



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

Dear Mr. Beausoleil:

Subject: ***Certification and Notification of Class 1 Modifications to Hazardous Waste Operating Permit NM5890110518-1 for Sandia National Laboratories/New Mexico (SNL/NM)***

Sandia Corporation (Sandia) is requesting that your office submit the enclosed materials to the New Mexico Environment Department (NMED) on or before **July XX, 2013**. The enclosures include modifications to Operating Permit NM58901105018-1 (the Permit) for the Hazardous Waste Management Facility (HWMF) at SNL/NM.

The permit changes are discussed below and are presented in enclosures to this letter in accordance with the requirements of New Mexico Administrative Code, Title 20, Chapter 4, Part 1, Subpart IX (20.4.1.900 NMAC) incorporating Title 40 of the Code of Federal Regulations, Part 270.42(a) (40 CFR 270.42(a)).

The changes affect Permit Attachment E *Contingency Plan*. Sandia is modifying the plan to reflect the following changes:

- Changes in personnel who serve as emergency coordinators (listed in Section 2.1 of the plan).
- Updates to department and organization names and titles.
- Correction of errors.

All the changes are summarized in Attachment A to this letter. The revised plan, with changes shown in redline/strikeout format, is enclosed as Attachment B. A clean copy of the entire revised plan is also enclosed as Attachment C.

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

If you have any questions regarding the proposed modifications, please contact Fran Nimick, Senior Manager, at (505) 284-2577/fbnimic@sandia.gov or Jeffrey Jarry, Manager, at (505) 284-3080/jfjarry@sandia.gov.

Sincerely,

Michael W. Hazen
Vice President

Enclosures:

1. Notification of Class 1 Modifications to Hazardous Waste Operating Permit NM5890110518-1, Certification Statement
2. Notification of Class 1 Modifications to Hazardous Waste Operating Permit NM5890110518-1 (consists of Attachments A, B, and C)

Copy to (w/enclosures):

MS-0184 David Rast, NNSA/SFO

MS-0184 Cynthia Wimberly, NNSA/SFO

MS-0184 SFO Waste Management File, NNSA/SFO

Blind copy to (w/enclosures):
MS-0651 Customer Funded Records Center, 09532

Blind copy to (w/o enclosures):
MS-0141 Amy J. Blumberg, 11100
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MS-0729 Francis B. Nimick, 04140
MS-0729 Anita S. Reiser, 04144
MS-1151 Jeffrey F. Jarry, 04144

**Notification of Class 1 Modifications
Hazardous Waste Operating Permit NM5890110518-1**

**Sandia National Laboratories
Albuquerque, New Mexico**

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.

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

Date signed

and

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

Date signed

Attachment A

Summary of Changes

Sandia National Laboratories
Hazardous Waste Management Facility Contingency Plan

Permit NM5890110518-1

ATTACHMENT A
SUMMARY OF CHANGES FOR HAZARDOUS WASTE MANAGEMENT FACILITY
PERMIT NM5890110518-1

June 2013

Item No.	Location	Current Language	Revised Language	Explanation for Change	Modification Class Rationale
1	Attachment E, <i>Contingency Plan</i> Cover	<u>September 2011</u> Approved by: <u>Pamela M. Puissant, Acting Department Manager, 4144</u> Date	<u>June 2013</u> Approved by: <u>Jeffrey F. Jarry, Department Manager, 4144</u> Date	Revise date of plan. Update personnel names.	<i>Class 1 modification.</i> Administrative change. 20.4.1.900 NMAC, 40 CFR 270.42, Appendix I, Modification A.1.
2	Attachment E, <i>Contingency Plan</i> All pages	<u>PLA94-23 Rev. 21 ICN00</u> <u>Page 1 of 29 September 2011</u>	<u>PLA94-23 Rev. 22 ICN00</u> <u>Page 1 of 29 June 2013</u>	Update revision number. Revise date.	<i>Class 1 modification.</i> Administrative change. 20.4.1.900 NMAC, 40 CFR 270.42, Appendix I, Modification A.1
3	Attachment E, <i>Contingency Plan</i> Table of Contents	2.1 FEC ASSIGNMENTS <u>September 2011</u> 9	2.1 FEC ASSIGNMENTS <u>June 2013</u> 9	Revise date.	<i>Class 1 modification.</i> Administrative change. 20.4.1.900 NMAC, 40 CFR 270.42, Appendix I, Modification A.1
4	Attachment E, <i>Contingency Plan</i> Section 1.1 Page 2	<ul style="list-style-type: none"> • Hazardous Waste Management Facility, SNL/NM • Emergency Operations Center, SNL/NM • Regulated Waste and Pollution Prevention Department, SNL/NM • New Mexico Environment Department • Department of Energy, National Nuclear Security Administration, Sandia <u>Site Office, Oversight and Assessments</u> 	<ul style="list-style-type: none"> • Hazardous Waste Management Facility, SNL/NM • Emergency Operations Center, SNL/NM • Waste <u>Management</u> and Pollution Prevention Department, SNL/NM • New Mexico Environment Department • Department of Energy, National Nuclear Security Administration, Sandia <u>Field</u> Office 	Update department and organization titles	<i>Class 1 modification.</i> Administrative change. 20.4.1.900 NMAC, 40 CFR 270.42, Appendix I, Modification A.1

ATTACHMENT A
SUMMARY OF CHANGES FOR HAZARDOUS WASTE MANAGEMENT FACILITY
PERMIT NM5890110518-1

June 2013

Item No.	Location	Current Language	Revised Language	Explanation for Change	Modification Class Rationale
5	Attachment E, <i>Contingency Plan</i> Sections 1.2, 1.3, and 1.4 Pages 3, 6, and 8	... the <u>Regulated</u> Waste and Pollution Prevention Department the Waste <u>Management</u> and Pollution Prevention Department ...	Update department title.	<i>Class 1 modification.</i> Administrative change. 20.4.1.900 NMAC, 40 CFR 270.42, Appendix I, Modification A.1
6	Attachment E, <i>Contingency Plan</i> Section 2.1, Page 9	<p>Primary: David Castillo 284-4192 269 <u>1705 951-6340</u> P.O. Box 5800 MS-1117 Albuquerque, New Mexico <u>87185-1117</u></p> <p><u>Alternate: Ken Tetreault 844-1346 or 270-4089 822-6336 283-1949</u> <u>P.O. Box 5800</u> <u>MS-1117</u> <u>Albuquerque, New Mexico</u> <u>87185-1117</u></p> <p><u>Alternate: Chris Dean 284-8083 or 350-4982 268-8913 283-1942</u> <u>P.O. Box 5800</u> <u>MS-1117</u> <u>Albuquerque, New Mexico</u> <u>87185-1117</u></p> <p><u>Alternate: Mary Ann Krauss 845-9997 299-0793 951-6335</u> <u>P.O. Box 5800</u> <u>MS-1117</u> <u>Albuquerque, New Mexico</u> <u>87185-1117</u></p>	<p>Primary: David Castillo 284-4192 269 <u>1705 269-1705</u> P.O. Box 5800 MS-1117 Albuquerque, New Mexico <u>87185-1117</u></p> <p><u>Alternate: Chris Dean 284-8083 350-4982 350-4982</u> <u>P.O. Box 5800</u> <u>MS-1117</u> <u>Albuquerque, New Mexico</u> <u>87185-1117</u></p> <p><u>Alternate: Mary Ann Krauss 845-9997 299-0793 250-2422</u> <u>P.O. Box 5800</u> <u>MS-1117</u> <u>Albuquerque, New Mexico</u> <u>87185-1117</u></p> <p><u>Alternate: Therese Martinez-Loner 284-5028 401-0381 401-0381</u> <u>P.O. Box 5800</u> <u>MS-1117</u> <u>Albuquerque, New Mexico</u> <u>87185-1117</u></p> <p><u>Alternate: Angel Ripoll 284-5334 573-0562 573-0562</u> <u>P.O. Box 5800</u> <u>MS-1117</u></p>	Update emergency coordinator information to reflect current personnel responsibilities and contact information	<i>Class 1 modification.</i> Changes in name, address, or phone number of coordinators. 20.4.1.900 NMAC, 40 CFR 270.42, Appendix I, Modification B.6.d

ATTACHMENT A
SUMMARY OF CHANGES FOR HAZARDOUS WASTE MANAGEMENT FACILITY
PERMIT NM5890110518-1

June 2013

Item No.	Location	Current Language	Revised Language	Explanation for Change	Modification Class Rationale
			<u>Albuquerque, New Mexico</u> <u>87185-1117</u> <u>Alternate: Tony Mocadlo 844-0564 332-</u> <u>9168 283-1947</u> <u>P.O. Box 5800</u> <u>MS-1117</u> <u>Albuquerque, New Mexico</u> <u>87185-1117</u>		
7	Attachment E, <i>Contingency Plan</i> Section 2.2 Page 10	... the <u>Regulated</u> Waste and Pollution Prevention Department the Waste <u>Management</u> and Pollution Prevention Department ...	Update department title.	<i>Class 1 modification.</i> Administrative change. 20.4.1.900 NMAC, 40 CFR 270.42, Appendix I, Modification A.1
8	Attachment E, <i>Contingency Plan</i> Section 3.0 Page 12	The Planning Section is responsible for collection of data (resources available, <u>whether</u> , field observations, etc.)	The Planning Section is responsible for collection of data (resources available, <u>weather</u> , field observations, etc.)	Correct typographical error.	<i>Class 1 modification.</i> Correction of typographical errors. 20.4.1.900 NMAC, 40 CFR 270.42, Appendix I, Modification A.2
9	Attachment E, <i>Contingency Plan</i> Sections 3.2, 3.2.3, 5.2, and 5.3 Pages 18, 21, 28, and 29	... <u>Regulated</u> Waste and Pollution Prevention Department Waste <u>Management</u> and Pollution Prevention Department ...	Update department title.	<i>Class 1 modification.</i> Administrative change. 20.4.1.900 NMAC, 40 CFR 270.42, Appendix I, Modification A.1

Attachment B

Sandia National Laboratories
Hazardous Waste Management Facility Contingency Plan
Revision 22

Redline/Strikeout Format

**CONTINGENCY PLAN
FOR THE
HAZARDOUS WASTE MANAGEMENT FACILITY**

Sandia National Laboratories
Albuquerque, New Mexico

June 2013September 2011

Recommended by:

David Castillo, Hazardous Waste Facility Site Manager

Date

Approved by:

Jeffrey F. Jarry Pamela M. Puissant, Acting Department Manager, 4144

Date

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ATTACHMENT 1 – HWMF EVACUATION ROUTES

1.0 INTRODUCTION

Sandia National Laboratories/New Mexico (SNL/NM) has prepared this Resource Conservation and Recovery Act (RCRA) Contingency Plan for the Hazardous Waste Management Facility (HWMF) in compliance with New Mexico Administrative Code, Title 20, Chapter 4, Part 1 (20 NMAC 4.1), Subpart IX, 40 Code of Federal Regulations (CFR) 270.14(b)(7) and 20 NMAC 4.1, Subpart V, 40 CFR 264.50 through 264.56, as applicable. This plan consists of descriptions and emergency procedures specific to the Hazardous Waste Management Facility (HWMF). This Contingency Plan supersedes all previous revisions.

Independent from this Plan, SNL personnel have also prepared SNL Emergency Plans and Procedures. The SNL Emergency Plan, incorporated in this Plan by reference, describes the corporate emergency response for all SNL/NM facilities. The SNL Emergency Plan also describes all of the written agreements between SNL/NM and local emergency response teams such as the Kirtland Air Force Base (KAFB) Fire Department, City of Albuquerque, and nearby hospitals. The SNL Emergency Plan is maintained and implemented by SNL/NM emergency management personnel.

1.1 DISTRIBUTION

To assure proper implementation in the event of any emergency, this Contingency Plan must be studied and understood by all personnel involved in the handling, storage, or treatment of hazardous waste at the HWMF and by personnel required to respond to emergency situations involving hazardous waste.

Copies of this RCRA Contingency Plan will be on file at the following locations:

- Hazardous Waste Management Facility, SNL/NM
- Emergency Operations Center, SNL/NM
- Regulated Waste Management and Pollution Prevention Department, SNL/NM
- New Mexico Environment Department
- Department of Energy, National Nuclear Security Administration, Sandia Site Field Office, Oversight and Assessments

1.2 PURPOSE

The purpose of this document is to define responsibilities, provide guidance for coordination of activities, and minimize hazards to human health or to the environment from fires, explosions, or any unplanned sudden or nonsudden release of hazardous waste. The provisions of this plan will be carried out immediately whenever there is a fire, explosion, spill, or release of hazardous waste constituents that could threaten human health or the environment outside the facility.

Minor accidents, those that can be controlled with HWMF resources and do not threaten human health, or the environment outside the HWMF boundaries, will be managed by trained HWMF personnel. After control of the situation, the Regulated Waste Management and Pollution Prevention Department Manager will be notified by the Facility Emergency Coordinator (FEC) (Section 2.0). Response to minor incidents is not considered activation of this Contingency Plan. In the case of emergencies (e.g., large spills, fire, explosion, aircraft incidents, or natural disasters) that threaten hazardous waste management activities at the HWMF, the FEC will activate this Contingency Plan and notify the SNL/NM Emergency Operations Center at 911 or 844-0911. The SNL/NM Emergency Operations Center assumes primary responsibility for response coordination.

1.3 FACILITY DESCRIPTION

SNL/NM is a multidisciplinary laboratory engaged in the research and development of weapons and alternative energy sources. SNL/NM is managed by Lockheed Martin for the U.S. Department of Energy (DOE). SNL/NM falls under Standard Industrial Classification Code Numbers 9711 (national defense organizations) and 7391 (research and development).

SNL/NM is located in Bernalillo County, New Mexico, adjacent to the southeastern boundary of Albuquerque. SNL/NM occupies an area of about 2,810 acres located in the eastern portion of the 52,233-acre KAFB. SNL/NM consists of five technical areas, designated Tech Area I through V, as well as remote test areas.

Hazardous Waste Management Facility

The HWMF is located in Tech Area II, approximately 1,000 feet north of the entrance to Tech Area II. The HWMF consists of two separate permanent buildings, the Waste Packaging Building (Building 959) and the Waste Storage Building (Building 958), located within a single 8-foot fenced enclosure. Additionally, the following structures are located at the facility within the fenced area:

- Six supply sheds (Buildings 959A, C, D, E, F, and G)
- Two identical self-contained, relocatable, prefabricated storage structures for water-reactive waste and other reactive waste (Building 958B and Building 958C)
- A waste oil storage area
- Catchment pond
- Two office trailers (Trailer Nos. 1 and 2)

The Waste Packaging Building is the easternmost building and provides 1,800 square feet of enclosed floor space. The building is of precast concrete construction with an eave height of 12 feet. Eight recessed waste holding cells and a recessed repackaging area are located in the building. The floor and lower wall surface of each recessed area is coated with an epoxy finish. A restroom, a general use area, an office area, and an area for packing materials are also present.

A deluge-type system provides fire protection throughout the building. The system is designed for Extra Hazard Group 1 occupancy and complies with the provisions of the National Fire Protection Association Standard No. 13, 1985 edition. No water-reactive waste is stored in areas protected by wet sprinkler fire suppression.

The building is also provided with intrusion alarms, lightning protection, emergency lighting, and a telephone. A 1,200-square-foot covered outdoor area extends immediately to the west of the Waste Packaging Building.

The Waste Storage Building is located west of the Waste Packaging Building. The Waste Storage Building is a 3,520-square-foot precast concrete building with an eave height of 14 feet. The building includes eight separate and recessed waste storage compartments for segregation of waste groups. The floor and lower wall surface of each storage compartment is coated with an epoxy finish. The sprinkler system in this building is a deluge-type and is also designed for Extra Hazard Group 1 occupancy. The building is equipped with a telephone, a fire alarm system, intrusion alarms, emergency lighting, and lightning protection.

Two relocatable, prefabricated safety storage structures (Buildings 958B and 958C) are designed and constructed to comply with regulatory standards applicable to the safe storage of hazardous materials. The safety storage structures are used for the storage of reactive wastes and lithium batteries and waste poison and flammable gases. They are constructed of welded 10- and 12-gauge steel with supporting structural steel sections. Each structure has three doors, each with a three-point locking system to provide access and security. The 500-gallon containment reservoirs within each building, the walls, and the ceilings are covered with two coats of chemical-resistant epoxy. The reservoirs are lined with polypropylene, which is compatible with reactive wastes. The floors are 1-inch-thick vinyl ester fiberglass grating. The buildings are equipped with a dry chemical fire suppression system and an automatic alarm-dialing system. Both the security and fire departments are notified that the dry chemical fire suppression has been released by a panel box light. The dry fire suppression system is compatible with the storage of reactive materials. Other safety features in each of the buildings

include a spill-containment subfloor constructed of continuously welded, epoxy-coated, 10-gauge steel; blow-out panels for pressure relief under explosive conditions; and a static grounding connection to protect against ignition of flammable materials by electrical discharge.

An outdoor area is located immediately west of the HWMF Waste Packaging Building and is covered by a steel-framed roof. A drum compactor is located within the concrete bermed area.

The Office Trailers are for business operations of the HWMF. Two 1960-square-foot moveable trailers are located along the south fence.

The Bermed Storage area is an approximately 3,700-square-foot concrete bermed area covered by a steel frame and roof. It is located at the northeast corner of the fenced area.

Five 160-square-foot moveable sheds (Buildings 959A, C, E, F, and G) and one 120-square-foot permanent storage shed (Building 959D) are used for equipment storage.

The HWMF is enclosed in an 8-foot, single chain-link and barbed wire fence. Offset space of at least 70 feet is provided between the permanent buildings and the fence line. The safe handling, treatment, and/or storage of hazardous waste is the responsibility of the Regulated Waste Management and Pollution Prevention Department. Hazardous chemical waste is generated at all five of the SNL/NM Tech Areas and is transported to the HWMF on a routine basis. All hazardous waste is sent to the HWMF for packaging, and storage prior to transportation off site for recycling, treatment or disposal at a permitted facility. Some waste streams are also sampled at the HWMF.

Hazardous chemical waste generated at SNL/NM that requires packaging is transported to the Waste Packaging Building. There, waste is segregated into compatible types, based on U.S. Department of Transportation (DOT) regulations (49 CFR 177.848) and placed into the appropriate holding cell. The waste is assembled into lab-packs or bulk transferred into 55-gallon drums. Completed lab-packs and full waste drums are moved to the appropriate storage

area to await transport off site for treatment, recycling, or disposal. Incompatible waste is segregated and stored in different holding cells.

Any necessary overpacking of drums or repacking of material in damaged or leaking drums occurs within the Waste Packaging Building. Waste that does not require repackaging is transported directly to the Waste Storage Building to await transport off site to disposal, treatment or recycling locations.

Waste handling equipment currently in place at the HWMF includes the following:

- Diaphragm pump
- Pneumatic pumps
- Dual-action hand pumps
- Drum-handling hand truck (two-wheel)
- Hydraulic drum handler – 800 pound capacity
- Empty drum compactor
- Forklift drum carriers

1.4 TYPES OF WASTE

Overall responsibility for hazardous waste management at SNL/NM is with the **Regulated Waste Management** and Pollution Prevention Department. Generators of hazardous waste throughout SNL/NM are responsible for properly identifying and packaging their waste before it is transported to the HWMF.

The chemical waste at SNL/NM is generated by 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 waste such as contaminated rags or nickel-cadmium batteries. This type of waste is primarily stored in the bays of the Waste Packaging Building or in lab-packs in the Waste Storage Building. Typical process waste includes large volumes (5- to 55-gallon containers) of solvents, oils, photochemicals and corrosive solutions. This type of waste is primarily stored in the Waste Storage Building. Typical environmental restoration activity waste includes contaminated soil cuttings, personal protective equipment, and decontamination fluids. This type of waste is primarily stored in the Waste Storage Building.

Because of the changing efforts at SNL/NM, the volumes and waste streams stored at the HWMF continually vary from day to day. The location of each hazardous waste and the approximate quantity of hazardous waste at each location is available at the HWMF.

1.5 HWMF SCHEDULE

SNL/NM HWMF is manned from 0800 to 1630, Monday through Thursday, and 0700 to 1530 on Friday. The Safeguards and Security Center inspects the facility every eight hours during the time the facility is closed. If an emergency is discovered during these inspections, the SNL/NM Emergency Operations Center and the FEC (Section 2.0) will be notified immediately.

2.0 FACILITY EMERGENCY COORDINATORS

2.1 FEC ASSIGNMENTS

At all times a FEC must be on site or on call (20 NMAC 4.1, Subpart V, 40 CFR 264.55). In the event that the primary FEC is not on site or available, an alternate FEC must be contacted.

<u>FACILITY EMERGENCY COORDINATOR</u>	<u>OFFICE PHONE</u>	<u>HOME PHONE</u>	<u>PAGER</u>
Primary: David Castillo <u>6340269-1705</u> P.O. Box 5800 MS-1117 Albuquerque, New Mexico 87185-1117	284-4192	269-1705	<u>951</u>
Alternate: Ken Tetreault <u>P.O. Box 5800</u> <u>MS-1117</u> <u>Albuquerque, New Mexico 87185-1117</u>	844-1346 or 270-4089	822-6336	283-1949
Alternate: Chris Dean <u>1942350-4982</u> P.O. Box 5800 MS-1117 Albuquerque, New Mexico 87185-1117	284-8083 or 350-4982	268-8913 <u>350-4982</u>	<u>283-</u>
Alternate: Mary Ann Krauss <u>6335250-2422</u> P.O. Box 5800 MS-1117 Albuquerque, New Mexico 87185-1117	845-9997	299-0793	<u>951</u>
Alternate: Therese Martinez-Loner <u>P.O. Box 5800</u> <u>MS-1117</u> <u>Albuquerque, New Mexico 87185-1117</u>	284-5028	401-0381	401-0381
Alternate: Angel Ripoll <u>P.O. Box 5800</u> <u>MS-1117</u> <u>Albuquerque, New Mexico 87185-1117</u>	284-5334	573-0562	573-0562
Alternate: Tony Mocadlo <u>P.O. Box 5800</u> <u>MS-1117</u> <u>Albuquerque, New Mexico 87185-1117</u>	844-0564	332-9168	283-1947

2.2 FEC RESPONSIBILITIES

When the FEC is notified of an incident, he must first determine if procedures for minor incidents or for emergencies should be implemented. In the case of minor incidents, the FEC will coordinate the response. In the case of emergencies, the FEC will relinquish control to the Incident Commander (IC) (assigned by the Emergency Operations Center Emergency Response Director) when he or she arrives to handle the emergency; however, the FEC will remain on hand to provide technical guidance and relevant information about the HWMF.

The FEC will ensure that personnel assigned to the HWMF are trained in the location and use of safety showers/eyewash, fire extinguishers, and emergency protective clothing; in emergency procedures; and in evacuation procedures.

During minor incidents at the HWMF, or until the IC arrives, the FEC has three primary responsibilities:

1. Assess the Situation. By observing the scene, interviewing personnel, and/or reviewing records, the FEC must gather information relevant to the response, such as the type of event, quantity and type of released material, and actual or potential hazards to human health or the environment.
2. Protect Personnel. The FEC should take any reasonable measures to ensure the safety of personnel, such as activating the fire alarm, accounting for HWMF personnel, attending to injuries, or coordinating the evacuation of HWMF personnel, if necessary. If evacuation is indicated for other personnel, the IC must be informed.
3. Contain or Mitigate the Hazards. The FEC should take reasonable measures to ensure that fires, explosions, or releases do not occur, recur, or spread. For example, released water-reactive material should be kept dry.

After both minor incidents and emergencies, the FEC must ensure that the facility and equipment are cleaned, waste is properly handled and disposed, and the HWMF is safe to resume operation. Before operations are resumed, the FEC must contact the Regulated-Waste Management and Pollution Prevention Department, who will inform the appropriate agencies, if necessary. See Emergency Recovery Procedures, Section 5.0.

3.0 HWMF RESPONSE PROCEDURES

During normal working hours, the first person to become aware of an incident shall contact the FEC. Note that any person is authorized to implement the evacuation procedures and notify the SNL/NM Emergency Operations Center in the unlikely event that the FEC and all alternate FECs cannot be contacted or respond in a timely manner.

Only personnel trained in incident response activities will approach or handle unplanned situations. All other personnel will leave the vicinity of the unplanned conditions.

The FEC will assess the situation and determine the scale of the incident. If the FEC determines that an emergency situation exists at the HWMF (i.e., large spills, fire, explosion, aircraft incidents, or natural disasters) that threatens human health or the environment outside the HWMF, he will immediately notify the SNL/NM Emergency Operations Center at 911 or 844-0911 and activate this Contingency Plan. The SNL/NM Emergency Operations Center then assumes primary responsibility for emergency response coordination. The SNL/NM Emergency Operations Center will notify the National Response Center (1-800-424-8802) with the details of the emergency, if necessary.

The SNL/NM Emergency Operations Center operates within the SNL/NM Incident Command System (ICS) – a management system used to coordinate the efforts of all SNL/NM response teams and capabilities and other response teams, such as KAFB Fire Department, as needed. The ICS is a system that is implemented at the time an incident occurs, expanded to control the incident as needs arise, and which remains in effect until the need for management no longer exists. The SNL/NM Emergency Operations Center, when activated, is manned by the Emergency Response Director and a staff consisting of DOE personnel, SNL/NM management, KAFB staff, and representatives from various response groups. Under the SNL/NM Emergency Operations Center, the IC is responsible for management of operations at the emergency site. The IC coordinates operations with the four SNL/NM Emergency Operations Center sections:

Operations, Logistics, Safety, and Planning. The Operations Section identifies and carries out the actions necessary at the site to contain the emergency.

The Logistics Section identifies, acquires, deploys, and mobilizes the supplies, material, and equipment needed to deal with an emergency. Under the Logistics Section, Facilities Engineering has teams capable of responding to incidents that require knowledge of buildings and utilities; use of heavy equipment; and transportation of material, equipment, or personnel.

The Safety Section is responsible for ensuring that Medical and ES&H resources are available as needed. The Medical organization has established a Medical emergency response team that responds to all medical emergencies during operational hours. The type of response to each emergency is determined through information received about the emergency. ES&H is primarily responsible for responding to releases of hazardous or toxic materials at facilities located within SNL/NM and for providing consulting services associated with personnel safety and health.

The Planning Section is responsible for collection of data (resources available, whetherweather, field observations, etc.)

3.1 MINOR INCIDENTS

In the event that the FEC determines an incident to be minor, a person will be assigned to standby at a safely located telephone. At the first indication of incident escalation, the standby person will be instructed to notify SNL/NM Emergency Operations Center at 911 or 844-0911. If the incident can be easily handled by the on-hand equipment, supplies, and labor, then it is a minor incident. Minor incidents do not require activation of this Contingency Plan.

Note: In no instance will a fire be considered a minor incident.

3.1.1 Controlled Spills

Since the HWMF usually handles hazardous waste in containers equal to or less than an 85-gallon drum, hazardous waste spills generally would be expected to be of 85 gallons or less.

- The first priority in a spill is personnel protection – do not attempt to do anything to a spill until proper personal protective equipment has been donned. Stay clear of the spill area, then assess the type of material spilled so proper cleanup procedures can be followed. Great caution in handling a spill must be exercised.
- The second priority in a spill is containment – if the spill is not in a contained area, use absorbent material to contain the spread of the spill before attempting sampling or cleanup.

A. If a spill occurs while working with a material:

1. Evacuate the immediate area, notify the FEC, and don appropriate personal protective equipment for exposure to the material.
2. If possible, secure the source of the release (i.e., tip the drum to stop the leak).
3. Use a portable hand-pump to transfer the spill to a new receiving drum if the material spilled is sufficient to form a pumpable pool.
4. After pumping or if the spill is small, spread absorbent over the area of the spill and transfer the contaminated absorbent to the new receiving drum.
5. Stabilize flammable solvent spills with the organic solvent spill kit.
6. Stabilize other chemical spills using the SNL/NM acid and caustic spill kits or by the addition of absorbent.
7. Handle the stabilized material as a hazardous waste. Sweep, shovel, or pump it back into the drums.
8. Remove contaminated soil, if any, and transfer to new receiving drums.
9. Remove any contamination from floors, walls, and other containers with a solvent appropriate to the spilled material and transfer all solvent and cleaning materials to the new receiving drum.
10. Properly identify the new receiving drum.
11. Promptly complete a weekly inspection log and include the details of the spill and cleanup in the log.
12. Handle the original spill container in the same manner as a bulging or leaking drum.
13. Decontaminate all reusable spill cleanup equipment.

B. If an unattended spill is discovered:

1. Leave the immediate area of the spill, notify the FEC, and don complete personal protective equipment including a Self-Contained Breathing Apparatus (SCBA).
2. Cautiously approach the area of the spill and attempt to ascertain the source of the spill.
3. If the spill material can be identified from the source container, handle the spill as in A above.
4. If the spill material cannot be identified, collect a sample of the material.
5. Obtain a rush analysis of the sample from an SNL/NM or commercial laboratory.
6. Once the material has been identified, proceed as in A above.

3.1.2 Leaking or Punctured Drums

1. Leave the immediate area and notify the FEC.
2. Identify the material inside the drum, based on drum log or inventory records.
3. Based upon the hazardous characteristics of the material in the drum, select appropriate personal protective equipment.
4. After donning personal protective equipment and securing emergency equipment, spread absorbent material around the drum to absorb the leak.
5. If the spill material can be identified from the source container, handle the spill as in A above.
6. Be certain that the contents of the leaking drum have been emptied into the new receiving drum.
7. Crush the leaking drum and handle as determined by the HWMF Disposal/Request (DR) chemist.

3.1.3 Bulging Drums

1. Notify the FEC.

2. Identify the material inside the drum, based on log or inventory records.
3. Based upon the hazardous characteristics of the material in the drum, select appropriate personal protective emergency equipment and a new receiving drum.
4. After donning personal protective equipment and securing emergency equipment, carefully and slowly open a bung to relieve the internal pressure.
5. Use a portable pump to transfer the material from the bulging drum to the new receiving drum. Properly mark new receiving drum.
6. Be certain that the contents of the bulging drum have been emptied into the new receiving drum.
7. Crush the drum and dispose of it as determined by the HWMF DR chemist.
8. Clean up any material that spilled during the transfer.
9. Record event summary in facility operating record.

3.1.4 Personal Exposure

In the event of chemical material in the eye or on the skin:

1. Notify the FEC.
2. Wash the eye(s) or skin using the permanent shower/eyewash station for at least 15 minutes.
3. Hold the eyelids open during washing.
4. Call 911 or 844-0911 to arrange for transport of the injured person to the SNL/NM Medical Clinic for evaluation.
5. If possible, the FEC should ascertain what chemical material was involved in the injury and give the information to the SNL/NM Medical Clinic.

In the event of:

- Irritation of the eyes, breathing passages or skin
- Difficulty in breathing
- Nausea, light-headedness, vertigo, or blurred vision

Personnel will:

1. Notify the FEC.
2. Evacuate and barricade the area to prevent unauthorized entry.
3. Call 911 or 844-0911 to arrange for transport of the injured person to the SNL/NM Medical Clinic for evaluation.
4. The FEC should attempt to ascertain what, if any, chemical exposure occurred and what corrective measures are appropriate.

3.1.5 Power Failure

The only equipment at the HWMF that would be affected by a power failure are the building lights, alarm system, ventilation exhaust fan, and electrical pumps. All other equipment is either self-powered or manually operated. The HWMF is equipped with an emergency power source in the event of utility failure. However, should total power failure occur, battery-operated lights will automatically turn on. Manually operated drum carts and pumps may be utilized. In the event of a power failure, secure any work in progress within the HWMF until power is restored.

3.1.6 Equipment Failure at the HWMF

1. Lights: Fixed battery-operated lights will operate.
2. Alarms: Emergency power supply will operate alarm devices.
3. Pumps: Use portable manually or pneumatically operated pumps.
4. Drum-handling equipment: Call the Transportation Team and secure forklifts and drum-handling equipment.
5. Personal Protective Equipment: Replace, as needed, with supplies in the HWMF equipment storage areas.
6. Vehicles: Call the Transportation Team and secure replacements for vehicle.
7. Telephone: Use cellular telephones.
8. Fire sprinklers: Use portable fire extinguishers.

3.2 EMERGENCIES

In the event of an emergency, the FEC or an assignee will immediately telephone the SNL/NM Emergency Operations Center (911 or 844-0911). Emergencies require the activation of this Contingency Plan and SNL/NM emergency response resources. Upon arrival at the scene, the IC will determine the extent of the emergency, cordon off the area, and notify appropriate response personnel. All personnel not involved in combating the emergency will be directed to evacuate the area and assemble in a convenient location upwind and away from the involved area.

If the FEC and IC determine that the emergency could threaten human health or the environment outside of KAFB, the IC or assignee will then notify the National Response Center (1-800-424-8802) and the New Mexico Spill Response (505-827-9329) to provide the following information:

1. Name and telephone number of reporter
2. Name and address of facility
3. Time and type of incident (e.g., fire, release, explosion)
4. Name and quantity of materials involved to the extent known
5. Extent of injuries, if any, and
6. The possible hazards to human health or the environment outside of KAFB.

The Regulated-Waste Management and Pollution Prevention Department will report the same information to the Secretary, New Mexico Environment Department (NMED).

The FEC must be especially cognizant of the potential release of hazardous materials and take every available measure to minimize the magnitude of that release.

3.2.1 Fire

Any fire in the HWMF vicinity is defined as an emergency. This includes any fire involving hazardous waste or hazardous material, or any building, vegetation, or nonhazardous waste fire that threatens to ignite hazardous waste.

1. Prior to any fire fighting, the KAFB fire department will be notified by activation of a manual pull alarm, activation of an automatic fire alarm, or by dialing the SNL/NM Emergency Operations Center at 911 or 844-0911.
2. Fire-fighting personnel must wear appropriate personal protective equipment.
3. If the fire is small and the fuel source is small, portable fire extinguishers may be used to put out the fire.

Note: Use only Lith-X fire extinguishers for water-reactive waste.

4. Whenever possible, remove flammable material from the area of fire.
5. If the fire spreads or increases in intensity, all personnel should evacuate to an upwind point at least 100 yards away from the fire.
6. The FEC should remain near the site, but at a safe distance, so he can advise the personnel responding to the fire of the known hazards.
7. Ensure that storm drains and/or sewers do not receive potentially hazardous runoff. Build dikes around storm drains or close any valves controlling discharge.
8. Upon arrival at a fire, the KAFB fire department officer-in-charge will be in command of fire fighting. He will accept and evaluate the advice of SNL/NM personnel and emergency response organization members, but he retains the responsibility to select the fire-fighting methods and tactics.
9. The IC will be in overall control of SNL/NM emergency response efforts until the emergency is terminated.
10. Materials involved in a fire can be identified in the following ways:
 - The location of the drum may indicate the contents of the drum (e.g., drums in the caustic storage bay contain caustics).
 - If the location of the drum does not indicate its contents, the label number can be used to identify the material. Records on the contents of each drum are kept in database that can be accessed from off site or in the HWMF office.
 - If the label has been burned, the number painted on the drum can be used to identify the material.

- If the label and number are destroyed by fire, the material will be treated as an unknown and analyzed according to methods in the SNL/NM Waste Analysis Plan and U.S. EPA "Test Methods for Evaluating Solid Waste Physical Chemical Methods," SW-846, Third Edition.

11. An absorbent will be poured over all chemical residues resulting from a hazardous waste fire. Once the liquid is absorbed, the waste will be swept or shoveled back into the drums, and the surface will be cleaned using cleaners appropriate to the chemicals.

12. Fire-fighting waters collected in the catchment pond at the HWMF are analyzed to determine an appropriate disposal method.

3.2.2 Explosion

The following procedures will be implemented in the event that an unplanned explosion of hazardous waste occurs or the danger exists that an explosion is imminent.

1. Immediately evacuate the area.
2. The FEC will contact the SNL/NM Emergency Operations Center (911 or 844-0911), who will in turn immediately notify the KAFB fire department and appropriate response personnel.
3. Immediately transport any injured personnel to the SNL/NM Medical Clinic for treatment.
4. The FEC will remain near the site, but at a safe distance, so he can advise the personnel responding to the explosion of the known hazards involved and the degree and location of the explosion and associated fires.
5. Upon arrival at the site, the KAFB fire department officer-in-charge will be in command of fire fighting. He will accept and evaluate the advice of SNL/NM personnel and emergency response organization members, but he retains the responsibility to select the fire-fighting methods and tactics.
6. The IC will be in overall control of SNL/NM emergency response efforts until the emergency is terminated.
7. An absorbent will be poured over all chemical residues resulting from a hazardous waste explosion. Once the liquid is absorbed, the waste will be swept or shoveled back into new receiving drums and the surface cleaned using cleaners appropriate to the chemicals.

8. The FEC will secure all operational units (e.g., process equipment, ventilation equipment) that may be affected directly or indirectly by the explosion once the areas needed to be entered have been determined safe by the IC or a safety officer.

3.2.3 Uncontrolled Releases

The FEC will implement the following procedures in the event that a hazardous waste or hazardous material spill causes an immediate health hazard, cannot be contained with secondary containment or application of absorbents, or a threat exists for spilled material to move out of the HWMF boundaries:

1. Evacuate the immediate area.
2. The FEC and Regulated Waste Management and Pollution Prevention Department personnel will review facility records (e.g., waste inventory database) to determine the identity and chemical nature of released material. The waste inventory database may be accessed from off site or in the HWMF office.
3. Don appropriate personal protective equipment for exposure to the material.
4. If possible, secure the source of the release.
5. Build a dike to contain runoff.
6. Ensure that storm drains and/or sewers do not receive potentially hazardous runoff or spill material. Build dikes around storm drains or close any valves controlling discharge.
7. Released wastes may be collected and contained by stabilizing or neutralizing the spilled material, as appropriate; pouring an absorbent over the spilled material; and sweeping or shoveling the absorbed material into drums or other appropriate containers.
8. No waste that may be incompatible with the released material will be treated, stored or disposed of until cleanup procedures are complete.
9. After collection of a released material, the release site will be sampled and evaluated. If contamination is found to exist, contaminated materials may be collected, drummed (if appropriate), and removed from the site for disposal at a permitted disposal facility. Depending on the specific conditions, however, SNL/NM may choose to implement an alternative decontamination method such as surface cleaning or in situ

neutralization or stabilization. Any such alternative will be discussed with the NMED prior to implementation.

3.2.4. Natural Emergencies

After any natural emergency (earthquake, flood, lightning strike, etc.) the FEC shall:

1. Inspect all containers and containment for signs of leakage or damage.
2. Inspect all operational units for proper operating mode and manually check to ensure all automatic and alarmed features on the unit are working.
3. Inspect all piping, valves, and fixed pumping units for damage.
4. Inspect electrical boards, overhead electrical lines, and poles for damage.
5. Check drum storage area for signs of leakage or damage to storage drums, containers, or carboys.
6. Check all buildings and fencing for damage.
7. Conduct a general survey of the site looking for signs of land movement, etc.
8. Take any necessary corrective measures, however temporary, to rectify potential or real problems.
9. Record all inspection results.

3.2.5 Aircraft Emergencies

The close proximity of the KAFB landing strip to the HWMF make the possibility of an aircraft emergency plausible. Any associated HWMF emergency involving aircraft will be handled as an explosion (Section 3.2.2).

3.3 EVACUATION

The FEC will initially make the determination to evacuate the HWMF. The facility will be evacuated upon the voice command of “evacuate the area” or upon the sounding of the evacuation/fire alarm.

3.3.1 Evacuation Procedures

The following procedures will allow for a safe, coordinated evacuation:

1. When an evacuation is announced, stop work.
2. Shut down predesignated operations that could contribute to further hazards unless an “immediate” building evacuation is announced.
3. Proceed to the closest building exit unless blocked by hazards.
4. Do not remain in affected area except to assist injured personnel.
5. Exit building and proceed to the east or west gate upwind of the fenced HWMF area.
6. Report to designated assembly area for roll call (taken by HWMF Site Manager or his assignee).
7. Be continually cognizant of wind directions (stay upwind) and emergency equipment.
8. Do not re-enter fenced area until the FEC (minor incidents), the IC, or a safety officer (emergencies) determines that all is safe and secure.

3.3.2 Evacuation Routes

Maps of the evacuation route are posted at the entrances to both of the permanent buildings and the office trailers. The HWMF Site Manager is responsible for ensuring that all new employees and site visitors are familiar with evacuation procedures and routes of evacuation. A map showing the evacuation routes at the HWMF is provided in Attachment 1.

4.0 EMERGENCY EQUIPMENT

4.1 HAZARDOUS WASTE MANAGEMENT FACILITY

The following is a list of dedicated emergency equipment located at the HWMF.

Showers and eyewashes: Fixed, equipped with eyecups and overhead shower, one in the HWMF Waste Storage Building, one in the HWMF Waste Packaging, and one in the Drum Crushing Area.

Fire extinguishers:

- Portable ABC – One at both the north and south entrances of the HWMF Waste Storage Building, one at both the north and south entrances of the HWMF Waste Packaging Building, one at each entrance to the HWMF Office Trailer No. 1, one near the door of the permanent storage shed (Building 959D), one at the southwest corner of the Bermed Storage Area, and one near the east entrance to the mechanical room of the HWMF Waste Packaging Building.
- Lith-X – One in the general-use area of the HWMF Waste Packaging Building and one in the office of the HWMF Waste Packaging Building.

Fire alarm system: Alarm signal sent to KAFB fire station. The fire-extinguishing system in the relocatable water-reactive chemical storage sheds is linked to the alarm system as well.

Fire alarm pull boxes:

- One on the interior walls near the north and south entrances of the HWMF Waste Storage Building (Building 958)
- One on the exterior walls near the north and south entrances of the HWMF Waste Packaging Building (Building 959)
- One in the office area of the HWMF Waste Packaging Building (Building 959)
- One on the east wall of the mechanical room in the HWMF Waste Packaging Building (Building 959)
- One on the east wall of the records room in the HWMF Waste Packaging Building (Building 959)

Telephone: One on the interior walls near the north and south from the HWMF Waste Storage Building, one in the HWMF Waste Packaging Building office, and one in each occupied office in each office trailer.

Fire sprinkler system:

- Water, deluge type, in the HWMF Waste Packaging Building
- Water, deluge type, in the HWMF Waste Storage Building
- Ansul dry system, in the relocatable water-reactive storage structures

Portable pump: Compressed-air-driven

First-aid kit: Standard first aid kit: One in both the packing room and the bathroom of the HWMF Waste Packaging Building

SCBA: At least six, two each at the perimeter fence (south of entrance gate), two each in the HWMF Waste Packaging Building office area, two each inside the HWMF Waste Storage Building (South end) and two each inside Trailer 2.

Goggles/face-shields: Chemical splash goggles/chemical-resistant face-shield, at least two each

Gloves/boots/coveralls: Latex, leather, pylox, nitrile and neoprene gloves; cotton, saranex, and Tyvek coveralls; rubber boots, at least five each

Respirators, purifying: Full-face

Cartridges: Organic vapors and acid gas; high-efficiency filter; ammonia and methylamine; dust, fumes, and mist; at least 10 each

Miscellaneous safety equipment: Hardhats, hearing protection, and safety glasses.

Miscellaneous response equipment: Absorbent materials, decontamination equipment, and salvage drums.

4.2 SNL/NM EMERGENCY EQUIPMENT

Equipment available for use at SNL/NM and the locations of this equipment are provided below:

<u>ITEM OR EQUIPMENT</u>	<u>LOCATION/TELEPHONE</u>
<u>Emergency Vehicles</u>	
Emergency Response Vehicle: Mobile Command Post equipped with communications equipment and SCBA.	SNL/NM Emergency Operations Center – Call 911 or 844-0911
Ambulances	SNL/NM Emergency Operations Center – Call 911 or 844-0911
Security Vehicles: Vans and trucks equipped with communications equipment and utilized for transportation of personnel and equipment.	SNL/NM Emergency Operations Center – Call 911 or 844-0911
Fire Trucks: Fire-fighting vehicles outfitted with equipment for fighting fires.	SNL/NM Emergency Operations Center – Call 911 or 844-0911
Helicopter: Rotary-wing aircraft for transportation of personnel to or from site.	SNL/NM Emergency Operations Center – Call 911 or 844-0911
<u>Medical Supplies</u>	
Stretchers/Stokes Litter: Equipment for movement of Injured personnel. Stokes Litter will immobilize Personnel so they may be moved vertically.	SNL/NM Emergency Operations Center – Call 911 or 844-0911
Blankets: Normal Blankets.	SNL/NM Emergency Operations Center – Call 911 or 844-0911
Medical Kits: Emergency first-aid supplies.	SNL/NM Emergency Operations Center – Call 911 or 844-0911
Oxygen: Medical grade oxygen in compressed cylinders equipped for personnel use.	SNL/NM Emergency Operations Center – Call 911 or 844-0911
<u>Safety Supplies</u>	
Air Packs: Self-contained breathing apparatus equipped with positive pressure mode for use by personnel entering hazardous atmospheres.	SNL/NM Emergency Operations Center – Call 911 or 844-0911
Cylinders contain sufficient air for 60 minutes. No fewer than six air-packs are available.	
Monitoring Instruments	Personal Monitoring and Laboratory Services – Call 844-2310

Transportation

Tractor-trailer combinations, 18 wheelers, 40-foot trailers, 40,000-pound capacity (7)

SNL/NM Emergency Operations Center – Call 911 or 844-0911

2-ton flat-bed trucks with sideboards (6)

1-ton flat-bed trucks with sideboards (7)

1.5-ton enclosed panel vans (4)

Passenger vehicles including sedans and vans (10)

Passenger buses (4)

5.0 EMERGENCY RECOVERY PROCEDURES

5.1 POST-EMERGENCY INSPECTIONS

The following post-incident inspections will be done after minor incidents or emergencies:

1. After any incident, the FEC will inspect the premises for leaks or ruptures of equipment. The FEC will ensure that all spill-related material is handled or disposed of properly. The results of the inspection will be recorded on an inspection log.
2. Emergency response equipment must be carefully inspected and the equipment decontaminated, replaced, or refurbished if needed. Fire extinguishers must be checked for adequate charge. Personal protective equipment must be checked for contamination. Remedial equipment must be inspected for contamination and proper operation. Emergency showers/eyewashes must be checked for proper operation and portable showers/eyewashes checked for proper pressure.

Within 24 hours of any incident, fire extinguishers should be replaced; personal protective equipment decontaminated, repaired or replaced; and portable showers/eyewashes refilled and pressurized.

Within three days of an incident, other equipment and facilities should be decontaminated by cleaning with a solvent appropriate to the waste contamination. The spent solvent should be collected and treated as hazardous waste. All appropriate personal protective equipment must be worn during decontamination procedures.

Within 30 days of an incident, other equipment should be repaired or replaced.

5.2 POST-EMERGENCY REPORTS

The following post-emergency reports will be made after emergencies:

1. A verbal report of any incident must be promptly reported to the FEC or to the Manager of the Regulated Waste Management and Pollution Prevention Department, if he was not informed of the incident during its occurrence. The SNL/NM Emergency Operations Center will also be notified of any incident. Verbal reports must also be made within 24 hours of the emergency to the National Response Center (see Section 3.2) and the Secretary, NMED.
2. For every incident that involves Contingency Plan implementation, a written emergency incident report will be prepared by the Regulated Waste Management and Pollution Prevention Department and forwarded to the DOE within three working days. The written report will include at a minimum:

- Name, address, and telephone number of the owner of SNL/NM
- Name, address, and telephone number of the HWMF
- Date, time, and type of emergency
- Name and quantity of materials involved
- Extent of injuries
- Assessment of actual or potential hazards to human health or the environment
- Estimated quantity and disposition of recovered material

The DOE will send the incident Report to the U.S. Environmental Protection Agency or the NMED within 15 days of the occurrence.

3. Before operations are resumed at the HWMF, the NMED will be notified that the HWMF is in compliance with 40 CFR 264.56(h).

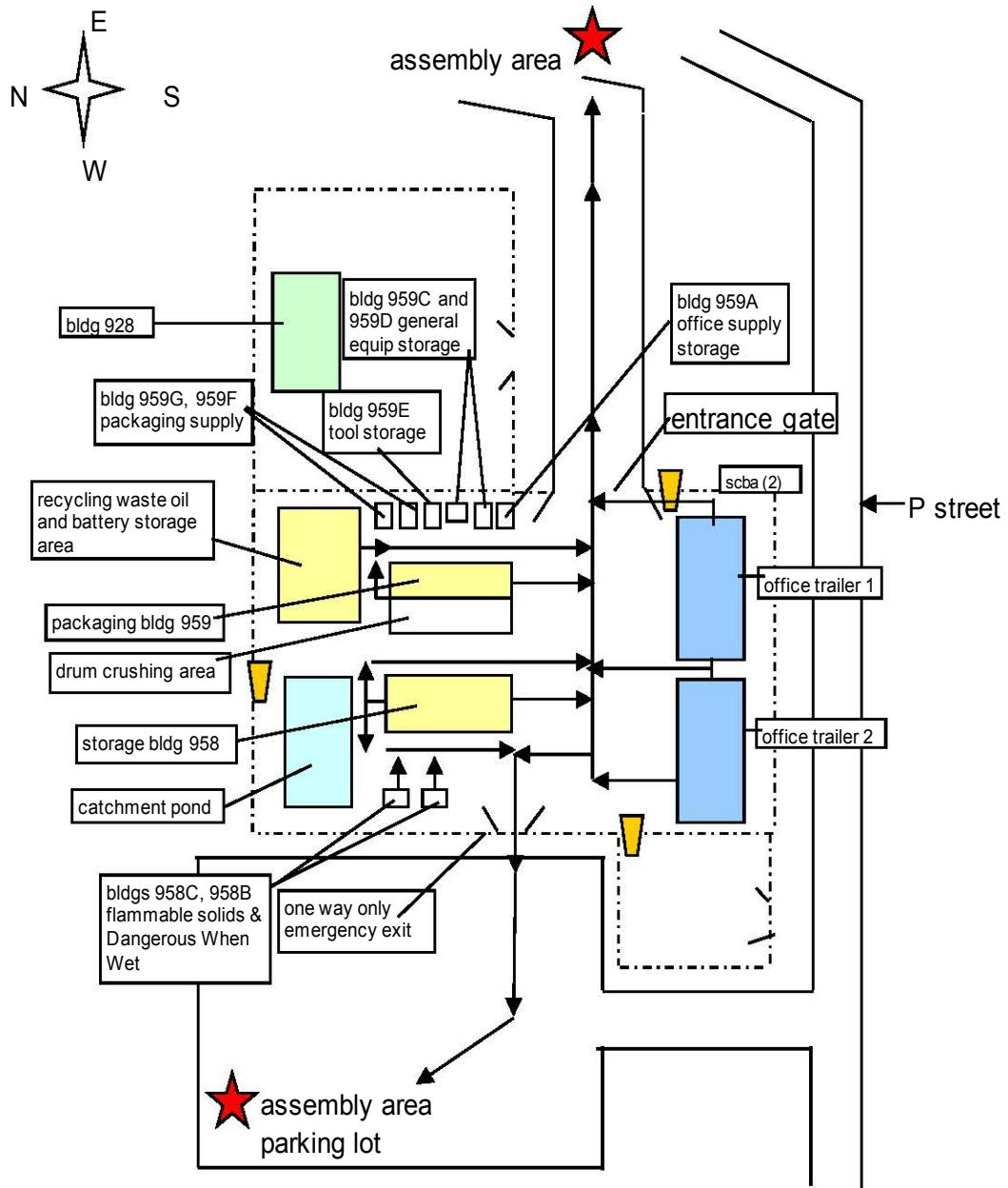
5.3 EMERGENCY RESPONSE EVALUATION

SNL/NM emergency management personnel are responsible for annual evaluations of the SNL/NM Emergency Plan and for the evaluation of the response to each emergency. If these evaluations reveal that changes to the Emergency Plan are necessary, they will be amended by the SNL/NM emergency management personnel and distributed to the appropriate organizations.

This Contingency Plan will be reviewed and, if necessary, amended by HWMF personnel and the Regulated Waste Management and Pollution Prevention Department whenever:

1. The facility permit or applicable regulations are revised.
2. The plan fails in an emergency.
3. The facility design, construction, operation, maintenance, or other circumstances change to increase the potential for fires, explosions, or releases of hazardous waste or hazardous waste constituents, or changes the response necessary in an emergency.
4. The list of FECs and/or phone number changes.
5. The list of emergency equipment changes.

Attachment 1



not to scale

windsocks

evacuation route

Hazardous Waste Management Facility Evacuation Routes

Attachment C

**Sandia National Laboratories
Hazardous Waste Management Facility Contingency Plan
Revision 22**

**Permit NM5890110518-1
Permit Attachment E**

**CONTINGENCY PLAN
FOR THE
HAZARDOUS WASTE MANAGEMENT FACILITY**

Sandia National Laboratories
Albuquerque, New Mexico

June 2013

Recommended by:

David Castillo, Hazardous Waste Facility Site Manager

Date

Approved by:

Jeffrey F. Jarry , Department Manager, 4144

Date

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ATTACHMENT 1 – HWMF EVACUATION ROUTES

1.0 INTRODUCTION

Sandia National Laboratories/New Mexico (SNL/NM) has prepared this Resource Conservation and Recovery Act (RCRA) Contingency Plan for the Hazardous Waste Management Facility (HWMF) in compliance with New Mexico Administrative Code, Title 20, Chapter 4, Part 1 (20 NMAC 4.1), Subpart IX, 40 Code of Federal Regulations (CFR) 270.14(b)(7) and 20 NMAC 4.1, Subpart V, 40 CFR 264.50 through 264.56, as applicable. This plan consists of descriptions and emergency procedures specific to the Hazardous Waste Management Facility (HWMF). This Contingency Plan supersedes all previous revisions.

Independent from this Plan, SNL personnel have also prepared SNL Emergency Plans and Procedures. The SNL Emergency Plan, incorporated in this Plan by reference, describes the corporate emergency response for all SNL/NM facilities. The SNL Emergency Plan also describes all of the written agreements between SNL/NM and local emergency response teams such as the Kirtland Air Force Base (KAFB) Fire Department, City of Albuquerque, and nearby hospitals. The SNL Emergency Plan is maintained and implemented by SNL/NM emergency management personnel.

1.1 DISTRIBUTION

To assure proper implementation in the event of any emergency, this Contingency Plan must be studied and understood by all personnel involved in the handling, storage, or treatment of hazardous waste at the HWMF and by personnel required to respond to emergency situations involving hazardous waste.

Copies of this RCRA Contingency Plan will be on file at the following locations:

- Hazardous Waste Management Facility, SNL/NM
- Emergency Operations Center, SNL/NM
- Waste Management and Pollution Prevention Department, SNL/NM
- New Mexico Environment Department
- Department of Energy, National Nuclear Security Administration, Sandia Field Office

1.2 PURPOSE

The purpose of this document is to define responsibilities, provide guidance for coordination of activities, and minimize hazards to human health or to the environment from fires, explosions, or any unplanned sudden or nonsudden release of hazardous waste. The provisions of this plan will be carried out immediately whenever there is a fire, explosion, spill, or release of hazardous waste constituents that could threaten human health or the environment outside the facility.

Minor accidents, those that can be controlled with HWMF resources and do not threaten human health, or the environment outside the HWMF boundaries, will be managed by trained HWMF personnel. After control of the situation, the Waste Management and Pollution Prevention Department Manager will be notified by the Facility Emergency Coordinator (FEC) (Section 2.0). Response to minor incidents is not considered activation of this Contingency Plan. In the case of emergencies (e.g., large spills, fire, explosion, aircraft incidents, or natural disasters) that threaten hazardous waste management activities at the HWMF, the FEC will activate this Contingency Plan and notify the SNL/NM Emergency Operations Center at 911 or 844-0911. The SNL/NM Emergency Operations Center assumes primary responsibility for response coordination.

1.3 FACILITY DESCRIPTION

SNL/NM is a multidisciplinary laboratory engaged in the research and development of weapons and alternative energy sources. SNL/NM is managed by Lockheed Martin for the U.S. Department of Energy (DOE). SNL/NM falls under Standard Industrial Classification Code Numbers 9711 (national defense organizations) and 7391 (research and development).

SNL/NM is located in Bernalillo County, New Mexico, adjacent to the southeastern boundary of Albuquerque. SNL/NM occupies an area of about 2,810 acres located in the eastern portion of the 52,233-acre KAFB. SNL/NM consists of five technical areas, designated Tech Area I through V, as well as remote test areas.

Hazardous Waste Management Facility

The HWMF is located in Tech Area II, approximately 1,000 feet north of the entrance to Tech Area II. The HWMF consists of two separate permanent buildings, the Waste Packaging Building (Building 959) and the Waste Storage Building (Building 958), located within a single 8-foot fenced enclosure. Additionally, the following structures are located at the facility within the fenced area:

- Six supply sheds (Buildings 959A, C, D, E, F, and G)
- Two identical self-contained, relocatable, prefabricated storage structures for water-reactive waste and other reactive waste (Building 958B and Building 958C)
- A waste oil storage area
- Catchment pond
- Two office trailers (Trailer Nos. 1 and 2)

The Waste Packaging Building is the easternmost building and provides 1,800 square feet of enclosed floor space. The building is of precast concrete construction with an eave height of 12 feet. Eight recessed waste holding cells and a recessed repackaging area are located in the building. The floor and lower wall surface of each recessed area is coated with an epoxy finish. A restroom, a general use area, an office area, and an area for packing materials are also present.

A deluge-type system provides fire protection throughout the building. The system is designed for Extra Hazard Group 1 occupancy and complies with the provisions of the National Fire Protection Association Standard No. 13, 1985 edition. No water-reactive waste is stored in areas protected by wet sprinkler fire suppression.

The building is also provided with intrusion alarms, lightning protection, emergency lighting, and a telephone. A 1,200-square-foot covered outdoor area extends immediately to the west of the Waste Packaging Building.

The Waste Storage Building is located west of the Waste Packaging Building. The Waste Storage Building is a 3,520-square-foot precast concrete building with an eave height of 14 feet. The building includes eight separate and recessed waste storage compartments for segregation of waste groups. The floor and lower wall surface of each storage compartment is coated with an epoxy finish. The sprinkler system in this building is a deluge-type and is also designed for Extra Hazard Group 1 occupancy. The building is equipped with a telephone, a fire alarm system, intrusion alarms, emergency lighting, and lightning protection.

Two relocatable, prefabricated safety storage structures (Buildings 958B and 958C) are designed and constructed to comply with regulatory standards applicable to the safe storage of hazardous materials. The safety storage structures are used for the storage of reactive wastes and lithium batteries and waste poison and flammable gases. They are constructed of welded 10- and 12-gauge steel with supporting structural steel sections. Each structure has three doors, each with a three-point locking system to provide access and security. The 500-gallon containment reservoirs within each building, the walls, and the ceilings are covered with two coats of chemical-resistant epoxy. The reservoirs are lined with polypropylene, which is compatible with reactive wastes. The floors are 1-inch-thick vinyl ester fiberglass grating. The buildings are equipped with a dry chemical fire suppression system and an automatic alarm-dialing system. Both the security and fire departments are notified that the dry chemical fire suppression has been released by a panel box light. The dry fire suppression system is compatible with the storage of reactive materials. Other safety features in each of the buildings

include a spill-containment subfloor constructed of continuously welded, epoxy-coated, 10-gauge steel; blow-out panels for pressure relief under explosive conditions; and a static grounding connection to protect against ignition of flammable materials by electrical discharge.

An outdoor area is located immediately west of the HWMF Waste Packaging Building and is covered by a steel-framed roof. A drum compactor is located within the concrete bermed area.

The Office Trailers are for business operations of the HWMF. Two 1960-square-foot moveable trailers are located along the south fence.

The Bermed Storage area is an approximately 3,700-square-foot concrete bermed area covered by a steel frame and roof. It is located at the northeast corner of the fenced area.

Five 160-square-foot moveable sheds (Buildings 959A, C, E, F, and G) and one 120-square-foot permanent storage shed (Building 959D) are used for equipment storage.

The HWMF is enclosed in an 8-foot, single chain-link and barbed wire fence. Offset space of at least 70 feet is provided between the permanent buildings and the fence line. The safe handling, treatment, and/or storage of hazardous waste is the responsibility of the Waste Management and Pollution Prevention Department. Hazardous chemical waste is generated at all five of the SNL/NM Tech Areas and is transported to the HWMF on a routine basis. All hazardous waste is sent to the HWMF for packaging, and storage prior to transportation off site for recycling, treatment or disposal at a permitted facility. Some waste streams are also sampled at the HWMF.

Hazardous chemical waste generated at SNL/NM that requires packaging is transported to the Waste Packaging Building. There, waste is segregated into compatible types, based on U.S. Department of Transportation (DOT) regulations (49 CFR 177.848) and placed into the appropriate holding cell. The waste is assembled into lab-packs or bulk transferred into 55-gallon drums. Completed lab-packs and full waste drums are moved to the appropriate storage

area to await transport off site for treatment, recycling, or disposal. Incompatible waste is segregated and stored in different holding cells.

Any necessary overpacking of drums or repacking of material in damaged or leaking drums occurs within the Waste Packaging Building. Waste that does not require repackaging is transported directly to the Waste Storage Building to await transport off site to disposal, treatment or recycling locations.

Waste handling equipment currently in place at the HWMF includes the following:

- Diaphragm pump
- Pneumatic pumps
- Dual-action hand pumps
- Drum-handling hand truck (two-wheel)
- Hydraulic drum handler – 800 pound capacity
- Empty drum compactor
- Forklift drum carriers

1.4 TYPES OF WASTE

Overall responsibility for hazardous waste management at SNL/NM is with the Waste Management and Pollution Prevention Department. Generators of hazardous waste throughout SNL/NM are responsible for properly identifying and packaging their waste before it is transported to the HWMF.

The chemical waste at SNL/NM is generated by 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 waste such as contaminated rags or nickel-cadmium batteries. This type of waste is primarily stored in the bays of the Waste Packaging Building or in lab-packs in the Waste Storage Building. Typical process waste includes large volumes (5- to 55-gallon containers) of solvents, oils, photochemicals and corrosive solutions. This type of waste is primarily stored in the Waste Storage Building. Typical environmental restoration activity waste includes contaminated soil cuttings, personal protective equipment, and decontamination fluids. This type of waste is primarily stored in the Waste Storage Building.

Because of the changing efforts at SNL/NM, the volumes and waste streams stored at the HWMF continually vary from day to day. The location of each hazardous waste and the approximate quantity of hazardous waste at each location is available at the HWMF.

1.5 HWMF SCHEDULE

SNL/NM HWMF is manned from 0800 to 1630, Monday through Thursday, and 0700 to 1530 on Friday. The Safeguards and Security Center inspects the facility every eight hours during the time the facility is closed. If an emergency is discovered during these inspections, the SNL/NM Emergency Operations Center and the FEC (Section 2.0) will be notified immediately.

2.0 FACILITY EMERGENCY COORDINATORS

2.1 FEC ASSIGNMENTS

At all times a FEC must be on site or on call (20 NMAC 4.1, Subpart V, 40 CFR 264.55). In the event that the primary FEC is not on site or available, an alternate FEC must be contacted.

<u>FACILITY EMERGENCY COORDINATOR</u>	<u>OFFICE PHONE</u>	<u>HOME PHONE</u>	<u>PAGER</u>
Primary: David Castillo P.O. Box 5800 MS-1117 Albuquerque, New Mexico 87185-1117	284-4192	269-1705	269-1705
Alternate: Chris Dean P.O. Box 5800 MS-1117 Albuquerque, New Mexico 87185-1117	284-8083	350-4982	350-4982
Alternate: Mary Ann Krauss P.O. Box 5800 MS-1117 Albuquerque, New Mexico 87185-1117	845-9997	299-0793	250-2422
Alternate: Therese Martinez-Loner P.O. Box 5800 MS-1117 Albuquerque, New Mexico 87185-1117	284-5028	401-0381	401-0381
Alternate: Angel Ripoll P.O. Box 5800 MS-1117 Albuquerque, New Mexico 87185-1117	284-5334	573-0562	573-0562
Alternate: Tony Mocadlo P.O. Box 5800 MS-1117 Albuquerque, New Mexico 87185-1117	844-0564	332-9168	283-1947

2.2 FEC RESPONSIBILITIES

When the FEC is notified of an incident, he must first determine if procedures for minor incidents or for emergencies should be implemented. In the case of minor incidents, the FEC will coordinate the response. In the case of emergencies, the FEC will relinquish control to the Incident Commander (IC) (assigned by the Emergency Operations Center Emergency Response Director) when he or she arrives to handle the emergency; however, the FEC will remain on hand to provide technical guidance and relevant information about the HWMF.

The FEC will ensure that personnel assigned to the HWMF are trained in the location and use of safety showers/eyewash, fire extinguishers, and emergency protective clothing; in emergency procedures; and in evacuation procedures.

During minor incidents at the HWMF, or until the IC arrives, the FEC has three primary responsibilities:

1. Assess the Situation. By observing the scene, interviewing personnel, and/or reviewing records, the FEC must gather information relevant to the response, such as the type of event, quantity and type of released material, and actual or potential hazards to human health or the environment.
2. Protect Personnel. The FEC should take any reasonable measures to ensure the safety of personnel, such as activating the fire alarm, accounting for HWMF personnel, attending to injuries, or coordinating the evacuation of HWMF personnel, if necessary. If evacuation is indicated for other personnel, the IC must be informed.
3. Contain or Mitigate the Hazards. The FEC should take reasonable measures to ensure that fires, explosions, or releases do not occur, recur, or spread. For example, released water-reactive material should be kept dry.

After both minor incidents and emergencies, the FEC must ensure that the facility and equipment are cleaned, waste is properly handled and disposed, and the HWMF is safe to resume operation. Before operations are resumed, the FEC must contact the Waste Management and Pollution Prevention Department, who will inform the appropriate agencies, if necessary. See Emergency Recovery Procedures, Section 5.0.

3.0 HWMF RESPONSE PROCEDURES

During normal working hours, the first person to become aware of an incident shall contact the FEC. Note that any person is authorized to implement the evacuation procedures and notify the SNL/NM Emergency Operations Center in the unlikely event that the FEC and all alternate FECs cannot be contacted or respond in a timely manner.

Only personnel trained in incident response activities will approach or handle unplanned situations. All other personnel will leave the vicinity of the unplanned conditions.

The FEC will assess the situation and determine the scale of the incident. If the FEC determines that an emergency situation exists at the HWMF (i.e., large spills, fire, explosion, aircraft incidents, or natural disasters) that threatens human health or the environment outside the HWMF, he will immediately notify the SNL/NM Emergency Operations Center at 911 or 844-0911 and activate this Contingency Plan. The SNL/NM Emergency Operations Center then assumes primary responsibility for emergency response coordination. The SNL/NM Emergency Operations Center will notify the National Response Center (1-800-424-8802) with the details of the emergency, if necessary.

The SNL/NM Emergency Operations Center operates within the SNL/NM Incident Command System (ICS) – a management system used to coordinate the efforts of all SNL/NM response teams and capabilities and other response teams, such as KAFB Fire Department, as needed. The ICS is a system that is implemented at the time an incident occurs, expanded to control the incident as needs arise, and which remains in effect until the need for management no longer exists. The SNL/NM Emergency Operations Center, when activated, is manned by the Emergency Response Director and a staff consisting of DOE personnel, SNL/NM management, KAFB staff, and representatives from various response groups. Under the SNL/NM Emergency Operations Center, the IC is responsible for management of operations at the emergency site. The IC coordinates operations with the four SNL/NM Emergency Operations Center sections:

Operations, Logistics, Safety, and Planning. The Operations Section identifies and carries out the actions necessary at the site to contain the emergency.

The Logistics Section identifies, acquires, deploys, and mobilizes the supplies, material, and equipment needed to deal with an emergency. Under the Logistics Section, Facilities Engineering has teams capable of responding to incidents that require knowledge of buildings and utilities; use of heavy equipment; and transportation of material, equipment, or personnel.

The Safety Section is responsible for ensuring that Medical and ES&H resources are available as needed. The Medical organization has established a Medical emergency response team that responds to all medical emergencies during operational hours. The type of response to each emergency is determined through information received about the emergency. ES&H is primarily responsible for responding to releases of hazardous or toxic materials at facilities located within SNL/NM and for providing consulting services associated with personnel safety and health.

The Planning Section is responsible for collection of data (resources available, weather, field observations, etc.)

3.1 MINOR INCIDENTS

In the event that the FEC determines an incident to be minor, a person will be assigned to standby at a safely located telephone. At the first indication of incident escalation, the standby person will be instructed to notify SNL/NM Emergency Operations Center at 911 or 844-0911. If the incident can be easily handled by the on-hand equipment, supplies, and labor, then it is a minor incident. Minor incidents do not require activation of this Contingency Plan.

Note: In no instance will a fire be considered a minor incident.

3.1.1 Controlled Spills

Since the HWMF usually handles hazardous waste in containers equal to or less than an 85-gallon drum, hazardous waste spills generally would be expected to be of 85 gallons or less.

- The first priority in a spill is personnel protection – do not attempt to do anything to a spill until proper personal protective equipment has been donned. Stay clear of the spill area, then assess the type of material spilled so proper cleanup procedures can be followed. Great caution in handling a spill must be exercised.
- The second priority in a spill is containment – if the spill is not in a contained area, use absorbent material to contain the spread of the spill before attempting sampling or cleanup.

A. If a spill occurs while working with a material:

1. Evacuate the immediate area, notify the FEC, and don appropriate personal protective equipment for exposure to the material.
2. If possible, secure the source of the release (i.e., tip the drum to stop the leak).
3. Use a portable hand-pump to transfer the spill to a new receiving drum if the material spilled is sufficient to form a pumpable pool.
4. After pumping or if the spill is small, spread absorbent over the area of the spill and transfer the contaminated absorbent to the new receiving drum.
5. Stabilize flammable solvent spills with the organic solvent spill kit.
6. Stabilize other chemical spills using the SNL/NM acid and caustic spill kits or by the addition of absorbent.
7. Handle the stabilized material as a hazardous waste. Sweep, shovel, or pump it back into the drums.
8. Remove contaminated soil, if any, and transfer to new receiving drums.
9. Remove any contamination from floors, walls, and other containers with a solvent appropriate to the spilled material and transfer all solvent and cleaning materials to the new receiving drum.
10. Properly identify the new receiving drum.
11. Promptly complete a weekly inspection log and include the details of the spill and cleanup in the log.
12. Handle the original spill container in the same manner as a bulging or leaking drum.
13. Decontaminate all reusable spill cleanup equipment.

B. If an unattended spill is discovered:

1. Leave the immediate area of the spill, notify the FEC, and don complete personal protective equipment including a Self-Contained Breathing Apparatus (SCBA).
2. Cautiously approach the area of the spill and attempt to ascertain the source of the spill.
3. If the spill material can be identified from the source container, handle the spill as in A above.
4. If the spill material cannot be identified, collect a sample of the material.
5. Obtain a rush analysis of the sample from an SNL/NM or commercial laboratory.
6. Once the material has been identified, proceed as in A above.

3.1.2 Leaking or Punctured Drums

1. Leave the immediate area and notify the FEC.
2. Identify the material inside the drum, based on drum log or inventory records.
3. Based upon the hazardous characteristics of the material in the drum, select appropriate personal protective equipment.
4. After donning personal protective equipment and securing emergency equipment, spread absorbent material around the drum to absorb the leak.
5. If the spill material can be identified from the source container, handle the spill as in A above.
6. Be certain that the contents of the leaking drum have been emptied into the new receiving drum.
7. Crush the leaking drum and handle as determined by the HWMF Disposal/Request (DR) chemist.

3.1.3 Bulging Drums

1. Notify the FEC.

2. Identify the material inside the drum, based on log or inventory records.
3. Based upon the hazardous characteristics of the material in the drum, select appropriate personal protective emergency equipment and a new receiving drum.
4. After donning personal protective equipment and securing emergency equipment, carefully and slowly open a bung to relieve the internal pressure.
5. Use a portable pump to transfer the material from the bulging drum to the new receiving drum. Properly mark new receiving drum.
6. Be certain that the contents of the bulging drum have been emptied into the new receiving drum.
7. Crush the drum and dispose of it as determined by the HWMF DR chemist.
8. Clean up any material that spilled during the transfer.
9. Record event summary in facility operating record.

3.1.4 Personal Exposure

In the event of chemical material in the eye or on the skin:

1. Notify the FEC.
2. Wash the eye(s) or skin using the permanent shower/eyewash station for at least 15 minutes.
3. Hold the eyelids open during washing.
4. Call 911 or 844-0911 to arrange for transport of the injured person to the SNL/NM Medical Clinic for evaluation.
5. If possible, the FEC should ascertain what chemical material was involved in the injury and give the information to the SNL/NM Medical Clinic.

In the event of:

- Irritation of the eyes, breathing passages or skin
- Difficulty in breathing
- Nausea, light-headedness, vertigo, or blurred vision

Personnel will:

1. Notify the FEC.
2. Evacuate and barricade the area to prevent unauthorized entry.
3. Call 911 or 844-0911 to arrange for transport of the injured person to the SNL/NM Medical Clinic for evaluation.
4. The FEC should attempt to ascertain what, if any, chemical exposure occurred and what corrective measures are appropriate.

3.1.5 Power Failure

The only equipment at the HWMF that would be affected by a power failure are the building lights, alarm system, ventilation exhaust fan, and electrical pumps. All other equipment is either self-powered or manually operated. The HWMF is equipped with an emergency power source in the event of utility failure. However, should total power failure occur, battery-operated lights will automatically turn on. Manually operated drum carts and pumps may be utilized. In the event of a power failure, secure any work in progress within the HWMF until power is restored.

3.1.6 Equipment Failure at the HWMF

1. Lights: Fixed battery-operated lights will operate.
2. Alarms: Emergency power supply will operate alarm devices.
3. Pumps: Use portable manually or pneumatically operated pumps.
4. Drum-handling equipment: Call the Transportation Team and secure forklifts and drum-handling equipment.
5. Personal Protective Equipment: Replace, as needed, with supplies in the HWMF equipment storage areas.
6. Vehicles: Call the Transportation Team and secure replacements for vehicle.
7. Telephone: Use cellular telephones.
8. Fire sprinklers: Use portable fire extinguishers.

3.2 EMERGENCIES

In the event of an emergency, the FEC or an assignee will immediately telephone the SNL/NM Emergency Operations Center (911 or 844-0911). Emergencies require the activation of this Contingency Plan and SNL/NM emergency response resources. Upon arrival at the scene, the IC will determine the extent of the emergency, cordon off the area, and notify appropriate response personnel. All personnel not involved in combating the emergency will be directed to evacuate the area and assemble in a convenient location upwind and away from the involved area.

If the FEC and IC determine that the emergency could threaten human health or the environment outside of KAFB, the IC or assignee will then notify the National Response Center (1-800-424-8802) and the New Mexico Spill Response (505-827-9329) to provide the following information:

1. Name and telephone number of reporter
2. Name and address of facility
3. Time and type of incident (e.g., fire, release, explosion)
4. Name and quantity of materials involved to the extent known
5. Extent of injuries, if any, and
6. The possible hazards to human health or the environment outside of KAFB.

The Waste Management and Pollution Prevention Department will report the same information to the Secretary, New Mexico Environment Department (NMED).

The FEC must be especially cognizant of the potential release of hazardous materials and take every available measure to minimize the magnitude of that release.

3.2.1 Fire

Any fire in the HWMF vicinity is defined as an emergency. This includes any fire involving hazardous waste or hazardous material, or any building, vegetation, or nonhazardous waste fire that threatens to ignite hazardous waste.

1. Prior to any fire fighting, the KAFB fire department will be notified by activation of a manual pull alarm, activation of an automatic fire alarm, or by dialing the SNL/NM Emergency Operations Center at 911 or 844-0911.
2. Fire-fighting personnel must wear appropriate personal protective equipment.
3. If the fire is small and the fuel source is small, portable fire extinguishers may be used to put out the fire.

Note: Use only Lith-X fire extinguishers for water-reactive waste.

4. Whenever possible, remove flammable material from the area of fire.
5. If the fire spreads or increases in intensity, all personnel should evacuate to an upwind point at least 100 yards away from the fire.
6. The FEC should remain near the site, but at a safe distance, so he can advise the personnel responding to the fire of the known hazards.
7. Ensure that storm drains and/or sewers do not receive potentially hazardous runoff. Build dikes around storm drains or close any valves controlling discharge.
8. Upon arrival at a fire, the KAFB fire department officer-in-charge will be in command of fire fighting. He will accept and evaluate the advice of SNL/NM personnel and emergency response organization members, but he retains the responsibility to select the fire-fighting methods and tactics.
9. The IC will be in overall control of SNL/NM emergency response efforts until the emergency is terminated.
10. Materials involved in a fire can be identified in the following ways:
 - The location of the drum may indicate the contents of the drum (e.g., drums in the caustic storage bay contain caustics).
 - If the location of the drum does not indicate its contents, the label number can be used to identify the material. Records on the contents of each drum are kept in database that can be accessed from off site or in the HWMF office.
 - If the label has been burned, the number painted on the drum can be used to identify the material.

- If the label and number are destroyed by fire, the material will be treated as an unknown and analyzed according to methods in the SNL/NM Waste Analysis Plan and U.S. EPA "Test Methods for Evaluating Solid Waste Physical Chemical Methods," SW-846, Third Edition.

11. An absorbent will be poured over all chemical residues resulting from a hazardous waste fire. Once the liquid is absorbed, the waste will be swept or shoveled back into the drums, and the surface will be cleaned using cleaners appropriate to the chemicals.

12. Fire-fighting waters collected in the catchment pond at the HWMF are analyzed to determine an appropriate disposal method.

3.2.2 Explosion

The following procedures will be implemented in the event that an unplanned explosion of hazardous waste occurs or the danger exists that an explosion is imminent.

1. Immediately evacuate the area.
2. The FEC will contact the SNL/NM Emergency Operations Center (911 or 844-0911), who will in turn immediately notify the KAFB fire department and appropriate response personnel.
3. Immediately transport any injured personnel to the SNL/NM Medical Clinic for treatment.
4. The FEC will remain near the site, but at a safe distance, so he can advise the personnel responding to the explosion of the known hazards involved and the degree and location of the explosion and associated fires.
5. Upon arrival at the site, the KAFB fire department officer-in-charge will be in command of fire fighting. He will accept and evaluate the advice of SNL/NM personnel and emergency response organization members, but he retains the responsibility to select the fire-fighting methods and tactics.
6. The IC will be in overall control of SNL/NM emergency response efforts until the emergency is terminated.
7. An absorbent will be poured over all chemical residues resulting from a hazardous waste explosion. Once the liquid is absorbed, the waste will be swept or shoveled back into new receiving drums and the surface cleaned using cleaners appropriate to the chemicals.

8. The FEC will secure all operational units (e.g., process equipment, ventilation equipment) that may be affected directly or indirectly by the explosion once the areas needed to be entered have been determined safe by the IC or a safety officer.

3.2.3 Uncontrolled Releases

The FEC will implement the following procedures in the event that a hazardous waste or hazardous material spill causes an immediate health hazard, cannot be contained with secondary containment or application of absorbents, or a threat exists for spilled material to move out of the HWMF boundaries:

1. Evacuate the immediate area.
2. The FEC and Waste Management and Pollution Prevention Department personnel will review facility records (e.g., waste inventory database) to determine the identity and chemical nature of released material. The waste inventory database may be accessed from off site or in the HWMF office.
3. Don appropriate personal protective equipment for exposure to the material.
4. If possible, secure the source of the release.
5. Build a dike to contain runoff.
6. Ensure that storm drains and/or sewers do not receive potentially hazardous runoff or spill material. Build dikes around storm drains or close any valves controlling discharge.
7. Released wastes may be collected and contained by stabilizing or neutralizing the spilled material, as appropriate; pouring an absorbent over the spilled material; and sweeping or shoveling the absorbed material into drums or other appropriate containers.
8. No waste that may be incompatible with the released material will be treated, stored or disposed of until cleanup procedures are complete.
9. After collection of a released material, the release site will be sampled and evaluated. If contamination is found to exist, contaminated materials may be collected, drummed (if appropriate), and removed from the site for disposal at a permitted disposal facility. Depending on the specific conditions, however, SNL/NM may choose to implement an alternative decontamination method such as surface cleaning or in situ

neutralization or stabilization. Any such alternative will be discussed with the NMED prior to implementation.

3.2.4. Natural Emergencies

After any natural emergency (earthquake, flood, lightning strike, etc.) the FEC shall:

1. Inspect all containers and containment for signs of leakage or damage.
2. Inspect all operational units for proper operating mode and manually check to ensure all automatic and alarmed features on the unit are working.
3. Inspect all piping, valves, and fixed pumping units for damage.
4. Inspect electrical boards, overhead electrical lines, and poles for damage.
5. Check drum storage area for signs of leakage or damage to storage drums, containers, or carboys.
6. Check all buildings and fencing for damage.
7. Conduct a general survey of the site looking for signs of land movement, etc.
8. Take any necessary corrective measures, however temporary, to rectify potential or real problems.
9. Record all inspection results.

3.2.5 Aircraft Emergencies

The close proximity of the KAFB landing strip to the HWMF make the possibility of an aircraft emergency plausible. Any associated HWMF emergency involving aircraft will be handled as an explosion (Section 3.2.2).

3.3 EVACUATION

The FEC will initially make the determination to evacuate the HWMF. The facility will be evacuated upon the voice command of “evacuate the area” or upon the sounding of the evacuation/fire alarm.

3.3.1 Evacuation Procedures

The following procedures will allow for a safe, coordinated evacuation:

1. When an evacuation is announced, stop work.
2. Shut down predesignated operations that could contribute to further hazards unless an “immediate” building evacuation is announced.
3. Proceed to the closest building exit unless blocked by hazards.
4. Do not remain in affected area except to assist injured personnel.
5. Exit building and proceed to the east or west gate upwind of the fenced HWMF area.
6. Report to designated assembly area for roll call (taken by HWMF Site Manager or his assignee).
7. Be continually cognizant of wind directions (stay upwind) and emergency equipment.
8. Do not re-enter fenced area until the FEC (minor incidents), the IC, or a safety officer (emergencies) determines that all is safe and secure.

3.3.2 Evacuation Routes

Maps of the evacuation route are posted at the entrances to both of the permanent buildings and the office trailers. The HWMF Site Manager is responsible for ensuring that all new employees and site visitors are familiar with evacuation procedures and routes of evacuation. A map showing the evacuation routes at the HWMF is provided in Attachment 1.

4.0 EMERGENCY EQUIPMENT

4.1 HAZARDOUS WASTE MANAGEMENT FACILITY

The following is a list of dedicated emergency equipment located at the HWMF.

Showers and eyewashes: Fixed, equipped with eyecups and overhead shower, one in the HWMF Waste Storage Building, one in the HWMF Waste Packaging, and one in the Drum Crushing Area.

Fire extinguishers:

- Portable ABC – One at both the north and south entrances of the HWMF Waste Storage Building, one at both the north and south entrances of the HWMF Waste Packaging Building, one at each entrance to the HWMF Office Trailer No. 1, one near the door of the permanent storage shed (Building 959D), one at the southwest corner of the Bermed Storage Area, and one near the east entrance to the mechanical room of the HWMF Waste Packaging Building.
- Lith-X – One in the general-use area of the HWMF Waste Packaging Building and one in the office of the HWMF Waste Packaging Building.

Fire alarm system: Alarm signal sent to KAFB fire station. The fire-extinguishing system in the relocatable water-reactive chemical storage sheds is linked to the alarm system as well.

Fire alarm pull boxes:

- One on the interior walls near the north and south entrances of the HWMF Waste Storage Building (Building 958)
- One on the exterior walls near the north and south entrances of the HWMF Waste Packaging Building (Building 959)
- One in the office area of the HWMF Waste Packaging Building (Building 959)
- One on the east wall of the mechanical room in the HWMF Waste Packaging Building (Building 959)
- One on the east wall of the records room in the HWMF Waste Packaging Building (Building 959)

Telephone: One on the interior walls near the north and south from the HWMF Waste Storage Building, one in the HWMF Waste Packaging Building office, and one in each occupied office in each office trailer.

Fire sprinkler system:

- Water, deluge type, in the HWMF Waste Packaging Building
- Water, deluge type, in the HWMF Waste Storage Building
- Ansul dry system, in the relocatable water-reactive storage structures

Portable pump: Compressed-air-driven

First-aid kit: Standard first aid kit: One in both the packing room and the bathroom of the HWMF Waste Packaging Building

SCBA: At least six, two each at the perimeter fence (south of entrance gate), two each in the HWMF Waste Packaging Building office area, two each inside the HWMF Waste Storage Building (South end) and two each inside Trailer 2.

Goggles/face-shields: Chemical splash goggles/chemical-resistant face-shield, at least two each

Gloves/boots/coveralls: Latex, leather, pylox, nitrile and neoprene gloves; cotton, saranex, and Tyvek coveralls; rubber boots, at least five each

Respirators, purifying: Full-face

Cartridges: Organic vapors and acid gas; high-efficiency filter; ammonia and methylamine; dust, fumes, and mist; at least 10 each

Miscellaneous safety equipment: Hardhats, hearing protection, and safety glasses.

Miscellaneous response equipment: Absorbent materials, decontamination equipment, and salvage drums.

4.2 SNL/NM EMERGENCY EQUIPMENT

Equipment available for use at SNL/NM and the locations of this equipment are provided below:

<u>ITEM OR EQUIPMENT</u>	<u>LOCATION/TELEPHONE</u>
<u>Emergency Vehicles</u>	
Emergency Response Vehicle: Mobile Command Post equipped with communications equipment and SCBA.	SNL/NM Emergency Operations Center – Call 911 or 844-0911
Ambulances	SNL/NM Emergency Operations Center – Call 911 or 844-0911
Security Vehicles: Vans and trucks equipped with communications equipment and utilized for transportation of personnel and equipment.	SNL/NM Emergency Operations Center – Call 911 or 844-0911
Fire Trucks: Fire-fighting vehicles outfitted with equipment for fighting fires.	SNL/NM Emergency Operations Center – Call 911 or 844-0911
Helicopter: Rotary-wing aircraft for transportation of personnel to or from site.	SNL/NM Emergency Operations Center – Call 911 or 844-0911
<u>Medical Supplies</u>	
Stretchers/Stokes Litter: Equipment for movement of Injured personnel. Stokes Litter will immobilize Personnel so they may be moved vertically.	SNL/NM Emergency Operations Center – Call 911 or 844-0911
Blankets: Normal Blankets.	SNL/NM Emergency Operations Center – Call 911 or 844-0911
Medical Kits: Emergency first-aid supplies.	SNL/NM Emergency Operations Center – Call 911 or 844-0911
Oxygen: Medical grade oxygen in compressed cylinders equipped for personnel use.	SNL/NM Emergency Operations Center – Call 911 or 844-0911
<u>Safety Supplies</u>	
Air Packs: Self-contained breathing apparatus equipped with positive pressure mode for use by personnel entering hazardous atmospheres.	SNL/NM Emergency Operations Center – Call 911 or 844-0911
Cylinders contain sufficient air for 60 minutes. No fewer than six air-packs are available.	
Monitoring Instruments	Personal Monitoring and Laboratory Services – Call 844-2310

Transportation

Tractor-trailer combinations, 18 wheelers, 40-foot trailers, 40,000-pound capacity (7)

SNL/NM Emergency Operations Center – Call 911 or 844-0911

2-ton flat-bed trucks with sideboards (6)

1-ton flat-bed trucks with sideboards (7)

1.5-ton enclosed panel vans (4)

Passenger vehicles including sedans and vans (10)

Passenger buses (4)

5.0 EMERGENCY RECOVERY PROCEDURES

5.1 POST-EMERGENCY INSPECTIONS

The following post-incident inspections will be done after minor incidents or emergencies:

1. After any incident, the FEC will inspect the premises for leaks or ruptures of equipment. The FEC will ensure that all spill-related material is handled or disposed of properly. The results of the inspection will be recorded on an inspection log.
2. Emergency response equipment must be carefully inspected and the equipment decontaminated, replaced, or refurbished if needed. Fire extinguishers must be checked for adequate charge. Personal protective equipment must be checked for contamination. Remedial equipment must be inspected for contamination and proper operation. Emergency showers/eyewashes must be checked for proper operation and portable showers/eyewashes checked for proper pressure.

Within 24 hours of any incident, fire extinguishers should be replaced; personal protective equipment decontaminated, repaired or replaced; and portable showers/eyewashes refilled and pressurized.

Within three days of an incident, other equipment and facilities should be decontaminated by cleaning with a solvent appropriate to the waste contamination. The spent solvent should be collected and treated as hazardous waste. All appropriate personal protective equipment must be worn during decontamination procedures.

Within 30 days of an incident, other equipment should be repaired or replaced.

5.2 POST-EMERGENCY REPORTS

The following post-emergency reports will be made after emergencies:

1. A verbal report of any incident must be promptly reported to the FEC or to the Manager of the Waste Management and Pollution Prevention Department, if he was not informed of the incident during its occurrence. The SNL/NM Emergency Operations Center will also be notified of any incident. Verbal reports must also be made within 24 hours of the emergency to the National Response Center (see Section 3.2) and the Secretary, NMED.
2. For every incident that involves Contingency Plan implementation, a written emergency incident report will be prepared by the Waste Management and Pollution Prevention Department and forwarded to the DOE within three working days. The written report will include at a minimum:

- Name, address, and telephone number of the owner of SNL/NM
- Name, address, and telephone number of the HWMF
- Date, time, and type of emergency
- Name and quantity of materials involved
- Extent of injuries
- Assessment of actual or potential hazards to human health or the environment
- Estimated quantity and disposition of recovered material

The DOE will send the incident Report to the U.S. Environmental Protection Agency or the NMED within 15 days of the occurrence.

3. Before operations are resumed at the HWMF, the NMED will be notified that the HWMF is in compliance with 40 CFR 264.56(h).

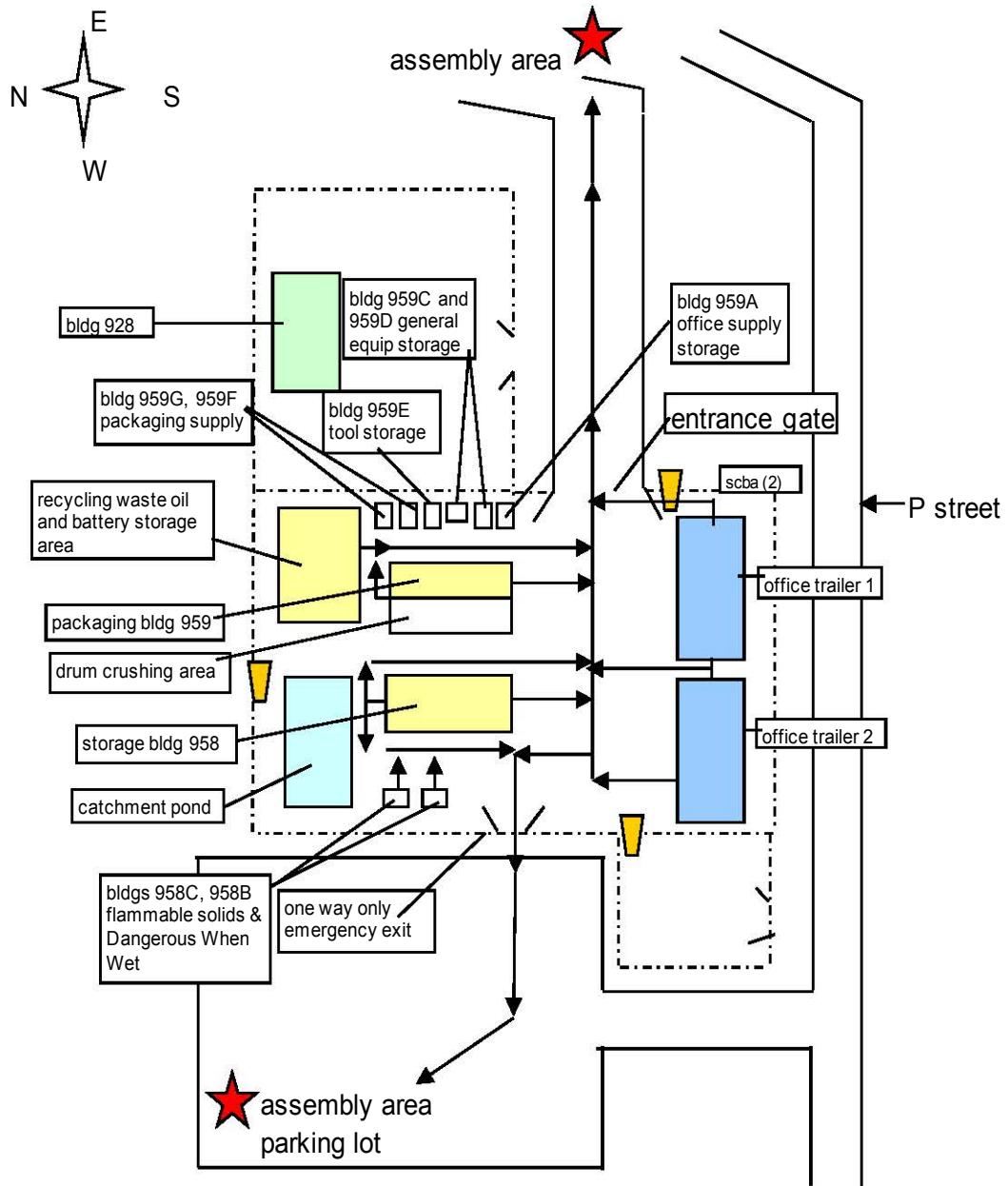
5.3 EMERGENCY RESPONSE EVALUATION

SNL/NM emergency management personnel are responsible for annual evaluations of the SNL/NM Emergency Plan and for the evaluation of the response to each emergency. If these evaluations reveal that changes to the Emergency Plan are necessary, they will be amended by the SNL/NM emergency management personnel and distributed to the appropriate organizations.

This Contingency Plan will be reviewed and, if necessary, amended by HWMF personnel and the Waste Management and Pollution Prevention Department whenever:

1. The facility permit or applicable regulations are revised.
2. The plan fails in an emergency.
3. The facility design, construction, operation, maintenance, or other circumstances change to increase the potential for fires, explosions, or releases of hazardous waste or hazardous waste constituents, or changes the response necessary in an emergency.
4. The list of FECs and/or phone number changes.
5. The list of emergency equipment changes.

Attachment 1



not to scale

windsocks

evacuation route

Hazardous Waste Management Facility Evacuation Routes