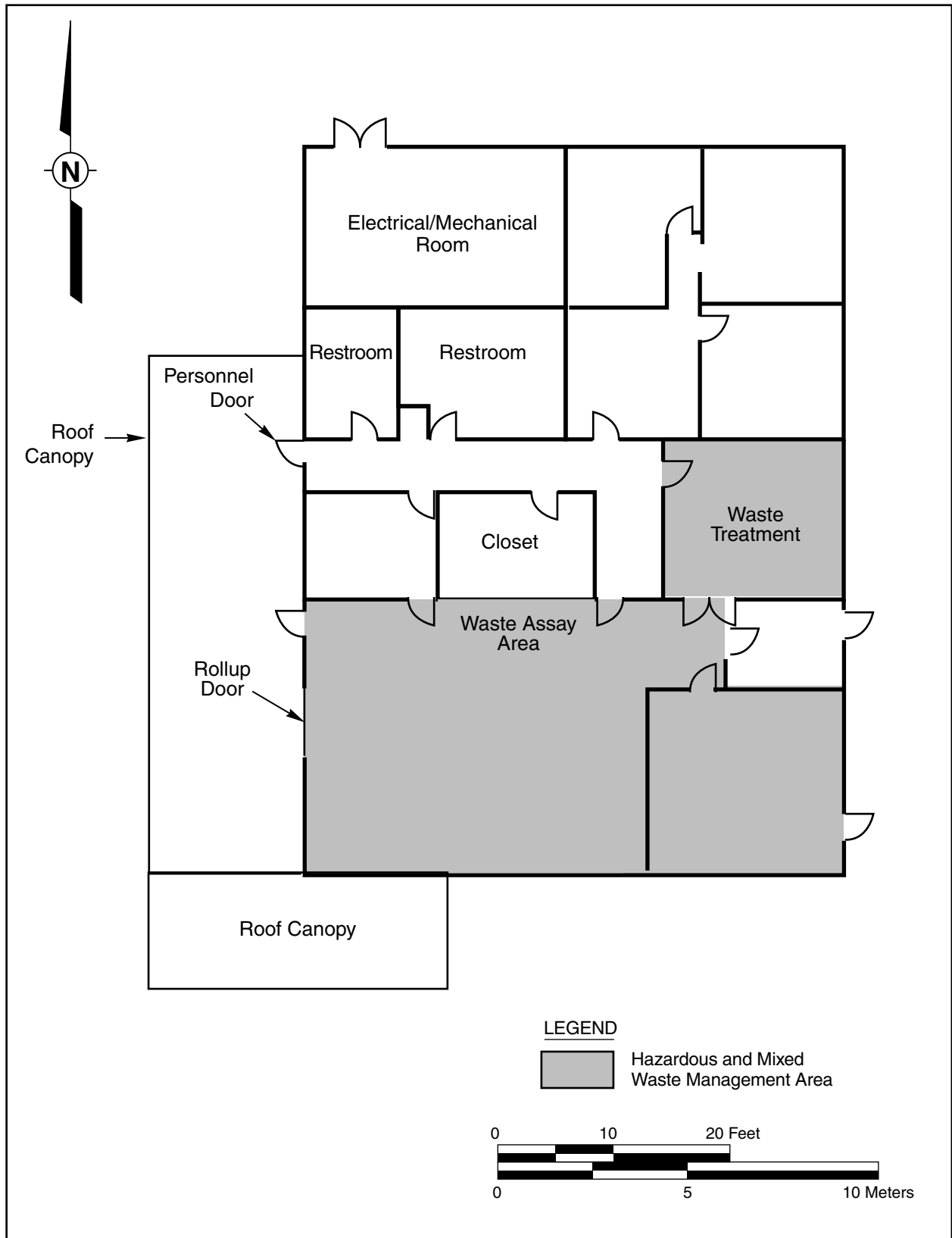


**Figure 10**  
**Thermal Treatment Unit (TTU)**  
**Hazardous Waste Management Area**

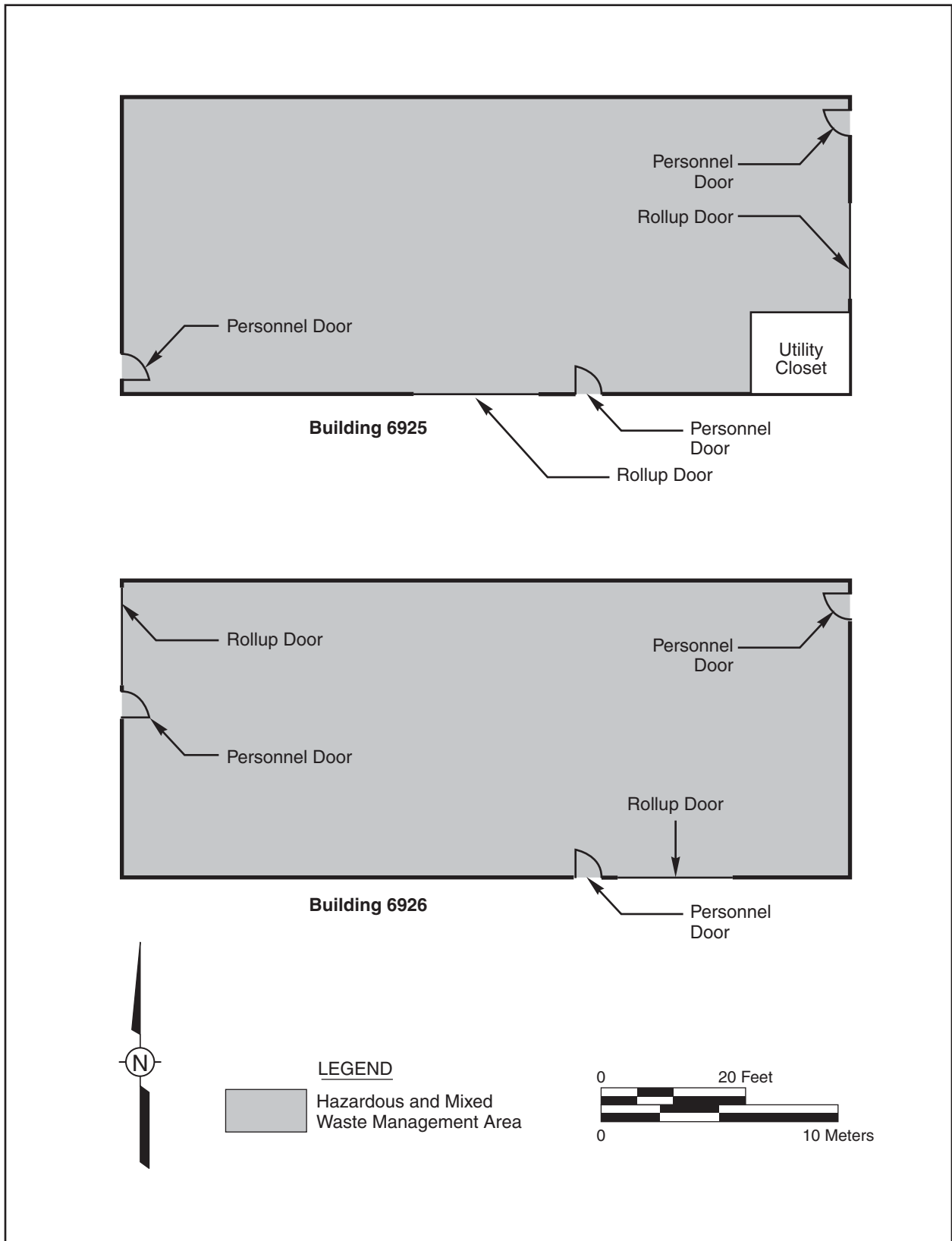


**Figure 17**

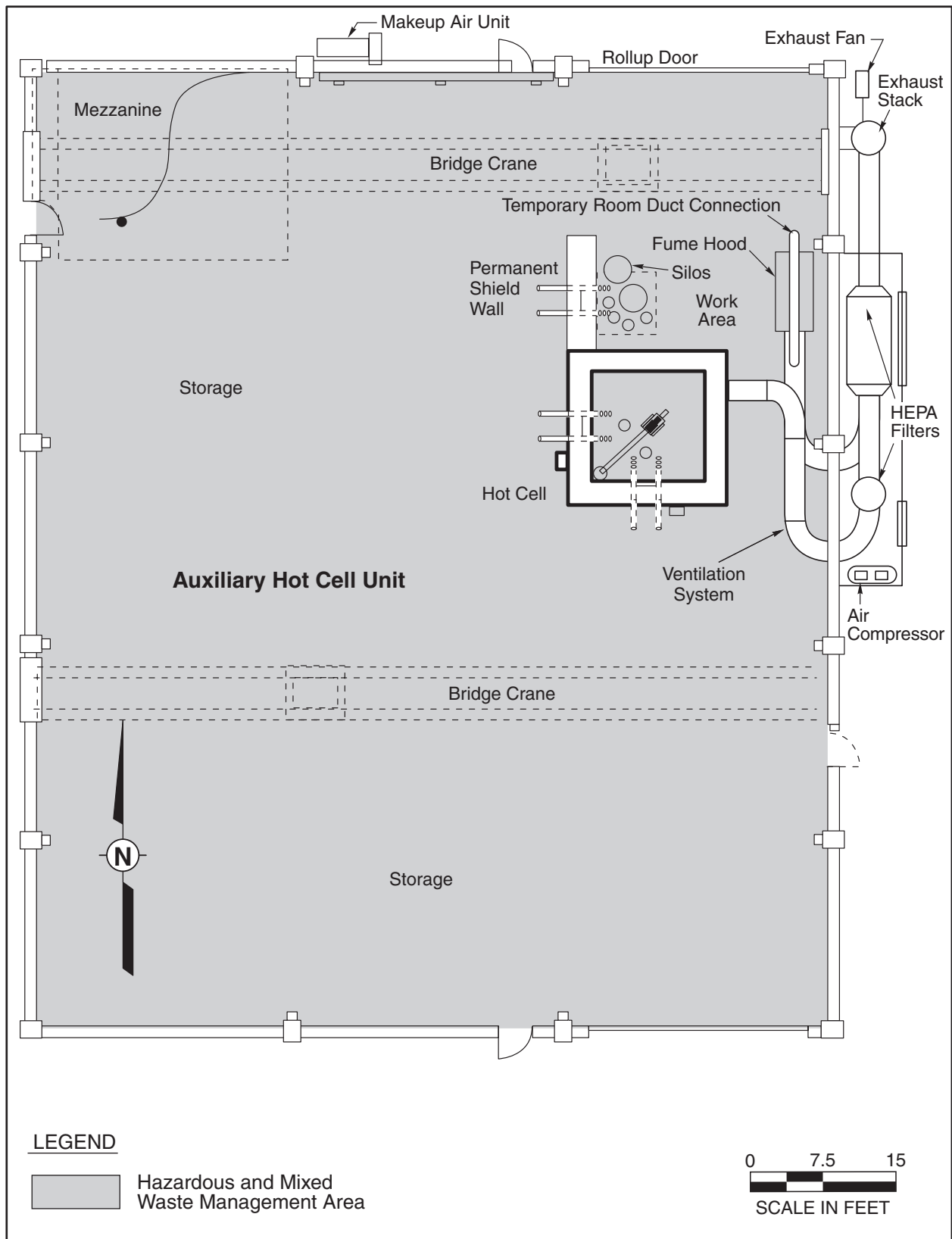
**Radioactive and Mixed Waste Management Unit, Building 6920, Hazardous and Mixed Waste Management Areas**



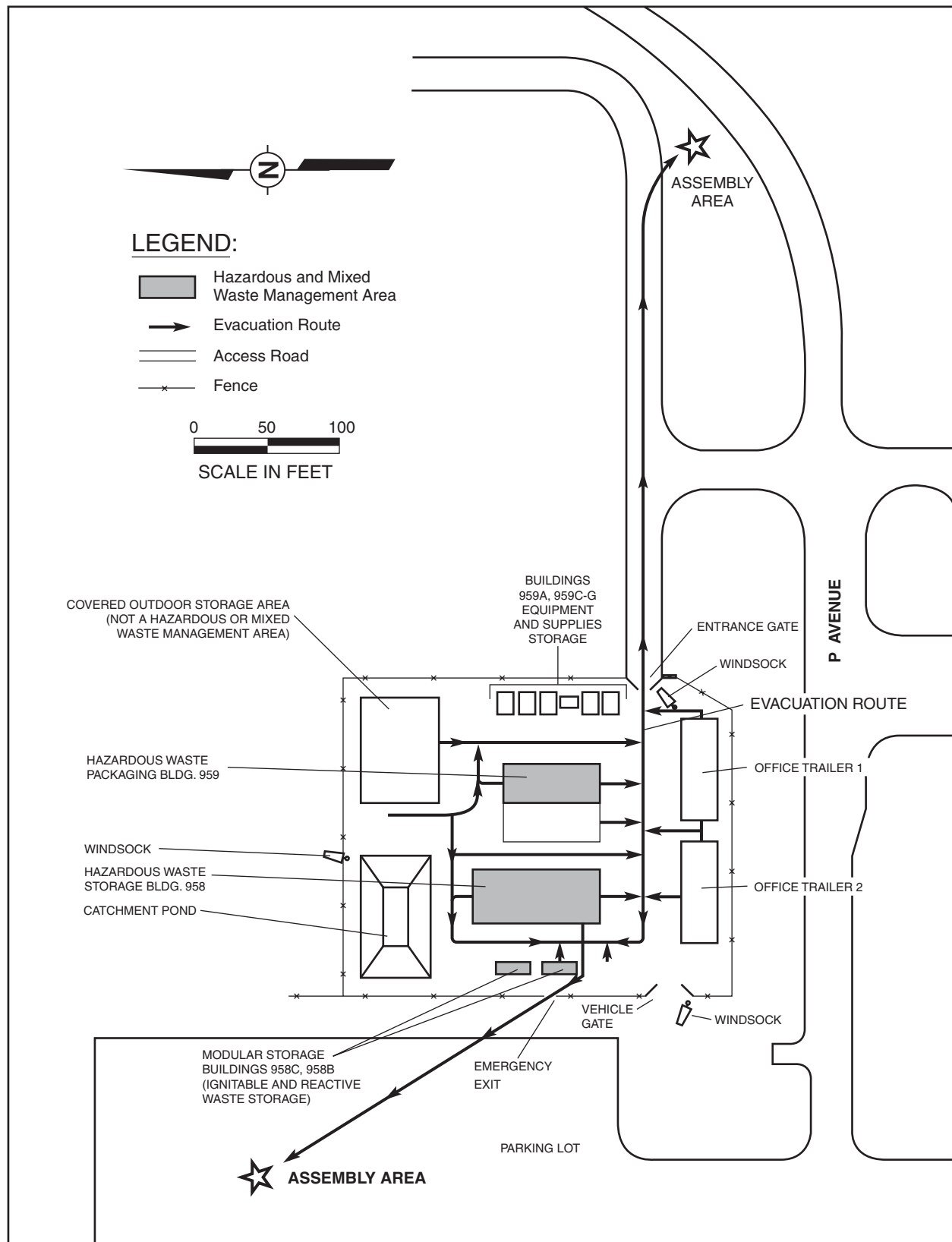
**Figure 18**  
**Radioactive and Mixed Waste Management Unit,**  
**Building 6921, Hazardous and Mixed Waste Management Areas**



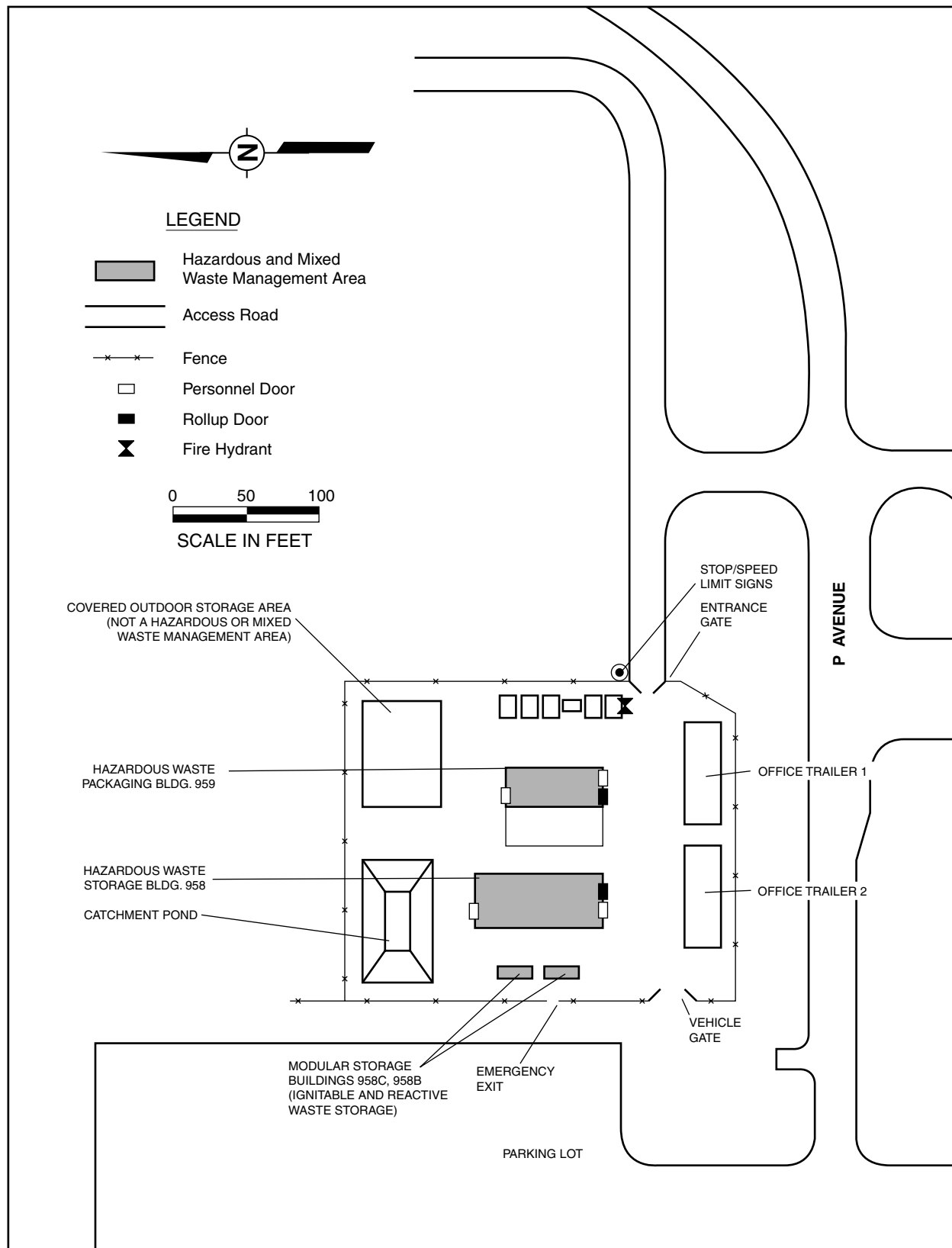
**Figure 19**  
**Radioactive and Mixed Waste Management Unit,**  
**Buildings 6925 and 6926, Hazardous and Mixed Waste Management Areas**



**Figure 22**  
**Auxiliary Hot Cell Unit, Hazardous and Mixed Waste Management Areas**

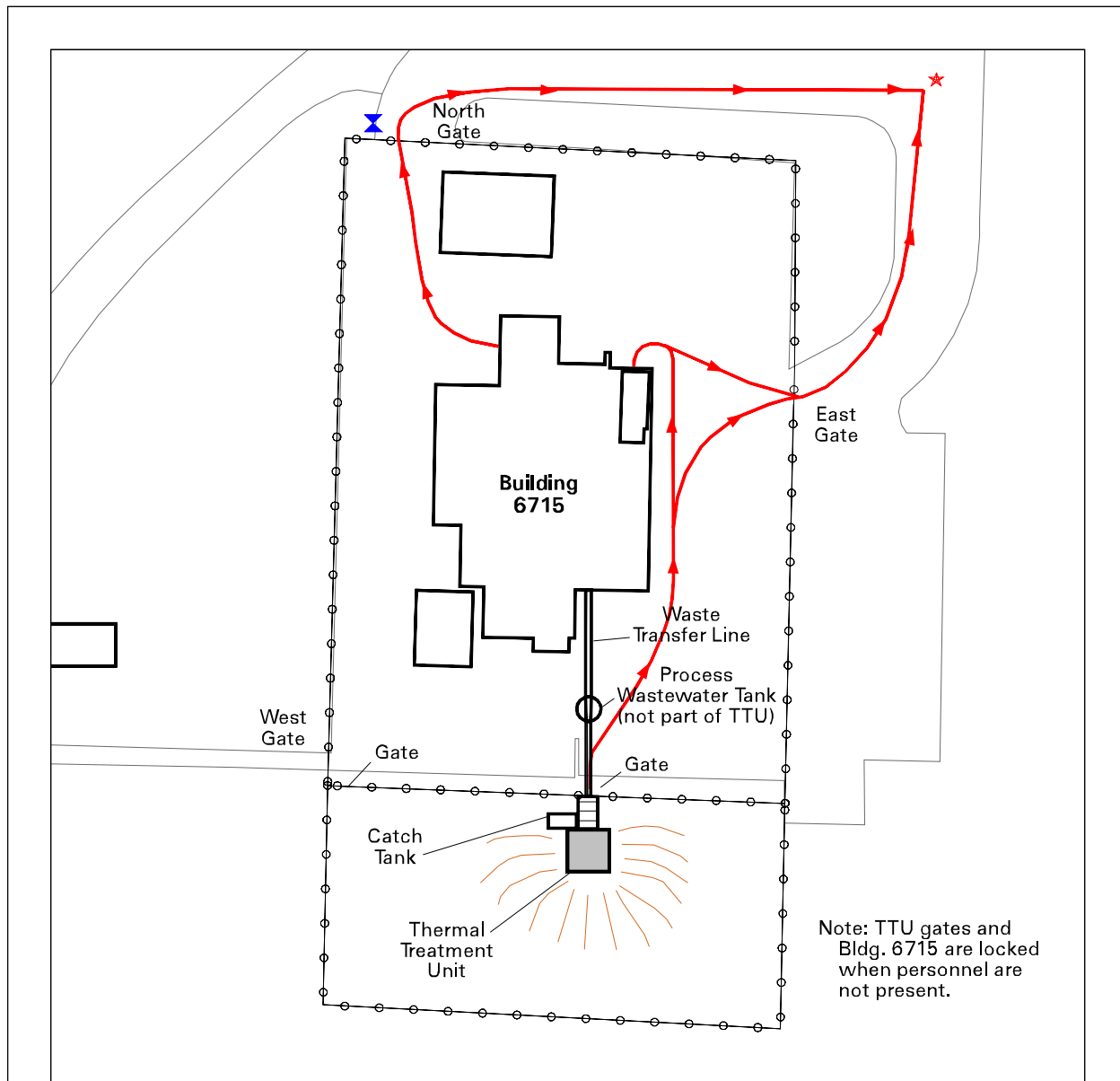


**Figure 43**  
**Hazardous Waste Handling Unit Evacuation Routes**


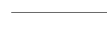
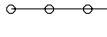








**Figure 44**

**Hazardous Waste Handling Unit Emergency Response and Access Information**



**Legend**

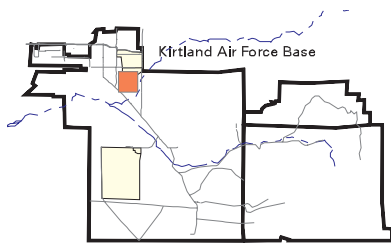
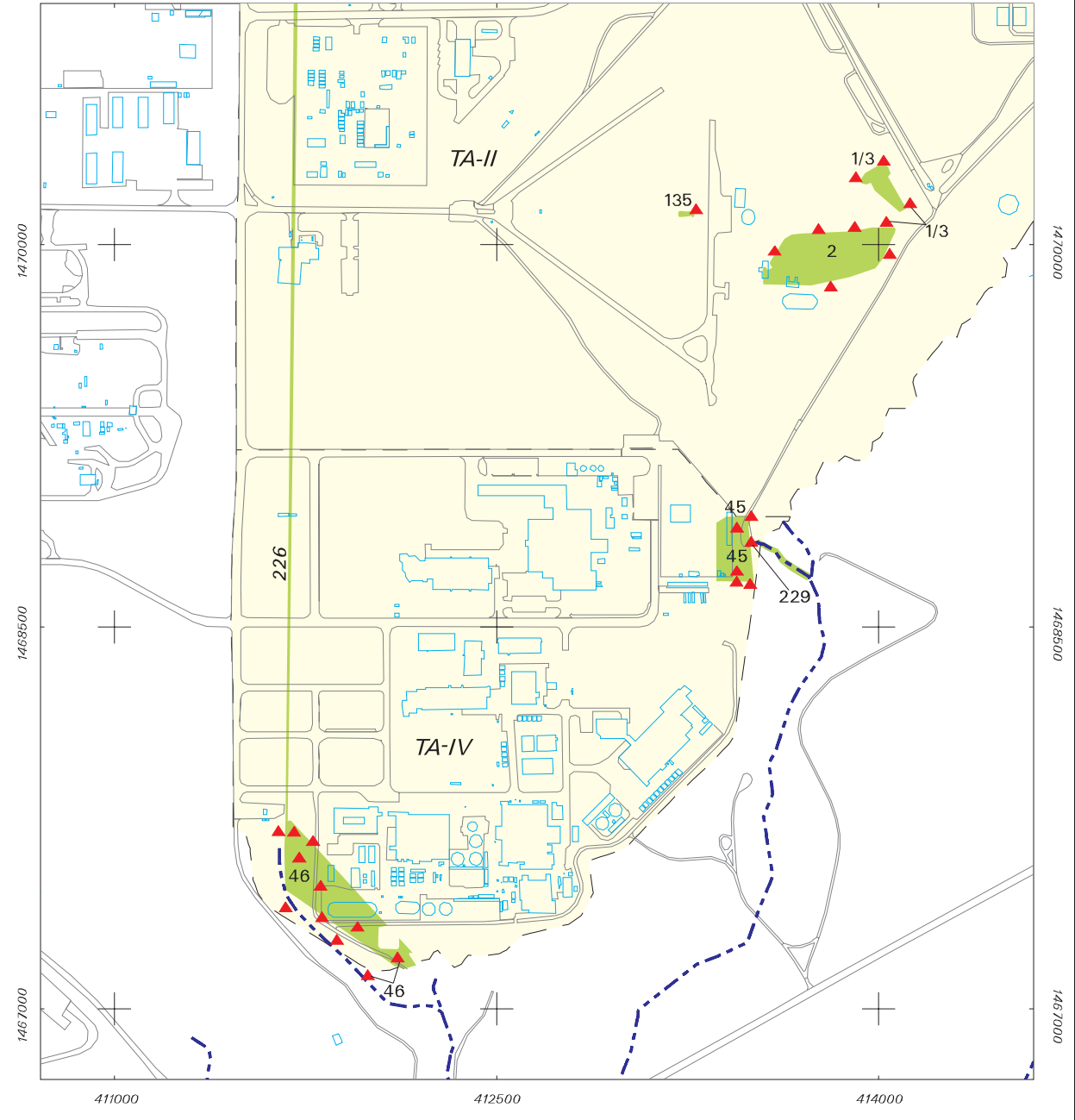
-  Earthen Berm
-  Road / Parking
-  Fence
-  Evacuation Route
-  Building / Structure
-  Hazardous Waste Management Area
-  Steps
-  Assembly Area
-  Fire Hydrant

0 25 50  
Scale In Feet






0 6 12  
Scale In Meters



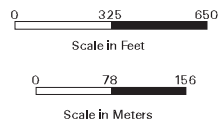
**Figure 45**  
**Thermal Treatment Unit (TTU)**  
**Evacuation Route**

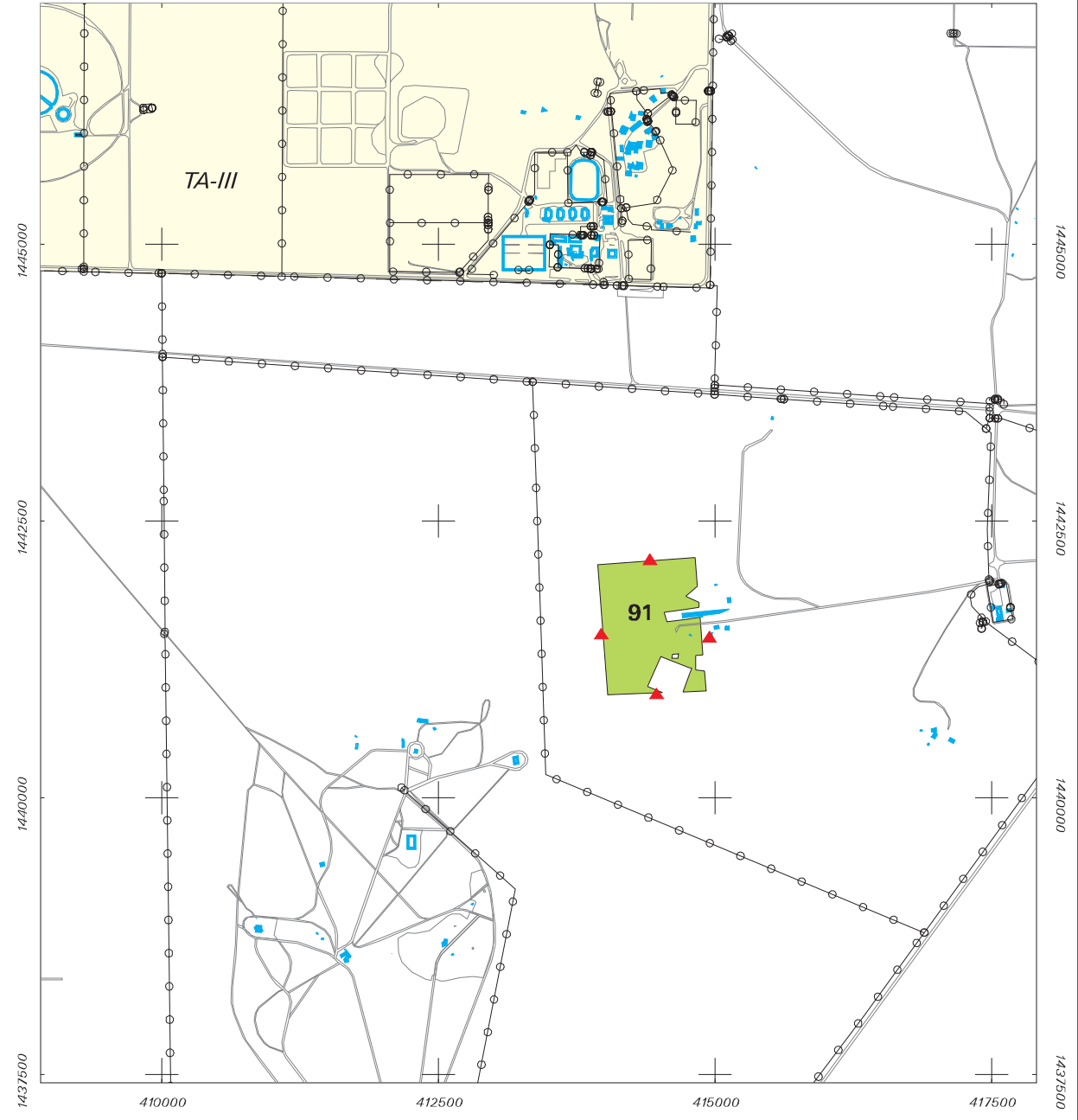


**Legend**

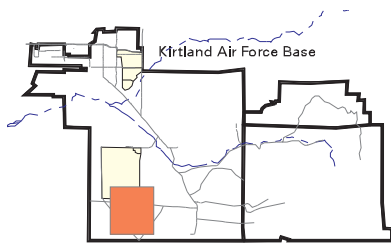
-  Sign Location
-  Road
-  Surface Drainage
-  Building / Structure
-  SWMU with Controls
-  SNL Tech Area II & IV




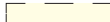
**Figure 2**  
**Solid Waste Management Units -**  
**Corrective Action Complete with**  
**Controls, Tech Areas II and IV**



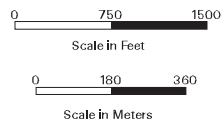


**Legend**



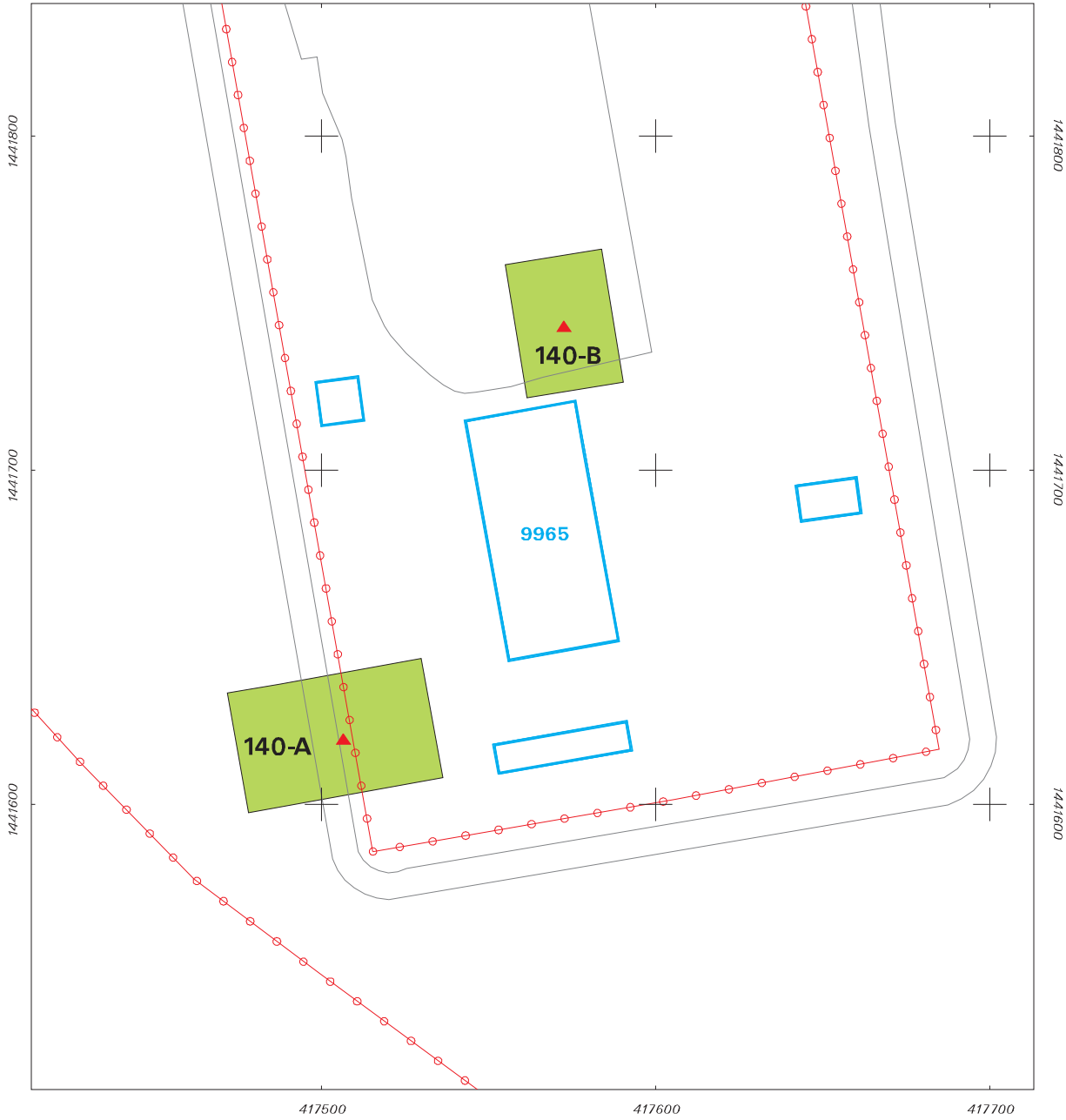
-  Sign Location
-  Road
-  Fence
-  Building / Structure
-  SWMU with Controls
-  SNL Tech Area III

**Figure 4**  
**Solid Waste Management**  
**Unit 91 - Corrective Action**  
**Complete with Controls**








Projection: New Mexico State Plane, Central  
 Zone 3002, 1927 North American Datum

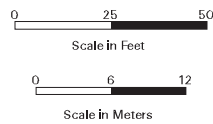
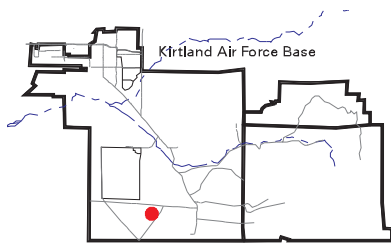
Sandia National Laboratories, New Mexico  
 Environmental Geographic Information System



**Legend**

-  Sign Location
-  Unpaved Road
-  Fence
-  Building / Structure
-  SWMU with Controls

**Figure 5**  
**Solid Waste Management**  
**Unit 140 - Corrective Action**  
**Complete with Controls**



Projection: New Mexico State Plane, Central  
Zone 3002, 1927 North American Datum

Sandia National Laboratories, New Mexico  
Environmental Geographic Information System