



BILL RICHARDSON  
GOVERNOR

State of New Mexico  
ENVIRONMENT DEPARTMENT

Hazardous Waste Bureau  
2905 Rodeo Park Drive East, Building 1  
Santa Fe, New Mexico 87505-6303  
Telephone (505) 428-2500  
Fax (505) 428-2567  
www.nmenv.state.nm.us



RON CURRY  
SECRETARY

DERRITH WATCHMAN-MOORE  
DEPUTY SECRETARY

**CERTIFIED MAIL  
RETURN RECEIPT REQUESTED**

June 30, 2003

Mr. Howard Moffitt  
Deputy Base Engineer  
49 CES/CD  
550 Tabosa Avenue  
Holloman Air Force Base, NM 88330-8458

**RE: PUBLIC NOTICE OF DRAFT PERMIT FOR  
CONTAINER STORAGE FACILITY  
HOLLOMAN AIR FORCE BASE, NEW MEXICO  
EPA ID NUMBER: NM6572124422**

Dear Mr. Moffitt:

Enclosed is a copy of the Holloman Air Force Base (HAFB) draft Container Storage Facility operating Permit prepared by the New Mexico Environment Department (NMED), the Public Notice, and Fact Sheet. NMED will begin a 45-day public notice period on **July 2, 2003** indicating that a draft permit has been prepared for review and public comment, including requests for a public hearing. HAFB will be notified by certified mail if a public hearing is scheduled. HAFB may submit any comments on the draft Permit to NMED not later than **5:00 p.m. on August 18, 2003.**

NMED will give due consideration and the weight it deems appropriate to all comments received during the public comment period. When ruling on permit issuance, NMED may make reasonable modifications to the permit to meet the requirements of the Hazardous Waste Management Regulations (20.4.1 NMAC). At the time that any final permit decision is made, NMED will issue a response to all comments submitted during the public notice period.

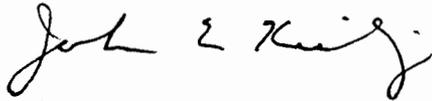
The final permit decision shall become effective as of the date of signature of the Secretary of the New Mexico Environment Department. The approved permit will be transmitted to HAFB by

Mr. Howard Moffitt  
June 30, 2003  
Page 2 of 2

certified mail.

Should you have any questions, please contact Mr. Cornelius Amindyas of my staff at the above address or at (505) 841-9488.

Sincerely,



John E. Kieling  
Manager  
Permits Management Program

JEK:ca

Enclosure

Cc w/out enclosure:

J. Bearzi, Chief, HWB, NMED  
C. Amindyas, HWB NMED  
L. King, Chief, EPA Region VI  
D. Hartell, HAFB  
D. Holmquist, HAFB

File: HAFB 03 and Reading



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SECRETARY

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DEPUTY SECRETARY

**FACT SHEET**  
**July 2, 2003**

**Intent to Issue a Permit for the Operation of  
A Hazardous Waste Storage Facility under the  
New Mexico Hazardous Waste Act**

**Holloman Air Force Base  
Otero County, New Mexico**

- Facility Name:** Holloman Air Force Base (**HAFB**)
- EPA ID Number:** NM6572124422
- Type of Facility:** The HAFB Container Storage Unit (**CSU**) is classified as a hazardous waste storage facility under the New Mexico Hazardous Waste Act (**HWA**) and the Resource Conservation and Recovery Act, Subtitle C (**RCRA**). The facility will be permitted to continue to accept, manage and store on-site generated hazardous waste before it is transferred to a permitted treatment or disposal facility. The facility also stores Toxic Substances Control Act (**TSCA**)-regulated wastes contaminated with polychlorinated biphenyls (**PCBs**).
- Location:** The HAFB hazardous waste **CSU** is located on Holloman Air Force Base (**HAFB**), about seven miles west of the City of Alamogordo in Otero County, New Mexico at Latitude 32.85 North, and Longitude 106.09 West.
- Owner:** 49th. Fighter Wing/Central Command (**FW/CC**), U.S. Department of Defense, Holloman Air Force Base
- Operators:** Defense Reutilization and Marketing Service, U.S. Department of Defense

## INTRODUCTION

Holloman Air Force Base (**HAFB**) is the owner and the Defense Reutilization and Marketing Service at HAFB is the operator of the hazardous waste CSU facility that is required to obtain a permit from the New Mexico Environment NMED (**NMED**) to manage, and store, treat, and dispose hazardous waste at HAFB pursuant to the HWA and the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act of 1976 (RCRA, 42 U.S.C. 6901 *et seq.*). Prior to issuing a final permit, the NMED is required to issue a draft permit for public comment, pursuant to 20.4.1.901.A.3 NMAC. This fact sheet contains all required information under 20.4.1.901 (a) through (f) and is intended to facilitate public review of the draft permit.

## REGULATORY BACKGROUND

Subtitle C of RCRA provides for "cradle to grave" environmental regulation for the management of hazardous waste at a hazardous waste facility. These requirements will be applicable from the moment waste is received at CSU. The New Mexico Administrative Code (20.4.1.500 and 20.4.1.900 NMAC, incorporating 40 CFR 264 and 270) provides specific performance standards in addition to general and specific environmental requirements that will apply to this facility.

The United States Environmental Protection Agency (EPA), under RCRA, authorizes NMED, to issue and enforce RCRA hazardous waste facility permits (see 50 FR 1515, January 11, 1985). New Mexico implements this authority under the HWA, Sections 74-4-1 *et seq.* (Repl. Pamp. 1992). On January 2, 1996, New Mexico received final authorization to implement federal requirements under the Hazardous and Solid Waste Amendments of 1984 (**HSWA**, see 61 FR 2450, January 26, 1996).

NMED, by and through its Secretary, is responsible for the administration and enforcement of the HWA. The HWA requires each person owning and/or operating an existing facility or planning to construct a new facility for the treatment, storage, and/or disposal of hazardous waste identified or listed under law to have a permit. NMED has adopted pertinent sections of the federal code of regulations (40 CFR Parts 260 through 270 and 273) under which it administers its hazardous waste treatment, storage, and disposal facility permitting program, as codified in the New Mexico Hazardous Waste Management Regulations 20.4.1 NMAC. Thus, the NMED Secretary has the authority to administer the issuance of a hazardous waste facility permit for Holloman Air Force Base.

## PROCEDURAL BACKGROUND FOR THE HAFB CSU APPLICATION

**General Permit Application Requirements:** NMED followed the same regulatory procedure for Holloman Air Force Base's permit application as it does for other facilities seeking a RCRA permit. Owners or operators of hazardous waste management facilities are required to submit a comprehensive permit application covering all aspects of design, operation, maintenance, and closure of the facility. This permit application is divided into two parts: A and B.

HAFB Fact Sheet

July 2, 2003

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Part A is a short, standard form that summarizes general information about a facility, including the name of the owner/operator, a list of the types of wastes managed at the facility, a facility layout diagram, and the activities requiring a permit.

Part B is an extensive document, submitted in a narrative, tabular, and schematic format, that describes the facility operations in detail. This information must include, but is not limited to: a general description of the facility; a waste analysis plan; information on the design and operation of all hazardous waste management units; procedures to prevent hazards; a contingency plan; and special information where applicable. In addition to the general Part B information required of all applicants, the New Mexico Hazardous Waste Management Regulations require that applicants comply with specific information requirements for containers, under 20.4.1.900 NMAC (incorporating 40 CFR 270.15).

**Permit Application.** HAFB submitted its initial Permit Application on July 1997 to manage and store hazardous waste at its CSU. HAFB revised the permit application in response to the NMED's technical comments.

Following review of the application NMED sent HAFB a request for supplemental information (RSI) on April 22, 1999. On May 24, 1999 Holloman Air Force Base submitted a request for a thirty-day extension of the response deadline. On June 29, 1999 NMED granted the deadline extension. On January 19, 2000 NMED sent HAFB a notice of deficiency regarding technical completeness of the permit application. On October 4, 2000 NMED approved the permit application for technical adequacy. On October 16, 2002 NMED issued HAFB a notice of deficiency on Waste Analysis Plan. On December 3, 2002 HAFB requested a thirty-day extension to the NOD deadline to fully respond to the deficiencies. NMED granted the extension on December 11, 2002. HAFB submitted a response to the NOD on January 23, 2003. NMED deemed the application administratively complete on June 29, 1999.

**TYPE AND QUANTITY OF WASTES PROPOSED TO BE TREATED, STORED, AND DISPOSED.**

**Type of Wastes.** The facility will be permitted to store the following hazardous wastes. [Note: the "D", "F", "K", and "U" Codes are EPA Hazardous Waste Numbers that are assigned to specific hazardous wastes. These codes can be identified at 20.4.1.200 NMAC (incorporating 40 CFR 261, Subparts C and D).]

- **D Codes (Wastes exhibiting the characteristics of Ignitability, Reactivity, Corrosivity, and/or Toxicity): D001 - Ignitability<sup>1</sup>; D002 - Corrosivity<sup>1</sup>; D003 - Reactivity<sup>1</sup>; D004-D018; and D022-D043.**
- **F Codes (Wastes from non-specific sources): F001 through F008**
- **P Codes (Discarded commercial chemical products, off-specification species, container residues, and spill residues thereof): These include miscellaneous P listed wastes generated from expired shelf-life products. These may consist of any P listed wastes, as defined in 20.4.1.200 NMAC, incorporating 40 CFR Part 261.**

- U Codes (**Wastes identified as toxic wastes**): **These include miscellaneous U listed wastes generated from expired shelf-life products. These may consist of any U listed wastes, as defined in 20.4.1.200 NMAC, incorporating 40 CFR Part 261.**

**Storage Unit.** The facility will be permitted to store the hazardous waste identified above, and hazardous waste generated on-site in drums. The facility may store hazardous waste as follows:

- **Container Storage Unit (CSU):** The facility may store hazardous waste in as many as 788 55-gallon drums or equivalent (43, 340 gallons). The CSU is situated 1400 feet inside the eastern boundary of HAFB on approximately 400,000 square feet of land designated for use by the Defense Reutilization and Marketing Office. The CSU consists of an indoor covered building and outdoor covered area.

## **ORGANIZATION OF THE PERMIT**

The HAFB operating permit follows the general format specified by the NMED for hazardous waste facility permits. The Permit also follows the format suggested by EPA (*Model RCRA Permit for Hazardous Waste Management Facilities*, Office of Solid Waste, U.S. Environmental Protection Agency, September, 1988).

This permit specifies the actions that HAFB may take during storage operations, during closure, and any corrective action required at the Facility. The permit specifies general and specific conditions that generally apply to all hazardous waste management facilities under the HWA and RCRA. Conditions covering general facility requirements include:

- general waste analysis [20.4.1.500 NMAC (incorporating 40 CFR 264.13)];
- security and inspection [20.4.1.500 NMAC (incorporating 40 CFR 264.14 and 264.15)];
- training [20.4.1.500 NMAC (incorporating 40 CFR 264.16)];
- ignitable, reactive or incompatible wastes [20.4.1.500 NMAC (incorporating 40 CFR 264.17)];
- standards for preparedness and prevention to ensure the facility is designed, constructed, maintained and operated to minimize the possibility of fire, explosion or unplanned sudden or non-sudden releases of hazardous wastes into the environment, including testing of equipment [20.4.1.500 NMAC incorporating 40 CFR 264.30 *et seq.*];
- contingency and emergency procedures [20.4.1.500 NMAC (incorporating 40 CFR 264.50 *et seq.*)];
- record-keeping and reporting [20.4.1.500 NMAC incorporating 40 CFR 264.70 *et seq.*];

- closure activities for the regulated unit [20.4.1.500 NMAC (incorporating 40 CFR 264.110 *et seq.*)];
- corrective action for releases from solid waste management units and/or areas of concern [20.4.1.500 NMAC (incorporating 40 CFR 264.101)]; and

Additionally, the permit covers specific requirements such as conditions for:

- storage of hazardous waste in containers (20.4.1.500 NMAC (incorporating 40 CFR 264.170 *et seq.*));

The permit is organized into five parts as described below. The column titled *Regulation* provides the regulatory authority for each permit condition. The permit also expressly incorporates attachments that have been approved, with revisions, for enforceability consistent with NMED regulations.

PERMIT ORGANIZATION		
PERMIT MODULE	TOPIC	REGULATORY CITATION
1	GENERAL PERMIT CONDITIONS	20.4.1.500 NMAC (incorporating 40 CFR Part 270)
2	GENERAL FACILITY CONDITIONS	20.4.1.500 NMAC (incorporating 40 CFR Part 264, Subparts B through H)
3	STORAGE OF HAZARDOUS WASTE IN CONTAINERS	20.4.1.500 NMAC (incorporating 40 CFR Part 264, Subpart I)
4	CORRECTIVE ACTION	20.4.1.500 NMAC (incorporating 40 CFR §264.101)
5	ORGANIC AIR EMISSIONS REQUIREMENTS	20.4.1.500 NMAC (incorporating 40 CFR Part 264, Subparts AA, BB, and CC)

**Permit Module I** contains conditions that generally apply to all hazardous waste management facilities and includes permit conditions specifying: the Effect of Permit; Permit Actions; Severability; Definitions; Duties and Requirements; Signatory Requirement; Reports and Notifications Submitted to the Secretary; Confidential Information; and Documents to Be Maintained at the Facility.

**Permit Module II** contains conditions covering general Facility requirements for HAFB and includes permit conditions specifying: Construction and Operation; Run-on And Run-off Controls; Permitted And Prohibited Waste Sources; Permitted And Prohibited Waste; Waste Analysis Plan; Security; General Inspection Requirements; Personnel Training; Special Provisions For Ignitable, Reactive, or Incompatible Waste; Preparedness And Prevention; Contingency Plan; Recordkeeping And Reporting; Waste Minimization Program; Land Disposal Restrictions, Transportation of Hazardous Waste; and General Closure Requirements.

HAFB Fact Sheet

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**Permit Module III** contains conditions for storage of hazardous waste in drums. Permit Part 3 specifies standards for the construction, operation, and maintenance of the CSU. The requirements and conditions for the maximum volumes and kinds of waste that can be stored in approved containers are also specified.

**Permit Module IV** contains the conditions and requirements for corrective action for releases from Solid Waste Management Units (SWMUs) and Areas of Concern (AOCs), and includes: notification and assessment requirements for releases; confirmatory sampling requirements; investigations requirements; interim measures; remedy selection; and permit modification requirements. SWMUs are any discernable units at which solid waste has been placed at any time, irrespective of whether the unit was intended for the management of solid or hazardous waste. Such units may include any area at the Facility at which solid wastes has been routinely and systematically released, but does not include one-time accidental spills that are immediately remediated or areas in which waste has not been managed, e.g., product storage areas. AOCs are considered to be any discernable area at the facility, or are off-site, determined by the Secretary to be impacted by migration of contamination from the facility, where hazardous waste or hazardous constituent(s) are present, or are suspected to be present, as a result of a release from the facility, and that pose a current or potential threat to human health or the environment. The regulatory justifications for imposing corrective action are contained in the NMED's technical support documents filed in the administrative record. Permit Module IV also contains a schedule of compliance with due dates for submittal of corrective action deliverables, and the deadlines for NFA request by the Permittee.

**Permit Module V** contains organics air emissions requirements for which required control equipment has been installed and is operational, or are exempt from Subpart CC standards under 20.4.1.500 NMAC, incorporating 40 CFR Part 264 Subpart CC.

## **PUBLIC PARTICIPATION**

### **Availability of Additional Information:**

NMED announced the availability of the draft Permit for public comment on **June 10, 2003**. The administrative record for this draft Permit consists of the Permit Application, the draft Permit, a Fact Sheet, and related correspondence. A copy of the draft Permit and the Fact Sheet may be reviewed at the following locations during the public comment period:

NMED - Hazardous Waste Bureau  
2905 Rodeo Park Drive East, Building 1  
Santa Fe, New Mexico 87505-6303  
*Mondays - Fridays from 8:00 a.m. to 5:00 p.m.*

Alamogordo Public Library  
920 Oregon Street  
Alamogordo, New Mexico 88310  
*Monday - Thursday 10:00 a.m. to 8:00 p.m.  
Friday from 10:00 a.m. to 5:00 p.m., Saturday  
from 11:00 a.m. to 5:00 p.m., and Sunday  
from 1:00 p.m. to 5:00 p.m.*

A copy of the draft Permit, Fact Sheet, and Public Notice are also available on the NMED website at [www.nmenv.state.nm.us/HWB/hafbpermits.html](http://www.nmenv.state.nm.us/HWB/hafbpermits.html) under Draft Permit. To obtain a copy of the administrative record or a portion thereof, in addition to further information, please contact Mr. Cornelius Amindyas at (505) 841-9488, or the address given below. NMED will provide members of the public with up to 80 pages of the Administrative Record free of charge. Thereafter, NMED will charge a copy fee of \$0.25 per page.

### **Comment Period and Regulatory Contact:**

NMED issued a Public Notice on **July 2, 2003** to announce the beginning of a 45-day comment period that will end on **August 18, 2003**. Any person who wishes to comment on the draft Permit or request a public hearing should submit written or electronic mail (e-mail) comment(s) with the commenter's name and address to the respective address below. Only comments and/or requests received on or before **5:00 p.m., August 18, 2003** will be considered.

John E. Kieling, Program Manager  
Hazardous Waste Bureau - New Mexico Environment Department  
2905 Rodeo Park Drive East, Building 1  
Santa Fe, NM 87505-6303  
Ref: Holloman Air Force Base draft Permit  
e-mail: [hazardous\\_waste\\_comment@nmenv.state.nm.us](mailto:hazardous_waste_comment@nmenv.state.nm.us)

Written comments must be based on available information for review and include, to the extent practicable, all referenced factual materials. Documents in the administrative record need not be

HAFB Fact Sheet

July 2, 2003

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re-submitted if expressly referenced by the commenter. Requests for a public hearing shall provide: (1) a clear and concise factual statement of the nature and scope of the interest of the person requesting the hearing; (2) the name and address of all persons whom the requestor represents; (3) a statement of any objections to the draft Permit, including specific references to any Permit conditions being addressed; and (4) a statement of the issues which the commenter proposes to raise for consideration at the hearing. NMED will provide a thirty (30) day notice of a public hearing, if scheduled.

**Final Decision:**

The NMED must ensure that the approved draft Permit is consistent with the New Mexico Hazardous Waste Management Regulations. All written comments submitted on the draft Permit will become part of the administrative record, be considered in formulating a final decision, and may cause the draft Permit to be modified. NMED will respond in writing to all public comments. This response will specify which provisions, if any, of the draft Permit have been changed in the final Permit decision, the reasons for the change, and will briefly describe and respond to all public comments on the draft Permit or the Permit application raised during the public comment period. This response will also be posted on the NMED website in addition to all persons presenting written comments.

After consideration of all the written public comments received, the NMED will issue, or modify and issue the Permit. If the NMED modifies and issues the Permit, the Permittee shall be provided by mail a copy of the modified Permit and a detailed written statement of reasons for the modifications. The NMED Secretary will make the final Permit decision publicly available and shall notify the Permittee by certified mail. The Secretary's decision shall constitute a final agency decision and may be appealed as provided by the Hazardous Waste Act. All persons on the facility mailing list, presenting written comments, or who requested notification in writing, will be notified of the final decision by mail.

The final decision will become effective thirty days after service of the decision, unless a later date is specified or review is requested under the New Mexico Hazardous Waste Management Regulations, 20.4.1 NMAC, Section 901.E., *Hearings*.

**Arrangements for Persons with Disabilities:**

Any person with a disability requiring assistance or auxiliary aid to participate in this process should contact Cliff Hawley, NMED, Room N-4030, P.O. Box 26110, 1190 St. Francis Drive, Santa Fe, NM 87502-6110; Telephone Number (505) 827-2580. TDD or TDY users please access Mr. Hawley's number via the New Mexico Relay Network. Albuquerque users may access Mr. Hawley's number at (505) 275-7333 or 800-659-1779.



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**RON CURRY**  
SECRETARY

**DERRITH WATCHMAN-MOORE**  
DEPUTY SECRETARY

**PUBLIC NOTICE 03-02**

**NEW MEXICO ENVIRONMENT DEPARTMENT**  
**HAZARDOUS WASTE BUREAU**  
Santa Fe, New Mexico 87505  
July 2, 2003

**NOTICE OF PUBLIC COMMENT PERIOD AND OPPORTUNITY TO REQUEST A  
PUBLIC HEARING ON A DRAFT HAZARDOUS WASTE PERMIT FOR  
HOLLOMAN AIR FORCE BASE EPA ID NO. NM6572124422**

The New Mexico Environment Department (NMED) proposes to issue a final Permit to Holloman Air Force Base (**Applicant**) for a Container Storage Unit. The Applicant, is located at 550 Tabosa Avenue, Holloman AFB, New Mexico 88330-8458, about seven miles west of the City of Alamogordo in Otero County, New Mexico. The final Permit would renew the current operating Permit and allow the Applicant to continue to accept, manage and store on-site generated hazardous waste before its transfer to a permitted treatment or disposal facility. The Permit would be issued pursuant to the New Mexico Hazardous Waste Act, NMSA 1978 §§74-4-1 et seq.

NMED announces the availability of the draft Permit for public comment. In addition, NMED will consider any requests for public hearing and determine whether a public hearing will be held to consider further public comment. NMED also announces the availability of a Fact Sheet providing the principal basis for NMED's decision to renew the Permit and issue a final Permit, and the significant factual, legal and policy questions considered in preparing the draft Permit. The Fact Sheet also explains in detail the type and quantity of wastes that are to be managed and stored at HAFB, and includes a summary of the basis for Permit conditions, including applicable statutory and regulatory support.

**PUBLIC REVIEW OF THE DRAFT PERMIT**

A copy of the draft Permit and the Fact Sheet may be reviewed at the following locations during the public comment period:

NMED - Hazardous Waste Bureau  
2905 Rodeo Park Drive East, Building 1  
Santa Fe, New Mexico 87505-6303  
*Mondays - Fridays from 8:00 a.m. to 5:00 p.m.*

Alamogordo Public Library  
920 Oregon Street  
Alamogordo, New Mexico 88310  
*Monday - Thursday 10:00 a.m. to 8:00 p.m.,  
Saturday from 11:00 a.m. to 5:00 p.m., and  
Sunday from 1:00 p.m. to 5:00 p.m.*

A copy of the draft Permit, Fact Sheet, and Public Notice are also available on the NMED website at [www.nmenv.state.nm.us/HWB/hafbperm.html](http://www.nmenv.state.nm.us/HWB/hafbperm.html) under Draft Permit. To obtain a copy of the administrative record or a portion thereof, in addition to further information, please contact Mr. Cornelius Amindyas at (505) 841-9488, or the address given below. NMED will provide members of the public with up to 80 pages of the Administrative Record free of charge. Thereafter, NMED will charge a copy fee of \$0.25 per page. The administrative record for this draft Permit consists of the Permit Application, the draft Permit, a Fact Sheet, and related correspondence.

Any person who wishes to comment on the draft Permit or request a public hearing should submit written or electronic mail (e-mail) comment(s) with the commenter's name and address to the respective address below. The comment period begins on **July 2, 2003** and ends on **August 18, 2003**. Only comments and/or requests received on or before **5:00 p.m. August 18, 2003** will be considered.

John E. Kieling, Program Manager  
Hazardous Waste Bureau - New Mexico Environment Department  
2905 Rodeo Park Drive East, Building 1  
Santa Fe, NM 87505-6303  
Ref: Holloman Air Force Base draft Permit  
e-mail: [hazardous\\_waste\\_comment@nmenv.state.nm.us](mailto:hazardous_waste_comment@nmenv.state.nm.us)

Written comments must be based on available information for review and include, to the extent practicable, all referenced factual materials. Documents in the administrative record need not be re-submitted if expressly referenced by the commenter. Requests for a public hearing shall provide: (1) a clear and concise factual statement of the nature and scope of the interest of the person requesting the hearing; (2) the name and address of all persons whom the requestor represents; (3) a statement of any objections to the draft Permit, including specific references to any Permit conditions being addressed; and (4) a statement of the issues which the commenter proposes to raise for consideration at the hearing. NMED will provide a thirty (30) day notice of a public hearing, if scheduled.

NMED must ensure that the approved draft Permit is consistent with the New Mexico Hazardous Waste Management Regulations. All written comments submitted on the draft Permit will be considered in formulating a final decision and may cause the draft Permit to be modified. NMED will respond in writing to all public comments. This response will specify which provisions, if any, of the draft Permit have been changed in the final Permit decision, the reasons for the change, and will briefly describe and respond to all public comments on the draft Permit or the Permit application raised during the public comment period. All persons presenting written comments or who requested notification in writing will be notified of the decision by mail. This response will also be posted on the NMED website.

After consideration of all the written public comments received, NMED will issue, or modify and issue the Permit. If NMED modifies and issues the Permit, the Applicant shall be provided by

mail a copy of the modified Permit and a detailed written statement of reasons for the modifications.

The NMED Secretary will make the final Permit decision publicly available and shall notify the Applicant by certified mail. The Secretary's decision shall constitute a final agency decision and may be appealed as provided by the Hazardous Waste Act.

#### **ARRANGEMENTS FOR PERSONS WITH DISABILITIES**

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**DRAFT**

**RESOURCE CONSERVATION AND RECOVERY ACT  
HAZARDOUS WASTE CONTAINER STORAGE FACILITY  
OPERATING PERMIT  
EPA ID No. NM6572124422**

To

**HOLLOMAN AIR FORCE BASE**

For the

**CONTAINER STORAGE UNIT**

Located at

**HOLLOMAN AIR FORCE BASE**

**DRAFT**  
Prepared by the

**NEW MEXICO ENVIRONMENT DEPARTMENT  
HAZARDOUS WASTE BUREAU  
2905 RODEO PARK DRIVE EAST  
BUILDING 1  
SANTA FE, NEW MEXICO, 87505-6303**

JUNE 2003

**DRAFT**

**LIBRARY COPY**

**DRAFT**

**RESOURCE CONSERVATION AND RECOVERY ACT  
HAZARDOUS WASTE CONTAINER STORAGE FACILITY  
OPERATING PERMIT  
EPA ID No. NM6572124422**

To

**HOLLOMAN AIR FORCE BASE**

For the

**CONTAINER STORAGE UNIT**

Located at

**HOLLOMAN AIR FORCE BASE**

**DRAFT**

Prepared by the

**NEW MEXICO ENVIRONMENT DEPARTMENT  
HAZARDOUS WASTE BUREAU  
2905 RODEO PARK DRIVE EAST  
BUILDING 1  
SANTA FE, NEW MEXICO, 87505-6303**

JUNE 2003

**HAZARDOUS WASTE FACILITY**  
**PERMIT**

Name of Permittee: Holloman Air Force Base  
EPA Identification Number: NM6572124422  
Permit Number: NM6572124422-2

Pursuant to the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act (RCRA), as amended (42 U.S.C. 6901, et seq.), and the New Mexico Hazardous Waste Act, NMSA 1978, Sections 74-4-1 et seq. (Repl. Pamph. 2000), and regulations promulgated thereunder by the New Mexico Environmental Improvement Board (codified and to be codified in the Hazardous Waste Management Regulations [20.4.1 NMAC]), a Permit is issued to Holloman Air Force Base (**the Permittee**) to operate a Subtitle C hazardous waste Container Storage Unit (CSU), comprising two rooms. The CSU is located at Holloman Air Force Base, New Mexico on Latitude 32.85 North, and Longitude 106.09 West.

The Permittee shall comply with all terms and conditions of this Permit. This Permit consists of five modules and attachments A through L. Applicable provisions of regulations cited are those, which are in effect on the effective date of this permit, New Mexico Hazardous Waste Management Regulations 20.4.1 NMAC (Effective June 14, 2000).

This Permit is based on the assumption that all information contained in the Permit Application and the administrative record is accurate and that the CSU will be constructed and operated as specified in the application. The permit application consists of information submitted in July 1997 and supplementary technical documents.

Any inaccuracies found in the submitted information may be grounds for the termination or modification of this Permit in accordance with 20.4.1.900 NMAC, incorporating 40 CFR §270.41, §270.42, and §270.43 and for potential enforcement action.

This Permit shall become effective thirty days (30) after notice of the decision has been served on the applicant, and shall remain in effect for ten (10) years in accordance with the New Mexico Hazardous Waste Act, Section 74-4-4 unless modified, suspended or revoked under Section 74-4-4.2 or 20.4.1.900 NMAC, incorporating 40 CFR §270.41, §270.42, §270.43, or continued in accordance with 20.4.1.900 NMAC, incorporating 40 CFR §270.51, or issued for a duration that is less than the full allowable term in accordance with 20.4.1.900 NMAC, incorporating 40 CFR §270.50(c).

Signed this \_\_\_\_\_ day of August 2003.

By \_\_\_\_\_

Ron Curry  
Secretary  
New Mexico Environment Department

**DRAFT**

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## LIST OF ACRONYMS

AK	Acceptable Knowledge
AOC	Area of Concern
AMU	Atomic Mass Unit
ASTM	American Society for Testing and Materials
BGS	Below Ground Surface
CAMU	Corrective Action Management Unit
CEC	Cation Exchange Capacity
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CES	Civil Engineering Squadron
CFR	Code of Federal Regulations
CMS	Corrective Measure Study
COC	Chain of Custody
CSU	Container Storage Unit
DOT	U.S. Department of Transportation
DQO	Data Quality Objectives
DRMO	Defense Reutilization and Marketing Office
EC	Emergency Coordinator
EPA	U.S. Environmental Protection Agency
GC/MS	Gas Chromatography/Mass Spectrometry
HAFB	Holloman Air Force Base
HWA	New Mexico Hazardous Waste Act
HWB	Hazardous Waste Bureau
KOP	Knowledge of Process
LDR	Land Disposal Restrictions
MOU	Memorandum of Understanding
MSDS	Material Safety Data Sheet
MS/MSD	Matrix Spike/Matrix Spike Duplicate
NFA	No Further Action
NMAC	New Mexico Administrative Code
NMED	New Mexico Environment Department
PARCC	Precision, Accuracy, Representativeness, Completeness, and Comparability
PCBs	Polychlorinated Biphenyls
PID	Photo-ionization Detector
PPE	Personal Protective Equipment
QA/QC	Quality Assurance/Quality Control
QAPP	Quality Assurance Project Plans
RCRA	Resource Conservation and Recovery Act
RFA	RCRA Facility Assessment

**LIST OF ACRONYMS (Continued)**

RFI	RCRA Facility Investigation
SAP	Sampling and Analysis Plan
SAR	SWMU Assessment Report
SCBA	Self Contained Breathing Apparatus
SOP	Standard Operating Procedures
SVOCs	Semivolatile Organic Compounds
SWMU	Solid Waste Management Unit
TSCA	Toxic Substances Control Act
TSDF	Treatment, Storage and Disposal Facility
VOCs	Volatile Organic Compounds
WAP	Waste Analysis Plan
WQCC	New Mexico Water Quality Control Commission

**PART 1**  
**GENERAL PERMIT CONDITIONS**

## PART 1 GENERAL PERMIT CONDITIONS

### **HIGHLIGHTS:**

This Part contains conditions pertaining to all hazardous waste storage facilities permitted under the New Mexico Hazardous Waste Act (HWA) and Resource Conservation and Recovery Act (RCRA).

#### **I.A. PERMIT CONSTRUCTION: CITATIONS**

Whenever provisions of this Permit or of the New Mexico Hazardous Waste Management Regulations (HWMR), 20.4.1 NMAC, incorporating 40 CFR Parts 260 through 270 are cited, the citation shall include all subordinate provisions of the cited provision paragraphs of this Permit or of the HWMR. When subordinate sections are cited, such citations shall include all subsections of the cited paragraphs.

If there is a conflict between the language of the Permit Parts and the language of the Permit Attachments, then the language of the Permit Parts shall override the language in the Permit Attachments.

#### **I.B. SEVERABILITY**

The provisions of the Permit are severable, and if any provision of this Permit, or any application of any provision of this Permit to any circumstance is held invalid, the application of such provision to other circumstances and the remainder of this Permit shall not be affected thereby.

#### **I.C. DEFINITIONS**

For purposes of this Permit, terms used herein shall have the same meanings as those in HWA, RCRA, and their implementing regulations, unless this Permit specifically provides otherwise. Where a term is not defined in HWA, RCRA, pursuant regulations, EPA guidelines or publications, or this Permit, the meaning associated with such a term shall be defined by a standard dictionary reference or the generally accepted scientific or industrial meaning of the term.

**“Action levels”** are health-based concentrations of hazardous constituents determined by the Secretary to be indicators for the protection of human health and/or the environment.

**“Area of Concern”** means any discernable area at the container storage unit (CSU), or an area off-site impacted by migration of contamination from the CSU, where the Secretary determines may have a probable release of hazardous waste or hazardous constituents not from a solid waste management unit (SWMU) and may cause a current or potential threat to human health or the environment. An area of concern (AOC) may require investigation and

remedial action under Section 74-4-4.2.B of the HWA or 20.4.1.900 NMAC (incorporating 40 CFR §270.32(b)(2)), in order to ensure adequate protection of human health and the environment.

**“Cleanup levels”** for the purposes of this permit, are concentrations of hazardous waste or constituents based on excess lifetime cancer risk levels that are consistent with EPA’s National Contingency Plan.

**“Container Storage Unit” (CSU)** means the Holloman Air Force Base (HAFB) hazardous waste management and storage unit which comprises Building 118. (20.4.1.101 NMAC, incorporating 40 CFR §260.10).

A **“Corrective Action Management Unit” (CAMU)** includes any area within HAFB that is designated by the Secretary under the HWA and its regulations, for the purpose of implementing corrective action requirements. A CAMU shall only be used for the management of remediation wastes pursuant to implementing such corrective action requirements at the Facility.

**“Corrective Measures”** include all corrective action necessary to protect human health and the environment for all releases of hazardous waste or hazardous constituents from any solid waste management unit at the Facility, regardless of the time at which waste was placed in the unit, as required under Section 74-4-4.2.B of the HWA and 20.4.1.500 NMAC, incorporating 40 CFR §264.101. Corrective measures may address releases to air, soils, surface water or groundwater.

**“Extent of contamination”** is defined as the horizontal and vertical area in which the concentrations of hazardous constituents in the environmental media being investigated are above detection limits or background concentrations indicative of the region, whichever is appropriate as determined by the Secretary.

**“Facility”** means Holloman Air Force Base including all contiguous land, and structures, other appurtenances, and improvements on the land located on latitude 32.85 North, and Longitude 106.09 West, Holloman Air Force Base, about 7 miles (11 kilometers) west of the City of Alamogordo, in Otero County, New Mexico. For the purposes of implementing corrective action under 20.4.1.500 NMAC, incorporating 40 CFR §264.101, or RCRA Section 3008(h), the Hazardous Waste Act §74-4-10.E. The Facility includes all contiguous property under the control of the owner or operator seeking a permit under 20.4.1 NMAC, incorporating 40 CFR Parts 260 through 270. (20.4.1.100 NMAC, incorporating 40 CFR §260.10).

**“Foreign Source”** refers to hazardous waste generated outside the United States of America.

**“Hazardous Constituents”** are those substances listed in 20.4.200 NMAC, incorporating 40 CFR §261 Appendix VIII, and 20.4.1.500 NMAC, incorporating 40 CFR §264 Appendix IX.

**“Hazardous Waste”** means a hazardous waste as defined in Section 74-4-3(I) of the HWA, and 20.4.1.200 NMAC, incorporating 40 CFR §261.3.

**“He”** means "he" or "she" as appropriate.

**“Interim Measures”** are actions necessary to minimize or prevent the further migration of contaminants and limit actual or potential human and environmental exposure to contaminants while long-term corrective action remedies are evaluated and, if necessary, implemented.

**“Off-Site Source”** means a generator of hazardous waste located within the United States of America, but outside the Permittee's Facility boundary.

**“Release”** means any spilling, leaking, pumping, pouring, emitting, emptying, discharging, injecting, escaping, leaching, dumping, or disposing of any hazardous waste or hazardous constituents into the environment (including the abandonment or discarding of barrels, containers, and other closed receptacles containing hazardous waste or hazardous constituents).

**“Remediation Waste”** for the purposes of this permit includes all solid and hazardous wastes, and all media (including groundwater, surface water, soils, and sediments) and debris, which contain listed hazardous wastes or which themselves exhibit a hazardous waste characteristic, that are managed for the purpose of implementing corrective action requirements. For the Facility, remediation wastes may originate only from within the Facility boundary, but may include releases beyond the Facility boundaries.

**“Secretary”** means the Secretary of the New Mexico Environment Department or his designee or authorized representative.

A **“Solid Waste Management Unit”** (SWMU) for the purposes of this permit, means any discernable unit or area at the Facility at which solid waste has been placed at any time, and from which the Secretary determines there may be a risk of a release of hazardous waste or constituents, irrespective of whether the unit was intended for the management of solid waste. Placement of solid waste includes one time and accidental events that were not remediated, as well as any units or area at which solid waste has been routinely and systematically placed.

**I.D. EFFECT OF PERMIT**

The Secretary of the New Mexico Environment Department (**Secretary**) issues this Permit to Holloman Air Force Base, (**the Permittee**) the owner and operator of a container storage unit (**CSU**) (**EPA I.D. Number NM6572124422**). This Permit authorizes the Permittee to accept, manage, store, and transfer on-site hazardous waste at the permitted CSU upon the Facility, and establishes the general and specific standards for these activities, pursuant to the New Mexico Hazardous Waste Act (**HWA**) NMSA 1978, §74-4-1 et seq. (Repl. Pamp. 1993), and the New Mexico Hazardous Waste Management Regulations, 20.4.1.100 NMAC et. seq.

Compliance with this permit during its term constitutes compliance, for purposes of enforcement, with 20.4.1.500 and 800 NMAC, which incorporate 40 CFR Parts 264 and 268, only for those management practices specifically authorized by this permit. The Permittee must also comply with 20.4.1.100, 200, 300, and 400 NMAC which incorporate 40 CFR Parts 260, 261, 262, and 263, to the extent the requirements of those Sections are applicable. The Permittee must also comply with all applicable self- implementing provisions imposed by statute or rule. Compliance with this Permit shall not constitute a defense to any order issued or any action brought under HWA §74-4-10.E or §74-4-13; RCRA §3008(a), §3008(h), §3013, §7002, or §7003; the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (**CERCLA**), 42 U.S.C. §9601 et seq., or any other law providing for protection of public health or the environment. This Permit does not convey any property rights of any sort or any exclusive privilege, nor authorize any injury to persons or property, any invasion of other private rights, or any infringement of State or local laws or regulations, in accordance with 20.4.1.900 NMAC, incorporating 40 CFR §§270.4 and 270.30(g).

The complete Permit consists of Permit Parts 1 through 5 and Permit Attachments A through L as follows:

- Part 1 - General Permit Conditions
- Part 2 - General Facility Conditions
- Part 3 - Storage of Hazardous Waste in Containers
- Part 4 - Corrective Action
- Part 5 - Organic Air Emission Requirements
- Attachment A - Authorized Wastes
- Attachment B - General Facility Description
- Attachment C - Design and Operation of the Container Storage Unit
- Attachment D - Waste Analysis Plan

Attachment E	-	Security Plan
Attachment F	-	Inspection Plan
Attachment G	-	Preparedness and Prevention
Attachment H	-	Contingency Plan
Attachment I	-	Manifesting, Reporting, and Record Keeping
Attachment J	-	Personnel Training
Attachment K	-	Closure Plan
Attachment L	-	Corrective Action for Solid Waste Management Units

If there is a conflict between the language of the Permit Parts and the language of the Permit Attachments, the language of the Permit Parts shall override the language in the Permit Attachments.

**I.E. PERMIT ACTIONS**

**I.E.1. Term of Permit**

This Permit shall be effective for a fixed period of ten (10) years from the effective date of issuance as specified in the Permit certificate, as required by 20.4.1.900 NMAC, incorporating 40 CFR §270.50(a)].

**I.E.2. Permit Modification, Suspension and Revocation**

This Permit may be modified, suspended, or revoked for cause as specified in HWA §74-4-4.2 and 20.4.1.900 NMAC, incorporating 40 CFR §§270.41 through 270.43. The filing of a request by the Permittee for a Permit modification, suspension, or revocation, or the notification of planned changes or anticipated noncompliance, shall not stay any Permit condition, in accordance with 20.4.1.900 NMAC, incorporating 40 CFR §270.30(f).

**I.E.3 Permit Renewal**

Permittee may renew this Permit by submitting an application for a new permit at least one hundred eighty (180) calendar days before the expiration date of this Permit. In reviewing any application for a permit renewal, the Secretary shall consider improvements in the state of control and measurement technology and changes in applicable regulations, as required by 20.4.1.900 NMAC, incorporating 40 CFR §270.10(h) and §270.30(b).

**I.E.4            Continuation of Expiring Permit**

If the Permittee has submitted a timely and complete application for renewal of this Permit as specified in 20.4.1.900 NMAC (incorporating 40 CFR §270.10, §270.13 through §270.29), this Permit shall remain in effect until the effective date of the new permit if, through no fault of the Permittee, the Secretary has not issued a new permit on or before the expiration date of this Permit, pursuant to 20.4.1.900 NMAC, incorporating 40 CFR §270.51.

**I.E.5.            Transfer of Permit**

The Permittee shall not transfer this Permit to any person except after providing notice to the Secretary and receiving approval from the Secretary for this action. The prospective new owner or operator must file a disclosure statement with the Secretary as specified at HWA, §74-4-4.7. The Secretary may require modification or revocation and reissuance of this Permit in accordance with 20.4.1.900 and 20.4.1.901 NMAC, incorporating 40 CFR §270.40(b) and §270.41(b)(2).

Before transferring ownership or operation of the Hazardous Waste Storage Facility during its operating life or post-closure care period, the Permittee shall notify the new owner or operator in writing of the requirements of 20.4.1.500 NMAC, incorporating 40 CFR part 264 and 20.4.1.900 NMAC, incorporating 40 CFR part 270, and the Hazardous Waste Act, pursuant to 20.4.1.500 NMAC, incorporating 40 CFR 264.12(c) and 20.4.1.900 NMAC, incorporating 40 CFR 270.30(l)(3) and shall provide the Secretary with a copy of this notice.

**I.E.6.            Permit Review**

The Secretary shall review this Permit no later than five (5) years after the effective date of this Permit, and shall modify this Permit as necessary pursuant to Section §74-4-4.2 of the HWA and 20.4.1.900 NMAC (incorporating 40 CFR §270.41, §270.50(b) and §270.50(d)). Such modification(s) shall not extend the effective term of this Permit as specified in Permit Condition I.E.1. (20.4.1.900 NMAC, incorporating 40 CFR §270.41, §270.50(b) and §270.50(d)).

**I.E.7.            Scope of Permit**

This Permit authorizes the management and storage of hazardous wastes only in the Container Storage Unit, as defined herein, and at no other locations on the Facility.

**I.F.            DUTIES AND REQUIREMENTS**

**I.F.1.            Duty to Comply**

The Permittee shall comply with all conditions in this Permit, except to the extent and for the duration such noncompliance is authorized in an Emergency Permit specified in 20.4.1.900 NMAC, incorporating 40 CFR §270.61. Any Permit noncompliance, except under the terms of an Emergency Permit, constitutes a violation of HWA and/or RCRA and may subject the Permittee, its successors and assigns, officers, directors, employees, parents, or subsidiaries, to an administrative or civil enforcement action, including civil penalties and injunctive

relief, as specified under §74-4-10 or §74-4-10.1 of the HWA or Sections 3008(a) and (g), 7002, or 7003 of RCRA; to permit modification, suspension, or revocation, or to denial of a permit application or modification request, under §74-4-4.2 of the HWA; or to criminal fines or imprisonment under HWA Section 74-4-11 or Section 3008(d), (e), or (f) of RCRA; or to a combination of the foregoing. (20.4.1.900 NMAC, incorporating 40 CFR §270.30(a)).

**I.F.2. Duty to Reapply**

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

**I.F.3. Need to Halt or Reduce Activity Not a Defense**

It shall not be a defense for the Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the terms of this Permit, as provided by 20.4.1.900 NMAC, incorporating 40 CFR §270.30(c).

**I.F.4. Duty to Mitigate**

In the event of noncompliance with this Permit, the Permittee shall take all reasonable steps to minimize releases to the environment, and shall carry out such measures as are reasonable to prevent significant adverse impacts on human health or the environment, as required by 20.4.1.900 NMAC, incorporating 40 CFR §270.30(d).

**I.F.5. Proper Operation and Maintenance**

The Permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the Permittee to achieve compliance with the conditions of this Permit. Proper operation and maintenance includes effective performance, adequate funding, adequate operator staffing and training, and adequate laboratory and process controls, including appropriate quality assurance/quality control procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems only when necessary to achieve compliance with the conditions of this Permit as required by 20.4.1.900 NMAC, incorporating 40 CFR §270.30(e).

**I.F.6. Duty to Provide Information**

The Permittee shall furnish to the Secretary, within a reasonable time as specified by the Secretary, any relevant information which the Secretary may request to determine whether cause exists for modifying, suspending, or revoking this Permit, or to determine compliance with this Permit. The Permittee shall also furnish to the Secretary, upon request, copies of records required to be kept by this Permit as required by 20.4.1.500 NMAC incorporating 40 CFR §264.74(a) and 20.4.1.900 NMAC, incorporating 40 CFR §270.30(h).

Permit Condition I.F.6 shall not be construed to limit, in any manner, the Secretary's authority under HWA §74-4-4.3 or RCRA §3007(a).

**I.F.7. Inspection and Entry**

The Permittee shall allow the Secretary, or authorized representatives, upon the presentation of credentials and other documents as may be required by law, the following entry and inspection privileges specified in 20.4.1.900 NMAC, incorporating 40 CFR §270.30(i):

**I.F.7.a. Entrance to premises** - to enter at reasonable times into the Permittee's premises where the regulated facility or activity is located or conducted, or where records must be kept under the conditions of this Permit;

**I.F.7.b. Access to records** - to have access to and copy, at reasonable times, any records that must be kept under the conditions of this Permit;

**I.F.7.c. Inspection** - to inspect at reasonable times the Facility, equipment (including monitoring and control equipment), practices, or operations regulated or required under this Permit; and

**I.F.7.d. Sampling** - to sample or monitor at reasonable times, for the purposes of assuring Permit compliance or as otherwise authorized by RCRA and/or HWA, any substances or parameters, including soil, surface water, and ground water at the Facility.

Permit Condition I.F.7 shall not be construed to limit, in any manner, the Secretary's authority under HWA §74-4-4.3 or RCRA §3007(a).

**I.F.8. Monitoring and Records**

**I.F.8.a. Representative sampling**

For purposes of monitoring, the Permittee shall take samples and measurements representative of the monitored activity as required by

20.4.1.900 NMAC, incorporating 40 CFR §270.30(j)(1), and the procedures stipulated in Permit Condition II.C.2.

**I.F.8.b. Record retention**

The Permittee shall retain records of all ground water monitoring information, including all calibration and maintenance records, well logs, copies of all reports and records required by this Permit, the waste minimization certification required by 20.4.1.500 NMAC, incorporating 40 CFR §264.73(b)(9), and records of all data used to complete the Permit Application for a period of at least three (3) years from the date of the sample, measurement, report, record, certification, or application as required by 20.4.1.900 NMAC incorporating 40 CFR §270.30.(j)(2). This period may be extended by request of the Secretary at any time and is automatically extended during the course of any unresolved enforcement action regarding this Facility.

**I.F.8.c. Monitoring records contents**

In accordance with 20.4.1.900 NMAC, incorporating 40 CFR §270.30(j)(3), records of monitoring information shall include:

- i. the dates, exact place, and times of sampling or measurements;
- ii. the names and qualifications of the individuals who performed the sampling or measurements;
- iii. the name and address of the laboratory that performed the analysis;
- iv. the dates analyses were performed;
- v. the names and qualifications of the individuals who performed the analyses;
- vi. the analytical techniques or methods used; and
- vii. the results of such analyses.

**I.F.9. Reporting Planned Changes**

The Permittee shall give notice to the Secretary, as soon as possible, of any planned physical alterations or additions to the CSU, as required by 20.4.1.900 NMAC, incorporating 40 CFR §270.30(l)(1).

**I.F.10.            Reporting Anticipated Noncompliance**

The Permittee shall give advance notice to the Secretary of any planned changes to the CSU or in any activities, which may result in noncompliance with Permit requirements, as required by 20.4.1.900 NMAC, incorporating 40 CFR §270.30(1)(2).

**I.F.11.            Certification of Construction or Modification**

If the CSU is modified, the Permittee shall not store hazardous waste in the modified portion of the CSU, until the following conditions specified in 20.4.1.900 NMAC, incorporating 40 CFR §270.30(1)(2), have been satisfied:

**I.F.11.a.            Submittal of statement** - the Permittee has submitted to the Secretary, by certified mail or hand delivery, a letter signed by the Permittee and an independent professional engineer registered in New Mexico stating that the CSU modification meets the requirements of this Permit; and

**I.F.11.b.            Inspection by the Secretary** - the Secretary has:

- i.        inspected the modified or newly constructed portion of the CSU and it meets the requirements and conditions of this Permit; or
- ii.        waived the inspection or, within fifteen (15) calendar days from the date of submission of the letter required by Permit Condition I.F.11.a., has not notified the Permittee of his intent to inspect.

**I.F.12.            Twenty-Four Hour and Subsequent Reporting**

**I.F.12.a.            Oral report** - The Permittee shall report to the Secretary any noncompliance which may endanger human health or the environment. Any such information shall be reported orally within 24 hours from the time the Permittee becomes aware of the circumstances, as required by 20.4.1.900 NMAC, incorporating 40 CFR §270.30(1)(6)(i). The report shall include the following:

- i.        information concerning release of any hazardous waste that may cause an endangerment to public drinking water supplies; and
- ii.        any information of a release or discharge of hazardous waste, or hazardous waste constituents, or of a fire or explosion at the CSU, which could threaten the environment or human health outside the CSU.

**I.F.12.b. Written report** - The Permittee shall submit a written report within five (5) calendar days from the time the Permittee becomes aware of the noncompliance as required by 20.4.1.900 NMAC, incorporating 40 CFR §270.30(l)(6)(iii). The written report shall contain the following:

- i. a description of the noncompliance and its cause;
- ii. name, address, and telephone number of the owner or operator;
- iii. name, address, and telephone number of the Facility;
- iv. the period of the occurrence including exact date and time, and, if the noncompliance has not been corrected, the anticipated time it is expected to continue;
- v. name and quantity of materials involved;
- vi. the extent of injuries, if any;
- vii. an assessment of actual or potential hazards to the environment and human health outside the Facility, where this is applicable;
- viii. estimated quantity and disposition of recovered material that resulted from the incident; and
- ix. steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance.

The Secretary may extend the time for submitting the written report to up to fifteen (15) calendar days.

**I.F.12.c. Contingency Plan implementation** - If the Contingency Plan provided in Permit Attachment H is implemented, the Permittee shall comply with the reporting requirements required by 20.4.1.500 NMAC, incorporating 40 CFR §264.56(j).

**I. F.13. Corrective Action**

Corrective action required pursuant to 20.4.1.500 NMAC, incorporating 40 CFR §264.101 shall continue under this Permit for any period necessary to comply with the requirements specified in Part 4 of this Permit .

**1.F.14. Admissibility of Data**

In any administrative or judicial action to enforce a condition of this Permit, the Permittee waives any objection to the admissibility as evidence of any data generated pursuant to this Permit.

**1.F.15. Other Noncompliance**

The Permittee shall report all other instances of noncompliance not otherwise required to be reported under this Permit at the time monitoring reports are submitted. The reports shall contain the information listed in Permit Condition I.F.12.b, as required by 20.4.1.900 NMAC, incorporating 40 CFR §270.30(l)(10).

**1.F.16. Other Information**

Whenever the Permittee becomes aware that he failed to submit any relevant facts in the Permit Application, or submitted incorrect information in the Permit Application or in any report to the Secretary, the Permittee shall promptly submit such facts or information in writing to the Secretary as required by 20.4.1.900 NMAC, incorporating 40 CFR §270.30(l)(11).

**I.G. SIGNATORY REQUIREMENT**

The Permittee shall sign and certify all applications, reports, or information submitted to or requested by the Secretary or required by this Permit, in accordance with and using the certification language specified in 20.4.1.900 NMAC, incorporating 40 CFR §§270.11 and 270.30(k).

**I.H. REPORTS, NOTIFICATIONS, AND SUBMISSIONS TO THE NMED**

The Permittee shall submit by certified mail or hand delivery all reports, notifications, or other submissions that are required by this Permit to be sent or given to the NMED. The submissions should be sent by certified mail or hand delivered to:

Manager, RCRA Permits Management Program  
New Mexico Environment Department  
Hazardous Waste Bureau  
2905 Rodeo Park Drive East, Building 1  
Santa Fe, New Mexico 87505-6303  
Telephone Number: (505) 428-2500  
Facsimile Number: (505) 428-2567

**I.I. CONFIDENTIAL INFORMATION**

The Permittee may claim confidentiality for any information required to be submitted by this Permit, to the extent authorized by the HWA §74-4-4.3(D) and 20.4.1.900 NMAC, incorporating 40 CFR §270.12.

**I.J. DOCUMENTS TO BE MAINTAINED UNTIL COMPLETION OF CLOSURE**

The Permittee shall maintain at the Facility, until completion of closure as specified in Permit Attachment K, the following documents and all amendments, revisions and modifications to these documents:

1. *Waste Analysis Plan*, contained in Attachment D, as required by 20.4.1.500 NMAC, incorporating 40 CFR §264.13(b) and this Permit.
2. *Inspection Plan*, contained in Attachment F, as required by 20.4.1.500 NMAC, incorporating 40 CFR §264.15(b)(2) and this Permit.
3. *Personnel Training* documents and records, contained in Attachment J, as required by 20.4.1.500 NMAC, incorporating 40 CFR §264.16(d) and this Permit.
4. *Contingency Plan*, contained in Attachment H, as required by 20.4.1.500 NMAC, incorporating 40 CFR §264.53(a) and this Permit, and including summary reports and details of all incidents that require implementation of the Contingency Plan, as required by 20.4.1.500 NMAC, incorporating 40 CFR §264.56(j).
5. *Operating Record*, contained in Attachment I, as required by 20.4.1.500 NMAC, incorporating 40 CFR §264.73 and this Permit.
6. *Closure Plan*, contained in Attachment K, as required by 20.4.1.500 NMAC, incorporating 40 CFR §264.112(a) and this Permit.
7. The names, addresses, and phone numbers of the Emergency Coordinator (**EC**) and all persons designated as alternate EC, as required by Permit Condition 11.J.4, and as contained in Permit Attachment H, *Contingency Plan*.
8. A list of all equipment, as contained in the Permit Attachment H, Table H-2, *List of Emergency Equipment*, and as required by 20.4.1.500 NMAC, incorporating 40 CFR Part 264, Subpart CC.

**PART 2**  
**GENERAL FACILITY CONDITIONS**

## PART 2 GENERAL FACILITY CONDITIONS

### PART HIGHLIGHTS:

This Permit sets forth the standards that every owner/operator of a Container Storage Unit (CSU) is required to meet, in order to manage and store hazardous waste at the CSU in a manner protective of human health and the environment.

### II. A. OPERATION AND MAINTENANCE OF THE CONTAINER STORAGE UNIT

The Permittee shall maintain and operate the CSU to minimize the possibility of a fire, explosion, or any unplanned, sudden or nonsudden release of hazardous waste or constituents to air, soil, ground water, or surface water which could threaten human health or the environment, as required by 20.4.1.500 NMAC, incorporating 40 CFR §264.31.

### II.B. WASTE SOURCES

#### II.B.1 Permitted Waste

The Permittee shall store for subsequent transfer to a treatment, storage, or disposal facility only the hazardous wastes specified in Permit Part 3.

#### II.B.2. Hazardous Waste Imports

The Permittee shall not accept hazardous waste from a foreign source.

#### II.B.3. Hazardous Waste From Off-site Sources

The Permittee shall not receive any hazardous waste from an off-site source.

#### II.B.4. Specific Waste Ban

The Permittee is prohibited from managing or storing liquid hazardous wastes containing polychlorinated biphenyls (PCBs) at concentrations greater than 50 parts per million (ppm). Hazardous wastes with PCB concentrations greater than 50 ppm must be regulated by a Toxic Substances Control Act (TSCA) permit from the EPA and must be stored at the CSU in compliance with all requirements of 40 CFR §761.65(b). The Permittee is prohibited from storing liquid hazardous wastes containing PCBs at concentrations greater than 50 ppm for more than one year from the date such waste was first placed in storage, pursuant to 20.4.1.700 NMAC, incorporating 40 CFR §268.50 (f).

- a) The Permittee may store wastes restricted under 20.4.1.800 NMAC, incorporating 40 CFR Part 268 solely for the purpose of accumulating quantities necessary to facilitate proper recovery, treatment, or disposal provided that it meets the requirements of

20.4.1.800 NMAC, incorporating 40 CFR §268.50 (a) (2), including, but not limited to, clearly marking each drum or container.

- b) The Permittee shall comply with all the requirements of 20.4.1.800 NMAC, incorporating 40 CFR §268.7 as amended. Changes to the waste analysis plan will be processed as minor modifications, pursuant to 20.4.1.900 NMAC, incorporating 40 CFR §270.42.

#### **II.B.5. Additional Waste Ban Requirements**

The Permittee shall not land dispose any hazardous waste restricted by 20.4.1.800 NMAC, incorporating 40 CFR Part 268 unless:

- a) The waste meets treatment standards specified in 20.4.1.800 NMAC, incorporating 40 CFR §§268.40, .41, .42, or .43;
- b) A variance from the treatment standards has been granted pursuant to 20.4.1.800 NMAC, incorporating 40 CFR §268.44;
- c) A petition has been granted on a case-by-case extension to the effective date, pursuant to 20.4.1.800 NMAC, incorporating 40 CFR §268.5;
- d) A “no-migration” petition has been granted pursuant to 20.4.1.800 NMAC, incorporating 40 CFR §268.6; or
- e) The surface impoundment is exempt under 20.4.1.800 NMAC, incorporating 40 CFR §268.4.

#### **II.B.6. Land Disposal Restrictions**

The New Mexico Hazardous Waste Management Regulations 20.4.1.800 NMAC, incorporating 40 CFR Part 268 identify hazardous wastes that are restricted from land disposal and define those limited circumstances under which an otherwise prohibited waste may continue to be placed on or in a storage unit. The Permittee shall maintain compliance with the requirements of 20.4.1.800 NMAC, incorporating 40 CFR Part 268. Where the Permittee has applied for an extension, waiver or variance under 20.4.1.800 NMAC, incorporating 40 CFR §268, the Permittee shall comply with all restrictions on land disposal under this Permit.

The Permittee is prohibited from management and storage of hazardous wastes restricted from land disposal under 20.4.1.800 NMAC, incorporating 40 CFR Part 268, unless the requirements of 20.4.1.800 NMAC, incorporating 40 CFR §268 Subpart E are met.

The Permittee shall not place hazardous waste in any surface impoundment or landfill unless such a unit has a permit meeting the Minimum Technological Requirements outlined in

Section 3004 (o) of RCRA. The Secretary must approve the plans and specifications for retrofitting prior to commencement of construction.

## **II.C GENERAL WASTE CHARACTERIZATION**

### **II.C.1 General Requirements**

The Permittee shall not store any hazardous waste at a permitted hazardous waste management unit at the Facility unless the hazardous waste has been fully characterized as specified by the characterization requirements of this Permit, including the attached Waste Analysis Plan (**WAP**), Permit Attachment D, to demonstrate compliance with all waste characterization requirements of 20.4.1.500 NMAC, incorporating 40 CFR Part 264, including §264.13, and 20.4.1.800 NMAC, incorporating 40 CFR Part 268, including §§268.7 and 268.9.

Waste characterization requirements are specified both in this Permit Part and the WAP, Permit Attachment D. If there is a conflict between the conditions in this Permit Part and the language in the WAP, the conditions in this Permit Part shall supersede the conflicting language in the WAP.

The Permittee shall obtain the following hazardous waste characterization information at the waste's point of generation in compliance with 20.4.1.800 NMAC, incorporating 40 CFR §268.9(c) and 20.4.1.500 NMAC, incorporating 40 CFR Part 264, Subparts BB and CC:

1. All applicable EPA Hazardous Waste Numbers (i.e., waste codes) in compliance with 20.4.1.500 NMAC, incorporating 40 CFR §264.13 and 20.4.1.800 NMAC, incorporating 40 CFR §268.9(a);
2. Whether the waste meets the applicable Land Disposal Restriction (**LDR**) treatment standard(s) specified at 20.4.1.800 NMAC, incorporating 40 CFR §§268.40, 268.45, and 268.49, in compliance with 20.4.1.800 NMAC, incorporating 40 CFR §268.7(a). To determine the applicable treatment standard(s) for each listed and/or characteristic waste code, the Permittee must obtain the following waste characterization information:
  - a. All applicable hazardous constituents as defined in 20.4.1.100 NMAC, incorporating 40 CFR §260.10 or underlying hazardous constituents (**UHC**) as defined at 20.4.1.800 NMAC, incorporating 40 CFR §268.2(i), in the waste in compliance with 20.4.1.800 NMAC, incorporating 40 CFR §§268.7 and 268.9 respectively, unless the waste will be treated and monitored for all constituents;
  - b. The waste's treatability category i.e., wastewater or non-wastewater, as defined at 20.4.1.800 NMAC, incorporating 40 CFR §268.2(d) and (f);
  - c. Whether the waste belongs to a treatment/regulatory subcategory as identified in the Table "Treatment Standards for Hazardous Wastes" at 20.4.1.800 NMAC, incorporating 40 CFR §268.40;

- d. For hazardous debris as defined at 20.4.1.800 NMAC, incorporating 40 CFR §268.2(g) to be treated with the alternative treatment technologies provided by 20.4.1.800 NMAC, incorporating 40 CFR §268.45, identify the contaminants subject to treatment as described at 20.4.1.800 NMAC, incorporating 40 CFR §268.45(b); and
  - e. For contaminated soil subject to LDRs as provided in 20.4.1.800 NMAC, incorporating 40 CFR §268.49(a), identify the constituents subject to treatment as described in 20.1.4.800 NMAC, incorporating 40 CFR §268.49(d).
3. Whether the air emission requirements at 40 CFR Part 264, Subpart BB apply to a waste managed in equipment, in compliance with 20.4.1.500 NMAC, incorporating 40 CFR subpart BB). This determination shall conform to Permit Condition II.C.6.a.
  4. Whether the air emission requirements at 40 CFR Part 264, Subpart CC apply to a waste managed in a tank or container, in compliance with 20.4.1.500 NMAC, incorporating 40 CFR §264.1082. This determination shall conform to Permit Condition II.C.6.b.

The Permittee shall characterize all hazardous wastes, prior to placement in a permitted storage unit at the Facility, to determine the following in compliance with 20.4.1.500 NMAC, incorporating 40 CFR §264.13(a)(1):

- a. Whether the waste is listed as an authorized waste in Permit Attachment A, *Authorized Wastes*, and is not otherwise prohibited by the Permit;
- b. The waste characteristics necessary to prevent the mixing or placing of incompatible wastes in the same container or in unacceptable proximity in compliance with 20.4.1.500 NMAC, incorporating 40 CFR §§264.17 and 264.177, or in a tank system in compliance with 20.4.1.500 NMAC, incorporating 40 CFR §264.199. The Permittee shall characterize the waste sufficiently to prevent the impairment of containers by associated wastes in compliance with 20.4.1.500 NMAC, incorporating 40 CFR §264.172, and to prevent the impairment of secondary containment systems by associated wastes in compliance with 20.4.1.500 NMAC, incorporating 40 CFR §264.193(c)(1);
- c. Characterization sufficient to prevent accidental ignition or reaction of ignitable or reactive wastes in compliance with 20.4.1.500 NMAC, incorporating 40 CFR §264.17, in containers in compliance with 20.4.1.500 NMAC, incorporating 40 CFR §264.177, and tank systems in compliance with 20.4.1.500 NMAC, incorporating 40 CFR §264.198; and
- d. Whether the waste contains free liquids, as defined at 20.4.1.500 NMAC, incorporating 40 CFR §§260.10 and 261.7(b)(1).

## **II.C.2 Acceptable Knowledge**

The Permittee shall obtain the waste characterization information required under Permit Condition 2.3.1 above by current sampling and analysis, and/or by use of acceptable knowledge (**AK**). AK is defined in U.S. EPA's Waste Analysis at Facilities that Generate, Treat and Dispose of Hazardous Wastes (OSWER 9938.4-03, April 1994) as process knowledge and prior sampling data that may or may not conform to RCRA. Sampling and analysis is the preferred method, and the Permittee shall obtain characterization by sampling and analysis whenever feasible.

AK may be used as the sole method to characterize waste only when the waste is from processes that are well documented with supporting information that address all characterization requirements of this Permit, including the requirement to determine the LDR status of the waste as specified at Permit Condition II.C.1, or if there is prior sampling and analysis data with documentation that demonstrates conformance to the sampling and analysis requirements of this Permit. AK shall be considered a suitable waste characterization method for waste that is an unused, commercial chemical product, reagent, or chemical of known physical and chemical constituents, for example a P or U-listed EPA Hazardous Waste Number under 20.4.1.200 NMAC, incorporating 40 CFR §261.33, and the waste is documented by a packaging label, a Material Safety Data Sheet, or equivalent information supplied by the manufacture identifying the chemical content of the waste.

### **II.C.2.a Acceptable Knowledge Documentation**

The Permittee shall maintain all documentation used to support a waste's AK in the Facility Operating Record in accordance with 20.4.1.800 NMAC, incorporating 40 CFR §268.7(a)(6) and 20.4.1.500 NMAC, incorporating 40 CFR §264.73(b)(3). For each waste stream, the Permittee shall maintain in the Operating Record, at a minimum, the following process knowledge information:

1. The location where the waste stream is generated;
2. Waste stream volume and time period of generation;
3. Description of the waste generating process; and
4. All material inputs or other information that identifies the chemical content and physical form of the waste stream.

## **II.C.3 Waste Sampling**

The Permittee shall establish and utilize a Sampling and Analysis Plan (**SAP**) for each waste stream undergoing sampling. The SAP shall identify the appropriate sampling methods to characterize the waste stream in accordance with Permit Condition II.C.2. The Permittee shall maintain the SAP in the specific waste's characterization documentation and shall document SAP compliance in the Facility's Operating Record for a minimum of three years from the date the waste was last stored.

The SAP shall identify the sample containers, preservation techniques, and holding times for each waste sampled, and shall conform to WAP Section D-4.5. The SAP must conform to the most recent version of Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, (U.S. EPA Publication SW-846) Chapter 9, Sampling Plan, and WAP Section D-4.2. The SAP must ensure collection of a representative sample of wastes by means that preserve its original physical form and composition and ensure prevention of contamination or changes in concentration of the constituents to be analyzed. The SAP shall ensure sample collection meets the quality assurance objectives (QAO's) required under Permit Condition II.C.5. The number of samples of each waste shall be sufficient to demonstrate that the upper limit of the confidence interval for the population mean is less than the applicable regulatory threshold, in accordance with SW-846.

#### **II.C.4 Laboratory analysis**

The Permittee shall establish and utilize a Sampling and Analysis Plan (SAP) for each waste stream undergoing analysis. The SAP shall identify the appropriate laboratory analytical methods to characterize the waste stream in accordance with Permit Condition II.C.2. The Permittee shall perform or obtain laboratory analysis of wastes in accordance with the conditions of this Permit Part, WAP Section D-4.6, and the SAP. The SAP shall identify the appropriate laboratory analytical methods, analytical detection limits, and analytical reporting limits. The Permittee shall maintain the SAP in the specific waste's characterization documentation and in the Facility's Operating Record.

If the Permittee wishes to use an analytical method other than that identified in the WAP, the Permittee must submit a petition to use the alternative analytical method to NMED for its approval, in compliance with 20.4.1.100 NMAC, incorporation 40 CFR §260.21.

If the Permittee uses an independent contract laboratory to perform analyses, the Permittee shall inform the laboratory in writing that it must operate under the waste analysis conditions set forth in this Permit.

When using laboratory analysis as part of a hazardous waste determination, the Permittee shall require the laboratory to report concentrations for all hazardous constituents listed at 40 CFR §268.48, Table of Universal Treatment Standards, that the analytical test method is capable of measuring. When using laboratory analysis to demonstrate that the waste meets its applicable LDR treatment standard concentrations specified at 20.4.1.800 NMAC, incorporating 40 CFR §268.40, Treatment Standards for Hazardous Wastes, in compliance with 20.4.1.800 NMAC, incorporating 40 CFR §268.7(a), the Permittee shall demonstrate that analytical method detection limits (MDL's) are not higher than the treatment standard.

#### **II.C.5 Quality Assurance (QA)/Quality Control (QC)**

The Permittee shall perform and record all waste characterization QA/QC procedures in accordance with SW-846 for data used to support waste characterizations required under this Permit Part. The statistical concepts of waste characterization precision, accuracy, completeness, comparability, and

representativeness, as described at SW-846, shall be addressed. The Permittee shall maintain a record of all QA/QC determinations in a manner traceable to specific wastes in the Facility Operating Record.

When performing waste sampling required under this Permit Part, the Permittee shall use the applicable sample collection QA/QC procedures specified at SW-846, Chapter 1, Section 3.4, *Field QA and QC Requirements*, including, but not limited to, those dealing with equipment preparation and field equipment maintenance, calibration, and cleaning. The Permittee shall identify and perform the appropriate number of control samples associated with each sample collected, for example; trip and field blanks, field duplicates, and field spikes.

When performing laboratory analysis required under this Permit Section, the Permittee shall analyze method blanks, laboratory duplicates, and laboratory control samples to assess the quality of the data resulting from laboratory analytical programs.

The Permittee shall ensure, prior to placement of a waste in a storage or treatment unit at the Facility, that all waste characterization information is accurate by making the following determinations:

1. Whether the waste was characterized at the point of generation in compliance with Permit Condition 2.3.1, 20.4.1.800 NMAC, incorporating 40 CFR §268.9(c), and 20.4.1.500 NMAC, incorporating 40 CFR Part 264, Subparts BB and CC);
2. Whether routinely generated wastes are re-characterized to ensure the waste's characterization is accurate and up to date in compliance with Permit Condition II.C.5.a, Characterization Re-evaluation Frequency, and 20.4.1.500 NMAC, incorporating 40 CFR §264.13(a)(3);
3. Whether Facility personnel who perform waste characterization at the point of generation have appropriately identified when the process or operation generating routinely generated wastes has changed in compliance with 20.4.1.500 NMAC, incorporating 40 CFR §264.13(a)(3)(i); and
4. Whether Facility personnel, including personnel who perform waste characterization at the point of generation, are trained in the applicable waste characterization requirements as required by 20.4.1.500 NMAC, incorporating 40 CFR §264.16.

#### **II.C.5.a Characterization Re-evaluation Frequency**

The Permittee shall re-evaluate the characterization of routinely generated wastes to ensure that the characterization remains accurate and up to date for subsequent batches of waste, in compliance with 20.4.1.500 NMAC, incorporating 40 CFR §264.13(b)(4). The results of the re-evaluation shall be thoroughly documented and placed in the Facility Operating Record for a minimum of three years from the date the waste was last stored.

The Permittee shall perform re-evaluation of a waste in accordance with the following minimum requirements:

1. Annually to verify the accuracy of initial characterization results achieved. For wastes originally characterized through sampling and analysis, re-evaluation shall be achieved using the same sampling and analysis methodologies used in the initial analysis. For wastes characterized through AK, re-evaluation may be achieved through a review of AK information;
2. When there is a change in waste-generating processes. Any information that indicates a change in the process that generates the waste and may affect the waste shall cause the waste to be re-characterized; and
3. When the Permittee is notified by an off-site facility receiving hazardous waste from the Facility that the characterization of the waste received at the receiving facility does not match a pre-approved waste analysis certification or accompanying waste manifest or shipping paper. The Permittee shall notify NMED within 24 hours of their receipt of such a discrepancy notice from a receiving facility.

Wastes listed at 20.4.1.200 NMAC, incorporating 40 CFR §261.31, P and U listings, and for which the Permittee possesses an MSDS or equivalent information from the manufacturer identifying chemical content are exempt from the re-evaluation requirements of this Permit Condition.

## **II.C.6 Air Emissions**

The Permittee shall submit to NMED within three months of the effective date of this Permit a list of all locations at the Facility subject to the air emission control requirements at 20.4.1.500 NMAC, incorporating 40 CFR Part 264, Subparts BB and CC. The Permittee shall record the results of air emission waste characterization in the Facility Operating Record.

### **II.C.6.a Wastes Managed in Equipment**

If the Permittee manages hazardous wastes at the Facility in equipment subject to the requirements of 20.4.1.500 NMAC, incorporating 40 CFR Part 264, Subpart BB, the Permittee shall characterize that waste in compliance with the requirements of this Permit Section. That characterization shall determine whether the equipment is in "light" or "heavy liquid" service or in "gas/vapor" service, as defined at 20.4.1.500 NMAC, incorporating 40 CFR §264.1031 and §264.1063(h), and determine whether the organic concentration of the waste equals or exceeds ten percent by weight, using one of the methods specified at 20.4.1.500 NMAC, incorporating 40 CFR §264.1063(d). The Permittee shall use samples in making this concentration determination that are representative of the highest total organic content hazardous waste expected to contact the equipment, in compliance with 20.4.1.500 NMAC, incorporating 40 CFR §264.1063(g).

### **II.C.6.b Air Emissions from Tanks and Containers**

If the Permittee manages hazardous waste at the Facility in tanks or containers subject to the requirements of 20.4.1.500 NMAC, incorporating 40 CFR Part 264, Subpart CC, the Permittee shall characterize that waste to determine whether it has an average volatile organic (VO) concentration at the point of point of generation of less than 500 parts per million by weight (ppmw), in compliance with 20.4.1.500 NMAC, incorporating 40 CFR §264.1082(c)(1). The average VO concentration shall be determined using the procedures specified in 20.4.1.500 NMAC, incorporating 40 CFR §264.1083(a). The Permittee shall review and update this waste characterization at least once every 12 months following the date of the initial determination for the wastes entering the unit subject to this Permit Condition. The Permittee shall record the results of this review in the Facility Operating Record.

The Permittee shall not be required to determine the volatile organic concentration of hazardous wastes in containers for the purpose of complying with this Permit Condition if the Permittee control air pollution emissions from all hazardous waste containers in accordance with the container construction specifications and operation requirements at 20.4.1.500 NMAC, incorporating 40 CFR §264.1086(b), and Permit Part 5.

### **II.C.7 Waste Shipped to an Off-Site Facility**

Prior to off-Facility shipment of hazardous waste, the Permittee shall comply with all generator standards in 20.4.1.300 NMAC, incorporating 40 CFR Part 262, in compliance with 20.4.1.500 NMAC, incorporating 40 CFR §264.71(c), including the waste characterization necessary to facilitate appropriate packaging for transportation, including the U.S. DOT Proper Shipping Name, Hazard Class, an ID Number for each waste.

### **II.C.8 Remediation Wastes**

The Permittee shall characterize remediation waste, as defined at 40 CFR §260.10, in compliance with 20.4.1.300 NMAC, incorporating 40 CFR §262.10(h) and 20.4.1.500 NMAC, incorporating 40 CFR §264.1(j). The Permittee shall characterize remediation waste, including contaminated soil, in compliance with all waste characterization requirements in this Permit Section II.C, including, but not limited to; a hazardous waste determination, the identification of all applicable hazardous waste codes, and LDR status determination.

The Permittee shall obtain, at a minimum, the following information when characterizing remediation hazardous waste; the origin of the waste and how it was subsequently managed, the time and circumstances of the release that created the waste, and any investigation or other reports (e.g., RCRA Facility Investigation or SWMU Reports) describing the release.

### **II.C.9 Containerized Waste**

The Permittee shall characterize hazardous wastes placed inside containers, including overpacked drums, to ensure that the wastes do not react dangerously with, decompose, or ignite sorbent material

in the container, in compliance with 20.4.1.500 NMAC, incorporating 40 CFR §264.316(c), and to ensure that the wastes are not incompatible or reactive, in compliance with 20.4.1.500 NMAC, incorporating 40 CFR §§264.316(d) and 264.317(e). The Permittee shall characterize laboratory packs if they are intended to undergo the alternative treatment standards at 40 CFR §268.42 (c), as to whether they contain any of the prohibited hazardous wastes (i.e., EPA Hazardous Waste Codes specified at 40 CFR Part 268 Appendix IV).

#### **II.C.10 Impermissible Dilution**

The Permittee shall not dilute a restricted waste, as a substitute for treatment in compliance with 20.4.1.800 NMAC, incorporating 40 CFR §268.3. Dilution to avoid an applicable treatment standard includes, but is not limited to, the addition of solid waste to reduce a hazardous constituent's concentration, and an ineffective treatment method that does not destroy, remove, or permanently immobilize hazardous constituents. Aggregating or mixing wastes as part of a legitimate treatment process are not considered impermissible dilution for purposes of this Permit Condition.

#### **II.C.11 Waste Characterization Records**

The Permittee shall record and maintain in the Facility Operating Record the results of waste analysis and waste determinations performed as specified in this Permit Section in compliance with 20.4.1.500 NMAC, incorporating 40 CFR §§264.73(b)(3), (7), (10), (11), (12), (15), and (16). The requirements of this Permit Condition apply to solid wastes even when the hazardous characteristic is removed prior to disposal, or when the waste is excluded from the definition of hazardous or solid waste under 40 CFR §261.2 through §261.6, or exempted from Subtitle C regulation, subsequent to the point of generation, in accordance with 20.4.1.800 NMAC, incorporating 40 CFR §268.7(a)(8). The Permittee shall maintain records of the LDR status determination for all wastes in accordance with 20.4.1.800 NMAC, incorporating 40 CFR §268.7(a)(6).

#### **II.C.12 Notification and Certification**

The Permittee shall provide the notification and certification statements associated with the treatment and storage of hazardous wastes in compliance with 20.4.1.800 NMAC, incorporating 40 CFR §§268.7 and 268.9. Copies of these notification and certification statements shall be maintained in the Facility Operating Record.

## WASTE CHARACTERIZATION DOCUMENTATION

This Documentation Table summarizes all waste characterization documentation referenced in this Permit Section and the Waste Analysis Plan.

NAME	LOCATION	DESCRIPTION
Waste Analysis Plan (WAP)	Permit Attachment D	Permittee's commitments regarding waste characterization procedures. The WAP is a fully enforceable document. If contradiction exist between the WAP and the Permit see Permit Condition II.C.1.
Sampling and Analysis Plan (SAP)	Permit Conditions II.C.2, II.C.3, II.C.4, and WAP Section D-4	Required when sampling and analysis is required. See permit conditions and WAP for specifics.
Quality Assurance/Quality Control record	Permit Condition II.C.5	Regards waste sampling and analysis. Record traceable to a specific waste. See permit condition for specifics.
Record of waste re-evaluation	Permit Condition II.C.5.a	Re-evaluation performed at a minimum annually. See permit condition for specifics.
Record of evaluation of air emission control applicability	Permit Condition II.C.6.b	Re-evaluation of average volatile organic concentration in wastes managed in containers and tanks to be performed annually. See permit condition for specifics.
LDR notification and certification statements	Permit Condition II.C.12 and WAP Section D-3.2.2	LDR notification form accompanies manifest when waste is transferred off-site. It identifies all waste codes and underlying hazardous constituents associated with waste plus other information identified at 40 CFR §268.7(a). See permit condition and WAP for specifics.
Holloman AFB Hazardous Waste Management Database	WAP Section D-2.3 and WAP Figure D-1	See WAP for specifics.
HAFB waste disposal request form	WAP Section D-2.3 and WAP Figure D-2	See WAP for specifics.
HAFB Hazardous Waste Profile Sheet	WAP Section D-2.3 and WAP Figure D-2	See WAP for specifics.
Uniform Waste Manifests	Not referenced in Permit or WAP but required at 40 CFR 262 Subpart B	Documents transfer of waste to an off-site TSDF.
LDR status determination records	WAP Section D-3.2.2	See WAP for specifics

## **II.D. WASTE MINIMIZATION**

The Permittee shall submit to the Secretary a certified plan annually by December 1, for the previous year ending September 30th, that the Permittee has a program in place to reduce the volume and toxicity of all hazardous wastes which are generated by the Facility to the degree determined to be economically practicable, and the proposed method of treatment, storage, or disposal is that practicable method currently available to the Permittee which minimizes the present and future threat to human health and the environment. This certified plan must address the items below:

- Any written policy or statement that outlines goals, objectives, and/or methods for source reduction and recycling of hazardous waste at the facility;
- Any employee training or incentive programs designed to identify and implement source reduction and recycling opportunities for all hazardous/mixed wastes;
- Any source reduction and/or recycling measures implemented in the last five years or planned for the near future;
- An itemized list of the dollar amounts of capital expenditures (plant and equipment) and operating costs devoted to source reduction and recycling of hazardous waste;
- Factors that have prevented implementation of source reduction and/or recycling;
- Sources of information on source reduction and/or recycling received at the facility (e.g. local government, trade associations, suppliers, etc.);
- An investigation of additional waste minimization efforts that could be implemented at the facility. This investigation shall analyze the potential for reducing the quantity and toxicity of each waste stream through production process change, production reformulation, recycling, and all other appropriate means. The analysis shall include an assessment of the technical feasibility, cost, and potential waste reduction for each option;
- A flow chart or matrix detailing all hazardous wastes it produces, by quantity and type, including mixed waste, and by building/area and program if consistent with security considerations;
- Demonstration of the need to use those processes which produce a particular hazardous waste due to a lack of alternative processes, available technology, or available alternative processes that would produce less volume of toxic waste; and
- Demonstration of the applicability or inapplicability of the following waste minimization techniques:

- A program that inventories the amount of contaminated lead that exists at the facility;
- A program that substitutes steel for lead whenever possible;
- A program for coating lead with a strippable coating to prevent its entire contamination, if it is impossible to substitute steel for lead;
- A program or bench scale method to decontaminate the contaminated lead;
- Use of non-hazardous liquid scintillation cocktail solution; and
- A program designed to prevent commingling of radioactive waste.

The Permittee shall include the certified plan in the operating record.

## **II.E. DUST SUPPRESSION**

The Permittee shall not use waste or used oil or any other material, which is contaminated with dioxin, PCB, or any other hazardous waste, other than a waste identified solely on the basis of ignitability, for dust suppression or road treatment, pursuant to 20.4.1.700 NMAC, incorporating 40 CFR §266.23(b).

## **II.F. REQUIRED NOTICES**

### **II.F.1. Liquid Hazardous Wastes Containing Polychlorinated Biphenyls (PCBs)**

The Permittee is prohibited from managing or storing liquid hazardous wastes containing PCBs at concentrations greater than or equal to 50 parts per million (**ppm**). Hazardous wastes with PCB concentrations in excess of 50 ppm must be regulated by a Toxic Substances Control Act (**TSCA**) permit from the U.S. EPA, and must be stored at the CSU as required by the requirements of 40 CFR §761.65(b), and must be removed from storage and treated or disposed of within one year of the date when such wastes are first placed into storage, as required by 20.4.1.800 NMAC, incorporating 40 CFR §268.50(f). A copy of the TSCA Permit issued by the EPA for the storage of PCBs must be submitted to the New Mexico Environment Department before acceptance of such waste at the CSU, in accordance with 20.4.1.800 NMAC, incorporating 40 CFR §268.50.

## **II.G. SECURITY**

In order to prevent the unknowing entry and minimize the possibility of unauthorized entry of persons into the CSU, the Permittee shall comply with the security provisions and procedures described in Permit Attachment E, *Security Plan*, as required by 20.4.1.500 NMAC, incorporating 40 CFR §264.14.

### **II.G.1. Barriers and Means to Control Entry**

The Permittee shall maintain an artificial barrier (i.e. a fence in good repair) around the CSU and a means to control entry into the active portion of the CSU, as required by 20.4.1.500 NMAC, incorporating 40 CFR §264.14(b)(2), and as specified in Permit Attachment E, *Security Plan*.

The six foot high light gauge fabric, 2-inch mesh chain link fence shall be maintained around the CSU to prevent wild life, unauthorized personnel and livestock from gaining access to the CSU warehouse and its surrounding land. Access to the CSU shall be only through the gates described in the *Security Plan* contained in Permit Attachment E.

### **II.G.2. Warning Signs**

Warning signs in English and Spanish, for example: **DANGER, NO UNAUTHORIZED PERSONNEL, KEEP OUT**, and **PELIGRO, NO PERMITIDA LA ENTRADA SIN AUTORIZACION**, shall be posted at all the gates and around the fence, and at other locations of the CSU in sufficient numbers to be visible from all angles of approach to the CSU. These bilingual signs must be legible from a distance of at least 25 feet from any approach to the perimeter fence, in compliance with the standards contained in 20.4.1.500 NMAC, incorporating 40 CFR §264.14(c).

## **II.H. GENERAL INSPECTION REQUIREMENTS**

### **II.H.1. Inspection Schedule**

The Permittee shall implement the Inspection Plan contained in Permit Attachment F, to detect any container and equipment malfunctions and deteriorations, operator errors, and discharges, as required by 20.4.1.500 NMAC, incorporating 40 CFR §264.15(a).

### **II.H.2. Inspection Frequency**

The Permittee shall inspect monitoring equipment, safety and emergency equipment, security devices, and operating and structural equipment at the frequency specified in the weekly and monthly inspection schedules contained in Permit Attachment F, as required by 20.4.1.500 NMAC, incorporating 40 CFR §264.15(b).

### **II.H.3. Remediation Of Equipment/Structures**

The Permittee shall remedy any deterioration or malfunction of equipment or structures that an inspection reveals, as required by 20.4.1.500 NMAC, incorporating 40 CFR §264.15(c).

#### **II.H.4. Inspection Log and Checklist**

The Permittee shall use the inspection checklists contained in Table F-1 (*Inspection Schedule*) of Permit Attachment F, *Inspection Plan*. The Permittee shall record the date and time of the inspection, the name of the inspector, a notation of the observations made, and the date and nature of any repairs or other remedial actions, as required by 20.4.1.500 NMAC, incorporating 40 CFR §264.15(d).

#### **II.H.5. Inspection Records**

The Permittee shall maintain inspection checklists in the CSU operating record for at least three (3) years from the date of inspection, as required by 20.4.1.500 NMAC, incorporating 40 CFR §264.15(d).

### **II.I. PERSONNEL TRAINING**

The Permittee shall conduct personnel training following the procedures described in Permit Attachment J, *Personnel Training*, and the following Permit Conditions, as required by 20.4.1.500 NMAC, incorporating 40 CFR §264.16.

#### **II.I.1. Personnel Training Requirements**

The Permittee shall train all persons involved in the management and storage of hazardous waste in procedures relevant to the positions in which they are employed, as described in Permit Attachment J, *Personnel Training Requirements*, and as required by 20.4.1.500 NMAC, incorporating 40 CFR §264.16.

#### **II.I.2. Personnel Training Content**

The personnel training program shall include the courses and procedures described in Permit Attachment J, as required by 20.4.1.500 NMAC, incorporating 40 CFR §264.16(a-c).

#### **II.I.3. Personnel Training Records**

The Permittee shall maintain training documents and records, and keep training records on current personnel at the CSU Office for at least three years from the date the employee last worked at the CSU, as required by 20.4.1.500 NMAC, incorporating 40 CFR §264.16 (d-e).

### **II.J. GENERAL REQUIREMENTS FOR HANDLING IGNITABLE, REACTIVE, OR INCOMPATIBLE WASTES**

The Permittee shall follow the procedures for managing and storing ignitable, reactive, and incompatible wastes set forth in Permit Attachment C, *Container Storage Unit Design and Operation*, as required by 20.4.1.500 NMAC, incorporating 40 CFR §264.17.

## **II.K. PREPAREDNESS AND PREVENTION**

### **II.K.1. Required Equipment**

At a minimum, the Permittee shall maintain at the CSU the equipment set forth in Permit Attachment H, *Contingency Plan*, Table H-2, *List of Emergency Response Equipment*, as required by 20.4.1.500 NMAC, incorporating 40 CFR §264.32.

### **II.K.2. Testing and Maintenance of Equipment**

The Permittee shall test and maintain the equipment specified in Permit Attachment H, as necessary, to assure its proper operation in time of emergency, as required by 20.4.1.500 NMAC, incorporating 40 CFR §264.33.

### **II.K.3. Access to Communications or Alarm System**

The Permittee shall maintain access to the communications or alarm system as required by 20.4.1.500 NMAC, incorporating 40 CFR §264.34.

### **II.K.4. Required Aisle Space**

At a minimum, the Permittee shall maintain enough aisle space to allow the unobstructed movements of personnel, fire protection equipment, spill control equipment, and decontamination equipment to any area of CSU operation, as required by 20.4.1.500 NMAC, incorporating 40 CFR §264.35, and as described in Permit Attachment G, *Preparedness and Prevention*.

### **II.K.5. Arrangements with Local Authorities**

The Permittee shall maintain coordination agreements with the City of Alamogordo Fire Department, the Village of Cloudcroft, the Alamo West Fire Rescue, and the White Sands Missile Range Emergency Control Center, as described in Permit Attachment H, *Contingency Plan*. These arrangements shall be either Memoranda of Understanding (**MOU**) or Mutual Aid Agreements (**MAA**) between the Permittee and the off-site cooperating agencies, and shall include the elements required by 20.4.1.500 NMAC, incorporating 40 CFR §264.37(a). Copies and descriptions of these MOUs and agreements shall be maintained at the CSU Office in the operating record, as required by 20.4.1.500 NMAC, incorporating 40 CFR §264.37(b).

## **II.L. CONTINGENCY PLAN**

### **II.L.1. Implementation of Plan**

The Permittee shall immediately implement the Contingency Plan contained in Permit Attachment H, whenever there is a fire, explosion, or release of hazardous waste or hazardous waste constituents which could threaten human health or the environment, as required by 20.4.1.500 NMAC, incorporating 40 CFR §264.51(b).

### **II.L.2. Copies of the Plan**

The Permittee shall maintain copies of the Contingency Plan and all revisions and amendments to the Plan at the CSU, as required by 20.4.1.500 NMAC, incorporating 40 CFR §264.53. The Permittee shall provide copies of the current Contingency Plan and all revisions to the Plan to the Secretary and all entities with which the Permittee has emergency MOUs or MAAs, as required by 20.4.1.500 NMAC, incorporating 40 CFR §264.53.

### **II.L.3. Amendments to Plan**

The Permittee shall review and immediately amend, if necessary, the Contingency Plan, as required by 20.4.1.500 NMAC, incorporating 40 CFR §264.54.

### **II.L.4. Emergency Coordinator**

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

## **II.M. MANIFEST SYSTEM**

The Permittee shall comply with the manifest requirements of 20.4.1.500 NMAC, incorporating 40 CFR §264.71, §264.72, and §264.76. The Permittee shall not accept for management or storage any hazardous waste from an off-site source without the accompanying manifest.

## **II.N. RECORD KEEPING AND REPORTING**

In addition to the record keeping and reporting requirements specified elsewhere in this Permit and 20.4.1.500 NMAC, incorporating 40 CFR §264.73(a), the Permittee shall comply with the following conditions:

### **II.N.1. Operating Record**

The Permittee shall maintain a written Operating Record at the Facility pursuant to 20.4.1.500 NMAC, incorporating 40 CFR §264.73. The Permittee shall keep the Operating Record until the final closure of the Facility has been approved by the Secretary.

### **II.N.2. Biennial Report**

The Permittee shall comply with the biennial reporting requirements of 20.4.1.500 NMAC, incorporating 40 CFR §264.75.

### **II.N.3. Personnel and Telephone Number Changes**

The Permittee shall inform the Secretary in writing of changes in its management personnel and telephone numbers within fifteen (15) calendar days of the changes.

## **II.O. GENERAL CLOSURE REQUIREMENTS**

### **II.O.1. Performance Standard**

The Permittee shall close the CSU following the procedures described in the Closure Plan outlined in Permit Attachment K, as required 20.4.1.500 NMAC, incorporating 40 CFR §264.111.

### **II.O.2. Amendment to Closure Plan**

The Permittee shall amend the Closure Plan, as required by 20.4.1.500 NMAC, incorporating 40 CFR §264.112(c), whenever necessary.

### **II.O.3. Notification of Closure**

The Permittee shall notify the Secretary in writing at least fort-five (45) calendar days prior to the date on which he expects to begin closure of the CSU, as required by 20.4.1.500 NMAC, incorporating 40 CFR §264.112(d).

### **II.O.4. Time Allowed For Closure**

Within ninety (90) calendar days after receiving the final volume of hazardous waste, the Permittee shall remove all hazardous waste from the CSU to a permitted treatment, storage

or disposal Facility, and shall complete closure activities, as required by 20.4.1.500 NMAC, incorporating 40 CFR §264.113, following the schedule specified in the Closure Plan, in Table K-1, Permit Attachment K, or as amended, as required by Permit Condition II.M.2.

#### **II.O.5. Disposal or Decontamination of Equipment, Structures, and Soils**

The Permittee shall decontaminate or dispose of all contaminated equipment, structures, and soils, as specified in the Closure Plan, Permit Attachment K, as required by 20.4.1.500 NMAC, incorporating 40 CFR §264.114.

#### **II.O.6. Sampling for Metals, Organics and Halogenated Organics in the Container Storage Unit Building**

The Permittee shall collect the soil and ground water samples at and around the CSU for metals (i.e., Arsenic, Barium, Cadmium, Chromium, Lead, Mercury, Selenium, Zinc), organics and halogenated organics in the CSU using EPA approved methods in the latest copy of SW-846, or an alternate method approved by the Secretary. Samples shall be taken at the boring locations illustrated in Permit Attachment K, on Figure K-6, *Closure Soil Sample Locations at the CSU*.

#### **II.O.7. Certification of Closure**

Within sixty (60) calendar days from the date of completion of partial closure of the CSU, and within sixty calendar (60) days of completion of final closure of the Unit, the Permittee shall provide to the Secretary a final closure report and written closure certification signed by an independent professional engineer registered in the State of New Mexico, that the CSU was closed as required by the procedures specified in the Closure Plan, Permit Attachment K, as required by 20.4.1.500 NMAC, incorporating 40 CFR §264.115.

### **II.P. GENERAL POST-CLOSURE REQUIREMENTS**

#### **II.P.1. Clean Closure**

The Permittee shall clean close the Unit as specified in the Closure Plan, Permit Attachment K, and as required by 20.4.1.500 NMAC, incorporating 40 CFR §264.114 through §264.116.

#### **II.P.2. Post-Closure Care Permit**

If the Permittee does not clean close the CSU as required by 20.4.1.500 NMAC, incorporating 40 CFR Part 264, closure by removal standards, the CSU shall be subject to post-closure permitting requirements specified by 20.4.1.900 NMAC, incorporating 40 CFR §270.1(c)(6)(iii), and the Permittee shall submit an application for a Post-Closure Care Permit, not later than ninety calendar (90) days from the date that the Permittee determines that the CSU must be closed in place as a landfill, as required by 20.4.1.900 NMAC, incorporating 40 CFR §§264.117 through 264.120. During post-closure care the Permittee

shall analyze the ground water samples for those parameters contained in 20.4.1.200 NMAC, incorporating 40 CFR §261, Appendix VIII, that have been detected in the ground water at the monitoring well, or are expected to be in or derived from waste stored at the CSU, as required by 20.4.1.500 NMAC, incorporating 40 CFR §264.93(a).

## **II.Q. TRANSPORTATION OF HAZARDOUS WASTE**

The Permittee shall comply with all U.S. Department of Transportation, State, and local regulatory standards which apply to persons transporting hazardous waste within the United States and the State of New Mexico, as required by 20.4.1.400 NMAC, incorporating 40 CFR §263; and any other local restrictions established for transportation of hazardous waste in the affected communities during peak traffic hours.

## **II.R. GROUND WATER MONITORING**

The Permittee shall conduct quarterly ground water detection monitoring at the CSU, when it fails to achieve clean closure. The Permittee shall analyze the ground water samples for those parameters contained in 20.4.1.200 NMAC, incorporating 40 CFR §261, Appendix VIII that have been detected in the ground water at the monitoring wells (that shall be installed at the CSU), or are expected to be in or derived from waste stored at the CSU, as required by 20.4.1.500 NMAC, incorporating 40 CFR §264.93(a).

## **II.S. ESTABLISHMENT OF A BASELINE**

The Permittee shall conduct background soil sampling at the CSU in areas not impacted by waste management within 180 calendar days from the effective date of this Permit. The sampling locations must be approved by NMED. This sampling activity is necessary for the establishment of a baseline that shall be used for reference during closure activities described in Permit Attachment K, *Closure Plan*. The Permittee shall submit a copy of the background sample data to NMED. The results of this initial sampling event will assist the Permittee in characterizing the soil at the CSU and its proximity, and shall be used for reference during closure of the CSU.

**PART 3**  
**STORAGE OF HAZARDOUS WASTE IN CONTAINERS**

## PART 3 STORAGE OF HAZARDOUS WASTE IN CONTAINERS

### **III.A. PART HIGHLIGHTS**

This Part contains the regulatory requirements for the Permittee to manage and store the hazardous wastes at the CSU. The Facility is authorized to manage and store at the CSU only those hazardous wastes listed in Permit Attachment A, *Authorized Wastes*. Specific Facility and process information for the management, storage and transfer of hazardous waste, and a description of the CSU are provided in Permit Attachments B, and C. The location of the CSU is shown in Figure B-3 of Permit Attachment B.

#### **III.A.1. Waste Handling Building**

The Permittee shall manage and store hazardous waste in the CSU building as specified in Permit Attachment C subject to the following conditions:

##### **III.A.1.a. Storage Containers**

The Permittee shall manage and store hazardous waste in the containers specified by Permit Condition III.C.1. of this Permit Part.

##### **III.A.1.b. Storage Locations and Quantities**

The Permittee shall manage and store hazardous waste containers in the indoor covered container storage building and the covered outdoor storage areas as specified in Table III.B.1. below. The Permittee shall manage and store quantities of hazardous waste containers in these locations not to exceed the maximum capacities specified in Table III.B.1.

##### **III.A.1.c. Storage on Concrete Floor**

The Permittee shall manage and store hazardous waste containers unloaded from the trucks transporting waste containers from the on-site generators to the CSU in individual storage areas, segregated by waste type and compatibility. Each storage area shall have a concrete floor that slopes towards the aisles to expose any spills quickly as described in Permit Attachment C, *Container Storage Unit Design and Operation*.

##### **III.A.1.d. Storage Time Limit**

The Permittee shall not store any hazardous waste in the CSU for more than one (1) year.

**III.A.1.e. Minimum Aisle Space**

The Permittee shall maintain sufficient aisle space between storage drums in the storage rooms to allow the unobstructed movement of personnel, fire protection equipment, spill control equipment and decontamination equipment to any area within the CSU as described in Permit Attachment G, *Preparedness and Prevention Procedures*, as required by 20.4.1.500 NMAC, incorporating 40 CFR §264.35.

**III.B. PERMITTED AND PROHIBITED WASTE IDENTIFICATION**

**III.B.1. Permitted Waste**

The Permittee shall manage and store for subsequent transfer to a permitted treatment, storage, or disposal facility, only the hazardous wastes listed in Permit Attachment A, *Authorized Wastes*, subject to the terms of this Permit.

**III.B.2. Prohibited Waste**

The Permittee is prohibited from managing and storing any hazardous waste that is not identified in Permit Condition III.B.1. of this Permit. The Permittee shall not store more than 43,340 gallons of the Hazardous Wastes Types in containers at the CSU at any one time. Table III.B.1. below shows the maximum amounts of hazardous waste that the Permittee shall manage and store at the CSU subject to the terms of this Permit.

**TABLE III.B.1.**

**Total Storage Capacities of HAFB's Container Storage Unit**

<b>TYPE OF STORAGE UNIT</b>	<b>MAXIMUM VOLUME OF WASTES (Gallons)</b>
Covered Indoor Storage Building	15,840 [i.e., Approximately 288 55-gallon Drums]
Covered Outdoor Storage Building	27,500 [i.e., Approximately 500 55-gallon Drums]

**III.C. CONDITION OF CONTAINERS**

If a container holding hazardous waste is not in good condition (e.g., has severe rusting, apparent structural defects) or if it begins to leak, the Permittee shall transfer the hazardous waste from such a container to a container that is in good condition or otherwise manage the waste in compliance with the Conditions of this Permit, as required by 20.4.1.500 NMAC, incorporating 40 CFR §264.171.

### **III.C.1. Acceptable Storage Containers**

The Permittee shall use containers that comply with the requirements of the U.S. Department of Transportation container shipping regulations (*49 CFR §173 – Shipper's -General Requirements for Shipment and Packaging, and 49 CFR §178 - Specifications for Packaging*) for management and storage of hazardous waste at the subject CSU. The following is a description of the type of containers that the Permittee shall use at the CSU:

Standard 55-gallon (208-liter) drums - with a gross internal volume of 7.3 ft<sup>3</sup> (0.21 m<sup>3</sup>), as well as 10 gallon/1.23 ft<sup>3</sup> (0.04 m<sup>3</sup>), and 35 gallon/4.64 ft<sup>3</sup> (0.13 m<sup>3</sup>) drums, as necessary.

### **III.D. COMPATIBILITY OF WASTE WITH CONTAINERS**

The Permittee shall use containers made of or lined with materials which will not react with, and are otherwise compatible with, the hazardous waste to be managed and stored, so that the ability of the container to contain the waste is not impaired, as required by 20.4.1.500 NMAC, incorporating 40 CFR §264.172. The Permittee shall ensure compliance with this requirement by conducting pre-acceptance characterization of waste, as described in Permit Attachment D, *Waste Analysis Plan*, considering the precautions described in Permit Attachment C, *Design and Operation of the Container Storage Unit*.

### **III.E. MANAGEMENT OF CONTAINERS**

The Permittee shall keep all containers closed during storage, except when it is necessary to add or remove waste, and shall not open, handle, or store containers in a manner which may rupture the container or cause it to leak, as required by 20.4.1.500 NMAC, incorporating at 40 CFR §264.173.

### **III.F. SECONDARY CONTAINMENT SYSTEMS**

The Permittee shall construct and maintain secondary containment systems for all containers in the CSU in accordance with the specifications required by 20.4.1.500 NMAC, incorporating 40 CFR §264.175, and the procedures described in Table C-1 of Permit Attachment C, *Design and Operation of the Container Storage Unit*.

### **III.G. INSPECTION SCHEDULES AND PROCEDURES**

The Permittee shall inspect the CSU for the condition of containers and secondary containment systems, safety equipment, and aisle space daily, quarterly, and annually, to detect leaking containers, deterioration of containers and the containment system caused by corrosion and other factors, in accordance with the Schedules in the Inspection Plan of Permit Attachment F, Table F-1, and as required by 20.4.1.500 NMAC, incorporating 40 CFR §264.174.

### **III.H. RECORD KEEPING**

The Permittee shall place the results of all waste analyses and any other documentation in the CSU operating record, as specified in Permit Condition II.L, Permit Attachment I, *Manifesting, Record Keeping and Reporting*, as required by 20.4.1.500 NMAC, incorporating 40 CFR §264.73(a).

### **III.I. CLOSURE**

During closure of the CSU, the Permittee shall remove all hazardous waste and hazardous waste residues from the containment system in accordance with the procedures described in Permit Attachment K, *Closure Plan*, as required by 20.4.1.500 NMAC, incorporating 40 CFR §264.178. [Remaining containers, liners, bases and soils containing or contaminated with hazardous waste or hazardous waste residues must be decontaminated or removed, as required by 20.4.1.500 NMAC, incorporating 40 CFR §264.178].

### **III.J. SPECIAL CONTAINER PROVISIONS FOR IGNITABLE OR REACTIVE WASTE**

#### **III.J.1. Location of Ignitable and Reactive Waste**

The Permittee shall not locate containers holding ignitable or reactive hazardous waste within 15 meters (50 feet) of the Facility's property line as required by 20.4.1.500 NMAC, incorporating 40 CFR §264.176.

#### **III.J.2. Procedures to Prevent Ignition/Reaction**

The Permittee shall take precautions to prevent accidental ignition or reaction of ignitable or reactive waste and follow the procedures specified in Permit Attachment C, *Container Storage Unit Design and Operation*, as required by 20.4.1.500 NMAC, incorporating §264.17 and §264.176.

#### **III.J.3. Storage of Hazardous Waste Containers**

Containers of ignitable and reactive wastes shall be stacked no more than two high, in order to comply with the National Fire Protection Association's *Flammable and Combustible Liquids Code*.

### **III.K. SPECIAL CONTAINER PROVISIONS FOR INCOMPATIBLE WASTE**

#### **III.K.1. Storage of Incompatible Wastes**

The Permittee shall not place incompatible wastes in the same containers, as set forth in Permit Attachment C, *Container Storage Unit Design and Operation*, and as required by 20.4.1.500 NMAC, incorporating 40 CFR §264.177(a).

**III.K.2.      Management of Unwashed Containers**

The Permittee shall not place hazardous waste in an unwashed container that previously held an incompatible waste or material, as required by 20.4.1.500 NMAC, incorporating 40 CFR §264.177(b).

**III.K.3.      Separation of Hazardous Waste Containers**

The Permittee shall separate containers of incompatible wastes as described in Permit Attachment C, *Container Storage Unit Design and Operation*, and as required by 20.4.1.500 NMAC, incorporating 40 CFR §264.177(c).

**PART 4**  
**CORRECTIVE ACTION**

## PERMIT PART 4 CORRECTIVE ACTION

### PART HIGHLIGHTS

This Part sets forth the requirements for the Permittee to conduct corrective action for all releases of hazardous waste or hazardous constituents at the container storage unit (CSU) as required by Sections 74-4-4.A.5.h and 74-4-4.2.B, and 74-4-10.F of the New Mexico Hazardous Waste Act (HWA) and the Resource Conservation and Recovery Act (RCRA).

### CORRECTIVE ACTION FROM RELEASES

#### **Sections 74-4-4.A.5.h and 74-4-4.2 of the HWA**

Sections 74-4-4.A.5.h and 74-4-4.2 of the HWA and 20.4.1.500 NMAC, incorporating 40 CFR §264.101 require that Permits issued after April 8, 1987, shall require corrective action as necessary to protect human health and the environment for all releases of hazardous waste or constituents from any SWMU at a treatment, storage or disposal facility, regardless of the time at which the waste was placed in the SWMU.

#### **Sections 74-4-4.A.5.i of the HWA**

Sections 74-4-4.A.5.i of the HWA and 20.4.1.500 NMAC, incorporating 40 CFR §264.101(c) require corrective action beyond the facility boundary where necessary to protect human health and the environment unless the Permittee demonstrates to the satisfaction of the Secretary that, despite the Permittee's best efforts, the Permittee was unable to obtain the necessary permission to undertake such actions.

#### **Sections 3004(u) and 3004(v) of RCRA**

The Permittee may also be required to take corrective action for releases of hazardous constituents from any SWMU at the Facility, or beyond the facility property boundaries, regardless of when the waste was placed, under section 3004(u) and 3004(v) of RCRA.

### **IV.A APPLICABILITY**

The Conditions of this Part apply to:

- IV.A.1.** The SWMUs and AOCs identified in Appendix IV-A, Table A (SWMUs and AOCs requiring corrective action), and Table B which require no RCRA Facility Investigation (RFI) at this time;
- IV.A.2.** Any additional SWMUs or AOCs discovered during the course of groundwater monitoring, field investigations, environmental audits, or other

means. As used in this Permit, the terms "discover", "discovery", or "discovered" refer to the date on which the Permittee either, (1) visually observes evidence of a new SWMU or AOC, (2) visually observes evidence of a previously unidentified release of hazardous constituents to the environment, or (3) receives information which suggests the presence of a new release of hazardous waste or hazardous constituents to the environment.

- IV.A.3.** Contamination which has migrated beyond the CSU boundary, if applicable. The Permittee shall implement corrective actions beyond the CSU boundary where necessary to protect human health and the environment, unless the Permittee demonstrates to the satisfaction of the Secretary that, despite the Permittee's best efforts, as determined by the Secretary, the Permittee was unable to obtain the necessary permission to undertake such actions. The Permittee is not relieved of all responsibility to clean up a release that has migrated beyond the facility boundary where off-site access is denied. On-site measures to address such releases will be determined on a case-by-case basis. Assurances of financial responsibility for completion of such off-site corrective action will be required.

**IV.B. NOTIFICATION AND ASSESSMENT REQUIREMENTS FOR NEWLY IDENTIFIED SWMUs AND AOCs**

- IV.B.1.** The Permittee shall notify the Secretary in writing, within fifteen (15) calendar days of discovery, of any suspected new AOC as discovered under Condition IV.A.2. The notification shall include, at a minimum, the location of the AOC and all available information pertaining to the nature of the release (e.g., media affected, hazardous constituents released, magnitude of release, etc.). The Secretary may conduct, or require the Permittee to conduct, further assessment (i.e., confirmatory sampling) in order to determine the status of the suspected AOC. The Secretary will notify the Permittee in writing of the final determination as to the status of the suspected AOC. If the Secretary determines that further investigation is needed, it shall be investigated pursuant to Permit Condition IV.B.3.
- IV.B.2.** The Permittee shall notify the Secretary in writing, within fifteen (15) calendar days of discovery, of any additional SWMU as discovered under Condition IV.A.2.
- IV.B.3.** The Permittee shall prepare and submit to the Secretary, within ninety (90) calendar days of notification, a SWMU Assessment Report (**SAR**) for each SWMU identified under Condition IV.B.2. At a minimum, the SAR shall provide the following information:

- a. Location of unit(s) on a topographic map of appropriate scale such as required under 20.4.1.900 NMAC, incorporating 40 CFR §270.14(b)(19).
- b. Designation of type and function of unit(s).
- c. General dimensions, capacities and structural description of unit(s) (supply any available plans/drawings).
- d. Dates that the unit(s) was operated.
- e. Specification of all wastes that have been managed at/in the unit(s) to the extent available. Include any available data on hazardous constituents in the wastes.
- f. All available information pertaining to any release of hazardous waste or hazardous constituents from such unit(s) (to include groundwater data, soil analyses, air, and/or surface water data).

**IV.B.4.** Based on the results of the SAR, the Secretary will determine the need for further investigations at the SWMUs covered in the SAR. If the Secretary determines that such investigations are needed, the Permittee shall be required to prepare a plan for such investigations as outlined in Condition IV.E.1.b, or IV.D.2.

**IV.C. NOTIFICATION REQUIREMENTS FOR NEWLY DISCOVERED RELEASES FROM SWMUs or AOCs**

**IV.C.1.** The Permittee shall notify the Secretary in writing of any newly discovered release(s) of hazardous waste or hazardous constituents discovered during the course of groundwater monitoring, field investigations, environmental audits, or other means, within fifteen (15) calendar days of discovery. Such newly discovered releases may be from SWMUs or AOCs identified in Appendix IV-A, or SWMU or AOCs identified in Condition IV.A.2, for which further investigation under Condition IV.B.4, was not required.

**IV.C.2.** If the Secretary determines that further investigation of newly discovered releases from SWMUs or AOCs is needed, the Permittee shall be required to prepare a Work Plan for such investigations as outlined in Permit Conditions IV.E.1.b, c, and d.

#### **IV.D. CONFIRMATORY SAMPLING (CS)**

- IV.D.1.** The Permittee shall prepare and submit a Confirmatory Sampling (CS) Work Plan for each additional SWMU identified under Condition IV.B.2. The CS Work Plan shall be submitted within forty-five (45) calendar days from discovery of the SWMU, pursuant to Permit Condition IV.B.2. The CS Work Plan shall include schedules of implementation and completion of specific actions necessary to determine whether or not a release has occurred. It should also address applicable requirements and affected media. In order to partly or wholly satisfy the CS requirement, previously existing data may be submitted with the CS Work Plan for the Secretary's consideration.
- IV.D.2.** Upon notification by the Secretary, the Permittee shall prepare and submit a CS Work Plan for suspected AOCs per Permit Condition IV.B.1. The CS Work Plan shall be submitted within forty-five (45) calendar days of notification by the Secretary that a CS Work Plan is required. The CS Work Plan shall meet the basic requirements listed in Permit Condition IV.D.1.
- IV.D.3.** The CS Work Plan must be approved by the Secretary, in writing, prior to implementation. The Secretary will specify the start date of the CS Work Plan schedule in the letter approving the CS Work Plan. If the Secretary disapproves the CS Work Plan, the Secretary will either (1) notify the Permittee in writing of the CS Work Plan's deficiencies and specify a due date for submission of a revised CS Work Plan, (2) revise the CS Work Plan and notify the Permittee of the revisions, or (3) conditionally approve the CS Work Plan and notify the Permittee of the conditions.
- IV.D.4.** The Permittee shall implement the confirmatory sampling in accordance with the approved CS Work Plan.
- IV.D.5.** The Permittee shall prepare and submit to the Secretary in accordance with the schedule in the approved CS Work Plan, a CS Report identifying all SWMUs or AOCs that have released hazardous waste or hazardous constituents into the environment. The CS Report shall include all data, including raw data, and a summary and analysis of the data, that supports the above determination. If submittal of the CS Report coincides with submittal of the RFI Report, then the CS Report and the RFI Report may be combined into one document.
- IV.D.6.** Based on the results of the CS Report, the Secretary will determine the need for further investigations at the SWMUs or AOCs covered in the CS Report. If the Secretary determines that such investigations are needed, the Permittee shall be required to prepare a Work Plan for such investigations as outlined in

Condition IV.E.1.c. The Secretary will notify the Permittee of any decision that no further action is required.

#### **IV.E. RCRA FACILITY INVESTIGATION (RFI)**

##### **IV.E.1. RFI Work Plan**

- IV.E.1.a.** The Permittee shall prepare and submit to the Secretary, within ninety (90) calendar days of the effective date of this permit, a RCRA Facility Investigation Work Plan for those units identified in Condition IV.A.1, i.e., the sites listed in Table A, as requiring corrective action at this time. This Work Plan shall be developed to meet the requirements of Condition IV.E.1.c.
- IV.E.1.b.** The Permittee shall prepare and submit to the Secretary, within ninety (90) calendar days of notification by the Secretary, an RFI Work Plan for those units identified under Condition IV.B.4, Condition IV.C.2, or Condition IV.D.6.
- IV.E.1.c.** The RFI Work Plan shall meet the requirements of Appendix IV-B. The RFI Work Plan shall include schedules of implementation and completion of specific actions necessary to determine the nature and extent of contamination and the potential pathways of contaminant releases to the air, soil, surface water, and groundwater. The Permittee must provide sufficient justification and associated documentation that a release is not probable or has already been characterized if a unit or a media/pathway associated with a unit (groundwater, surface water, soil, subsurface gas, or air) is not included in the RFI Work Plan. Such deletions of a unit, medium or pathway from the RFI are subject to the approval of the Secretary. The Permittee shall provide sufficient written justification for any omissions or deviations from the minimum requirements of Appendix B. Such omissions or deviations are subject to the approval of the Secretary. In addition, the scope of the RFI Work Plan shall include all investigations necessary to ensure compliance with 20.4.1.500 NMAC, incorporating 40 CFR §264.101(c).
- IV.E.1.d.** The RFI Work Plan must be approved by the Secretary, in writing, prior to implementation. The Secretary will specify the start date of the RFI Work Plan schedule in the letter approving the RFI Work Plan. If the Secretary disapproves the RFI Work Plan, the Secretary will either (1) notify the Permittee in writing of the RFI Work Plan's deficiencies and specify a due date for submission of a revised RFI Work Plan, (2) revise the RFI Work Plan and notify the Permittee of

the revisions and the start date of the schedule within the approved RFI Work Plan, or (3) conditionally approve the RFI Work Plan and notify the Permittee of the conditions.

**IV.E.2. RFI Implementation**

The Permittee shall implement the RFI in accordance with the approved RFI Work Plan and Appendix B. The Permittee shall notify the Secretary at least twenty (20) calendar days prior to any sampling activity, field-testing or field monitoring activity required by this Permit to provide agency personnel the opportunity to observe investigation procedures and/or split samples.

**IV.E.3. RFI Reports**

**IV.E.3.a.** The Permittee shall prepare and submit to the Secretary Draft and Final RFI Report for the investigations conducted pursuant to the RFI Work Plan submitted under Condition IV.E.1. The Draft RFI Report shall be submitted to the Secretary for review in accordance with the schedule in the approved RFI Work Plan. The Final RFI Report shall be submitted to the Secretary within thirty (30) calendar days of receipt of the Secretary's final comments on the Draft RFI Report. The RFI Report shall include an analysis and summary of all required investigations of SWMUs and AOCs and their results. The summary shall describe the type and extent of contamination at the facility, including sources and migration pathways, identify all hazardous constituents present in all media, and describe actual or potential receptors. The RFI Report shall also describe the extent of contamination (qualitative/quantitative) in relation to background levels indicative of the area. If the Draft RFI Report is a summary of the initial phase investigatory work, the report shall include a work plan for the final phase investigatory actions required based on the initial findings. Approval of the final phase work plan shall be carried out in accordance with Condition IV.E.1.d. The objective of this task shall be to ensure that the investigation data are sufficient in quality (e.g., quality assurance procedures have been followed) and quantity to describe the nature and extent of contamination, potential threat to human health and/or the environment, and to support a Corrective Measures Study, if necessary.

**IV.E.3.b.** The Permittee shall prepare and submit to the Secretary, along with the Draft and Final RFI Report, action levels for each of the hazardous constituents reported in Condition IV.E.3.a. Action levels shall be calculated as specified in Appendix E of this permit.

**IV.E.3.c.** The Secretary will review the RFI Report, including the action levels stipulated in Condition IV.E.3.b. The Secretary will notify the Permittee of the need for further investigative action if necessary and, if appropriate at this moment of the investigation, inform the Permittee, if not already notified, of the need for a Corrective Measures Study to meet the requirements of IV.G and 20.4.1.500 NMAC, incorporating 40 CFR §264.101. The Secretary will notify the Permittee of any decision that no further action is necessary. Any further investigative action required by the Secretary will be prepared and submitted in accordance with a schedule specified by the Secretary and approved in accordance with Condition IV.E.1.d.

**IV.E.3.d.** If the time required to conduct the RFI is greater than one hundred eighty (180) calendar days, the Permittee shall provide the Secretary with quarterly RFI Progress Reports beginning ninety (90) calendar days from the start date specified by the Secretary in the RFI Work Plan approval letter. The Progress Reports shall contain the following information at a minimum:

- i. A description of the portion of the RFI completed;
- ii. Summaries of findings;
- iii. Summaries of any deviations from the approved RFI Work Plan during the reporting period;
- iv. Summaries of any significant contacts with local community public interest groups or State government;
- v. Summaries of any problems or potential problems encountered during the reporting period;
- vi. Actions taken to rectify problems;
- vii. Changes in relevant personnel;
- viii. Projected work for the next reporting period; and
- ix. Copies of daily reports, inspection reports, data, etc.

## **IV.F. INTERIM MEASURES (IM)**

### **IV.F.1. IM Work Plan**

- IV.F.1.a.** Upon notification by the Secretary, the Permittee shall prepare and submit an Interim Measures (IM) Work Plan for any SWMU or AOC, which the Secretary determines, is necessary. IM are necessary in order to minimize or prevent the further migration of contaminants and limit actual or potential human and environmental exposure to contaminants while long-term corrective action remedies are evaluated and, if necessary, implemented. The IM Work Plan shall be submitted within thirty (30) calendar days of such notification and shall include the elements listed in IV.F.1.b. Such interim measures may be conducted concurrently with investigations required under the terms of this Permit.
- IV.F.1.b.** The Permittee may initiate IM at a SWMU or AOC by submitting the appropriate notification pursuant to Condition I.G.10. The Secretary will process Permittee initiated IM by either conditionally approving the IM or imposing an IM Work Plan per Condition IV.F.1.a. Permittee-initiated IM shall be considered conditionally approved unless the Secretary specifically imposes an IM Work Plan within thirty (30) calendar days of receipt of notification of the Permittee initiated IM. The scope and success of Permittee initiated IM conditionally approved per Condition IV.F.1.b. shall be subject to subsequent in-depth review; the Secretary will either comment on or approve the Permittee initiated IM. Permittee initiated IM must follow the progress and final reporting requirements in Condition IV.F.3.
- IV.F.1.c.** The IM Work Plan shall ensure that the interim measures are designed to mitigate any current or potential threat(s) to human health or the environment and is consistent with and integrated into any long-term solution at the facility. The IM Work Plan shall include: the interim measures objectives, procedures for implementation (including any designs, plans, or specifications), and schedules for implementation.
- IV.F.1.d.** The IM Work Plan imposed under Condition IV.F.1.a must be approved by the Secretary in writing prior to implementation. The Secretary will specify the start date of the IM Work Plan schedule in the letter approving the IM Work Plan. If the

Secretary disapproves the IM Work Plan, the Secretary will either (1) notify the Permittee in writing of the IM Work Plan's deficiencies and specify a due date for submission of a revised IM Work Plan, (2) revise the IM Work Plan and notify the Permittee of the revisions and the start date of the schedule within the approved IM Work Plan, or (3) conditionally approve the IM Work Plan and notify the Permittee of the conditions.

**IV.F.2. IM Implementation**

**IV.F.2.a.** The Permittee shall implement the interim measures imposed under Condition IV.F.1.a. in accordance with the approved IM Work Plan.

**IV.F.2.b.** The Permittee shall give notice to the Secretary as soon as possible of any planned changes, reductions or additions to the IM Work Plan imposed under Condition IV.F.1.a. or initiated by the Permittee under Condition IV.F.1.b.

**IV.F.2.c.** Final approval of corrective action required under 20.4.1.500 NMAC, incorporating 40 CFR §264.101 which is achieved through interim measures shall be as a permit modification in accordance with 20.4.1.900 NMAC, incorporating 40 CFR §270.41 and Condition IV.H.

**IV.F.3. IM Reports**

**IV.F.3.a.** If the time required for completion of interim measures imposed under Condition II.F.1.a. or implemented under Condition II.F.1.b. is greater than one year, the Permittee shall provide the Secretary with progress reports at intervals specified in the approved Work Plan or semi-annually for Permittee initiated interim measures. The Progress Reports shall contain the following information at a minimum:

- i. A description of the portion of the interim measures completed;
- ii. Summaries of findings;
- iii. Summaries of any deviations from the IM Work Plan during the reporting period;

- iv. Summaries of any problems or potential problems encountered during the reporting period; and
- v. Projected work for the next reporting period.

**IV.F.3.b.** The Permittee shall prepare and submit to the Secretary, within ninety (90) calendar days of completion of interim measures conducted under Condition IV.F., an Interim Measures (**IM**) Report. The IM Report shall contain the following information at a minimum:

- i. A description of interim measures implemented;
- ii. Summaries of results;
- iii. Summaries of all problems encountered;
- iv. Summaries of accomplishments and/or effectiveness of interim measures; and
- v. Copies of all relevant laboratory/monitoring data, etc. in accordance with Condition I.F.8 (in Part I).

#### **IV.G. CORRECTIVE MEASURES STUDY**

##### **IV.G.1. Corrective Measures Study (CMS) Work Plan**

**IV.G.1.a.** The Permittee shall prepare and submit a CMS Work Plan for additional SWMUs requiring a CMS within ninety (90) calendar days of notification by the Secretary that a CMS is required. This CMS Work Plan shall be developed to meet the requirements of Condition IV.G.1.b. The Permittee may seek approval from the Secretary for concurrent RFI/CMS. The CMS may be performed concurrent with the RFI process if the Secretary determines that sufficient investigative details are available to allow concurrent action.

**IV.G.1.b.** The CMS Work Plan shall meet the requirements of Appendix C at a minimum. The CMS Work Plan shall include schedules of implementation and completion of specific actions necessary to complete a CMS. The Permittee must provide sufficient justification and/or documentation for any unit deleted from the CMS Work Plan. Such deletion of a unit is subject to the approval of the Secretary. The Permittee

shall provide sufficient written justification for any omissions or deviations from the minimum requirements of Appendix IV-C. Such omissions or deviations are subject to the approval of the Secretary. The scope of the CMS Work Plan shall include all investigations necessary to ensure compliance with Section 74-4-4.2 of the HWA, 3005(c)(3), 20.4.1.500 NMAC, incorporating 40 CFR §264.101, §264.552, and 20.4.1.900 NMAC, incorporating 40 CFR §270.32(b)(2). The Permittee shall implement corrective actions beyond the Facility boundary, as set forth in Condition IV.A.3.

**IV.G.1.c.** The Secretary will either approve or disapprove, in writing, the CMS Work Plan. If the Secretary disapproves the CMS Work Plan, the Secretary will either (1) notify the Permittee in writing of the CMS Work Plan's deficiencies and specify a due date for submittal of a revised CMS Work Plan, (2) revise the CMS Work Plan and notify the Permittee of the revisions, or (3) conditionally approve the CMS Work Plan and notify the Permittee of the conditions. This modified CMS Work Plan becomes the approved CMS Work Plan.

**IV.G.2. Corrective Measures Study Implementation**

The Permittee shall begin to implement the Corrective Measures Study according to the schedules specified in the CMS Work Plan, no later than fifteen (15) calendar days after the Permittee has received written approval from the Secretary for the CMS Work Plan. Pursuant to Permit Condition IV.G.1.b, the CMS shall be conducted in accordance with the approved CMS Work Plan.

**IV.G.3. CMS Report**

**IV.G.3.a.** The Permittee shall prepare and submit to the Secretary a draft and final CMS Report for the study conducted pursuant to the approved CMS Work Plan and in accordance with Appendix C. The draft CMS Report shall be submitted to the Secretary in accordance with the schedule in the approved CMS Work Plan. The final CMS Report shall be submitted to the Secretary within thirty (30) calendar days of receipt of the Secretary's final comments on the draft CMS Report. The CMS Report shall summarize any bench-scale or pilot tests conducted. The CMS Report must include an evaluation of each remedial alternative. If a remedial alternative requires

the use of a corrective action management unit (CAMU), the CMS report shall include all information necessary to establish and implement the CAMU. The CMS Report shall present all information gathered under the approved CMS Work Plan. The CMS Final Report must contain adequate information to support the Secretary's decision on the recommended remedy, described under Permit Condition IV.H.

**IV.G.3.b.** If the Secretary determines that the CMS Final Report does not fully satisfy the information requirements specified under Permit Condition IV.G.3.a., the Secretary may disapprove the CMS Final Report. If the Secretary disapproves the CMS Final Report, the Secretary will notify the Permittee in writing of deficiencies in the CMS Final Report and specify a due date for submittal of a revised CMS Final Report. The Secretary will notify the Permittee of any no further action decision.

**IV.G.3.c.** As specified under Permit Condition IV.G.3.b., based on preliminary results and the CMS Final Report, the Secretary may require the Permittee to evaluate additional remedies or particular elements of one or more proposed remedies.

#### **IV.H. REMEDY APPROVAL AND PERMIT MODIFICATION**

**IV.H.1.** A remedy shall be proposed by the Permittee from the remedial alternatives evaluated in the CMS. It will be based at a minimum on protection of human health and the environment, as per specific site conditions and existing regulations. The proposed remedy may include any interim measures implemented to date. The proposed remedy will be reviewed and approved by the Secretary prior to its implementation.

**IV.H.2.** Pursuant to 20.4.1.900 NMAC, incorporating 40 CFR §270.41, a permit modification will be initiated by the Secretary after recommendation of a remedy under Condition IV.H.1. This modification will serve to incorporate a final remedy, including a CAMU if necessary, into this Permit.

**IV.H.3.** Within one hundred and twenty (120) calendar days after this Permit has been modified for remedy selection, the Permittee shall demonstrate financial assurance for completing the approved remedy.

**IV.I. MODIFICATION OF THE CORRECTIVE ACTION SCHEDULE OF COMPLIANCE**

- IV.I.1.** If at any time the Secretary determines that modification of the Corrective Action Schedule of Compliance is necessary, the Secretary may initiate a modification to the Schedule of Compliance (Appendix IV-D).
- IV.I.2.** Modifications that are initiated and finalized by the Secretary will be in accordance with the applicable provisions of 20.4.1.900 NMAC, incorporating 40 CFR §270. The Permittee may also request a permit modification in accordance with 20.4.1.900 NMAC, incorporating 40 CFR §270 to change the Schedule of Compliance.

**IV.J. WORK PLAN AND REPORT REQUIREMENTS**

- IV.J.1.** All work plans and schedules shall be subject to approval by the Secretary prior to implementation to assure that such work plans and schedules are consistent with the requirements of this Permit and with applicable regulations. The Permittee shall revise all submittals and schedules as specified by the Secretary. Upon approval the Permittee shall implement all work plans and schedules as written.
- IV.J.2.** All work plans and reports shall be submitted in accordance with the approved schedule. Extensions of the due date for submittals may be granted by the Secretary based on the Permittee's demonstration that sufficient justification for the extension exists.
- IV.J.3.** If the Permittee at any time determines that the SWMU assessment report (SAR) information required under Condition IV.B, the CS Work Plan under Condition IV.D, or RFI Work Plan required under Condition IV.E. no longer satisfy the requirements of 20.4.1.500 NMAC, incorporating 40 CFR §264.101 or this Permit for prior or continuing releases of hazardous waste or hazardous constituents from solid waste management units and/or areas of concern, the Permittee shall submit an amended Work Plan to the Secretary within ninety (90) calendar days of such determination.
- IV.J.4.** Three (3) copies of all reports and work plans shall be provided by the Permittee to the Secretary at the following address:

New Mexico Environment Department  
The Hazardous Waste Bureau  
2095 Rodeo Park Drive East, Building 1  
P.O. Box 26110  
Santa Fe, NM 87505-6303

#### **IV.K. APPROVAL/DISAPPROVAL OF SUBMITTALS**

**IV.K.1.** The Secretary will review the work plans, reports, schedules, and other documents ("submittals") which require the Secretary's approval in accordance with the conditions of this permit. The Secretary will notify the Permittee in writing of any submittal that is disapproved, and the basis thereof. Condition IV.L, shall apply only to submittals that have been disapproved and revised by the Secretary, or that have been disapproved by the Secretary, then revised and resubmitted by the Permittee, and again disapproved by the Secretary.

#### **IV.L. VOLUNTARY CORRECTIVE MEASURES (VCM)**

At any time, if the Permittee identifies a corrective measure that, if implemented before final corrective measures have been identified, would reduce impacts to human health and the environment, reduce cost and/or reduce overall schedule, the Permittee is encouraged to request approval from the Administrative Authority for the activities. In the request for a approval, the Permittee must include: (1) a description of the remediation initiative, including the details of the unit or activity that is subject to permit requirements; and (2) an explanation of how the proposed action is consistent with the overall corrective action objectives and requirements. The administrative authority will review and consider the Voluntary Corrective Measure Request to ensure that it would not pose unacceptable risk to human health and the environment or interfere with the attainment of the final remedy at the SWMU. Where a Voluntary Corrective Measure Request is approved under these circumstances, the approval will make clear that the voluntary corrective activities initiated may not be the final remedy, and that the voluntary corrective measure will not absolve the Permittee from further cleanup responsibilities at a later date. Additionally, approval of a voluntary corrective measure shall not absolve the Permittee from petitioning the site for no further action (NFA) in the form of a Class 3 modification. Following this review, the Administrative Authority will approve or disallow the application.

#### **IV.M. DISPUTE RESOLUTION**

**IV.M.1.** The Permittee and NMED shall use their best efforts to informally and in good faith resolve all disputes arising out of requirements in this Part. The Permittee shall not invoke dispute resolution for purposes of delay. If, however, the Permittee disagrees, in whole or in part, with the Secretary's revision of a submittal or disapproval of any revised submittal required by the Permit, the following shall apply:

- IV.M.1.a.** The Permittee shall notify the Secretary in writing within thirty (30) calendar days of receipt of the Secretary's revision of a submittal or disapproval of a revised submittal. Such notice shall set forth the specific matters in dispute, the work affected by the dispute, including specific compliance dates, all factual data, analysis, opinion and documentation supporting the Permittee's position, and any matters considered necessary for the Secretary's determination.
- IV.M.1.b.** The Permittee and HWB permitting staff shall have thirty (30) calendar days to use best efforts to resolve the dispute informally. If the Permittee and HWB staff are unable to resolve the dispute, the Permittee may request a final decision from the Secretary.
- IV.M.1.c.** In the event agreement is reached, the Permittee shall comply with the terms of such agreement or if appropriate submit the revised submittal and implement the same in accordance with and within the time frame specified in such agreement. The resolution of the dispute shall, as necessary and appropriate, be incorporated as a Permit Condition.
- IV.M.1.d.** If agreement is not reached, the Secretary will notify the Permittee in writing of his/her decision on the dispute within thirty (30) calendar days from receipt of Permittee's request under Permit Condition IV.M.1.b. The Secretary's decision is a final agency action and shall be incorporated as an enforceable Permit Condition. The Permittee shall comply with the terms and conditions of the Secretary's decision.
- IV.M.1.e.** The invocation of dispute resolution shall not stay the requirements of the disputed Permit Condition absent a determination by the Secretary that just cause exists. The Permittee shall proceed to take any action required by those portions of the submission and of the permit that the Secretary determines are not affected by the dispute.

**APPENDIX 4-A**  
**TABLE A**  
**SUMMARY OF SOLID WASTE MANAGEMENT UNITS**

The following is the Prioritized list of Solid Waste Management Units (SWMUs) and Areas of Concern (AOCs) Requiring Corrective Action:

SERIAL NO.	SWMU	ERP SITE ID	UNIT NAME
1	4	SD-08	Building 131 Oil/Water Separator
2	8	N/A	Building 231 Oil/Water Separator
3	19	N/A	Building 638 Oil/Water Separator
4	20	N/A	Building 639 Oil/Water Separator
5	39	N/A	Building 1092 Oil/Water Separator
6	82	SD-08	Building 131 Washrack
7	101	LF-10	Building 121 Landfill
8	104	LF-29	Former Army Landfill
9	105	LF-19	Golf Course Landfill
10	106	LF-01	Main Base Landfill
11	108	LF-23	MOBSS Landfill Disposal Trench
12	109	LF-10	Old Main Base Landfill
13	111	RW-42	Radioactive Waste Disposal Area
14	113A	OT-20	Sludge Disposal Trenches near Lagoons
15	113B	DP-30/SD-33	Sludge Disposal Trenches Fire Train Area
16	114	OT-03	TEL Disposal Site
17	115	LF-22	Waste Area Landfill #1 PCB Disposal Area
18	116	LF-21	West Area Landfill #2
19	118	OT-16	Building 21 Pesticides Holding Tank
20	122	N/A	Building 702 Waste Oil Tank
21	123	N/A	Building 704 Waste Oil Tank
22	127	FT-31	Building 1092 Waste Oil Tank
23	130	SS-46	Taxiway 4 Tank 28 JP-4 Underground Waste Tank
24	132	OT-16	Building 21 Entomology Leachfield
25	135	FT-31	Building 1092 Oil/Water Sep Drainage Pit
26	136	N/A	Building 1119 Washrack Drainage Area
27	137	SS-38	Building 1166 Test Track Drain Field
28	139	N/A	Lake Holloman
29	140	N/A	Lake Stinky
30	141	SD-27	Pad 9 Drainage Pit
31	165	SS-39	Building 1176 Pond
32	166	SD-25	MOBSS Drainage Lagoon
33	170	FT-31	Fire Department Training Area 1

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34	177	SS-39	Building 1176 Sumps
35	179	SS-39	Discharge Box
36	181	SS-39	Building 1176 Drainage Trough
37	183	N/A	Air Base Sewer System
38	197	OT-14	Former Entomology Shop
39	229	SS-59	T-38 Test Cell Fuel Spill Site
40	AOC-1	DP-64	Chemical Agent Site
41	AOC-2	N/A	Sewage Drainage Pit NE of Building 864
42	AOC-3	DP-63	Ammunition Yard Disposal Pit
43	AOC-4	N/A	West POL Fuel Spill Site
44	AOC-1001	SS-61	Building 1001 Fuel Spill Site
45	AOC-FST837	N/A	Building 837 Fuel Septic Tank
46	AOC-A	OT-16	Building 21 Pesticide Rinsewater Spill Area
47	AOC-B	N/A	Building 807 Test Cell Surface Spill Area
48	AOC-C	N/A	Building 835 Spills
49	AOC-E	N/A	Buildings 903-909 Sand Plast Residues
50	AOC-F	N/A	Asphalt Tank Spill Area
51	AOC-H	SS-18	Chromic Acid Spill Area
52	AOC-I	OT-37	Fighter Wing Flight Line Spill
53	AOC-J	SS-13	Herbicide Sodium Arsenite Spill Area
54	AOC-K	SS-12	Northeast Fuel Line Spill Site # 1
55	AOC-L	N/A	Early Missile Test Site
56	AOC-M	N/A	Building 18
57	AOC-N	SS-48	Building 137 Military Gas Tank Leak
58	AOC-O	OT-45	Building 296 Old AGE Refueling Station
59	AOC-P	OT-44	Building 301 Fuel Tank Leak
60	AOC-Q	SS-17	BX Gas Station Fuel Line Leaks
61	AOC-R	SS-06	JP-4 Fuel Line Spill Site
62	AOC-RD	DP-62	Rita's Draw Disposal Pit
63	AOC-S	N/A	Leaking Underground Storage Tank
64	AOC-T	SS-05	POL Storage Tank Spill Sites 1 & 2
65	AOC-U	N/A	Lost River Basin
66	AOC-V	SS-57	Officer's Club
67	PRI-2	OT-35	PRI Bldg 1264 Solvent Burn Area
68	PRI-5	OT-35	PRI Bldg 1264 Solvent Burn Area
69	PRI-A	OT-32	Primate Research Lab Sewer Line

**TOTAL OF CORRECTIVE ACTION SITES = 69 [i.e., 39 SWMUs + 30 AOCs].**

**APPENDIX 4-A**  
**TABLE B**  
**SUMMARY OF SOLID WASTE MANAGEMENT UNITS**

The following is a list of Solid Waste Management Units (SWMUs) and Areas of Concern (AOCs) Not Currently Requiring Corrective Action.

<b>SWMU/AOC</b>	<b>DESCRIPTION</b>	<b>COMMENT</b>
1	Building 55 Oil/Water Separator	Site NFAd in February 2001
2	Building 121 Oil/Water Separator	Site NFAd in February 2001
3	Building 130 Oil/Water Separator	Site NFAd in February 2001
5	Building 137 Oil/Water Separator	Site NFAd in February 2001
6	Building 193 Oil/Water Separator	Site NFAd in February 2001
7	Building 198 Oil/Water Separator	Site NFAd in February 2001
9	Building 282 Oil/Water Separator	Site NFAd in February 2001
10	Building 283 Oil/Water Separator	Site NFAd in February 2001
11	Building 300 Oil/Water Separator	Site NFAd in February 2001
12	Building 304 Oil/Water Separator	Site NFAd in February 2001
13	Building 304A Oil/Water Separator	Site NFAd in February 2001
14	Building 306 Oil/Water Separator	Site NFAd in February 2001
15	Building 309 Oil/Water Separator	Site NFAd in February 2001
16	Building 315 Oil/Water Separator	Site NFAd in February 2001
17	Building 316 Oil/Water Separator	Site NFAd in February 2001
18	Building 500 Oil/Water Separator	Site NFAd in February 2001
21	Building 702 Oil/Water Separator	Site NFAd in February 2001
22	Building 704 Oil/Water Separator	Site NFAd in February 2001
23	Building 800 Oil/Water Separator	Site NFAd in February 2001
24	Building 801 Oil/Water Separator	Site NFAd in February 2001
25	Building 805 Oil/Water Separator	Site NFAd in February 2001
26	Building 809 Oil/Water Separator	Site NFAd in February 2001
27	Building 810 Oil/Water Separator	Site NFAd in February 2001
28	Building 822 Oil/Water Separator	Site NFAd in February 2001
29	Building 827 Oil/Water Separator	Site NFAd in February 2001
30	Building 830 Oil/Water Separator	Site NFAd in February 2001
31	Building 855 Oil/Water Separator	Site NFAd in February 2001
32	Building 868 Oil/Water Separator	Site NFAd in February 2001
33	Building 869 Oil/Water Separator	Site NFAd in February 2001
34	Building 902 Oil/Water Separator	Site NFAd in February 2001
35	Building 903 Oil/Water Separator	Site NFAd in February 2001
36	Building 1000 Oil/Water Separator	Site NFAd in February 2001

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37	Building 1080 Oil/Water Separator	Site NFAd in February 2001
38	Building 1080A Oil/Water Separator	Site NFAd in February 2001
40	Building 1166 Oil/Water Separator	Site NFAd in February 2001
41	Building 1266 Oil/Water Separator	Site NFAd in February 2001
42	Building 1 Waste Accumulation Area	Site NFAd in February 2001
43	Building 55 Waste Accumulation Area	EPA listed the site in 1988 as a SWMU, but no corrective action was required.
44	Building 121 Waste Accumulation Area	EPA listed the site in 1988 as a SWMU, but no corrective action was required.
45	Building 195 Waste Accumulation Area	EPA listed the site in 1988 as a SWMU with no further corrective action required.
46	Building 198 Waste Accumulation Area	EPA listed the site in 1988 as a SWMU with no further corrective action required.
47	Building 280 Waste Accumulation Area	EPA listed the site in 1988 as a SWMU with no further corrective action required.
48	Building 282 Waste Accumulation Area	EPA listed the site in 1988 as a SWMU with no further corrective action required.
49	Building 300 Waste Accumulation Area	EPA listed the site in 1988 as a SWMU with no further corrective action required.
50	Building 301 Waste Accumulation Area	EPA listed the site in 1988 as a SWMU with no further corrective action required.
51	Building 308 Waste Accumulation Area	EPA listed the site in 1988 as a SWMU with no further corrective action required.
52	Building 500 Waste Accumulation Area	EPA listed the site in 1988 as a SWMU with no further corrective action required.
53	Building 638 Waste Accumulation Area	EPA listed the site in 1988 as a SWMU with no further corrective action required.
54	Building 702 Waste Accumulation Area	EPA listed the site in 1988 as a SWMU
55	Building 702A Waste Accumulation Area	EPA listed the site in 1988 as a SWMU.
56	Building 807 Waste Accumulation Area	EPA listed the site in 1988 as a SWMU.
57	Building 809 Waste Accumulation Area	EPA listed the site in 1988 as a SWMU with no further corrective action required.

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58	Building 822 Waste Accumulation Area	EPA listed the site in 1988 as a SWMU with no further corrective action required.
59	Building 837 Waste Accumulation Area	EPA listed the site in 1988 as a SWMU with no further corrective action required.
60	Building 844 Waste Accumulation Area	EPA listed the site in 1988 as a SWMU with no further corrective action required.
61	Building 851 Waste Accumulation Area	EPA listed the site in 1988 as a SWMU with no further corrective action required.
62	Building 855 Waste Accumulation Area	EPA listed the site in 1988 as a SWMU with no further corrective action required.
63	Building 867 Waste Accumulation Area	EPA listed the site in 1988 as a SWMU with no further corrective action required.
64	Building 869 Waste Accumulation Area	EPA listed the site in 1988 as a SWMU with no further corrective action required.
65	Building 901 Waste Accumulation Area	EPA listed the site in 1988 as a SWMU with no further corrective action required.
66	Building 901 Waste Accumulation Area	EPA listed the site in 1988 as a SWMU with no further corrective action required.
67	Building 909 Waste Accumulation Area	EPA listed the site in 1988 as a SWMU with no further corrective action required.
68	Building 910 Waste Accumulation Area	EPA listed the site in 1988 as a SWMU with no further corrective action required.
69	Building 807 Waste Accumulation Area	EPA listed the site in 1988 as a SWMU with no further corrective action required.
70	Building 1119 Waste Accumulation Area	EPA listed the site in 1988 as a SWMU with no further corrective action required.
71	Building 1778A Waste Accumulation Area	EPA listed the site in 1988 as a SWMU.
72	Building 1178A Waste Accumulation Area	EPA listed the site in 1988 as a SWMU with no further corrective action required.
73	Building 1266 Waste Accumulation Area	EPA listed the site in 1988 as a SWMU with no further corrective action required.

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74	Building 7005 Waste Accumulation Area	EPA listed the site in 1988 as a SWMU with no further corrective action required.
76	DRMO Non-Hazardous Waste Drain	EPA listed the site in 1988 as a SWMU with no further corrective action required.
77	RATSCAT Waste Accumulation Area	EPA listed the site in 1988 as a SWMU with no further corrective action required.
78	Trim Pad 3 WAA	EPA listed the site in 1988 as a SWMU with no further corrective action required.
79	Building 21 Wash rack	EPA listed the site in 1988 as a SWMU.
80	Building 55 Wash rack	EPA listed the site in 1988 as a SWMU with no further corrective action required.
81	Building 121 Wash rack	EPA listed the site in 1988 as a SWMU with no further corrective action required.
83	Building 134 Wash rack	EPA listed the site in 1988 as a SWMU with no further corrective action required.
84	Building 137 Wash rack	EPA listed the site in 1988 as a SWMU with no further corrective action required.
85	Building 283 Wash rack	EPA listed the site in 1988 as a SWMU with no further corrective action required.
86	Building 304A Wash rack	EPA listed the site in 1988 as a SWMU with no further corrective action required.
87	Building 306 Wash rack	EPA listed the site in 1988 as a SWMU.
88	Building 309 Wash rack	EPA listed the site in 1988 as a SWMU with no further corrective action required.
89	Building 703 Wash rack	EPA listed the site in 1988 as a SWMU.
90	Building 801 Wash rack	EPA listed the site in 1988 as a SWMU.
91	Building 816 Wash rack	EPA listed the site in 1988 as a SWMU with no further corrective action required.
92	Building 822 Wash rack	EPA listed the site in 1988 as a SWMU with no further corrective action required.

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93	Building 827 Wash rack	EPA listed the site in 1988 as a SWMU with no further corrective action required
94	Building 830 Wash rack	EPA listed the site in 1988 as a SWMU with no further corrective action required
95	Building 902 Wash rack	EPA listed the site in 1988 as a SWMU with no further corrective action required
96	Building 1080 Wash rack	EPA listed the site in 1988 as a SWMU with no further corrective action required
97	Building 1119 Wash rack	EPA listed the site in 1988 as a SWMU with no further corrective action required
98	Building 1166 Wash rack	EPA listed the site in 1988 as a SWMU with no further corrective action required
99	Building 1266 Wash rack	EPA listed the site in 1988 as a SWMU with no further corrective action required
100	Pad 9 Wash rack	EPA listed the site in 1988 as a SWMU with no further corrective action required
102	Acid Trailer Burial Site	EPA listed the site in 1988 as a SWMU with no further corrective action required
103	Causeway Rubble Disposal Area	EPA listed the site in 1988 as a SWMU with no further corrective action required
107	Main Base Substation PCB Disposal Area	EPA listed the site in 1988 as a SWMU with no further corrective action required
110	POL Rubble Disposal Area	EPA listed the site in 1988 as a SWMU with no further corrective action required
112	RATSCAT Disposal Area	EPA listed the site in 1988 as a SWMU with no further corrective action required
117	Wire Spool Disposal Area	EPA listed the site in 1988 as a SWMU with no further corrective action required
119	Building 121 Waste Oil Tank	NFAd in February 2001
120	Building 309 Waste Oil Tank	NFAd in February 2001
121	Building 316 Waste Oil Tank	NFAd in February 2001
124	Building 752 Waste Oil Tank	NFAd in February 2001
125	Building 868 Fire Water Tank	NFAd in February 2001

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126	Building 1000 Waste Oil Tank	NFAd in February 2001
128	Building 1166 Waste Oil Tank	NFAd in February 2001
129	Buildings 1191 and 1192 Spill Tanks	NFAd in February 2001
131	Waste Oil Bowsers	NFAd in February 2001
133	Building 703 Wash rack Discharge Pit	NFAd in February 2001
134	Buildings 902-924 Drainage Ditch	NFAd in February 2001
138	Building 1166 Oil/Water Sep Drainage Pit	NFAd in February 2001
142	Wastewater Influent Chamber	NFAd in February 2001
143	Bar Screen	NFAd in February 2001
144	Comminutor	NFAd in February 2001
145	Grit Chamber	NFAd in February 2001
146	Parshall Flume and Wet Well	NFAd in February 2001
147	Splitter Box	NFAd in February 2001
148	Sewage Lagoon A	Closed June 30, 2000
149	Sewage Lagoon B	Closed June 30, 2000
150	Sewage Lagoon C	Closed June 30, 2000
151	Sewage Lagoon D	Closed June 30, 2000
152	Sewage Lagoon E	Closed June 30, 2000
153	Sewage Lagoon F	Closed June 30, 2000
154	Sewage Lagoon G	Closed June 30, 2000
155	Sludge Drying Beds	NFAd in February 2001
156	Imhoff Tanks (5)	NFAd in February 2001
157	ABLE 51 PCB Storage Area	NFAd in February 2001
158	PCB Storage Bunker	NFAd in February 2001
159	Building 500 Pb Storage Shelves	NFAd in February 2001
160	Building 500 NiCd Battery Storage Area	NFAd in February 2001
161	Building 844 Battery Storage Area	NFAd in February 2001
162	DRMO Scrap Metal Storage Area	EPA called this site a SWMU in 1988.
163	DRMO Wood Pile	EPA called this site a SWMU in 1988.
164	Building 1080 Pond	NFAd in February 2001.
165	Building 1176 Pond	NFAd in February 2001.
167	Test Shed Launch Area Collection Basin	EPA identified it in 1988 as a SWMU
169	Burn Kettle	EPA identified it in 1988 as a SWMU without requiring further corrective action

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171	Fire Department Training Area 2	NFAd in February 2001
173	Building 198 Sand Trap	EPA listed this as a SWMU in the 1988 RFA Report
174	Building 231 Hobby Shop Silver Recovery Unit	EPA listed this as a SWMU in the 1988 RFA Report
176	Building 844 Sand Trap	EPA listed this as a SWMU in the 1988 RFA Report
178	Building 1191 Fuel Runoff Pits	NFAd in February 2001
180	Building 301 Outdoor Drainage Flume	NFAd in February 2001
182	Building Floor Drains	NFAd in February 2001
184	Wastewater Re-circulation Line	NFAd in February 2001
185	Building 332 Silver Recovery Unit	EPA identified this site as a SWMU in 1988.
186	Hospital Silver Recovery Unit	EPA identified this site as a SWMU in 1988.
187	West Area Silver Recovery Unit	EPA identified this site as a SWMU in 1988.
188	Building 161 Acid Neutralization Unit	EPA identified this site as a SWMU in 1988.
189	Building 282 Recycling Area	EPA identified this site as a SWMU in 1988.
190	Building 500 Battery Neutralization Unit	EPA identified this site as a SWMU in 1988.
191	Building 855 Concrete Pad	EPA identified this site as a SWMU in 1988.
192	Coco Block House Disposal Well	EPA identified this site as a SWMU in 1988.
193	Trash Dumpster	EPA identified this site as a SWMU in 1988.
194-228	SWMUs which no longer exist or could not be located	EPA identified this site as a SWMU in 1988.
212	Former north Area Wash Rack	NFAd in February 2001
230	Building 828 Fuel Spill Site	NFAd in February 2001
231	Incinerator/Landfill	NFAd in February 2001
194-228	SWMUs which no Longer Exist or Could not be Located	EPA identified the site in the 1988, but did not require corrective action <sup>1</sup> .
PRI-1	Primate Research Institute (PRI) Building 1264: Waste accumulation Area	EPA identified the site in the 1988
PRI-3	PRI Building 1264:Biological Incinerator	EPA identified the site in the 1988
PRI-4	PRI Building 1264: Quarantine Area Incinerator	EPA identified the site in the 1988

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<b>AOC-BBMS</b>	Bare Base Mobility Squadron Spill Area	EPA identified the site in the 1988
<b>AOC-D</b>	SD-26 Building 882 Spills	EPA identified the site in the 1988
<b>AOC-G</b>	Atlas Substation PCB Spill	EPA identified the site in the 1988
<b>AOC-PRI-A</b>	Sewer Line from Primate Research Laboratory	EPA identified the site in the 1988
<b>PRI-S</b>	Primate Research Lab Borehole Disposal Site.	EPA identified the site in the 1988
<b>AOC-RR</b>	Buried RR Cars.	EPA identified the site in the 1988

**HOLLOMAN AIR FORCE BASE OPERATING AND CLOSED UNITS**

<b>OPERATING/CLOSED UNIT</b>	<b>DESCRIPTION</b>	<b>COMMENT</b>
<b>20,000-Pound Open Detonation (OD) Treatment Unit/SWMU # 168.</b>	The OD Unit was permitted in 1997.	Permitted in 1997 and is operating.
<b>Container Storage Unit/SWMU # 75</b>	Permit Expired July 4, 2001	Undergoing Renewal. <sup>2</sup>
<b>300-Pound Open Burn (OB) Unit. This site was listed in the 1988 RFA Report as SWMU 172.</b>	The OB Unit was under Interim Status from 1965 to 1979. HAFB conducted risk-based closure as per approved Work Plan of 1997.	NMED approved Closure of this site on February 3, 1997.

1. Unit underwent Corrective Action, was approved for NFA, and is limited by Institutional Controls
2. Unit is a Hazardous Waste Management Unit.

**APPENDIX 4-B**  
**RCRA FACILITY INVESTIGATION (RFI) OUTLINE**

The purpose of the RFI portion of the RCRA corrective action process is to evaluate the nature and extent of releases of hazardous wastes and/or hazardous constituents and to gather necessary data to support the Corrective Measures Study (CMS) and/or Interim Measures. The Permittee shall accomplish the investigation through the following logical progression of tasks:

1. gather information on the source of the release(s) to the environment (**Source Characterization**),
2. gather information on the physical aspects of the environment which will affect the migration and fate of the release and identification of exposure pathways for both humans and non-human members of the environment (**Environmental Setting**),
3. use Source Characterization and Environmental Setting to develop a conceptual model of the release which will be used to plan and conduct a program to define the nature, rate and extent of the release (**Sampling and Analysis Plan**).

An RFI Work Plan and RFI Report are generally required elements of the RCRA corrective action process. The requirements for a full, detailed RFI are provided in the following paragraphs:

**I. RFI WORK PLAN REQUIREMENTS - ELEMENTS OF THE RFI WORK PLAN**

The RFI Work Plan shall include, at a minimum, the following elements:

**A. Introduction - Summary of any relevant existing assessment data**

The Permittee shall describe the purpose or objective of the RFI Work Plan and provide a summary of any existing environmental data which is relevant to the investigation. The summary should provide the following items, at a minimum:

1. Land ownership history,
2. Facility operating dates,
3. Facility's product(s),
4. Raw materials used in facility operations, wastes generated,
5. Nature and extent of any known contamination,
6. Summary of ongoing Interim Measures and past assessments,
7. Summary of permit objective and how this objective will be satisfied.

## B. Environmental Setting

The Permittee shall provide information on the environmental setting at the Facility. The Permittee shall characterize the Environmental Setting as it relates to identified sources, pathways and areas of releases of hazardous constituents from Solid Waste Management Units (SWMUs) and/or Areas of Concern (AOCs). Data gaps pertinent to characterization of releases shall be identified and provisions made in Section E (*Sampling and Analysis Plan for Characterization of releases of hazardous Wastes/Hazardous Constituents*) to obtain the relevant information to fill the data gap. The Environmental Setting shall cover the following items, at a minimum:

### 1. Hydrogeology

The Permittee shall provide a summary of the hydrogeologic conditions at the Facility. This discussion shall include, but not be limited to, the following information:

- a. A description of the regional and local geologic and hydrogeologic characteristics affecting ground-water flow beneath the HAFB's Container Storage Unit (**the CSU**), including:
  - i) Regional and facility specific stratigraphy: a description of strata including strike and dip, identification of stratigraphic contacts;
  - ii) Structural geology: a description of local and regional structural features (e.g., folding, faulting, tilting, jointing, metamorphic foliation, etc.);
  - iii) Depositional history;
  - iv) Regional and Facility specific ground water flow patterns (porous media, fracture media, karst media); and
  - v) Identification and characterization of areas and amounts of recharge and discharge (springs in karst terrain, base level streams and rivers).
- b. An analysis of any topographic features that might influence the ground water flow system (e.g., sinkholes and sinking streams in karst terrains).
- c. Based on any existing field data, tests (e.g., pump tests, tracer tests), and cores, a representative and accurate classification and description of the hydrogeologic units which may be part of the migration pathways at the facility (i.e., the aquifers and any intervening saturated and unsaturated units), including:

- i) Hydraulic conductivity and porosity (total and effective), groundwater flow velocity, groundwater basin discharge;
  - ii) Lithology, grain size, sorting, degree of cementation;
  - iii) An interpretation of hydraulic interconnections between saturated zones (i.e., aquifers) and surface waters; and
  - iv) The attenuation capacity and mechanisms of the natural earth materials (e.g., ion exchange capacity, organic carbon content, mineral content, etc.).
- d. Based on data obtained from groundwater monitoring wells and piezometers installed upgradient, water wells downgradient of the potential contaminant source, a representative description of water level or fluid pressure monitoring including:
- i) Water-level contour and/or potentiometric maps, including seasonal variations;
  - ii) Hydrologic cross sections showing vertical gradients;
  - iii) The flow system, including the vertical and horizontal components of flow; and
  - iv) Any temporal changes in hydraulic gradients, for example, due to tidal or seasonal influences and for karst terrain, storm flow.
- e. A description of man-made influences that may affect the hydrology of the site, identifying:
- i) Local water-supply and production wells with an approximate schedule of pumping; and
  - ii) Man-made hydraulic structures (pipelines, french drains, ditches, roofs, runways, parking lots, etc.).

## 2. Soils

The Permittee shall provide an explanation of the soil and rock units above the water table in the vicinity of contaminant release(s). This summary may include, but not be limited to, the following types of information as appropriate:

- i) Surface soil distribution;
- ii) Soil profile, including ASTM classification of soils;
- iii) Transects of soil stratigraphy;
- iv) Hydraulic conductivity (saturated and unsaturated);
- v) Relative permeability;
- vi) Bulk density;

- vii) Porosity;
- viii) Soil sorption capacity;
- ix) Cation exchange capacity (CEC);
- x) Soil organic content;
- xi) Soil pH;
- xii) Particle size distribution;
- xiii) Depth of water table;
- xiv) Moisture content;
- xv) Effect of stratification on unsaturated flow;
- xvi) Infiltration;
- xvii) Evapotranspiration;
- xviii) Storage capacity;
- xix) Vertical flow rate; and
- xx) Mineral content.

3. Surface Water and Sediment

The Permittee shall provide a description of the surface water bodies in the vicinity of the Facility. This summary may include, but not be limited to, the following activities and information:

- a. Description of the temporal and permanent surface water bodies including:
  - ii) For impoundments: location, elevation, surface area, depth, volume, freeboard, and construction and purpose;
  - iii) For streams, ditches, and channels: location, elevation, flow, velocity, depth, width, seasonal fluctuations, flooding tendencies (i.e., 100 year event), discharge point(s), and general contents.
  - iv) Drainage patterns; and
  - v) Evapotranspiration.
- b. Description of the chemistry of the natural surface water and sediments. This includes determining the pH, total dissolved solids, total suspended solids, biological oxygen demand, alkalinity, conductivity, dissolved oxygen profiles, nutrients, chemical oxygen demand, total organic carbon, specific contaminant concentrations, etc.
- c. Description of sediment characteristics including:
  - i) Deposition area;
  - ii) Thickness profile; and

- iii) Physical and chemical parameters (e.g., grain size, density, organic carbon content, ion exchange capacity, pH, etc.)

4. Air

The Permittee shall provide information characterizing the climate in the vicinity of the facility. Such information may include, but not be limited to:

- a. A description of the following parameters:
  - i) Annual and monthly rainfall averages;
  - ii) Monthly temperature averages and extremes;
  - iii) Wind speed and direction;
  - iv) Relative humidity/dew point;
  - v) Atmospheric pressure;
  - vi) Evaporation data;
  - vii) Development of inversions; and
  - viii) Climate extremes that have been known to occur in the vicinity of the facility, including frequency of occurrence (i.e., Hurricanes)
- b. A description of topographic and man-made features which affect air flow and emission patterns, including:
  - i) Ridges, hills or mountain areas;
  - ii) Canyons or valleys;
  - iii) Surface water bodies (e.g., rivers, lakes, bays, etc.); and
  - iv) Buildings.

**C. Source Characterization**

For those sources from which releases of hazardous constituents have been detected, the Permittee shall provide analytical data to completely characterize the wastes and the areas where wastes have been placed, to the degree that is possible without undue safety risks, including: type, quantity; physical form; disposition (containment or nature of deposits); and facility characteristics affecting release (e. g., facility security, and engineering barriers). Data gaps on source characterization shall be identified and provisions made in Section E (Sampling and Analysis Plan...) to obtain the relevant information to fill the data gap. This summary shall include quantification of the following specific characteristics, at each source area:

- 1. Unit/Disposal Area Characteristics:
  - a. Location of unit/disposal area;

- b. Type of unit/disposal area;
  - c. Design features;
  - d. Operating practices (past and present)
  - e. Period of operation;
  - f. Age of unit/disposal area;
  - g. General physical conditions; and
  - h. Method used to close the unit/disposal area.
2. Waste Characteristics:
- a. Type of wastes placed in the unit;
    - i) Hazardous classification (e. g., flammable, reactive, corrosive, oxidizing or reducing agent);
    - ii) Quantity; and
    - iii) Chemical composition.
  - b. Physical and chemical characteristics such as:
    - i) Physical form (solid, liquid, gas);
    - ii) Physical description (e.g., powder, oily sludge);
    - iii) Temperature;
    - iv) pH;
    - v) General chemical class (e.g., acid, base, solvent);
    - vi) Molecular weight;
    - vii) Density;
    - viii) Boiling point;
    - ix) Viscosity;
    - x) Solubility in water;
    - xi) Cohesiveness of the waste; and
    - xii) Vapor pressure.
  - c. Migration and dispersal characteristics of the waste such as:
    - i) Sorption capability;
    - ii) Biodegradability, bioconcentration, and biotransformation;
    - iii) Photodegradation rates;
    - iv) Hydrolysis rates; and
    - v) Chemical transformations.

**D. Potential Receptors**

The Permittee shall provide data describing the human populations and environmental systems that are susceptible to contaminant exposure from the facility.

Data gaps pertinent to receptor analysis shall be identified and provisions made in Section E to obtain the relevant information to fill the data gap. The following characteristics shall be identified at a minimum:

1. Current local uses and planned future uses of groundwater:
  - a. Type of use (e.g., drinking water source: municipal or residential, agricultural, domestic/non-potable, and industrial);
  - b. Location of groundwater users, to include withdrawal and discharge wells and springs, within one mile of the impacted area.

The above information should also indicate the aquifer or hydrogeologic unit used and/or impacted for each item.

2. Current local uses and planned future uses of surface waters directly impacted by the Facility:
  - a. Domestic and municipal (e.g., potable and lawn/gardening watering);
  - b. Recreational (e.g., swimming, fishing);
  - c. Agricultural;
  - d. Industrial; and
  - e. Environmental (e.g., fish and wildlife propagation).
3. Human use of or access to the facility and adjacent lands, including but not limited to:
  - a. Recreation;
  - b. Hunting;
  - c. Residential;
  - d. Commercial; and
  - e. Relationship between population locations and prevailing wind direction.
4. A general description of the biota in surface water bodies on, adjacent to, or affected by the Facility.
5. A general description of the ecology within the area adjacent to the Facility.
6. A general demographic profile of the people who use, have access to the Facility and adjacent land, including, but not limited to: age; sex; and sensitive subgroups.
7. A description of any known or documented endangered or threatened species near the Facility.

**E. Sampling and Analysis Plan (SAP) for Characterization of Releases of Hazardous Waste/Hazardous Constituents**

The Permittee shall prepare a plan to document all monitoring procedures necessary to characterize the extent, fate and transport of releases (i.e., identify sample locations, sample procedures and sample analysis to be performed during the investigation to characterize the environmental setting, source, and releases of hazardous constituents, so as to ensure that all information and data are valid and properly documented). The sampling strategy and procedures shall be in accordance with EPA Region 4 Environmental Compliance Branch's Standard Operating Procedure and Quality Assurance Manual (SOP) (most recent version). Any deviations from this reference must be requested by the Permittee and approved by NMED. If a Risk Assessment is expected to be performed once release characterization is complete or nearly complete, Data Quality Objectives (DQO) for a Human Health Risk Assessment requires a Data Quality Objective of Level 3 or greater.

The Sampling and Analysis Plan must specifically discuss the following unless the SOP procedures are specifically referenced.

1. Sampling Strategy

- a. Selecting appropriate sampling locations, depths, etc.;
- b. Obtaining all necessary ancillary data;
- c. Determining conditions under which sampling should be conducted;
- d. Determining which media are to be sampled (e.g., groundwater, air, soil, sediment, subsurface gas);
- e. Determining which parameters are to be measured and where;
- f. Selecting the frequency of sampling and length of sampling period;
- g. Selecting the types of samples (e.g., composite vs. grab) and the number of samples to be collected.

2. Sampling Procedures

- a. Documenting field sampling operations and procedures, including:
  - i) Documentation of procedures for preparation of reagents or supplies which become an integral part of the sample (e.g., filters, preservatives, and absorbing reagents);
  - ii) Procedures and forms for recording the exact location and specific considerations associated with sample acquisition;
  - iii) Documentation of specific sample preservation method;
  - iv) Calibration of field instruments;

- v) Submission of appropriate blanks (e.g., field, equipment, trip, etc.);
  - vi) Potential interferences present at the Facility;
  - vii) Construction materials and techniques, associated with monitoring wells and piezometers;
  - viii) Field equipment listing and sampling containers;
  - ix) Sampling order; and
  - x) Decontamination procedures.
- b. Selecting appropriate sample containers;
  - c. Sampling preservation; and
  - d. Chain-of-custody, including:
    - i) Standardized field tracking reporting forms to establish sample custody in the field prior to shipment; and
    - ii) Pre-prepared sample labels containing all information necessary for effective sample tracking.
    - iii) Chain-of-custody seals for sample containers and shipping coolers.

3. Sample Analysis

Sample analysis shall be conducted in accordance with the most recent version of SW-846: "Test Methods for Evaluating Solid Waste - Physical/Chemical Methods" or an alternate method approved by NMED. The sample analysis section of the Sampling and Analysis Plan shall specify the following:

- a. Chain-of-custody procedures, including:
  - i) Identification of a responsible party to act as sampling custodian at the laboratory facility authorized to sign for incoming field samples, obtain documents of shipment, and verify the data entered onto the sample custody records;
  - ii) Provision for a laboratory sample custody log consisting of serially numbered standard lab-tracking report sheets; and
  - iii) Specification of laboratory sample custody procedures for sample handling, storage, and disbursement for analysis.
- b. Sample storage (e.g., maximum holding times for constituents);
- c. Sample preparation methods;

- d. Analytical Procedures, including:
  - i) Scope and application of the procedure;
  - ii) Sample matrix;
  - iii) Potential interferences;
  - iv) Precision and accuracy of the methodology; and
  - v) Method Detection Limits; and
  - vi) Practical Quantitative Limits
- e. Calibration procedures and frequency;
- f. Data reduction, validation and reporting;
- g. Internal quality control checks, laboratory performance and systems audits and frequency, including:
  - i) Method blank(s);
  - ii) Laboratory control sample(s);
  - iii) Calibration check sample(s);
  - iv) Replicate sample(s);
  - v) Matrix-spiked sample(s);
  - vi) "Blind" quality control sample(s);
  - vii) Control charts;
  - viii) Surrogate samples;
  - ix) Zero and span gases; and
  - x) Reagent quality control checks.
- h. External quality control checks by NMED, including:
  - i) Spikes and blanks at sampling events for which NMED or its technical representative provides oversight; and
  - ii) The equivalent of a CLP data package for samples split with NMED or for which NMED specifically requests the package.
- I. Preventive maintenance procedures and schedules;
- j. Corrective action (for laboratory problems); and
- k. Turnaround time.

**F. Data Management Plan**

The Permittee shall develop and initiate a Data Management Plan to document and track investigation data and results. This plan shall identify and set up data documentation materials and procedures, project file requirements, and project-related progress reporting procedures and documents. The plan shall also provide the format to be used to present the raw data and conclusions of the investigation.

1. Data Record

The data record shall include the following:

- a. Unique sample or field measurement code;
- b. Sampling or field measurement location and sample or measurement type;
- c. Sampling or field measurement raw data;
- d. Laboratory analysis identification number;
- e. Property or component measures; and
- f. Result of analysis (e.g. concentration, data qualifiers).

2. Tabular Displays

The following data shall be presented in tabular displays:

- a. Unsorted (raw) data;
- b. Results for each medium, or for each constituent monitored;
- c. Data reduction for statistical analysis, as appropriate;
- d. Sorting of data by potential stratification factors (e.g., location, soil layer, topography); and
- e. Summary data

3. Graphical Displays

The following data shall be presented in graphical formats (e.g., bar graphs, line graphs, area or plan maps, isopleth plots, cross-sectional plots or transects, three dimensional graphs, etc.):

- a. Sampling location and sampling grid;
- b. Indicate boundaries of sampling area, and area where more data are required;
- c. Display geographical extent of contamination, both horizontally and vertically;
- d. Illustrate changes in concentration in relation to distances from the source, time, depth or other parameters; and

- e. Indicate features affecting inter-media transport and show potential receptors.

**G. Project Management Plan - Schedule of Implementation**

Permittee shall prepare a Project Management Plan which will cover qualifications of personnel categories and the management control structure for the project. The Permittee shall also provide a schedule for completing the planned RFI activities. The schedule shall be as specific as possible (i.e., it should indicate the number of days/weeks/months required for each major work plan task).

**II. RFI REPORT REQUIREMENTS - ELEMENTS OF THE RFI REPORT**

The RFI Report shall include, at a minimum, the following elements:

**A. Introduction**

The Permittee shall describe the purpose of the RFI Work Plan and provide a summary description of the project.

**B. Environmental Setting**

The Permittee shall describe the Environmental Setting in and around the Facility. The RFI Work Plan shall contain some, if not all, of the information on the Environmental Setting. Any information collected during work plan implementation which clarifies or improves understanding of the Environmental Setting should be provided in this section.

**C. Source Characterization**

The Permittee shall summarize the sources of contamination and nature of releases identified at the Facility. The RCRA Facility Assessment and the RFI Work Plan shall contain some, if not all, of the information on Source Characterization. Any information collected during work plan implementation or obtained from the sources (e.g., voluntarily or from other Environmental Programs), which directly addresses Source Characterization, should be provided in this section.

**D. Sampling and Analysis Results**

The Permittee shall present data results obtained pursuant to the RFI Work Plan. The Permittee shall identify any work plan proposals which were not completed and explain why such actions were not finished. The Permittee shall also present his analysis/interpretation of how the sampling data meet the RFI objective and how the

sampling data fits or modifies the contaminant conceptual model. For all analytical data, the Permittee shall discuss the results of data quality/data review.

**E. Data Quality Assurance/Data Quality Control Review**

The Permittee shall perform a Quality Assurance/Quality Control (QA/QC) data review on all data present in the RFI. The QA/QC data review shall be in accordance with the U.S. EPA *Contract Laboratory Program National Functional Guidelines for Inorganic Data Review (EPA-540/R94-013)* and the U.S. EPA *Contract Laboratory Program National Functional Guidelines for Organic Data Review (EPA-540/R94-012)*. The data review shall address the following, at a minimum:

- a. Holding times;
- b. Blanks;
- c. Laboratory Control Samples;
- d. Field Duplicates;
- e. Surrogate Recoveries;
- f. Matrix Spike/Matrix Spike Duplicates
- g. Data Assessment - Data Usability.

**F. Conclusions**

The Permittee shall summarize the major conclusions reached after analysis of the environmental setting, source characterization, sampling and analysis results and data quality. Any data gaps, needed to complete characterization of the scope and extent of the releases from SWMUs and/or AOCs or to refine further the contaminant conceptual model, shall be identified and recommendations made in the Recommendations Section of the report.

**G. Recommendations**

The Permittee shall provide his recommendations on what, if any, further action is needed to complete the characterization of release(s) from SWMUs and/or AOCs.

**H. Work Plan for Additional Investigations**

If further investigations are determined to be needed to complete the objective of the RFI, then the Permittee shall provide a work plan to complete characterization of the release(s).

**III. DETERMINATION OF NO FURTHER ACTION (NFA)**

1. Based on the results of the RFI and other relevant information, the Permittee may submit an application to NMED for a Class 3 Permit modification under 20.4.1.900

NMAC, incorporating 40 CFR §270.42 (c) to terminate the RFI/CMS process for a specific unit. This permit modification application must contain information demonstrating that there are no releases of hazardous wastes or hazardous constituents from a particular SWMU/AOC at the facility that poses a threat to human health and the environment, as well as information required in 20.4.1.900 NMAC, incorporating 40 CFR §270.42 (c), which incorporates by reference 40 CFR §270.13 through §270.21, §270.62, and §260.63. If, based upon review of the Permittee's request for a permit modification, the results of the RFI, and other information, including comments received during the sixty (60) day public comment period required for Class 3 permit modifications, NMED determines that releases or suspected releases which were investigated either are non-existent or do not pose a threat to human health and the environment, NMED will grant the requested modification.

2. A determination of no further action shall not preclude the Administrative Authority from requiring continued or periodic monitoring of air, soil, ground water, or surface water, when site-specific circumstances indicate that release of hazardous wastes including hazardous constituents are likely to occur, if necessary to protect human health and the environment.
3. A determination of no further action shall not preclude NMED from requiring further investigations, studies, or remediation at a later date, if new information or subsequent analysis indicates a release or likelihood of a release from a SWMU at the facility that is likely to pose a threat to human health or the environment. In such case, the Administrative Authority may initiate either a modification to the Corrective Action Part of this Permit according to procedures in this Permit, or a major permit modification according to 20.4.1.900 NMAC, incorporating 40 CFR §270.41, to rescind the determination made in accordance with Permit Condition III.
4. Any request for no further action by the Permittee must demonstrate that each SWMU or AOC included in the request meets one of the following NMED's criteria for no further action (NFA):
  - **NFA Criterion 1:** The SWMU cannot be located, does not exist, or is a duplicate SWMU.
  - **NFA Criterion 2:** The SWMU has never been used for the management (i.e., generation, treatment, storage and/or disposal) of Resource Conservation and Recovery Act (RCRA) solid waste or hazardous wastes and/or constituents or other Comprehensive Environmental Response, Conservation and Liability Act (CERCLA) hazardous substances.

- **NFA Criterion 3:** No release to the environment has occurred or is likely to occur in the future from the SWMU.
- **NFA Criterion 4:** A release from the SWMU to the environment has occurred, but the SWMU was characterized and/or remediated under another authority (such as the New Mexico Environment Department's Underground Storage Tank or Ground Water Quality Bureaus), which adequately addressed RCRA corrective action, and documentation, such as a closure letter, is available.
- **NFA Criterion 5:** The SWMU has been characterized or remediated in accordance with current applicable state or federal regulations, and the available data indicate that contaminants pose an acceptable level of risk under current and projected future land use.

## APPENDIX 4-C

### CORRECTIVE MEASURE STUDY OUTLINE

The purpose of the corrective measure study (CMS) portion of the RCRA corrective action process is to identify and evaluate potential remedial alternatives for the releases of hazardous constituents that have been identified at the Facility through the RFI or other investigations to need further evaluation. The scope and requirements of the CMS are balanced with the expeditious initiation of remedies and rapid restoration of contaminated media. The scope and requirements of the CMS should be focused to fit the complexity of the site-specific situation. It is anticipated that Permittee's with sites with complex environmental problems may need to evaluate a number of technologies and corrective measure alternatives. For other facilities, however, the evaluation of a single corrective measure alternative may be adequate. Therefore, a streamlined or focused approach to the CMS may be initiated. Information gathered during any stabilizations or interim measures will be used to augment the CMS and in cases where corrective action goals are met, may be a substitute for the final CMS.

Regardless of whether a streamlined/focused or a detailed CMS is required, a CMS Work Plan and CMS Report are generally required elements. The requirements for a full, detailed CMS are listed below. The New Mexico Environment Department (NMED) has the flexibility not to require sections of the plan and/or report, where site-specific situations indicate that all requirements are not necessary. Additionally, the NMED may require additional studies besides those discussed below in order to support the CMS.

#### **I. CORRECTIVE MEASURES STUDY WORK PLAN**

##### **A. Elements of the CMS Work Plan**

The Corrective Measures Study Work Plan shall include at a minimum the following elements:

1. A brief site-specific description of the overall purpose of the CMS;
2. A brief description of the corrective measure objectives, including proposed target media cleanup standards (e.g., promulgated Federal and State standards) and preliminary points of compliance or a description of how a risk assessment will be performed (e.g., guidance documents);
3. A brief description of the specific corrective measure technologies and/or corrective measure alternatives that will be studied;

4. A brief description of the general approach to investigating and evaluating potential corrective measures;
5. A detailed description of any proposed pilot, laboratory and/or bench scale studies;
6. A proposed outline for the CMS Report including a description of how information will be presented;
7. A brief description of overall project management including overall approach, levels of authority (include organization chart), lines of communication, project schedules, budget and personnel. Include a description of qualifications for personnel directing or performing the work;
8. A project schedule that specifies all significant steps in the process and when key documents (*e.g.*, CMS Progress Reports, draft CMS Report) are to be submitted to the NMED; and
9. A detailed Public Involvement Plan.

## II. CORRECTIVE MEASURES STUDY (CMS) REPORT

The detail of a CMS may vary based upon the complexity of the site, on-going Interim Measures, etc. However, the CMS Report may include the following elements:

### A. Introduction/Purpose

The Permittee shall describe the purpose of the CMS Report and provide a summary description of the project.

### B. Description of Current Situation

The Permittee shall submit a summary and an update to the information describing the current situation at the Facility and the known nature and extent of the contamination as documented by the RCRA Facility Investigation (RFI) Report. This discussion should concentrate on those issues which could significantly affect the evaluation and selection of the corrective measures alternative(s). The Permittee shall provide an update to information presented in the RFI regarding previous response activities and interim measures which have been, or are being implemented at the Facility. The Permittee shall also make a facility-specific statement of the purpose for the response, based on the results of the RFI. The statement of purpose should identify the actual or potential exposure pathways that should be addressed by corrective measures.

**C. Establishment of Proposed Media Specific Cleanup Standards**

The Permittee shall describe the proposed media cleanup standards and point of compliance. The standards must be either background, promulgated Federal and State standards or risk-derived standards. If media clean-up standards are not proposed, then NMED will unilaterally propose setting media clean-up standards to either background, promulgated Federal and State standards or the most conservative risk-derived standards.

**D. Identification, Screening and Development of Corrective Measure Technologies**

1. Identification: List and briefly describe potentially applicable technologies for each affected media that may be used to achieve the corrective action objectives. Include a table that summarizes the available technologies.

The Permittee should consider innovative treatment technologies, especially in situations where there are a limited number of applicable corrective measure technologies.

2. Screening: The Permittee shall screen the corrective measure technologies to eliminate those that may prove infeasible to implement, that rely on technologies unlikely to perform satisfactorily or reliably, or that do not achieve the corrective measure objective within a reasonable time period. This screening process focuses on eliminating those technologies which have severe limitations for a given set of waste and site-specific conditions. The screening step may also eliminate technologies based on inherent technology limitations.

Site, waste, and technology characteristics which are used to screen inapplicable technologies are described in more detail below:

- a. *Site Characteristics*: Site data should be reviewed to identify conditions that may limit or promote the use of certain technologies. Technologies whose use is clearly precluded by site characteristics should be eliminated from further consideration.
- b. *Waste Characteristics*: Identification of waste characteristics that limit the effectiveness or feasibility of technologies is an important part of the screening process. Technologies clearly limited by these waste characteristics should be eliminated from consideration. Waste characteristics particularly affect the feasibility of in-situ methods, direct treatment methods, and land disposal (on/off-site).

- c. **Technology Limitations:** During the screening process, the level of technology development, performance record, and inherent construction, operation, and maintenance problems should be identified for each technology considered. Technologies that are unreliable, perform poorly, or are not fully demonstrated may be eliminated in the screening process. For example, certain treatment methods have been developed to a point where they can be implemented in the field without extensive technology transfer or development.
3. **Corrective Measure Development:** The Permittee shall assemble the technologies that pass the screening step into specific alternatives that have the potential to meet the corrective action objectives for each media. Options for addressing less complex sites could be relatively straight-forward and may only require evaluation of a single or limited number of alternatives. Each alternative may consist of an individual technology or a combination used in sequence (i.e., treatment train). Different alternatives may be considered for separate areas of the Facility, as appropriate. List and briefly describe each corrective measure alternative.

**E. Evaluation of a Final Corrective Measure Alternative**

For each remedy which warrants a more detailed evaluation (i.e., those that passed through the screening step), including those situations when only one remedy is being proposed, the Permittee shall provide detailed documentation of how the potential remedy will comply with each of the standards listed below. These standards reflect the major technical components of remedies including cleanup of releases, source control and management of wastes that are generated by remedial activities. The specific standards are as follows:

1. Protect human health and the environment.
2. Attain media cleanup standards set by NMED.
3. Control the source of releases so as to reduce or eliminate, to the extent practicable, further releases that may pose a threat to human health and the environment.
4. Comply with applicable standards for management of wastes.
5. Other factors.

In evaluating the selected alternative or alternatives, the Permittee shall prepare and submit information that documents that the specific remedy will meet the standards listed above. The following guidance should be used in completing this evaluation.

**1. Protect Human Health and the Environment**

Corrective action remedies must be protective of human health and the environment. Remedies may include those measures that are needed to be protective, but are not directly related to media cleanup, source control or management of wastes. An example would be a requirement to provide alternative drinking water supplies in order to prevent exposures to releases from an aquifer used for drinking water purposes. Therefore, the Permittee shall provide a discussion of any short term remedies necessary to meet this standard, as well as discuss how the corrective measures alternatives meet this standard.

**2. Attain Media Cleanup Standards**

Remedies will be required to attain media cleanup standards. As part of the necessary information for satisfying this requirement, the Permittee shall address whether the potential remedy will achieve the remediation objectives. An estimate of the time frame necessary to achieve the goals shall be included. Contingent remedies may be proposed if there is doubt if the initial remedy will be successful (e.g., contingent remedies to innovative technologies).

**3. Control of Sources of Releases**

The Permittee shall address the issue of whether source control measures are necessary, and if so, the type of actions that would be appropriate. Any source control measure proposed should include a discussion on how well the method is anticipated to work given the particular situation at the CSU, and the known track record of the specific technology.

**4. Comply With any Applicable Standards for Management of Wastes**

The Permittee shall include a discussion of how the specific waste management activities will be conducted in compliance with all applicable State and Federal regulations (e.g., closure requirements, LDRs).

**5. Other Factors**

There are five general factors that will be considered as appropriate by NMED in selecting/approving a remedy that meets the four standards listed above. These five decision factors include:

- a. *Long-term reliability and effectiveness;*
- b. *Reduction in the toxicity, mobility or volume of wastes;*
- c. *Short-term effectiveness;*
- d. *Implementability; and*
- e. *Cost.*

Examples of the type of information to include are provided below:

- a. *Long-term reliability and effectiveness:* The Permittee may consider whether the technology, or combination of technologies, have been used effectively under analogous site conditions, whether failure of any one technology in the alternative would have any immediate impact on receptors, and whether the alternative would have the flexibility to deal with uncontrollable changes at the site. Operation and maintenance requirements include the frequency and complexity of necessary operation and maintenance. In addition, each corrective measure alternative should be evaluated in terms of the projected useful life of the overall alternative and of its component technologies. Useful life is defined as the length of time the level of effectiveness can be maintained.
- b. *Reduction in the toxicity, mobility or volume of wastes:* As a general goal, remedies will be preferred that employ techniques that are capable of eliminating or substantially reducing the potential for the wastes in SWMUs and/or contaminated media at the Facility to cause future environmental releases. Estimates of how the corrective measure alternative will reduce toxicity, mobility and or volume of the waste is required and may be accomplished through a comparison of initial site conditions to expected post-corrective measures conditions.
- c. *Short-term effectiveness:* The Permittee shall evaluate each corrective measure alternative for short-term effectiveness. Possible factors to consider are fire, explosion, exposure to hazardous constituents and potential threats associated with the treatment, excavation, transportation and re-disposal or containment of the waste material.
- d. *Implementability:* Information to consider when assessing implementability include:
  - i. The administrative activities needed to implement the corrective measure alternative (e.g. permits, rights of way, etc.) and the length of time these activities will take;

- ii. The constructibility, time for implementation, and time for beneficial results;
  - iii. The availability of adequate off-site treatment, storage capacity, disposal services, needed technical services and materials; and
  - iv. The availability of prospective technologies for each corrective measure alternative.
- e. Cost: The Permittee shall develop an estimate of the cost of each corrective measure alternative (and for each phase or segment of the alternative). The cost estimate shall include both capital and operation and maintenance costs. The capital costs shall include, but are not limited to, costs for: engineering, site preparation, construction, materials, labor, sampling/analysis, waste management/disposal, permitting, health and safety measures, etc. The operation and maintenance costs shall include labor, training, sampling and analysis, maintenance materials, utilities, waste disposal and/or treatment, etc. Costs shall be calculated as the net present value of the capital and operation and maintenance costs.

**F. Justification and Recommendation of the Corrective Measure or Measures**

The Permittee shall justify and recommend in the CMS Report a corrective measure alternative for consideration by NMED. Such a recommendation should include a description and supporting rationale for the preferred alternative that is consistent with the corrective action standards and remedy selection decision factors discussed above. In addition, this recommendation shall include summary tables which allow the alternative or alternatives to be understood easily. Trade-offs among health risks, environmental effects, and other pertinent factors shall be highlighted. The Secretary will select the corrective measure alternative or alternatives to be implemented based on the results presented in the CMS Report.

**APPENDIX 4-D  
 SCHEDULE OF COMPLIANCE FOR NEWLY IDENTIFIED SWMUs AND AOC**

<b>Schedule of Compliance</b>	<b>Due Date</b>
Notification of Newly Identified SWMUs and AOCs <i>Permit Condition IV.B.1, and Permit Condition IV.B.2.</i>	Within fifteen (15) calendar days of discovery
SWMU Assessment Report <i>Permit Condition IV.B.3.</i>	Within ninety (90) calendar days of notification
Notification for Newly Discovered Releases at Previously Identified SWMUs and AOCs <i>Permit Condition IV.C.1.</i>	Within fifteen (15) calendar days of discovery
Confirmatory Sampling Work Plan for SWMUs or AOCs identified in Appendix IV-A <i>Permit Condition IV.D.1</i>	Within forty-five (45) calendar days after effective date of permit
Confirmatory Sampling Work Plan For SWMUs identified under <i>Permit Condition IV.B.4.</i> or AOCs identified under <i>Permit Condition IV.B.1.</i> <i>Permit Condition IV.D.2.</i>	Within forty-five (45) calendar days of notification by the Secretary
Confirmatory Sampling Report <i>Permit Condition IV.D.5.</i>	In accordance with the approved CS Work Plan
RFI Work Plan for SWMU(s) and AOC(s) identified under <i>Permit Condition IV.A.1.</i> <i>Permit Condition IV.E.1.a.</i>	Within ninety (90) calendar days from effective date of permit.
RFI Work Plan for SWMU(s) and AOC(s) Identified under <i>Permit Condition IV.B.4., Permit Condition IV.C.2., or Permit Condition IV.D.6. Permit Condition IV.E.1.b.</i>	Within ninety (90) calendar days after receipt of notification by the Secretary which SWMUs or AOCs require an RFI.
Draft RFI Report <i>Permit Condition IV.E.3.a.</i>	In accordance with the approved RFI Work Plan
Final RFI Report <i>Permit Condition IV.E.3.b.</i>	Within thirty (30) calendar days after receipt of the Secretary's final comments on Draft RFI Report.
RFI Progress Reports <i>Permit Condition IV.E.3.d.</i>	Quarterly, beginning ninety (90) calendar days from the start date specified by the Secretary*
Interim Measures Work Plan <i>Permit Condition IV.F.1.a.</i>	Within thirty (30) calendar days of notification by the Secretary
Interim Measures Progress Reports <i>Permit Condition IV.F.3.a.</i>	In accordance with the approved Interim Measures Work Plan ** or semi-annually for Permittee initiated IM
Interim Measures Report <i>Permit Condition IV.F.3.b.</i>	Within ninety (90) calendar days of completion
CMS Work Plan	Within ninety (90) calendar days of notification by the

Schedule of Compliance	Due Date
<i>Permit Condition IV.G.1.a.</i>	Secretary that a CMS is required
Implementation of CMS Work Plan <i>Permit Condition IV.G.2.</i>	Within fifteen (15) calendar days after receipt of the Secretary's approval of Plan
Draft CMS Report <i>Permit Condition IV.G.3.a.</i>	In accordance with the schedule in the approved CMS Work Plan
Final CMS Report <i>Permit Condition IV.G.3.a.</i>	Within thirty (30) calendar days of the Secretary's final comments on Draft CMS Report
Noncompliance/Imminent Hazard Report <i>Permit Condition I.D.14.</i>	Oral within 24 hours and written within fifteen (15) calendar days of becoming aware of the hazardous circumstances
Complete installation of emission control technology for units identified under <i>Permit Condition IV.A.2.</i>	By "Installation Due Date" under Permit Condition IV.A.2.
Written report of noncompliance of containers with 20.4.1.500 NMAC, incorporating 40 CFR §§ 264.1082(c)(1) or (c)(2) <i>Permit Condition IV.D.1.</i>	Within fifteen (15) calendar days of becoming aware of noncompliance
Semi-Annual Report for Use of Control Devices 20.4.1.500 NMAC, incorporating 40 CFR §264.1090(c) <i>Permit Condition IV.D.3***</i>	Semi-annually, beginning six (6) months from the effective date of the permit
The above reports must be signed and certified in accordance with 20.4.1.900 NMAC, incorporating 40 CFR §270.11.	
* This applies to Work Plan execution that requires more than one hundred eighty (180) calendar days	
** This applies to Work Plan execution that requires more than one year.	
*** Semi-annual report is not required if provisions of Permit Condition IV.D.4. are met	

**APPENDIX 4-E**  
**NFA COMPLIANCE SCHEDULE FOR SITES LISTED IN TABLE A**

The following is the list of Solid Waste Management Units (SWMUs) and Areas of Concern (AOCs) Requiring Corrective Action And The Dates For Which NFA Must Be Petitioned:

SERIAL NO.	SWMU	ERP SITE ID	UNIT NAME	PROPOSED DATES FOR NFA PETITION
1	4	SD-08	Building 131 Oil/Water Separator	September 30, 2004
2	8	N/A	Building 231 Oil/Water Separator	September 30, 2004
3	19	N/A	Building 638 Oil/Water Separator	September 30, 2011
4	20	N/A	Building 639 Oil/Water Separator	September 30, 2011
5	39	N/A	Building 1092 Oil/Water Separator	September 30, 2004
6	82	SD-08	Building 131 Washrack	September 30, 2004
7	101	LF-10	Building 121 Landfill	September 30, 2009
8	104	LF-29	Former Army Landfill	September 30, 2011
9	105	LF-19	Golf Course Landfill	September 30, 2009
10	106	LF-01	Main Base Landfill	September 30, 2009
11	108	LF-23	MOBSS Landfill Disposal Trench	September 30, 2009
12	109	LF-10	Old Main Base Landfill	September 30, 2009
13	111	RW-42	Radioactive Waste Disposal Area	September 30, 2004
14	113A	OT-20	Sludge Disposal Trenches near Lagoons	September 30, 2004
15	113B	DP-30/SD-33	Sludge Disposal Trenches Fire Train Area	September 30, 2009
16	114	OT-03	TEL Disposal Site	September 30, 2011
17	115	LF-22	Waste Area Landfill #1 PCB Disposal Area	September 30, 2009
18	116	LF-21	West Area Landfill #2	September 30, 2009
19	118	OT-16	Building 21 Pesticides Holding Tank	September 30, 2011
20	122	N/A	Building 702 Waste Oil Tank	September 30, 2009
21	123	N/A	Building 704 Waste Oil Tank	September 30, 2023
22	127	FT-31	Building 1092 Waste Oil Tank	September 30, 2005
23	130	SS-46	Taxiway 4 Tank 28 JP-4 Underground Waste Tank	September 30, 2011
24	132	OT-16	Building 21 Entomology Leachfield	September 30, 2011
25	135	FT-31	Building 1092 Oil/Water Sep Drainage Pit	September 30, 2004
26	136	N/A	Building 1119 Washrack Drainage Area	September 30, 2004
27	137	SS-38	Building 1166 Test Track Drain Field	September 30, 2011
28	139	N/A	Lake Holloman	September 30, 2004
29	140	N/A	Lake Stinky	September 30, 2004
30	141	SD-27	Pad 9 Drainage Pit	September 30, 2004
31	165	SS-39	Building 1176 Pond	September 30, 2011
32	166	SD-25	MOBSS Drainage Lagoon	September 30, 2004
33	170	FT-31	Fire Department Training Area 1	September 30, 2004
34	177	SS-39	Building 1176 Sumps	September 30, 2011
35	179	SS-39	Discharge Box	September 30, 2011
36	181	SS-39	Building 1176 Drainage Trough	September 30, 2011

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37	183	N/A	Air Base Sewer System	September 30, 2011
38	197	OT-14	Former Entomology Shop	September 30, 2007
39	229	SS-59	T-38 Test Cell Fuel Spill Site	September 30, 2011
40	AOC-1	DP-64	Chemical Agent Site	September 30, 2009
41	AOC-2	N/A	Sewage Drainage Pit NE of Building 864	September 30, 2011
42	AOC-3	DP-63	Ammunition Yard Disposal Pit	September 30, 2011
43	AOC-4	N/A	West POL Fuel Spill Site	September 30, 2011
44	AOC-1001	SS-61	Building 1001 Fuel Spill Site	September 30, 2011
45	AOC-FST837	N/A	Building 837 Fuel Septic Tank	September 30, 2004
46	AOC-A	OT-16	Building 21 Pesticide Rinsewater Spill Area	September 30, 2011
47	AOC-B	N/A	Building 807 Test Cell Surface Spill Area	September 30, 2011
48	AOC-C	N/A	Building 835 Spills	September 30, 2011
49	AOC-E	N/A	Buildings 903-909 Sand Blast Residues	September 30, 2011
50	AOC-F	N/A	Asphalt Tank Spill Area	September 30, 2011
51	AOC-H	SS-18	Chromic Acid Spill Area	September 30, 2009
52	AOC-I	OT-37	Fighter Wing Flight Line Spill	September 30, 2011
53	AOC-J	SS-13	Herbicide Sodium Arsenite Spill Area	September 30, 2011
46	AOC-A	OT-16	Building 21 Pesticide Rinsewater Spill Area	September 30, 2011
47	AOC-B	N/A	Building 807 Test Cell Surface Spill Area	September 30, 2011
48	AOC-C	N/A	Building 835 Spills	September 30, 2011
49	AOC-E	N/A	Buildings 903-909 Sand Plast Residues	September 30, 2011
50	AOC-F	N/A	Asphalt Tank Spill Area	September 30, 2011
51	AOC-H	SS-18	Chromic Acid Spill Area	September 30, 2009
52	AOC-I	OT-37	Fighter Wing Flight Line Spill	September 30, 2011
53	AOC-J	SS-13	Herbicide Sodium Arsenite Spill Area	September 30, 2011
54	AOC-K	SS-12	Northeast Fuel Line Spill Site # 1	September 30, 2011
55	AOC-L	N/A	Early Missile Test Site	September 30, 2011
56	AOC-M	N/A	Building 18	September 30, 2011
57	AOC-N	SS-48	Building 137 Military Gas Tank Leak	September 30, 2011
58	AOC-O	OT-45	Building 296 Old AGE Refueling Station	September 30, 2011
59	AOC-P	OT-44	Building 301 Fuel Tank Leak	September 30, 2009
60	AOC-Q	SS-17	BX Gas Station Fuel Line Leaks	September 30, 2009
61	AOC-R	SS-06	JP-4 Fuel Line Spill Site	September 30, 2011
62	AOC-RD	DP-62	Rita's Draw Disposal Pit	September 30, 2007
63	AOC-S	N/A	Leaking Underground Storage Tank	September 30, 2011
64	AOC-T	SS-05	POL Storage Tank Spill Sites 1 & 2	September 30, 2007
65	AOC-U	N/A	Lost River Basin	September 30, 2007
66	AOC-V	SS-57	Officer's Club	September 30, 2007
67	PRI-2	OT-35	PRI Bldg 1264 Solvent Burn Area	September 30, 2011
68	PRI-5	OT-35	PRI Bldg 1264 Solvent Burn Area	September 30, 2011
69	PRI-A	OT-32	Primate Research Lab Sewer Line	September 30, 2011

**TOTAL OF CORRECTIVE ACTION SITES = 69 [i.e., 39 SWMUs + 30 AOCs].**

## APPENDIX 4-F ACTION LEVELS AND CLEANUP LEVELS

### I. ACTION LEVELS OVERVIEW

Action levels are conservative health-based concentrations of hazardous waste and/or hazardous constituents determined to be indicators for the protection of human health or the environment. The Permittee shall establish action levels for all hazardous wastes and/or hazardous constituents identified in the RFI Report(s) or for those hazardous wastes and/or hazardous constituents, which NMED has reason to believe, may have been released from a SWMU/AOC at the Facility using the procedures specified in this Attachment.

If the concentration of a hazardous constituent in an aquifer, surface water, soils, or air exceeds its action level for any environmental medium, NMED may require the Permittee to conduct a Corrective Action Measure Study (CMS). If NMED determines that a constituent released from a SWMU/AOC in concentrations below its respective action level(s) may pose a threat to human health or the environment, given site-specific exposure conditions, cumulative effects, ecological concerns etc., then NMED may require the Permittee to conduct a CMS.

#### I.1 Action levels based on the background concentrations of the constituent(s)

For hazardous waste and/or hazardous constituents detected in ground water, air, surface water, or soils, for which a concentration level that meets the criteria specified above is not available or possible, the action level for the hazardous waste and/or hazardous constituents shall be the background concentration of the hazardous waste and/or hazardous constituents.

### II CLEANUP LEVELS OVERVIEW

Cleanup levels are concentrations based on excess lifetime cancer risk levels that are consistent with EPA's National Contingency Plan (*55 FR 8666 et seq.*). EPA recommends a range of  $10^{-4}$  to  $10^{-6}$  as being "acceptable". In general, NMED has selected a target risk of  $10^{-5}$  for establishing cleanup levels for hazardous waste and/or hazardous constituents. NMED has established cleanup levels, methods of calculating cleanup goals, and reporting requirements at SWMUs/AOCs where corrective action is required in response to a release of hazardous waste and/or hazardous constituents to the environment. NMED has generally selected a target hazard quotient of one (1.0) for individual noncarcinogenic chemicals of concern and a target hazard quotient of 0.1 for contamination involving two or more noncarcinogenic hazardous waste and/or hazardous constituents. The Permittee shall comply with NMED's cleanup levels and reporting requirements as specified in this Attachment.

### **III GROUND WATER**

#### **III.1 Ground Water Cleanup Levels**

The New Mexico Water Quality Control Commission (WQCC) has established ground water standards for contaminants (20.6.2.3103 NMAC). NMED has established ground water cleanup levels for hazardous waste and/or hazardous constituents that incorporate both the WQCC ground water cleanup standards and EPA's National Primary Drinking Water Standards Maximum Contaminant Levels (MCLs). If both WQCC ground water standard and an MCL have been established for an individual hazardous waste and/or hazardous constituents, then the lower of the two levels will be the cleanup level for that hazardous waste and/or hazardous constituents. NMED also uses the most recent version of the EPA Region VI "Human Health Medium Specific Screening Level" for tap water as the target cleanup level if a WQCC ground water standard or MCL has not been established for a specific hazardous waste and/or hazardous constituents.

##### **III.1.1 Ground Water Radionuclide Reporting Levels.**

NMED has not established ground water cleanup standards for radionuclides in environmental media; however, the Permittee shall determine if ground water has been affected by radiological contamination. The Permittee shall determine the nature and extent of radionuclide contamination and implement ground water monitoring at sites where radiological contamination is suspected or has been detected. EPA has published both current and proposed drinking water MCLs for radionuclides. These generic screening levels are specified in Table 2.3 of EPA's "*Screening Guidance for Radionuclides: Technical Background Document*" (October 2000, OSWER 9355.4-16).

The Permittee shall report all radionuclide concentrations in ground water exceeding background and/or either of the EPA screening levels listed in Table 2.3 to NMED. The Permittee also shall submit the results of all investigations and testing for the presence of radionuclides to the NMED.

##### **III.1.2 Ground water Perchlorate Cleanup Levels**

EPA has established a provisional reference dose for perchlorate in drinking water. At the time that this permit was issued, the drinking water cleanup level range for perchlorate established by EPA is 4 micrograms per liter ( $\mu\text{g/L}$ ) to 18  $\mu\text{g/L}$ . NMED has adopted the EPA provisional drinking water reference dose as an interim ground water cleanup level. NMED may adopt the EPA drinking water guideline for perchlorate as a ground water cleanup level when EPA publishes the new drinking water standard. The NMED drinking water cleanup level for perchlorate may be updated if EPA revises the reference dose for perchlorate in the future or publishes a drinking water standard.

## **IV. SURFACE WATER**

### **IV.1 Surface Water Cleanup Levels**

The Permittee shall comply with the surface water quality standards outlined in the Clean Water Act (33 U.S.C. 1251 *et seq.*), the New Mexico Water Quality Control Commission Regulations (20.6.1 NMAC), and the State of New Mexico Standards for Interstate and Intrastate Surface Waters (20.6.4 NMAC).

#### **IV.1.1 Surface Water Radionuclide Reporting Levels**

NMED has not established surface water cleanup standards for radionuclides in environmental media; however, the Permittee shall determine if surface water has been affected by radiological contamination. The Permittee shall determine the nature and extent of radionuclide contamination and implement surface water monitoring at sites where radiological contamination is suspected or has been detected. EPA has published both current and proposed drinking water MCLs for radionuclides. These generic screening levels are specified in Table 2.3 of EPA's "*Screening Guidance for Radionuclides: Technical Background Document*" (October 2000, OSWER 9355.4-16).

The Permittee shall report all radionuclide concentrations in surface water exceeding background and/or either of the EPA screening levels listed in Table 2.3 (of above named document) to NMED. The Permittee shall submit the results of all investigations and testing for the presence of radionuclides to NMED.

#### **IV.1.2 Surface Water Perchlorate Cleanup Levels**

EPA has established a provisional reference dose for perchlorate in drinking water. At the time that this permit was issued, the drinking water cleanup level range for perchlorate established by EPA was 4 micrograms per liter ( $\mu\text{g/L}$ ) to 18  $\mu\text{g/L}$ . NMED has adopted the EPA provisional drinking water reference dose as an interim ground water cleanup level. NMED may adopt the EPA drinking water standard for perchlorate as a surface water cleanup level when the EPA publishes the new drinking water standard. The NMED drinking water cleanup level for perchlorate may be updated if EPA revises the reference dose for perchlorate in future.

## **V. SOILS**

### **V.1 Soil Cleanup Levels**

NMED has established soil cleanup levels for 133 elements and compounds. In general, the cleanup levels are based on a target total risk of  $10^{-5}$  for carcinogenic substances and a target hazard index of one (1.0) for all noncarcinogenic chemicals. The target soil cleanup levels for selected substances are listed in NMED's "*Technical Background Document for Development of Soil Screening Levels*" (December 18, 2000, NMED SSLs). NMED also uses the most recent version of the EPA Region VI "*Human Health Medium Specific Screening Level*" (HHMSSL) for residential soil as the target

cleanup level for compounds designated as “n” (noncarcinogen effects), “max”, and “sat”, or ten times the EPA Region VI HHMSSL for compounds designated “c” (carcinogen effects) if an NMED soil cleanup level has not been established for hazardous waste and/or hazardous constituents. The Permittee shall use NMED's SSLs, as modified, as cleanup levels. For hazardous waste and/or hazardous constituents that NMED has not specified a cleanup level, the Permittee shall use EPA Region VI's HHMSSL for non-carcinogens and 10x the concentration for carcinogens. For hazardous waste and/or hazardous constituents that have not been listed in either NMED's SSLs or EPA Region VI's HHMSSLs, the Permittee shall propose soil cleanup levels from other sources. NMED may then either approve or deny the Permittee's proposed cleanup levels.

#### **V.1.1 Soil Polychlorinated Biphenyls Cleanup Levels**

NMED has established soil cleanup levels for polychlorinated biphenyls (PCBs). Soil cleanup levels for PCBs are discussed in the NMED Position Paper “Risk-based Remediation of Polychlorinated Biphenyls at RCRA Corrective Action Sites”. The default soil cleanup level for PCBs is 1 milligram per kilogram (mg/kg).

#### **V.1.2 Soil Perchlorate Cleanup Levels**

At the time that this permit was issued, a soil cleanup level for perchlorate has not been established by NMED. NMED will determine a soil cleanup level for perchlorate based on the reference dose when EPA establishes one. The soil cleanup level for perchlorate will be updated if EPA revises the reference dose for perchlorate in the future.

#### **V.1.3 Soil Radionuclide Reporting Levels**

NMED has not established soil cleanup levels for radionuclides in environmental media; the Permittee shall determine if soil has been affected by radiological contamination. The Permittee shall determine the nature and extent of radioactive contamination in soil or other solid-phase media and implement monitoring programs at sites where radiological contamination is suspected or has been detected. EPA has developed screening levels for radionuclides in soil that correspond to a  $10^{-6}$  excess risk for their standard residential scenario. These generic screening levels appear in Appendix A of EPA's "Soil Screening Guidance for Radionuclides: Technical Background Document" (October 2000, OSWER 9355.4-16). The Permittee shall report all radionuclide concentrations in soil exceeding background and/or the EPA screening levels to NMED. The Permittee also shall submit the results of all investigations and testing for the presence of radionuclides to NMED.

### **VI ECOLOGICAL EVALUATION**

Ecological risk for all affected media at each site shall be evaluated in a manner consistent with the NMED Hazardous Waste Bureau (HWB) "Guidance for Assessing Ecological Risks Posed by Chemicals: Screening-Level Ecological Risk Assessment" (March 2000) and the NMED HWB

"*Guidance for Assessing Ecological Risks Posed by Radionuclides: Screening-Level Ecological Risk Assessment*" (April 2000).

## **VII RISK-BASED VARIANCE FROM CLEANUP STANDARDS OR LEVELS**

The Permittee may perform a risk-based evaluation to establish alternative cleanup levels for specific media at individual SWMUs/AOCs. The Permittee's risk-based evaluation must be conducted in accordance with the NMED HWB Guidance "*Assessing Human Health Risks Posed by Chemicals: Screening Level Risk Assessment*" (March 2000) and using the equations in the NMED HWB "*Technical Background Document for Development of Soil Screening Levels: Cleanup Levels for Ecological Risk*" (December 2000)". The risk-based evaluation must be developed in accordance with the NMED HWB "*Guidance for Assessing Ecological Risks Posed by Chemicals: Screening-level Ecological Risk Assessment*" (March 2000).

**PART 5**  
**ORGANIC AIR EMISSIONS REQUIREMENTS**

**PART 5**  
**ORGANIC AIR EMISSION REQUIREMENTS**

**V.A. APPLICABILITY**

**V.A.1.** 40 CFR Part 264 Subpart CC applies to all containers identified in the Facility Operating Permit, i.e., the Container Storage Unit (CSU) previously issued by NMED, except as provided for in 40 CFR §264.1 and §264.1080(b).

**V.A.2.** The Conditions of this Part apply to the hazardous waste management units identified in Table 5.A.1 below, and described in Permit Attachments B, *General Facility Description*, and L, *Corrective Action for Solid Waste Management Units*, for which required control equipment has been installed and is operational or are exempt from Subpart CC standards under §264.1082(c).

<b>Table 5.A.1. Hazardous Waste Management Units for Which Subpart CC Emissions Controls are Installed</b>		
<b>Hazardous Waste Management Unit Type Designation/ Identification Number</b>	<b>Hazardous Waste Management Unit Type</b>	<b>Description of Air Emission Control System</b>
Containers located at Containerized Waste Storage Units identified as Covered Indoor and Outdoor Storage Buildings, where hazardous waste is managed and stored, including the Staging Areas in front and behind the Storage Buildings.	<b>Container Type A:</b> These are containers with design capacity greater than 0.1 m <sup>3</sup> and less than 0.46 m <sup>3</sup> , (about 126 gal).	Container Level 1 Controls per §264.1086(c) - equipped with cover and closure devices which form a continuous barrier over container openings. These containers may also be controlled using Level 1 controls using applicable DOT regulations or using Level 1 Controls for open-top containers in which an organic vapor-suppressing barrier is placed on the hazardous waste. Type A containers also have an average volatile organic concentration at the point of waste origination equal to or greater than 500 ppmw.
	<b>Container Type B:</b> These are containers with design capacity greater than 0.46 m <sup>3</sup> that are not in light material service.	Container Level 1 Controls per 20.4.1.500 NMAC, incorporating 40 CFR §264.1086(c) - equipped with cover and closure devices which form a continuous barrier over container openings.
	<b>Container Type C:</b> Containers with design capacity greater than 0.46 m <sup>3</sup> that are in light material service.	Container Level 2 controls per 20.4.1.500 NMAC, incorporating 40 CFR §264.1086(c) - demonstrated to be vapor tight using 20.4.1.500 NMAC, incorporating 40 CFR Part 60, Appendix A, Method 27:  If the generator or transporter does not provide appropriate documentation to demonstrate compliance via testing for organic vapor tightness, Level 2 controls operated with no detectable emissions as defined in 20.4.1.600 NMAC, incorporating 40 CFR §265.1081 shall be used.

**V.B. GENERAL STANDARDS**

The Permittee shall comply with the applicable requirements of 20.4.1.500 NMAC, incorporating of 40 CFR Part 264, Subpart CC.

**V.C. SUBPART CC STANDARDS FOR CONTAINERS IN TABLE V.A.1:**

**V.C.1. Inspection of Level 1 or Types A and B Containers:**

**V.C.1.a.** The Permittee shall visually inspect all Type A containers for defects at the time the Permittee first manages and stores hazardous waste or hazardous waste or is accepted at the CSU. If a container remains at the Facility for one (1) calendar year or more, it shall be visually inspected for defects at least once every 12 months, in addition to the (weekly) frequency of inspection presented in Permit attachment F, *Inspection Schedule*. [20.4.1.500 NMAC, incorporating 40 CFR §264.1086(b)(1)(i) and (c)(1)(i-iii)].

**V.C.1.b.** The Permittee shall visually inspect all Type B containers and cover devices for defects at the time the container is first used for managing and storing hazardous waste or the first time hazardous waste is accepted at the CSU. If a container remains at the CSU for one (1) calendar year or more, it shall be visually inspected for defects at least once every 12 months. [20.4.1.500 NMAC, incorporating 40 CFR §264.1086(b)(1)(ii) and (c)(1) and (c)(1)(i-iii)].

**V.C.2. Inspection of Level 2 or Type C Containers:**

The Permittee shall visually inspect all Type C containers and cover devices for defects at the time the container is first used to manage and store hazardous waste or the first time hazardous waste is accepted at the CSU. If a container remains at the CSU for one (1) calendar year or more, it shall be visually inspected for defects at least once every 12 months. [40 C.F.R. 264.1086(b)(1)(iii) and (d)(1)(i-iii)].

**V.D. REPAIR OF LEVELS 1 AND 2 (i.e., TYPES A, B, and C) CONTAINERS:**

**V.D.1. Level 1 Containers:** If a defect is detected in a container using Level 1 standards in accordance with Permit Condition V.C.1, the Permittee shall repair the defect as required by 20.4.1.500 NMAC, incorporating 40 CFR §264.1086(c)(4)(iii).

**V.D.2. Level 2 Containers:** If a defect is detected in a container that is being managed using Container level 2 standards in accordance with Permit Condition V.C.2. the Permittee shall repair the defect as required by 20.4.1.500 NMAC, incorporating 40 CFR §264.1086(d)(4)(iii).

**V.E. REPORTING REQUIREMENTS**

**V.E.1.** For each container which manages hazardous waste that is exempted from using air emission controls, a written report shall be submitted to the Secretary within fifteen (15) calendar days of each occurrence when hazardous waste is placed in the waste management unit as required by 20.4.1.500 NMAC, incorporating 40 CFR §264.1082(c)(1) or (c)(2), as applicable. The written report shall contain the EPA identification number, Facility name and address, a description of the noncompliance event and the cause, the dates of the noncompliance, and the actions taken to correct the noncompliance and prevent reoccurrence of the noncompliance.

**V.E.2.** All reports shall be signed and dated by an authorized representative of the Permittee as per 20.4.1.900 NMAC, incorporating 40 CFR §270.11(b).

**V.F. NOTIFICATION OF NEW UNITS**

Prior to installing container or miscellaneous unit subject to 20.4.1.500 NMAC, incorporating 40 CFR Part 264, Subpart CC, or modifying an existing process, waste handling or container such that the unit(s) will become subject to 20.4.1.500 NMAC, incorporating 40 CFR Part 264 Subpart CC, the Permittee shall apply for a permit modification under 20.4.1.900 NMAC, incorporating 40 CFR §270.42, and provide specific Part B application information required under 20.4.1.900 NMAC, incorporating 40 CFR §270.14-17 and §270.27, as applicable, with the modification request.

**V.G. COMPLIANCE SCHEDULE**

The Permittee shall comply with the requirements of the compliance schedule contained in Permit Part 4, Appendix 4-D, *Schedule of Compliance*.

**ATTACHMENT A  
AUTHORIZED WASTES**

**PERMIT ATTACHMENT A  
AUTHORIZED WASTES**

The Following pages of Part A Permit Application contain a list of the hazardous wastes Holloman Air Force Base is allowed to manage and store at the Container Storage Unit.

Please print or type with ELITE type (12 characters per inch) in the unshaded areas only

For EPA Regional Use Only  Date Received Month    Day    Year _____	United States Environmental Protection Agency Washington, DC 20460  <h2 style="margin: 0;">Hazardous Waste Permit Application</h2> <h3 style="margin: 0;">Part A</h3> <p style="font-size: small; margin: 0;">(Read the Instructions before starting)</p>
---	--

**I. Installation's EPA ID Number (Mark 'X' in the appropriate box)**

<input type="checkbox"/> A. First Part A Submission	<input type="checkbox"/> B. Part A Amendment # _____
---	--

C. Installation's EPA ID Number N M 6 5 7 2 1 2 4 4 2 2	D. Secondary ID Number (If applicable)
--	--

**II. Name of Facility**

H O L L O M A N    A I R    F O R C E    B A S E
--

**III. Facility Location (Physical address not P.O. Box or Route Number)**

A. Street 5 5 0    T A B O S A    A V E	
Street (Continued) 4 9    C E S / C E V	
City or Town H O L L O M A N    A F B	State    Zip Code N M    8 8 3 3 0 - 8 4 5 8
City Code (town) O T E R O	County Name

B. Land Type (Enter code) F	C. Geographic Location LATITUDE (Degrees, Minutes, & Seconds)    LONGITUDE (Degrees, Minutes & Seconds) 3 2 5 0 0 4 1    1 0 6 0 5 0 4 0	D. Facility Existence Date Month    Day    Year 0 1 0 1 1 9 7 1
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**IV. Facility Mailing Address**

Street or P.O. Box S A M E	
City or Town	State    Zip Code

**V. Facility Contact (Person to be contacted regarding waste activities at facility)**

Name (Last) P O L A N D	(First) J O H N
Job Title C H E N V I R O N M E N T L	Phone Number (Area Code and Number) 5 0 5 - 4 7 5 - 3 9 3 1

**VI. Facility Contact Address (See instructions)**

A. Contact Address Location Mailing Other <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	B. Street or P.O. Box
City or Town	State    Zip Code



Please print or type with ELITE type (12 characters per inch) in the unshaded areas only

EPA I.D. Number (Enter from page 1)										Secondary ID Number (Enter from page 1)											
N	M	6	5	7	2	1	2	4	4	2	2										

**XI. Nature of Business (Provide a brief description)**

THE BASE IS HEADQUARTERS TO THE AIR COMBAT COMMAND 49TH FIGHTER WING. SUPPORTS NATIONAL SECURITY OBJECTIVES WITH F-117A STEALTH FIGHTERS, HH-60 HELICOPTERS, MEDICAL, AND BARE BASE ASSETS. RAPIDLY MOBILIZE AND DEPLOY WORLDWIDE TO MEET PEACETIME AND WARTIME CONTINGENCIES. TRAIN USAF AND SELECTED ALLIED AIRCREWS IN AT-38 INITIAL FIGHTER FUNDAMENTALS AND F-4E FIGHTER TRANSITION COURSES. SUPPORTS OVER 19,000 PERSONNEL. THE BASE SUPPORTS SEVERAL TENANTS 4TH SPACE WARNING SYSTEMS, 46TH TEST GROUP, 475TH WEG, 4TH AND 25TH WEATHER WING, CONTRACTORS, AND OTHERS. AS A RESULT OF THE ABOVE STATED\*

**XII. Process Codes and Design Capacities**

- A. PROCESS CODE** - Enter the code from the list of process codes below that best describes each process to be used at the facility. Thirteen lines are provided for entering codes. If more lines are needed, attach a separate sheet of paper with the additional information. For "other" processes (i.e., D99, S99, T04 and X99), describe the process (including its design capacity) in the space provided in item XIII.
- B. PROCESS DESIGN CAPACITY** - For each code entered in column A, enter the capacity of the process.
- AMOUNT** - Enter the amount. In a case where design capacity is not applicable (such as in a closure/post-closure or enforcement action) enter the total amount of waste for that process.
  - UNIT OF MEASURE** - For each amount entered in column B(1), enter the code from the list of unit measure codes below that describes the unit of measure used. Only the units of measure that are listed below should be used.
- C. PROCESS TOTAL NUMBER OF UNITS** - Enter the total number of units used with the corresponding process code.

PROCESS CODE	PROCESS	APPROPRIATE UNITS OF MEASURE FOR PROCESS DESIGN CAPACITY	PROCESS CODE	PROCESS	APPROPRIATE UNITS OF MEASURE FOR PROCESS DESIGN CAPACITY
<u>Disposal:</u> D79 Underground Injection Gallons; Liters; Gallons Per Day; or Liters Per Day D80 Landfill Acre-feet or Hectare-meter D81 Land Treatment Acres or Hectares D82 Ocean Disposal Gallons Per Day r Liters Per Day D83 Surface Impoundment Gallons or Liters D99 Other Disposal Any Unit of Measure Listed Below			T87 Smelting, Melting, Or Refining Furnace T88 Titanium Dioxide Chloride Process Oxidation Reactor T89 Methane Reforming Furnace T90 Pulping Liquor T91 Recovery Furnace Combustion Device Used In The Recovery Of Sulfur Values From Spent Sulfuric Acid T92 Halogen Acid Furnaces T93 Other Industrial Furnaces Listed In 40 CFR §260.10 T94 Containment Building-Treatment		
<u>Storage:</u> J1 Container (Barrel, Drum, Etc.) Gallons or Liters S02 Tank Gallons or Liters S03 Waste Pile Cubic Yards or Cubic Meters S04 Surface Impoundment Gallons or Liters S05 Drip Pad Gallons or Liters S06 Containment Building-Storage Cubic Yards or Cubic Meters S99 Other Storage Any Unit of Measure Listed Below			<u>Miscellaneous (Subpart X):</u> X01 Open Burning/Open Detonation Any Unit of Measure Listed Below X02 Mechanical Processing Short Tons Per Hour; Metric Tons Per Hour; Short Tons Per Day; Metric Tons Per Day; Pounds Per Hour; or Kilograms Per Hour X03 Thermal Unit Gallons Per Day; Liters Per Day; Pounds Per Hour; Short Tons Per Hour; Kilograms Per Hour; Metric Tons Per Day; or Btu's Per Hour X04 Geologic Repository Cubic Yards or Cubic Meters X99 Other Subpart X Any Unit of Measure Listed Below		
<u>Treatment:</u> T01 Tank Gallons Per Day or Liters Per Day T02 Surface Impoundment Gallons Per Day or Liters Per Day T03 Incinerator Short Tons Per Hour; Metric Tons Per Hour; Gallons Per Hour; Liters Per Hour; or Btu's Per Hour T04 Other Treatment Gallons Per Day; Liters Per Day; Pounds Per Hour; Short Tons Per Hour; Kilograms Per Hour; Metric Tons Per Day; Metric Tons Per Hour; Short Tons Per Day; or Btu's Per Hour T80 Boiler Gallons or Liters T81 Cement Kiln Gallons Per Day; Liters Per Day; Pounds Per Hour; Short Tons Per Hour; Kilograms Per Hour; Metric Tons Per Day; Metric Tons Per Hour; Short Tons Per Day; or Btu's Per Hour T82 Lime Kiln T83 Aggregate Kiln T84 Phosphate Kiln T85 Coke Oven T86 Blast Furnace					

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

Please print or type with ELITE type (12 characters per inch) in the unshaded areas only

EPA I.D. Number (Enter from page 1)										Secondary ID Number (Enter from page 1)													
N	M	6	5	7	2	1	2	4	4	2	2												

**XII. Process Codes and Design Capabilities (Continued)**

**EXAMPLE FOR COMPLETING ITEM XII (Shown in line number X-1 below): A facility has a storage tank, which can hold 533,788 gallons.**

Line Number	A. Process Code <small>(From list above)</small>				B. PROCESS DESIGN CAPACITY				C. Process Total Number Of Units	For Official Use Only												
	1. Amount (Specify)				2. Unit Of Measure <small>(Enter code)</small>																	
X 1	S	0	2		5	3	3	7	8	8	G	0	0	1								
1	S	0	1		1	7	6	0	0	0	G	0	0	1								
2																						
3																						
4																						
5																						
6																						
7																						
8																						
9																						
10																						
11																						
12																						
13																						

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

**XIII. Other Processes (Follow instructions from Item XII for D99, S99, T04 and X99 process codes)**

Line Number <small>(Enter #s in seg w/XII)</small>	A. Process Code <small>(From list above)</small>				B. PROCESS DESIGN CAPACITY				C. Process Total Number Of Units	D. Description Of Process												
	1. Amount (Specify)				2. Unit Of Measure <small>(Enter code)</small>																	
X 1	T	0	4												In-situ Vitrification							
1																						
2																						
3																						
4																						

PLEASE PRINT OR TYPE WITH CAPITAL LETTERS (12 CHARACTERS PER FIELD) IN THE UNSHADDED AREAS ONLY

USE NO. 096494-07

EPA ID Number (Enter from page 1)										Secondary ID Number (Enter from page 1)											
H	H	6	5	7	2	1	2	4	4	2	2										

**XIV. Description of Hazardous Wastes**

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

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

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

**D. PROCESSES**

**1. PROCESS CODES**

For listed hazardous waste: For each listed hazardous waste entered in column A select the code(s) from the list of process codes contained in Item XI A, on page 2 to indicate how the waste will be stored, treated, and/or disposed of at the facility.

For non-listed hazardous waste: For each characteristic or toxic contaminant entered in column A, select the code(s) from the list of process codes contained in Item XI A, on page 2 to indicate all the processes that will be used to store, treat, and/or dispose of all the non-listed hazardous wastes that possess that characteristic or toxic contaminant.

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

1. Enter the first two as described above.
2. Enter "000" in the extreme right box of Item XIV-D(1).
3. Enter in the space provided on page 7, Item XIV-E, the line number and the additional code(s).

**2. PROCESS DESCRIPTION: If a code is not listed for a process that will be used, describe the process in the space provided on the form (D(2)).**

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

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

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

Line Number	A. EPA HAZARD WASTE NO. (Enter code)				B. ESTIMATED ANNUAL QUANTITY OF WASTE	C. UNIT OF MEASURE (Enter code)	D. PROCESS									
	(1) PROCESS CODES (Enter code)						(2) PROCESS DESCRIPTION (If a code is not entered in D(1))									
X 1	K	0	5	4	900	P	T	0	3	0	0	0				
X 2	D	0	0	2	400	P	T	0	3	0	0	0				
X 3	D	0	0	1	100	P	T	0	3	0	0	0				
X 4	D	0	0	2												Included With Above

<b>EPA I.D. Number (Enter from page 1)</b>												<b>Secondary ID Number (Enter from page 1)</b>											
N	M	6	5	7	2	1	2	4	4	2	2												

**XIV. Description of Hazardous Wastes (Continued)**

Line Number	A. EPA HAZARDOUS WASTE NO. (Enter code)					B. ESTIMATED ANNUAL QUANTITY OF WASTE	C. UNIT OF MEASURE (Enter code)	D. PROCESSES						
								(1) PROCESS CODES (Enter code)					(2) PROCESS DESCRIPTION (If a code is not entered in D(1))	
1	D	0	0	1	35000	P	S	0	1					
2	D	0	0	2	15000	P	S	0	1					
3	D	0	0	3	2500	P	S	0	1					
4	D	0	0	4	200	P	S	0	1					
5	D	0	0	5	15000	P	S	0	1					
6	D	0	0	6	30000	P	S	0	1					
7	D	0	0	7	45000	P	S	0	1					
8	D	0	0	8	10000	P	S	0	1					
9	D	0	0	9	10000	P	S	0	1					
10	D	0	1	0	10000	P	S	0	1					
11	D	0	1	1	5000	P	S	0	1					
12	D	0	1	2	500	P	S	0	1					
13	D	0	1	3	500	P	S	0	1					
14	D	0	1	4	500	P	S	0	1					
15	D	0	1	5	500	P	S	0	1					
16	D	0	1	6	500	P	S	0	1					
17	D	0	1	7	500	P	S	0	1					
18	D	0	1	8	25000	P	S	0	1					
19	D	0	1	9	1000	P	S	0	1					
20	D	0	2	0	500	P	S	0	1					
21	D	0	2	1	500	P	S	0	1					
22	D	0	2	2	500	P	S	0	1					
23	D	0	2	3	500	P	S	0	1					
24	D	0	2	4	500	P	S	0	1					
25	D	0	2	5	500	P	S	0	1					
26	D	0	2	6	500	P	S	0	1					
27	D	0	2	7	500	P	S	0	1					
28	D	0	2	8	500	P	S	0	1					
29	D	0	2	9	500	P	S	0	1					
30	D	0	3	0	500	P	S	0	1					
31	D	0	3	1	500	P	S	0	1					
32	D	0	3	2	500	P	S	0	1					
33	D	0	3	3	500	P	S	0	1					

EPA I.D. Number (Enter from page 1)										Secondary ID Number (Enter from page 1)													
N	M	6	5	7	2	1	2	4	4	2	2												
XIV. Description of Hazardous Wastes (Continued)																							
Line Number	A. EPA HAZARDOUS WASTE NO. (Enter code)				B. ESTIMATED ANNUAL QUANTITY OF WASTE	C. UNIT OF MEASURE (Enter code)	D. PROCESSES																
	(1) PROCESS CODES (Enter code)															(2) PROCESS DESCRIPTION (If a code is not entered in D(1))							
1	D	0	3	4	500	P	S	0	1														
2	D	0	3	5	30000	P	S	0	1														
3	D	0	3	6	500	P	S	0	1														
4	D	0	3	7	500	P	S	0	1														
5	D	0	3	8	500	P	S	0	1														
6	D	0	3	9	2500	P	S	0	1														
7	D	0	4	0	500	P	S	0	1														
8	D	0	4	1	500	P	S	0	1														
9	D	0	4	2	500	P	S	0	1														
10	D	0	4	3	500	P	S	0	1														
11	F	0	0	1	10000	P	S	0	1														
12	F	0	0	2	10000	P	S	0	1														
13	F	0	0	3	20000	P	S	0	1														
14	F	0	0	4	1000	P	S	0	1														
15	F	0	0	5	30000	P	S	0	1														
16	F	0	0	6	1000	P	S	0	1														
17	F	0	0	7	1000	P	S	0	1														
18	F	0	0	8	1000	P	S	0	1														
19																							
20																							
21																							
22																							
23	U	*	*	*	10000	P	S	0	1													*Miscellaneous U listed wastes generated from expired shelf-life products	
24																						May consist of any U listed wastes as defined in (40 CFR - 261)	
25																							
26	P	*	*	*	10000	P	S	0	1													* Miscellaneous P listed wastes generated from expired shelf-life products	
27																						May consist of any P listed wastes as defined in (40- CFR -- 261).	
28																							
29																							
30																							
31					25000	P	S	0	1													PCB Contaminated Items	
32					5000	P	S	0	1													Asbestos Containing Material	
33																							



## ATTACHMENT TO RCRA PART A

EPA ID #: NM6572124422

### **VII. Name of Operator:**

Defense Reutilization and Marketing Service  
74 Washington Avenue  
Battle Creek Michigan

STEPHEN HOCKETT  
Colonel, USAF  
Deputy Commander, DRMS

### **VIII. Name of Facility's Legal Owner:**

49 FW/CC  
490 First Street, Suite 1700  
Holloman Air Force Base, New Mexico 88330-8457

WILLIAM J. LAKE  
Brigadier General, USAF  
Commander

**ATTACHMENT B**  
**GENERAL FACILITY DESCRIPTION**

## PERMIT ATTACHMENT B GENERAL FACILITY DESCRIPTION

### INTRODUCTION

This Attachment presents a general description of Holloman Air Force Base (**AFB**), which includes surrounding land uses, the location of the Container Storage Unit (**CSU**), a detailed topographic map, a detailed description of the CSU, and a discussion of basic standard operating procedures at the CSU. Hazardous waste management and storage procedures are addressed in Permit Attachment C, *Container Storage Unit Design and Operation*. The CSU currently operates in accordance with Hazardous Waste Facility Permit No. NM6572124422-1, issued by NMED in 1991.

### GENERAL DESCRIPTION

Holloman Air Force Base (**the Base**) is located on approximately 59,827 acres of land about seven miles west of the City of Alamogordo in Otero County, south central New Mexico. The Base lands are situated in the northern Chihuahuan Desert in the region known as the Tularosa Basin that is bound on the east and west by the Sacramento and San Andres Mountains, respectively. The Base is located adjacent to White Sands Missile Range and White Sands National Monument, both located west of the Base. Regional water supplies are derived from Bonito Lake, located approximately 60 miles north of the Base and the Boles, Douglas, and San Andres Well Fields, which are located 14 miles to the southeast.

The nearest population center is the City of Alamogordo, located approximately seven miles to the east. Regional metropolitan centers include El Paso, Texas, located 90 miles south-southwest and Las Cruces, located 70 miles southwest of the facility. The primary transportation route for the Base is Highway 70 that traverses its southern boundary in a northeasterly direction. The general location of Holloman AFB is shown on Figure B-1.

Holloman AFB was initiated as a temporary facility to provide gunnery and bomber training to aircrews during World War II. The Base mission was altered in the post-war years to the development of unmanned aircraft, guided missiles, and associated equipment. In the late 1950s, the Base was transferred to the Air Force Systems Command (**AFSC**) and designated as the Air Force Missile Development Center. On 1 January 1971, the Base mission expanded to provide lead in fighter training for the 479th Tactical Training Wing and its components.

Currently, Holloman AFB hosts the Air Combat Command (**ACC**) 49th Fighter Wing, which includes pilot training, mobility support, and combat support operations. The primary Air Force Materiel Command (**AFMC**) component located at Holloman AFB is the 46th Test Group, which is responsible for evaluation of propulsion and navigational systems for aircraft, space vehicles and missiles. A variety of tenant organizations are assigned to Holloman AFB including the 4th Space Warning Squadron, the Primate Research Laboratory, and Detachment 4 of the 50th Weather Squadron. A general layout of the facility is provided in Figure B-2.

ACC readiness requirements and Base activities necessitate the use of a variety of products to maintain and repair aircraft and aerospace ground equipment (AGE) as well as Base structures and roads. These items become wastes because of contamination during use, exceedance of shelf life, unanticipated deterioration, or failure to meet specifications that renders the material non-usable. Many of these wastes are also hazardous waste under the Resource Conservation and Recovery Act (RCRA) because they either exhibit a characteristic of ignitability, corrosivity, reactivity, or toxicity; or they meet the definition of listed waste under 40 CFR Part 261 Subpart D.

These on-site generated wastes are initially managed at waste accumulation points in accordance with the requirements specified in 20 NMAC 4.1.300 incorporating 40 CFR §262.34 and are located in the work areas where they are first generated. To facilitate disposal, most hazardous wastes are transferred by the individual producers of the wastes to the CSU operated by the Defense Reutilization and Marketing Office (DRMO), which is located on Base in Building 118. The objectives of the DRMO are to market and re-sell items that are reusable or have market value and to manage the contracts for the disposal of hazardous and solid wastes that have limited or no opportunities for reuse or resale.

#### **Container Storage (CSU) Location Information**

The CSU is located on the east side of the Base, approximately 1,400 feet (ft) inside the eastern boundary of the Base. The street address is 241 Arkansas Avenue, Holloman AFB, and New Mexico 88330. The CSU is located on approximately 400,000 ft<sup>2</sup> of land designated for use by DRMO as shown in Figure B-3.

#### **Seismic Standards**

The CSU is located in Otero County, which is not among the political jurisdictions designated in 40 CFR §264 Appendix VI for seismic considerations; therefore, the CSU is exempt from seismic considerations.

#### **Flood Plain Standards**

The CSU is not located within the 100-year or 500-year flood plains of intermittent streams in the area. Additional information related to surface drainage patterns is provided in the next paragraph.

#### **Topographic Map**

A map showing the CSU and the surrounding area is presented in Figure B-3. The contour lines on Figure B-3 indicate that the facility is located on relatively flat terrain. The facility is also located above the 100-year flood plain boundaries. No permanent surface water of constant flow conditions is located in the area.

The map (Figure B-3) shows the CSU and surrounding land on a scale of one inch equal to 200 ft. The map also shows a distance of 1,000 ft around the CSU at a scale of 2.5 centimeters (1 inch) equal to 61.0 meters (200 ft) and shows the following, as specified by 40 CFR 270.14(b)(19):

- ! Map scale and date;
- ! Orientation of map;
- ! Unit boundaries; and
- ! Distance to nearest residential buildings, public roadways, and passenger railroad.

### **Surrounding Land Uses**

The CSU is located within the boundaries of Holloman AFB. All lands within Holloman AFB boundaries are under the control of the U.S. Air Force. Thus, the CSU is surrounded by access-controlled federal lands for a distance of several miles in all directions. Figure B-4 shows the land use surrounding the CSU. Figure B-5 is an aerial photo that shows the distance to the nearest building and residence.

The area immediately surrounding the CSU is designated as industrial land use. No residential areas are located adjacent to the CSU. The nearest military housing is located at least 500 ft from the Container Storage Unit.

### **Unit Boundaries**

Boundaries of the CSU and the location of operational units within the CSU (including equipment) are shown in Figure B-6.

### **Wind Rose**

Wind roses for the last five years are provided as *Appendix B-1* to this Attachment. The wind roses show prevailing wind speed and direction.

### **Access Control**

Access control to the CSU is provided by a six-foot high chain-link fence surrounding the defense re-utilization and marketing office (DRMO) complex. The fence is equipped with locking gates, and access is strictly controlled by DRMO personnel. The CSU can only be accessed by Base personnel during DRMO hours of operation or in an emergency. Holloman AFB personnel turning in waste to the CSU are usually accompanied by DRMO and/or 49 Civil Engineer Squadron/Environmental Flight (CES/CEV) personnel while in the CSU area. Permit Attachment E presents additional details on CSU security procedures and equipment.

### **Injection and Withdrawal Wells**

No injection or withdrawal wells are located within the CSU's boundary or the adjacent area. The location of groundwater wells within the boundaries of Holloman AFB and the location of wells in the areas adjacent to the Base boundaries are discussed in Permit Attachment C, under the subtitle A, *Protection of Groundwater*.

## STRUCTURES

### Buildings

Buildings immediately surrounding the CSU are industrial shops. The nearest buildings are the DRMO Administration buildings located approximately 320 ft northwest of the CSU. Military housing units are located more than 500 ft from the CSU.

### Recreation Areas

No recreation areas are located in the vicinity of the CSU.

### Run-off Control Systems

The procedures for run-off control systems are addressed in Table C-1 of Permit Attachment C, under *Drainage, Run-on, and Run-off Controls*, for the staging area, covered outdoor storage area, and indoor storage building.

### Container Storage Facility Access and Internal Roads

The CSU can be accessed from Arkansas Avenue through a gate on the northeast side of the CSU, which remains locked except during DRMO operating hours. From the road, vehicles entering the CSU turn onto a flat paved asphalt area. From the paved area, vehicles have access to the cement ramp leading to the staging area.

### Storm, Sanitary, and Process Sewer Systems

The CSU does not discharge to a storm sewer, sanitary sewer, or process sewer.

### Loading and Unloading Areas

In order to load or unload hazardous waste from the CSU, vehicles back onto the concrete ramp that enters the staging area. Vehicles back into the staging area only far enough to ensure that any spills that could occur during loading or unloading of waste would be contained in the staging area. Vehicles do not typically drive completely into the staging area because of limited space in the staging area.

### Fire Control Facilities and Equipment

Detailed information on fire control facilities and equipment is included in Permit Attachment G, *Preparedness and Prevention Requirements*.

### **Surface Waters**

Surface water flows in the vicinity of Holloman AFB are generally intermittent in nature. Permit Attachment B, *Figure B-3: Topographic Map* shows the surface water features in the area.

### **Flood Control**

The Container Storage Unit is elevated sufficiently above the flood plain levels, making the potential for flooding virtually nonexistent. Figure B-7 is a flood plain map of the Container Storage Unit and its vicinity.

## **TRAFFIC INFORMATION**

### **Traffic Patterns**

Access to the CSU is provided by a paved asphalt entry that leads to the staging area ramp. Access to the paved asphalt area is provided by a paved Base road, Arkansas Avenue. Traffic along Arkansas Avenue is limited to Holloman AFB personnel and authorized visitors. Access to the CSU is controlled by a gate that is locked except during DRMO operating hours.

### **Access Road Surface**

The road leading to the CSU entrance is a paved surface. This surface is periodically maintained to prevent the formation of holes, ditches, or other deformations that would increase the possibility that containers holding hazardous waste en route to or from the CSU could rupture or spill.

### **Load Bearing Capacity**

The paved road and the paved asphalt area were graded and compacted to provide capacity for automobiles, light trucks, and service vehicles. The maximum amount of waste per vehicle that is moved along the paved road and asphalt area within the fence line of the CSU is approximately ten 55-gallon drums or 550 gallons.

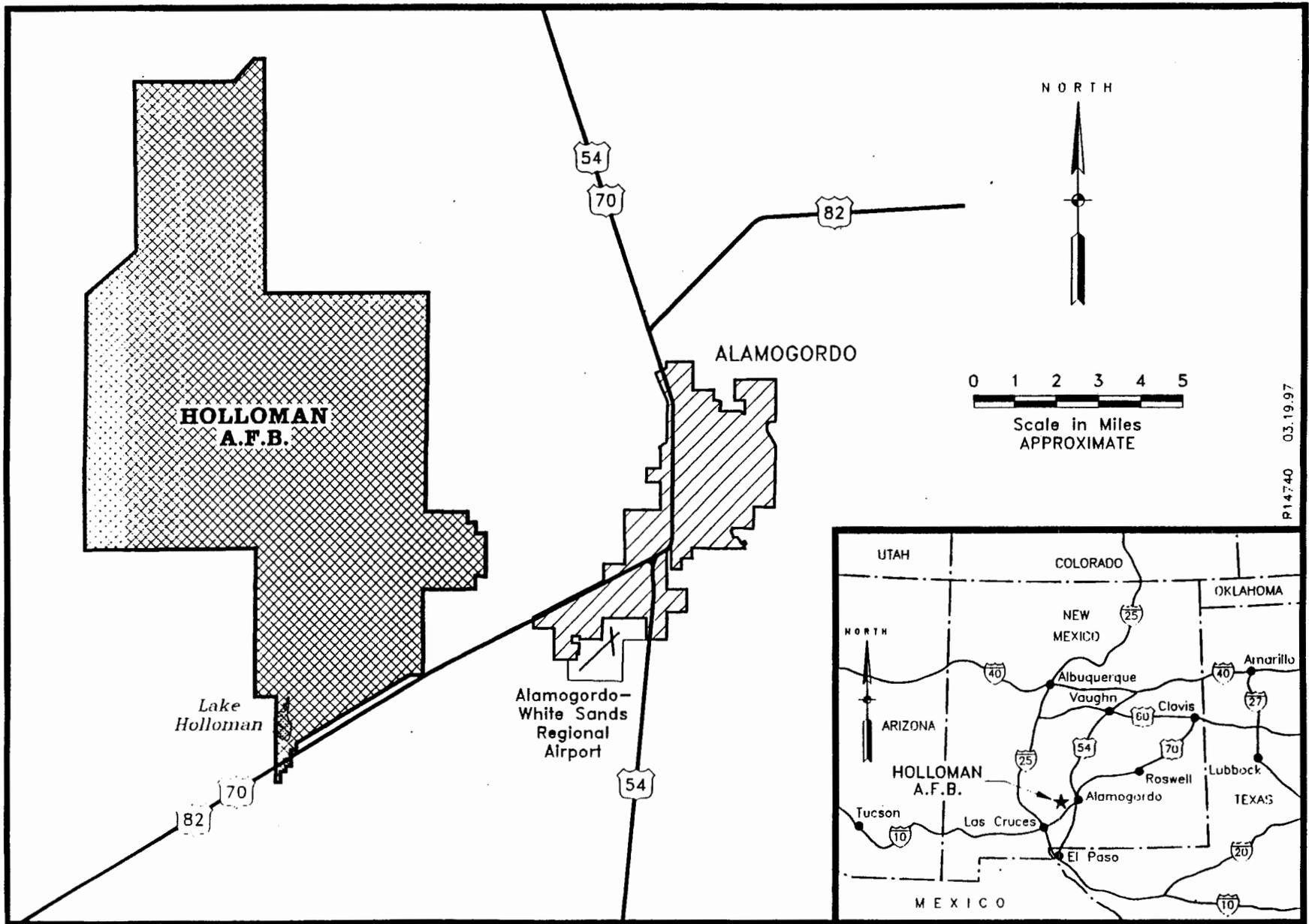


Figure B-1. General Location of Holloman Air Force Base

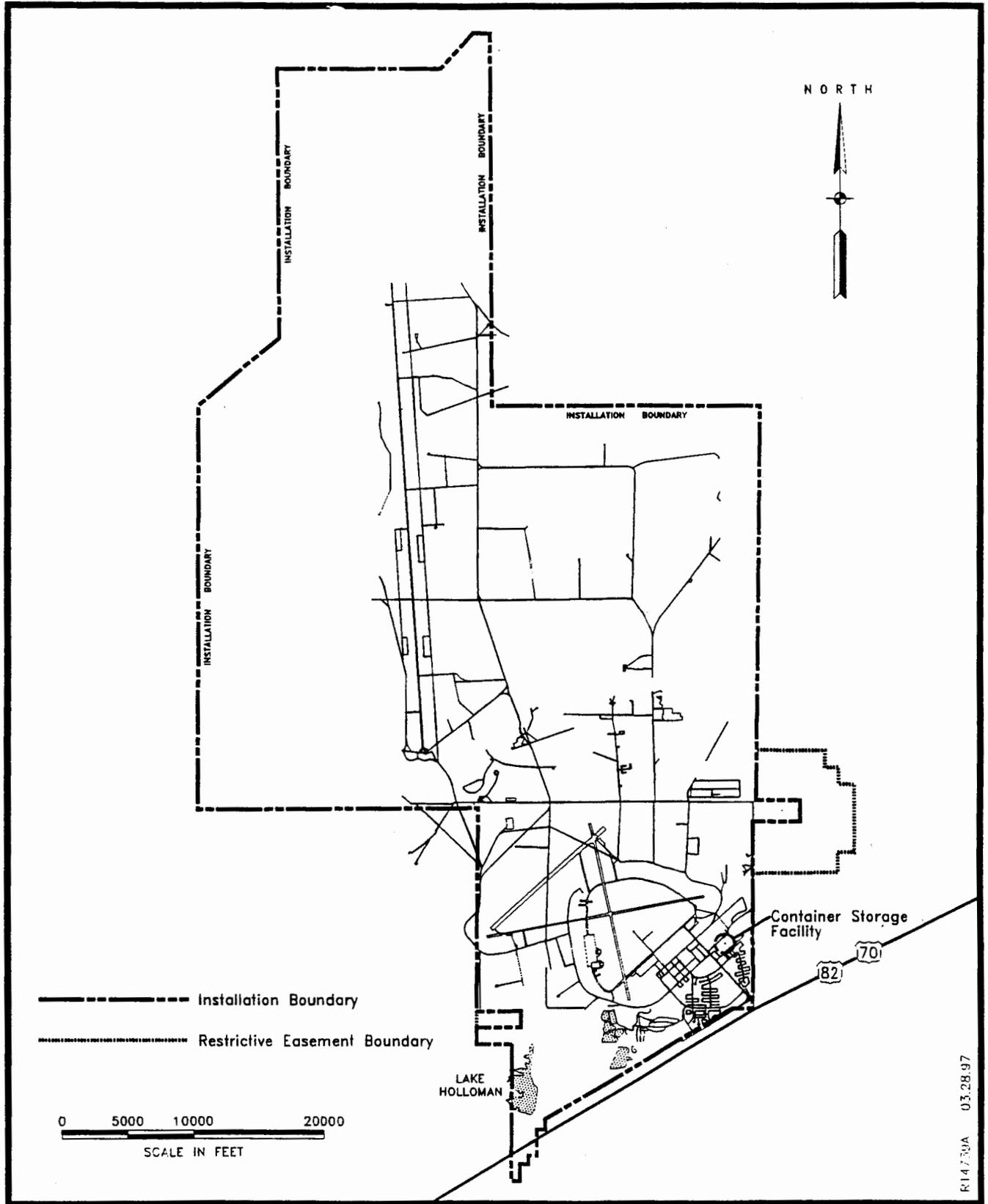
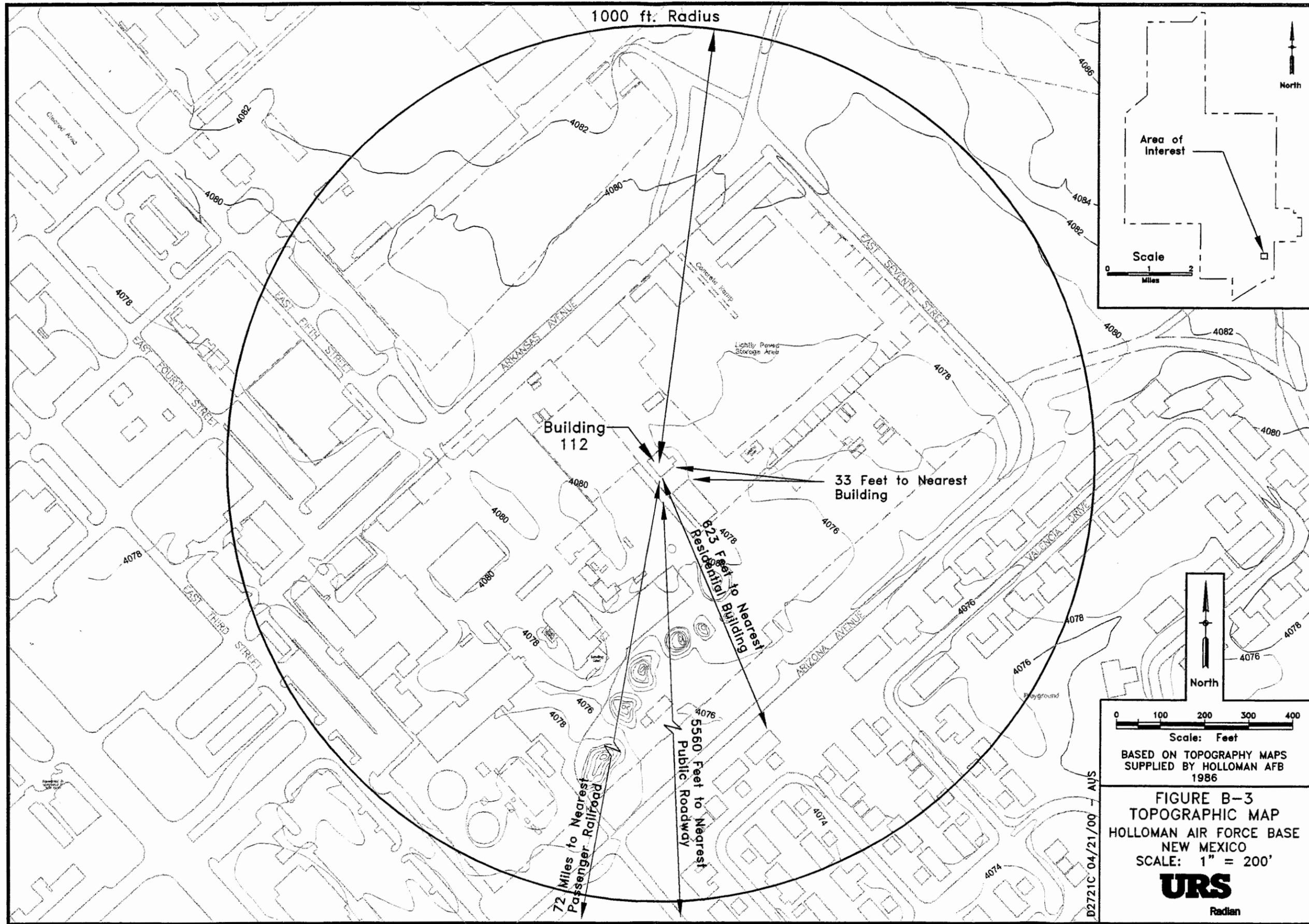


Figure B-2. Layout of Holloman Air Force Base



1000 ft. Radius

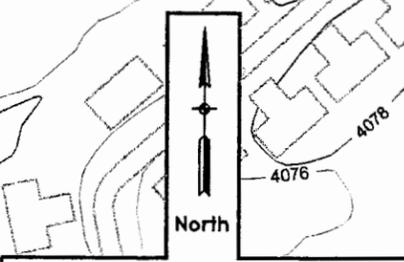
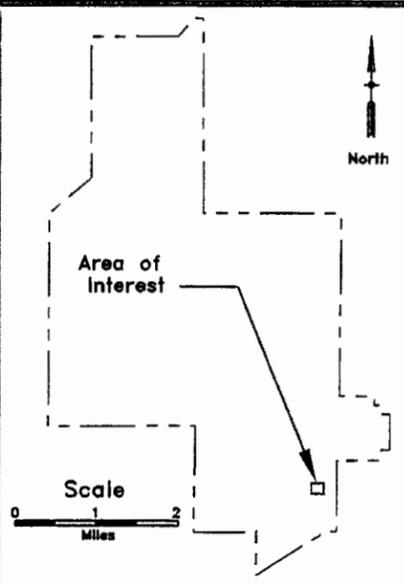
Building 112

33 Feet to Nearest Building

623 Feet to Nearest Residential Building

5560 Feet to Nearest Public Roadway

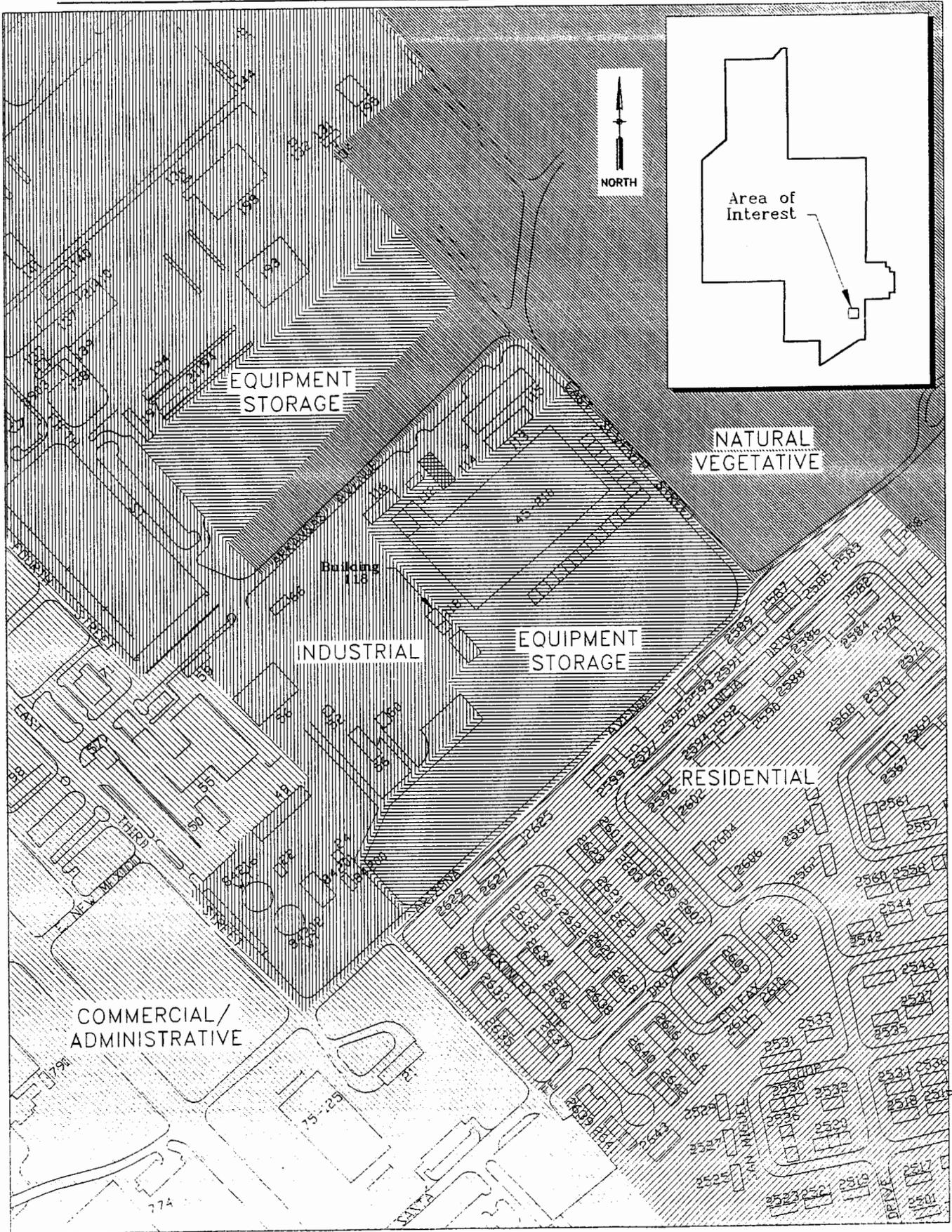
72 Miles to Nearest Passenger Railroad



Scale: Feet  
 0 100 200 300 400  
 BASED ON TOPOGRAPHY MAPS  
 SUPPLIED BY HOLLOMAN AFB  
 1986

FIGURE B-3  
 TOPOGRAPHIC MAP  
 HOLLOMAN AIR FORCE BASE  
 NEW MEXICO  
 SCALE: 1" = 200'  
**URS**  
 Radian

D2721C 04/21/00 - AUS



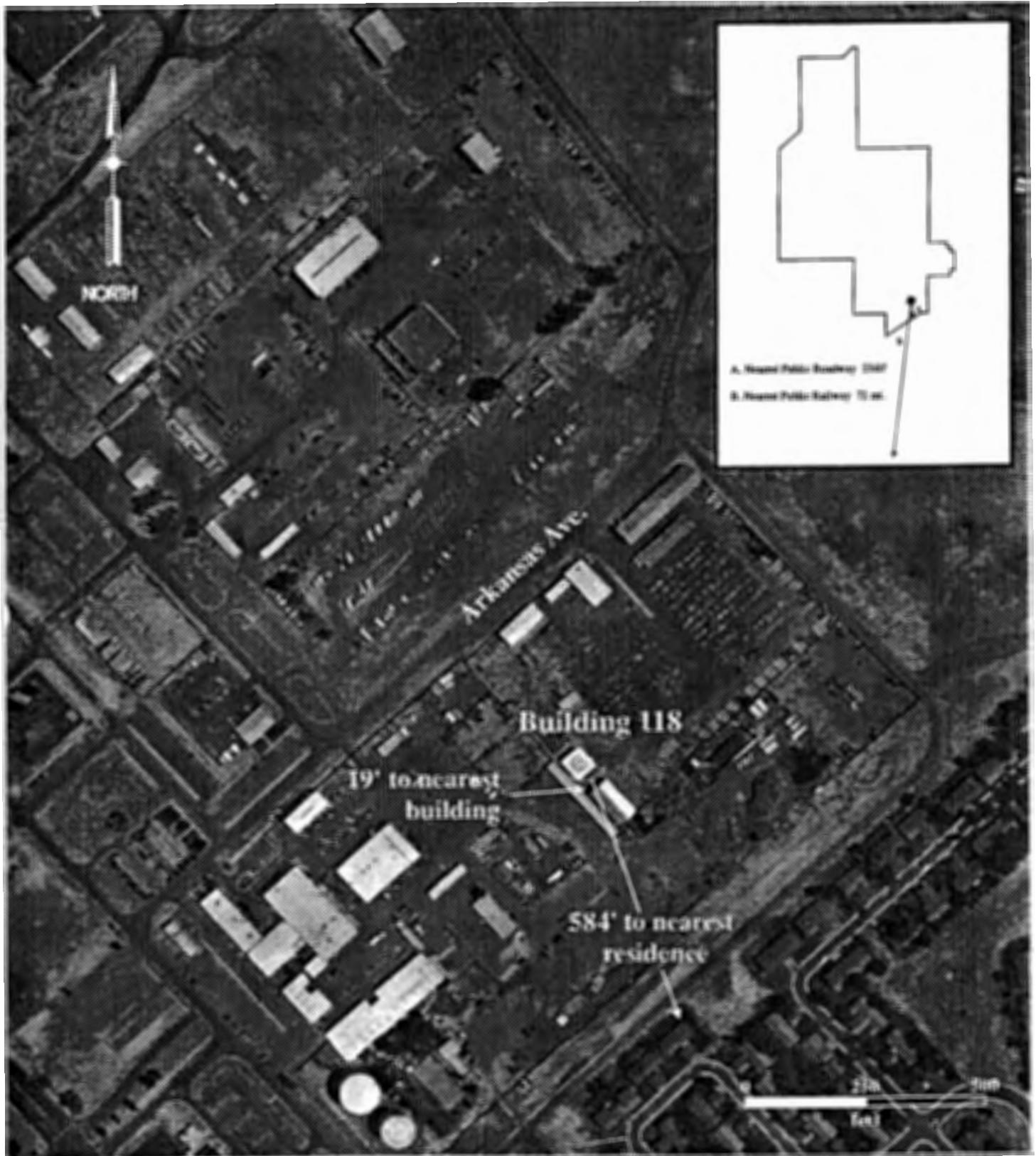
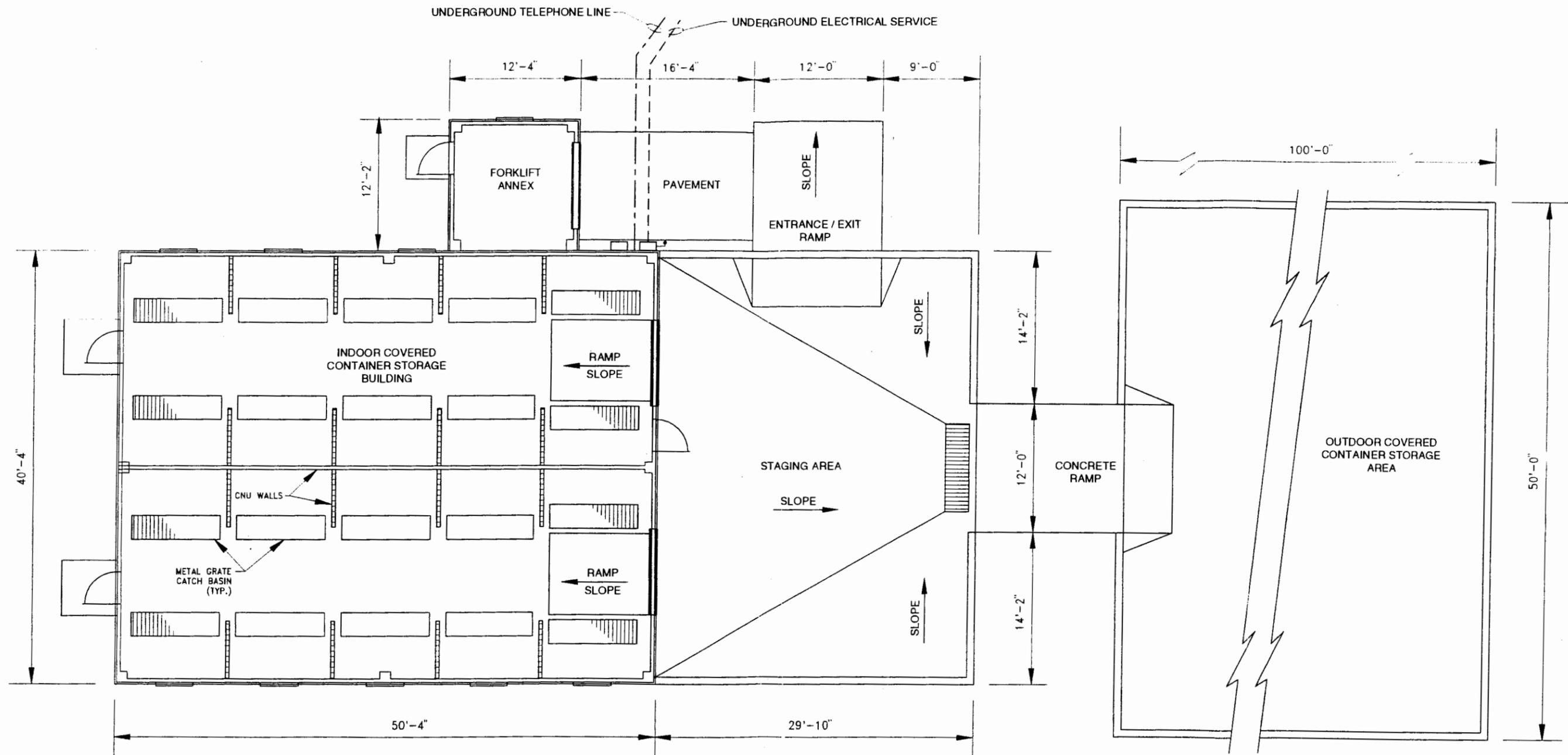


Figure B-5. Aerial Photo of Container Storage Facility Area



Scale: 1" = 10'

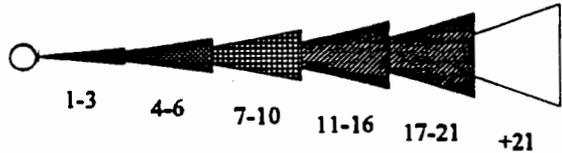
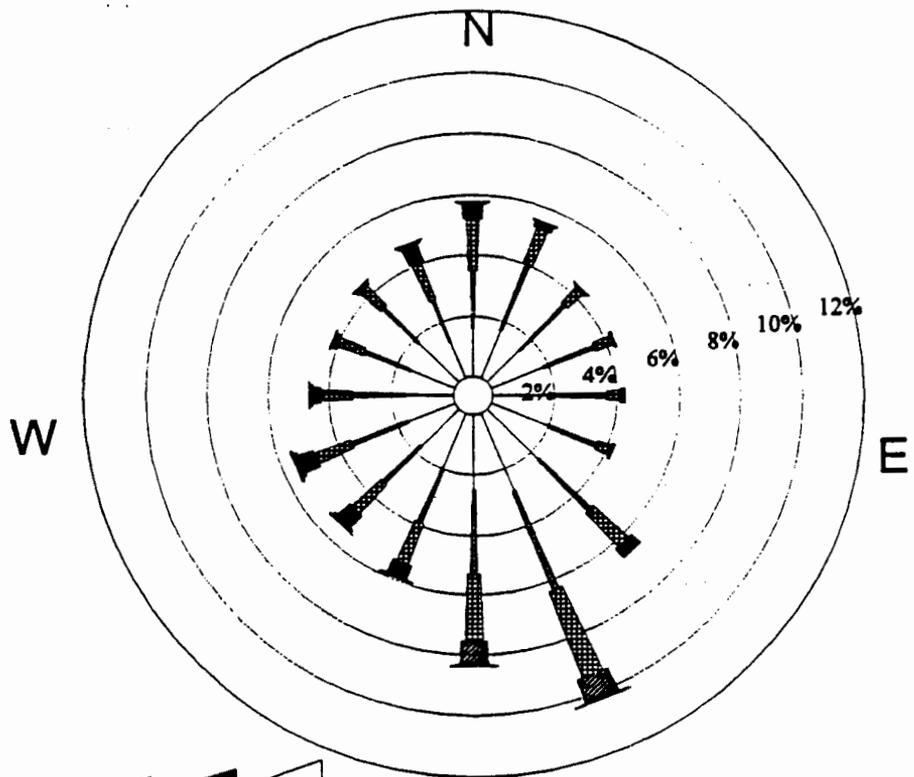
Figure B-6. Layout of Container Storage Facility

**TO VIEW THE MAP AND/OR  
MAPS WITH THIS DOCUMENT,  
PLEASE CALL THE  
HAZARDOUS WASTE BUREAU  
AT 505-476-6000 TO MAKE AN  
APPOINTMENT**

**APPENDIX B-1**  
**WIND ROSES OF HAFB**  
**(1992-996)**

Holloman AFB 1992  
January 1  
December 31  
Midnight-11 PM

NOTE: Frequencies  
indicate direction  
from which the  
wind is blowing.

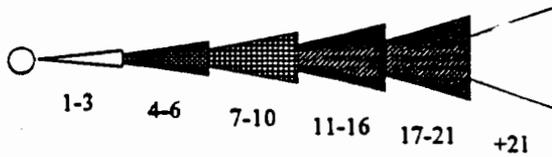
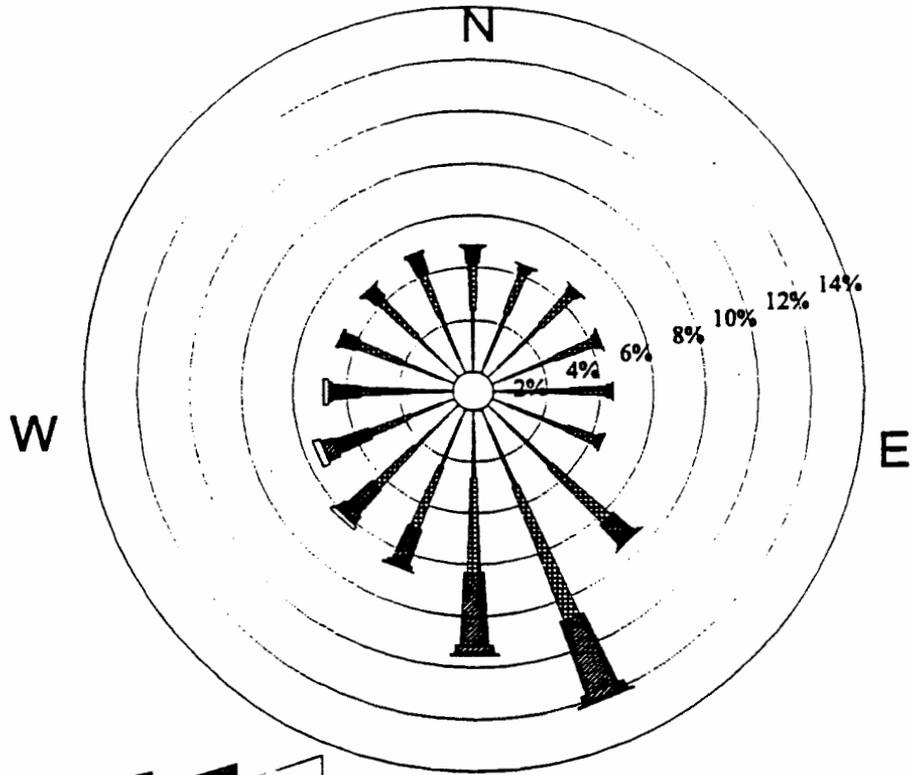


Wind Speed in Knots

Calm Winds or Missing Data 11.21%

Holloman AFB 1993  
January 1  
December 31  
Midnight-11 PM

NOTE: Frequencies  
indicate direction  
from which the  
wind is blowing.



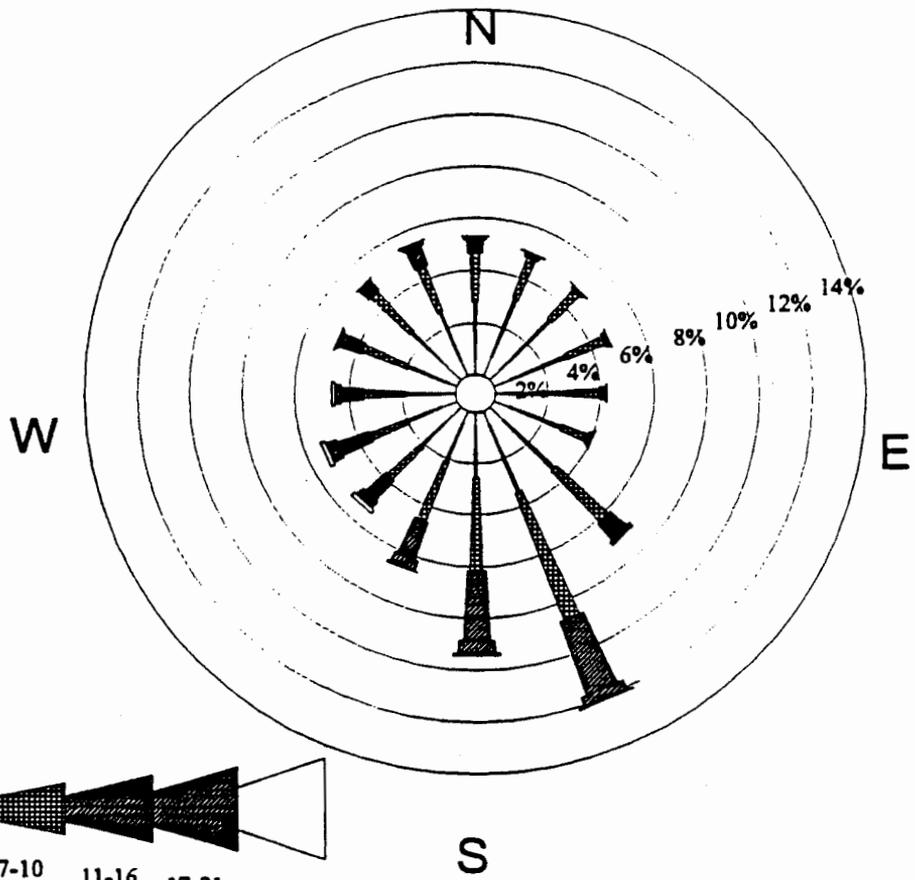
Wind Speed in Knots

Calm Winds or Missing Data 5.57%

Wind Rose - 1993

Holloman AFB 1994  
January 1  
December 31  
Midnight-11 PM

NOTE: Frequencies  
indicate direction  
from which the  
wind is blowing.



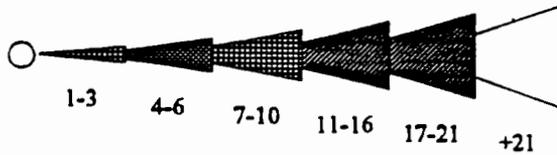
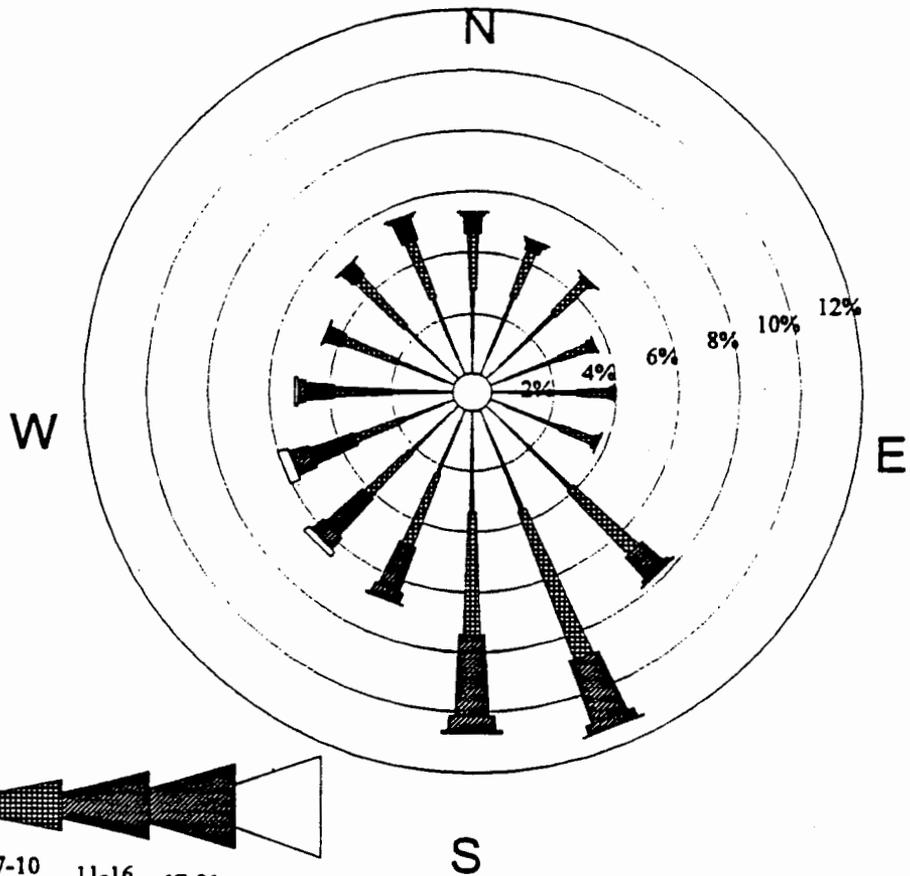
Wind Speed in Knots

Calm Winds or Missing Data 5.43%

Wind Rose - 1994

Holloman AFB 1995  
January 1  
December 31  
Midnight-11 PM

NOTE: Frequencies  
indicate direction  
from which the  
wind is blowing.



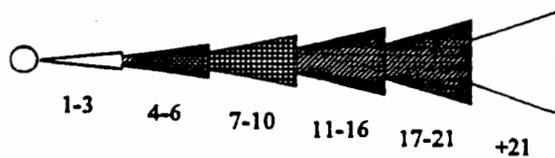
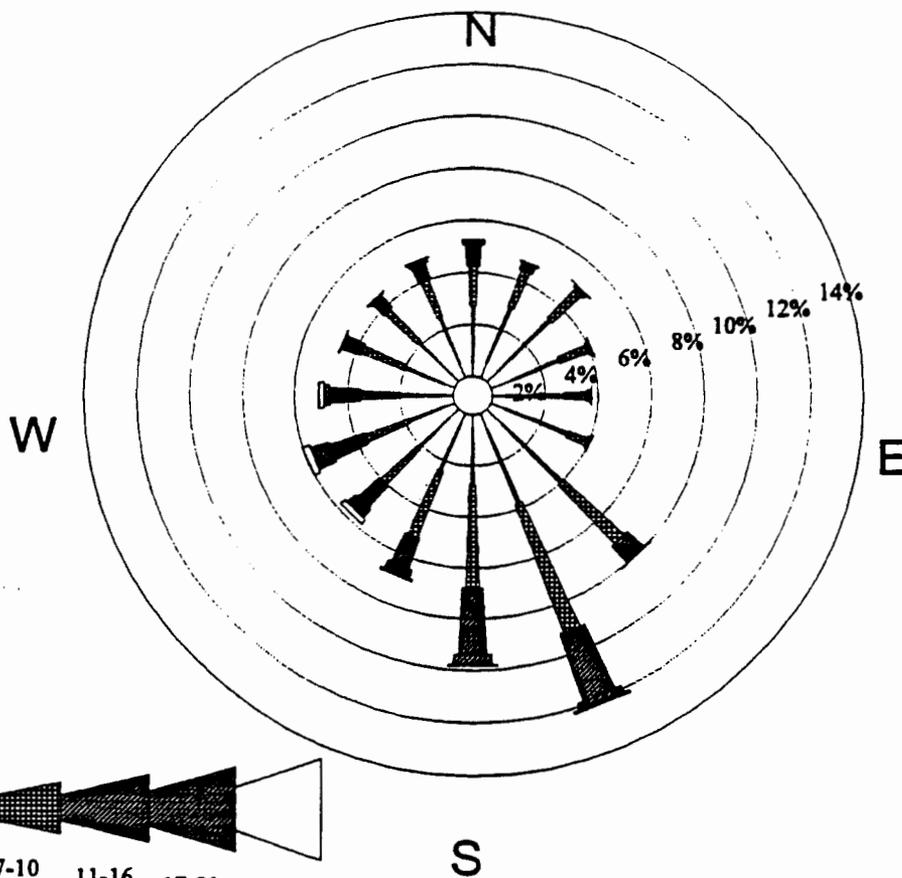
Wind Speed in Knots

Calm Winds or Missing Data 4.05%

Wind Rose - 1995

Holloman AFB 1996  
January 1  
December 31  
Midnight-11 PM

NOTE: Frequencies  
indicate direction  
from which the  
wind is blowing.



Wind Speed in Knots

Calm Winds or Missing Data 5.04%

Wind Rose - 1996

**ATTACHMENT C  
DESIGN AND OPERATION OF THE  
CONTAINER STORAGE UNIT**

## PERMIT ATTACHMENT C DESIGN AND OPERATION OF THE CONTAINER STORAGE UNIT

### Detailed Design Description of the Container Storage Unit

The Container Storage Unit (CSU) operated by the Defense Re-utilization and Marketing Office (DRMO) is used for the management and storage of hazardous waste generated at HAFB (i.e., **on-site**) in containers. No tanks, waste piles, surface impoundments, incinerators, landfills, land treatment units, or miscellaneous units are managed by or used at this CSU; thus the Unit is exempt from Construction Quality Assurance Program requirements outlined in 20.4.1.500 NMAC, incorporating 40 CFR §264.19. However, this description is provided to demonstrate compliance with 20.4.1.500 NMAC, incorporating 40 CFR §264.175. The purpose of the CSU is to temporarily manage and store hazardous waste generated at Holloman AFB to allow enough time for DRMO personnel to arrange for approved contractors to accept, transport, treat, and dispose of the hazardous waste cost effectively.

Holloman AFB does not treat or dispose of hazardous waste at the CSU. No wastes are accepted from any entity not located at Holloman AFB (i.e., **off-site**). The majority of the on-site wastes accepted by DRMO are contained in 55-gallon containers. Occasionally, wastes are contained in larger containers such as 85-gallon salvage drums or self-contained packaging including lead-acid batteries or transformers.

### Design of the CSU

The CSU comprises a staging area, a covered outdoor storage area, and a building that provides indoor storage capacity for wastes. The staging area, a concrete pad, is used for the initial receipt of waste from other locations at Holloman AFB. The building and covered outdoors storage area is used to temporarily store waste until an approved waste transportation contractor picks it up. The site plan layout and a floor plan are provided in Permit Attachment B, Figure B-6. Table C-1 of this Attachment provides the construction specifications for each part of the CSU.

### Containment System

The containment system for each of the container storage areas (i.e., the staging area, outdoor storage area, and indoor storage building) was described in detail in Table C-1, *Container Storage Facility Construction Specifications*.

**TABLE C-1.  
Container Storage Facility Construction Specifications**

	Staging Area	Covered Outdoor Storage Area	Indoor Container Storage Area
<b>Description</b>	Upon receipt, waste temporarily retained for inspection of condition of containers and to verify accuracy of corresponding turn-in documents. The staging area is also used to load waste on vehicles that will haul it off site for treatment and disposal.	Temporarily stores waste until picked up by certified waste transportation contractor. Typically, over 80% of wastes are Class 9 solids. Reactive wastes not stored here.	Located on northwest side of staging area. Consists of primary structure and small forklift storage annex. Used for primary storage of liquid wastes.
<b>Dimensions</b>	30 ft by 40 ft concrete pad.	100 ft by 50 ft covered concrete pad. Roof has an outside height of 12 ft with a one to four slope leading to a center height of 18 ft 3 inches.	Metal structure is 40 ft by 50 ft with height of 14.5 ft at roof apex. Forklift annex is 12 ft by 12 ft.
<b>Subsurface Data</b>	95% compacted sub-base topped by six inches of granular fill.	Constructed on 95% compacted soil.	Developed on 95% compacted sub-base topped by well-graded sand and gravel fill.
<b>Structural Description and Materials of Construction</b>	The pad and surrounding two-inch curb were developed from a continuous pour of cement reinforced with rebar. As cracks and gaps appear, they are filled with non-shrink grout and sealed with a lacquer sealant to ensure that the pad remains sufficiently impervious to contain leaks, spills, and accumulated precipitation.	Floor consists of a 6-inch thick concrete slab with welded wire mesh reinforcement. Monolithically poured slab cut with contraction joints. Joints filled with a cold-poured joint compound. Covering is a pre-engineered metal cover. Consists of steel roof panels and a ridge cap along the roof's center. No walls allowing for ventilation and a reduction of wind load.	Divided into cells designed for storage of separate waste types (e.g., ignitable and reactive). Each cell consists of concrete floor, masonry walls, and floor sump to contain liquid spills. Exterior walls and roof constructed from steel-sheet siding. Monolithic slab, perimeter curb, and cell dividing wall curbs. Six-inch slab constructed from Type II (sulfate resistant) Portland cement. Six-ft high masonry block walls used to segregate cells. Floor and curb sealed with standard vinyl-acrylic lacquer-type sealant.
<b>Settlement Potential/ Load-bearing Capacity</b>	28-day compressive strength of the concrete exceeded 4,000 pounds per square inch (psi).	28-day compressive strength of 4,000 psi. Metal building consists of an 80 miles per hour (mph) wind load and a 20 pounds per square foot (psf) live load.	28-day compressive strength of 4,000 psi. Design loads for metal building consist of 80 mph wind load and 20 psf live load.
<b>Drainage, Run-on, and Run-off Controls</b>	Sloped from side to center and north to south to promote drainage of leaks, spills, or precipitation to a pre-cast impervious sump. The sump is located inside the southeast curb. Containers placed on pallets to prevent contact with precipitation, spills, or leaks. Pad surrounded by 2-inch curb to prevent run-on.	Gutters run length of the building on both sides of the roof with down spouts located at each of the 10 columns. Accumulated precipitation or spills removed with wet vacuum or pump. Any spilled material pumped out is containerized for proper disposal.	No drainage lines exit building. Six-inch curb and building structure prevent run-on and run-off. Each cell equipped with container storage rack that elevates containers from floor preventing containers from contacting spilled or leaking material.
<b>Containment System Capacity</b>	Sump dimensions equal 2 ft by 8 ft by 4 ft; capacity equals approximately 420 gallons. Total capacity of sump and staging area exceeds 2,500 gallons. <sup>1</sup> Maximum of 5,500 gallons (approximately 100 55-gallon drums) held at any one time. This is well within maximum allowed capacity in 40 CFR 264.175.	Curbing along outside perimeter provides containment capacity up to 17,600 gallons (2,500 ft <sup>3</sup> ; 100 ft by 50 ft by 6 inches). <sup>2</sup> No more than maximum of 27,500 gallons including solids and liquids (approximately 500 55-gallon drums) held at one time.	Containment sumps for storage cells provide containment capacity of approximately 430 gallons. Containment system for each cell designed to hold at least 10% of wastes that can be accommodated in the unit. <sup>3</sup> No more than 880 gallons (approximately 16 55-gallon drums) held in each cell at any one time. Typically, no more than eight 55-gallon containers placed in metal racks located in each cell. Two sumps located at forklift entrances each have containment capacity of approximately 480 gallons.
<b>Segregation of Incompatibles</b>	Secondary containment, such as containment pads, used to contain all liquid wastes.	Reactive wastes not stored here. Liquid wastes typically stored indoors.	Segregation of incompatible wastes provided by facility layout. Each cell designated for management of specific waste type, and posted signs indicate waste to be stored in that location. <sup>4</sup> Secondary containment sump designated to each cell prevents incompatible wastes from mixing in case of leak or spill.

**Notes:**

<sup>1</sup> 40 CFR 264.175 requires that the containment system be designed to contain 10% of the volume of containers holding free liquids or the volume of the largest container holding free liquids. Typically, the largest containers holding liquids that are placed in this area are 55-gallon drums. However, other container sizes may be present, including 85-gallon salvage drums. The containment system for the staging area is designed to hold at least 10% of the wastes that can be accommodated in the unit.

<sup>2</sup> 40 CFR 264.175 requires that the containment system be designed to contain 10% of the volume of containers holding free liquids or the volume of the largest container holding free liquids. Typically, the largest containers to be placed in this area are 55-gallon drums.

<sup>3</sup> 40 CFR 264.175 requires that the containment system be designed to contain 10% of the volume of containers holding free liquids or the volume of the largest container holding free liquids. Typically, the largest containers to be placed in the storage cells are 55-gallon drums. However, larger containers are occasionally placed in these cells such as 85-gallon salvage drums.

<sup>4</sup> Figure D-1 provides example layout for segregation of wastes. Figure D-1 indicates certain cells may be used to store several waste types, but only one of designated wastes may occupy cell at any given time. This storage procedure allowed because wastes designated for such a cell are compatible with each other and wastes stored in adjacent cells. Organization of containers varies depending on wastes type and volume.

### **Protection from Precipitation and Run-on Controls.**

The maximum precipitation received at HAFB, including the CSU area during a 24-hour, 44-year storm event equals 2.1 inches. Since the average annual evaporation rate in the area is approximately 70 inches and the average annual rainfall is approximately 11 inches, generally there is no problem with accumulation of precipitation in any part of the CSU.

Much of the hazardous waste shall be stored in the indoor container storage building. The enclosed nature of this building prevents entry of precipitation or run-on. Additionally, precipitation and run-on are prevented from entering the structure by the curb on which the building rests. A 2 ft to 3 ft wide clear zone that slopes away from the building provides additional protection from run-on.

The sloped clear zone that surrounds the indoor container storage building extends to surround the staging area and directs run-off away from the staging area. Precipitation in the staging area collects in the sump and can be vacuumed or pumped out. It is highly unlikely that an accumulation of precipitation combined with a spillage of waste would occur simultaneously. Also, based on precipitation data, it is highly improbable that the containment capacity in the staging area would ever be inundated to the point that precipitation would run off to the surrounding area. The primary provisions for exclusion of precipitation or run-on from the current outdoor storage area are the 6-inch high curbs that encircle it and the sloped 2 ft to 3 ft clear zone that surrounds the area to direct run-off away from the pad.

### **Management of Accumulated Liquids.**

Accumulated liquids other than precipitation in the containment area in the outdoor covered storage building or the sump in the staging area shall be managed in a manner that is protective of human health and the environment. Accumulated liquids are considered to result from spillage until proven otherwise. Thus, upon discovery, DRMO personnel will notify the HAFB Fire Department. The Fire Department then has the primary responsibility to remove, clean up, and/or manage any liquid spills that are toxic or assumed to be toxic. The Fire Department will work with the Spill Response Team if necessary.

### **Operating Hours**

The DRMO maintains regular operating hours. During operating hours DRMO personnel are available to receive hazardous waste from less than 90-day accumulation sites and initial/satellite accumulation points located on HAFB.

## **OPERATING PROCEDURES**

### **Initial Waste Receipt and Confirmation**

When containerized hazardous and nonhazardous waste is received from Base accumulation areas, including less than 90-day accumulation sites and initial/satellite accumulation points, the containers shall be placed in the staging area to facilitate inspection of the containers. DRMO personnel shall verify that the turn-in documentation and labeling information (e.g., proper shipping name, warning labels) is accurate. If the information on the container label does not match the information on the turn-in documents or if the container is not in good condition (e.g., rusted, dented), DRMO personnel shall refuse to accept the waste until the problem is corrected by HAFB CEV and/or the generating activity.

### **Waste Staging**

All wastes shall be placed on pallets in the staging area. Incompatible wastes shall be kept segregated to ensure that they cannot mix in the event of a leak or accidental spill.

### **Loading and Unloading**

Vehicles do not enter the staging area beyond the ramp. Forklifts shall be used to transfer waste from the vehicles to the staging area.

Only Department of Transportation (**DOT**) approved containers in good condition shall be used for waste management and storage. This operating practice coupled with pre-storage inspections ensures that the waste is held in the appropriate DOT container and that the container is free of dents, creases, bulges, evidence of spillage, or corrosion. These practices reduce the possibility of handling spillage caused by a weakened container.

During staging operations, storage containers shall be kept free of standing liquids. This requirement shall be met by the use of pallets and drum racks. For some containers stored in the outdoor storage area, drumhead covers shall be used to prevent accumulation of moisture on the drum. Staging operations shall not be conducted if precipitation is occurring. If containers are stacked during transfer or storage, they shall be tied down to prevent spills and leaks.

Transfer operations (loading and unloading) are typically permitted only during posted operating hours. Pre-handling inspections shall be conducted to ensure the absence of standing liquids and unauthorized personnel or equipment.

### **Prevention of Ignition**

Prevention of ignition shall be accomplished during storage by exclusion of open flames, smoking, or maintenance activities during handling of waste. Forklifts shall be the only mobile equipment that operate during handling. Transport vehicles shall be turned off prior to any container entering the staging area and shall remain off until all containers are transferred into the storage building or are loaded on the off-site transport vehicle. Utilities are limited to the fire alarm and explosion-proof lighting system.

### **Placement of Wastes in Storage**

After DRMO staff have confirmed that wastes are compatible with their containers, containers are properly labeled and in good condition, and that the turn-in documentation matches the container(s) of waste, the wastes shall be placed in either an appropriate indoor storage cell that contains other compatible wastes or in the outdoor storage area in an appropriate container rack.

### **Container Compatibility**

To ensure that all containers are compatible with the contained waste, all wastes shall be placed in containers that meet performance-oriented packaging standards as specified by the DOT Hazardous Materials Table (HMT) in 49 CFR §172.101. If the CSU receives waste that is contained in its original packaging and that packaging is in good condition, the waste may not require repackaging. The HMT provides container labeling requirements, shipping requirements, and container specifications for all types of waste. By following the DOT requirements for container selection, personnel can ensure that all containers are compatible with the waste they contain. The wastes shall be packaged in DOT-approved containers before they arrive at the CSU. Incompatible wastes shall never be placed in the same container.

If a container leaks and must be over-packed or transferred to a new container, the salvage drums and containers into which the waste will be placed must not have previously held any waste. DRMO personnel will ensure that these containers and salvage drums are compatible with the leaking or spill wastes and any absorbent material.

## **MANAGEMENT OF IGNITABLE, REACTIVE, AND INCOMPATIBLE WASTE**

### **Precautions to Prevent Ignition or Reaction of Ignitable or Reactive Waste**

Both design standards and operating practices are relied upon to prevent accidental ignition of wastes. As previously indicated, the utilities of the CSU are restricted to interior lighting and fire alarms. These items are designed and installed to be of non-sparking nature. Forklifts that operate at the CSU are designed to operate in potential fire hazard situations. During loading and unloading operations, transport vehicles shall remain off until all containers are loaded onto the vehicle or offloaded into their appropriate cell.

Protection of hazardous waste from other ignition sources, such as an open flame or smoking, shall be achieved by exclusion of unauthorized personnel and posting of non-smoking signs at the CSU boundary, its exterior walls, and along the DRMO peripheral fence. Cutting, welding, soldering, sanding, etc., of containers shall be expressly forbidden. Any maintenance activity that may require these types of operations cannot be conducted in any portion of the facility until the ignitable wastes have been moved to the outdoor storage area. If such activities are required in the outdoor storage area, the waste must be relocated into the building or staging area for the duration of the activity. Protection from radiant heat shall be provided by the ventilated design of the building.

All containers used to store wastes must be in good condition and meet applicable DOT specifications. Containers that hold ignitable wastes usually have a minimum of 3 inches of outage to allow for pressurization due to vaporization of contents. Containers shall be inspected upon receipt, weekly thereafter, and prior to loading for off-site transportation.

Reactive wastes stored in the CSU include lithium batteries, pesticides, and spent plating wastes. These wastes are generated infrequently. During storage, these wastes shall be separated from acidic wastes by cell dividing walls in the indoor storage area. If placed in the outdoor storage area or the staging area, reactive waste shall be segregated from other waste and placed in a designated secondary containment pan. This procedure is designed to prevent accidental mixing with other waste, in the event of a spill.

During storage, hazardous waste containers shall remain closed unless it is necessary to transfer the waste due to container leakage. If emergency transfers are necessary, proper specification containers shall be used for repackaging the waste. Occasionally, it will be necessary for contractors who are taking the waste to an off-site treatment, storage, and disposal facility (TSD) to open containers to confirm contents by visual inspection.

### **General Precautions for Handling Ignitable or Reactive Wastes and Mixing of Incompatible Wastes**

Wastes shall never be deliberately mixed at the CSU. Accidental mixing of incompatible wastes shall be prevented by segregation plans based on the use of cell walls, separation distances, and secondary containment systems. Furthermore, incompatible wastes with the same hazardous waste characteristic (i.e., corrosives) shall not be stored in the same storage area. Personnel are cautioned in their formal training program (see Permit Attachment J) not to mix, open, or repackage hazardous waste before or after it is accepted for storage unless a container is found to be leaking; then attempts shall be made at overpacking or transfer. Salvage drums or containers used for such transfers shall be of proper DOT specification.

Copies of 20.4.1.500 NMAC, incorporating 40 CFR Part 264, Appendix V, and 49 CFR §177.848 shall be available to assist personnel in determining the compatibility of wastes. In addition, Table C-2 shall be used in making compatibility decisions.

## **MANAGEMENT OF IGNITABLE OR REACTIVE WASTES IN CONTAINERS**

### **Container Use and Management**

#### **Marking and Labeling**

While in storage at the CSU, hazardous waste containers shall be properly marked and labeled with appropriately completed RCRA hazardous waste labels. Before waste is shipped off-site, appropriate DOT markings and labels shall be applied to the containers. Each container shall be clearly marked with the name of its contents.

#### **Container Condition**

All hazardous waste containers shall be in good condition (e.g., no rust, dents, visual structural damage, etc.). Containers shall be inspected weekly as described in Permit Attachment F, *Inspection Schedule*. The inspection provides criteria to ensure that all containers are in good condition.

**TABLE C-2.**

**Hazardous Materials Guide [modified from 49 CFR 176.83(b)]  
Segregation Table for Hazardous Materials**

Class or Division	Notes	1.1 1.2	1.3	1.4	1.5	1.6	2.1	2.2	2.3 Gas Zone A	2.3 Gas other than Zone A	3	4.1	4.2	4.3	5.1	5.2	6.1 Liquids PG 1 Zone A	7	8 Liquids Only
Explosives 1.1 and 1.2	▲	✓	✓	✓	✓	✓	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗
Explosives 1.3		✓	✓	✓	✓	✓	⊗		⊗	⊗	⊗		⊗	⊗	⊗	⊗	⊗		⊗
Explosives 1.4		✓	✓	✓	✓	✓	□		□	□	□		□				□		□
Very insensitive explosives 1.5	▲	✓	✓	✓	✓	✓	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗
Extremely insensitive explosives 1.6		✓	✓	✓	✓	✓													
Flammable gases 2.1		⊗	⊗	□	⊗				⊗	□							□	□	□
Nontoxic, nonflammable gases 2.2		⊗			⊗														
Poison gas, Zone A 2.3		⊗	⊗	□	⊗		⊗				⊗	⊗	⊗	⊗	⊗	⊗			⊗
Poison gas other than Zone A 2.3		⊗	⊗	□	⊗		□				□	□	□	□	□	□			□
Flammable liquids 3		⊗	⊗	□	⊗				⊗	□					□		⊗		
Flammable solids 4.1		⊗			⊗				⊗	□							⊗		□
Spontaneously combustible materials 4.2		⊗	⊗	□	⊗				⊗	□							⊗		⊗
Dangerous when wet materials 4.3		⊗	⊗		⊗				⊗	□							⊗		□
Oxidizers 5.1	▲	⊗	⊗		⊗				⊗	□	□						⊗		□
Organic peroxides 5.2		⊗	⊗		⊗				⊗	□							⊗		□
Poisonous liquids PG 1 Zone A 6.1		⊗	⊗	□	⊗		□				⊗	⊗	⊗	⊗	⊗	⊗			⊗
Radioactive materials 7		⊗			⊗		□												
Corrosive liquids 8		⊗	⊗	□	⊗		□		⊗	□		□	⊗	□	□	□	⊗		

**Notes:**

- In the table the absence of a hazard class or division or a blank space indicates that no restrictions apply.
- A "⊗" indicates the materials may not be loaded, transported, or stored together.
- A "□" indicates the materials may not be loaded, transported, or stored together unless separated by a distance of 1.2 meters (4 ft) in all directions.
- The "✓" indicates the segregation of Class 1 (explosive) materials is governed by the Compatibility Table for Class 1 (explosive) Materials in Sec. 177.848(f).
- The "▲" means that notwithstanding the "⊗," ammonium nitrate fertilizer may be loaded or stored with Division 1.1 materials.

## **Releases From Containers**

If a waste container is leaking, the contents shall immediately be transferred to another DOT-approved container or overpacked in an appropriate DOT-approved container. If the waste is placed in a salvage drum, the space between the salvage drum and the leaking container shall be filled with a compatible absorbent material to prevent the salvage drum contents from shifting. Any spilled waste shall be cleaned up using the appropriate materials from the spill kit. The waste generated from the spill cleanup [e.g., contaminated absorbent material, personal protective equipment, etc.] shall be placed in an appropriate DOT-approved container and equipped with appropriate DOT and RCRA labels and markings. Mixtures of absorbent and released waste shall be removed by water/soap rinses, and the rinsate shall be drummed for proper hazardous waste management, storage and disposal.

## **MANAGEMENT OF AIR EMISSIONS**

### **Subpart AA** (Process Vents)

These regulations do not apply to this Facility because the CSU does not operate distillation, fractionation, thin-film evaporation, solvent extraction, or air or steam stripping operations that manage hazardous wastes.

### **Subpart BB** (Equipment Leaks)

These regulations do not apply to this facility because the CSU does not contain any of the equipment regulated under Subpart BB.

### **Subpart CC** (Containers)

Subpart CC establishes air emission controls for containers. HAFB shall demonstrate compliance with Container Level 1 standards (i.e., less than or equal to 0.46 m<sup>3</sup>/122 gallons) by ensuring that only DOT-approved containers are used to store wastes. Any wastes that meet the definition of "in light liquid service" [i.e., vapor pressure of one or more organic constituents is greater than 0.3 kilopascal at 20 °C, and the total concentration of pure organic constituents having a vapor pressure greater than 0.3 kilopascal at 20 °C is equal to or greater than 20% by weight (e.g., methyl ethyl ketone, toluene)] shall meet Container Level 2 standards, which include use of DOT containers and

an initial visual, and subsequent weekly inspection of container condition, as specified in Permit Attachment F, *Inspection Schedule*.

### **Protection of Groundwater**

Because the CSU does not contain a regulated unit (e.g., surface impoundment, waste pile, land treatment unit, or landfill), groundwater monitoring requirements are not applicable. However, ground water shall be monitored if Holloman Air Force Base fails to achieve clean closure at the time the facility decides to close the CSU.

Groundwater is located approximately 6 ft to 7 ft below the surface in the vicinity of the CSU. Groundwater is currently protected with all hazardous wastes having secondary containment in the storage building as well as in the covered Outdoor Storage Building. Additionally, spill containment procedures shall eliminate runoff as a pathway by which groundwater contamination might occur.

## **MANAGEMENT OF SPECIFIC WASTES**

### **Expired Shelf Life Products/Chemicals**

When materials can no longer be used for their intended purpose because the shelf life of the material has expired or the material has been deemed off-specification, such materials, now waste, shall be accepted by the CSU if they are in their original containers and the label is legible, or if they have been overpacked or transferred to a DOT-approved container for the waste/expired material.

### **Precious Metal Recovery**

The CSU accepts wastes containing precious metals and sends them off-site for reclamation.

### **Reclaimed Lead-Acid Batteries**

Reclaimed lead-acid batteries must comply with Land Disposal Restriction certification requirements as discussed in Permit Attachment I, *Manifesting, Recordkeeping and Reporting*.

### **Management of Universal Waste**

All batteries, including nickel-cadmium, lithium, silver oxide, and chlorine, shall be managed as hazardous waste if no recycling market is identified and shall be managed as universal waste if a recyclable market is available.

### **Wastes Containing Polychlorinated Biphenyls (PCBs)**

The CSU is authorized under the Toxic Substances Control Act (TSCA) to accept PCB waste. Equipment containing PCBs in concentrations greater than 50 parts per million. If the equipment containing the PCBs is not leaking and is in good condition, the equipment (e.g., transformer) can be stored on a pallet without overpacking the item. However, if the equipment is leaking, it shall be overpacked in a compatible container as required by 40 CFR §761-§765(c)(5) and (6) and applicable DOT requirements.

### **Final Disposition of Wastes**

All contractors that transport, store, treat, or dispose of hazardous wastes from the CSU have been assessed and deemed acceptable by DRMO. No transporter or treatment, storage, and disposal facility shall pick up or manage hazardous waste without a U.S. Environmental Protection Agency identification number.

**ATTACHMENT D**  
**WASTE ANALYSIS PLAN**

## PERMIT ATTACHMENT D WASTE ANALYSIS PLAN

### D-1 Introduction

This Waste Analysis Plan (WAP) has been prepared to support the RCRA Part B Permit Application for the CSU at HAFB, New Mexico. The CSU is used to store waste prior to shipment for off-site disposal. A detailed description of the CSU and a discussion of the facility's design and operation are provided in Permit Attachments B and C of this Permit, respectively. This WAP provides information on the characteristics of wastes that are stored at the CSU. Much of this information can be obtained through acceptable knowledge, also called process knowledge, as described in Section D-2. However, if the waste cannot be characterized with certainty by knowledge of the process, the waste streams must be sampled to safely manage the waste. Sampling and analytical protocols for required waste sampling at the CSU are outlined in the Sampling and Analysis Plan (SAP) presented below in Section D-4. The New Mexico Hazardous waste Management Regulations 20.4.1.500 NMAC, incorporating 40 CFR §264.13(a)(1) require waste characterization through acceptable (process) knowledge, analysis, or historical data to provide all the information needed to store, and ultimately dispose of the waste, as required by 20.4.1.300 NMAC, incorporating 40 CFR §264.13 and 40 CFR §268. Specific topics covered in this plan to ensure compliance with these requirements and proper waste management include:

- Waste Analysis Approach;
- Identification/EPA Classification of Hazardous Waste Managed;
- Selecting Waste Analysis Parameters;
- Criteria and Rationale for Parameter Selection;
- Special Parameter Selection and Procedural Requirements;
- Sampling and Analysis Plan.

#### D-1.1 Waste Characterization Objectives

The WAP prescribes the procedures used to properly characterize hazardous waste. These procedures, when implemented, are intended to meet the following objectives:

- To determine all information that must be known to treat, store and dispose of the wastes in accordance with New Mexico's Hazardous Waste Regulations 20.4.1.500 NMAC, incorporating 40 CFR §264.13 (a)(1);

- To determine if the waste is hazardous as required by 20.4.1.300 NMAC, incorporating 40 CFR §262.10 (c) and §262.11;
- To ascertain the hazardous constituents in a waste stream to identify all applicable hazardous waste codes and all underlying hazardous constituents as required by 20.4.1.300 NMAC, incorporating 40 CFR §262.11, 20.4.1.800 NMAC, incorporating §268.7 (a)(2), and §268.9 (a);
- To ascertain whether the waste must be treated before it can be land disposed as required by 20.4.1.800 NMAC, incorporating 40 CFR §268.7 and §268.9;
- To ascertain whether a routine waste generating process has changed sufficiently to create a new waste stream and alternative regulatory requirements as required by 20.4.1.800 NMAC, incorporating 40 CFR §264.13 (a)(3)(1), §268.7 (a)(3)(iii), and §268.7 (b)(3)(ii);
- To facilitate appropriate waste packaging for transportation as required by 20.4.1.300 NMAC, incorporating 40 CFR §262.10 (h);
- To ascertain the presence and concentration of wastes constituents that might cause unlawful air emissions as required by 40 CFR §270.25 (a), §264.179, §264.200, §264.13 (b)(6), §264.601 (c)(1), §264.1050, and §264.1082);
- To ensure that wastes are not inappropriately diluted to avoid LDR treatment requirements as required by 20.4.1.800 NMAC, incorporating 40 CFR §268.3;
- To determine the presence of prohibited waste as required by 40 CFR §268.50 (f);
- To determine the presence of free liquids in wastes as required by 40 CFR §270.15 (b)(1), §264.13 (b)(6));
- To ascertain waste/waste and waste/container compatibility characteristics as required by 40 CFR §270.15, §270.16, §264.172, §264.177, and §264.199; and
- To ascertain waste ignitability and reactivity characteristics as required by 40 CFR §270.16 (j), §264.17 (a), and §264.198 (a).

## **D-2 Waste Analysis Approach**

### **D-2.1 Acceptable (Process) Knowledge**

The CSU at HAFB accepts waste that is generated from numerous facilities and shops on Base. For many of these waste streams, acceptable (process) knowledge can be used to make a waste characterization using data developed under 40 CFR Part 261, or existing published or documented data on the hazardous waste or on hazardous waste generated by a similar process, as specified in 40 CFR §264.13(a)(2). For example, the generator of

a waste stream may know and be able to document that none of the constituents in a given waste are hazardous. For other waste streams, analytical samples have been historically collected and used to make waste characterizations. The characterization for a waste stream, whether it is based on acceptable (process) knowledge or historical data, is reevaluated any time the process generating the waste is changed.

Some wastes turned in to the CSU cannot be characterized by one of the above methods. Samples of these wastes are collected and analyzed to draw conclusions about the waste characteristics and disposal requirements. Many of these waste streams are generated in the course of fulfilling the mission of HAFB. For waste streams that are generated, a representative sample is collected and analyzed prior to disposal to facilitate identification of waste characteristics. Subsequent wastes from the same process are then characterized by the results of the initial sample. In accordance with 40 CFR §264.13(a)(3) and 40 CFR §264.13(b)(4), additional samples from the same waste stream are collected when:

- There is reasonable doubt about the identity of the waste;
- The process generating the waste has changed such that the characteristics of the waste may change; or
- Confirmation is needed that the analysis is current.

The feed materials from which these wastes are generated are specified by Military Specifications (MILSPECs) and Technical Orders (TOs). These MILSPECs and TOs ensure that the materials supplied by different manufacturers have a limited degree of variation for a given product. The processes generating the wastes also have limited variation as they are specified by the TOs. The combination of these two factors ensures that the wastes generated from mission-related processes are unlikely to be significantly changed without adequate notice to responsible personnel.

## **D-2.2 Identification/EPA Classification of the Hazardous Waste Managed**

Some of the activities conducted at HAFB in support of its mission generate hazardous wastes or waste streams with the potential to be hazardous.

Many of these activities can be grouped into eight main categories. Within these categories, common waste streams have been identified. These categories and respective waste streams consist of:

- Painting and Corrosion Control
  - Spent solvents
  - Stripping waste

- Waste paint and paint-related waste
- Abrasive-blasting wastes
- Rags contaminated with paint wastes
- Rags contaminated with solvent wastes
- Aircraft, Vehicle, and Equipment Maintenance
  - Spent solvents from parts cleaning
  - Fuel filters and oil filters
  - Waste sealants, adhesives, and epoxies
  - Off-specification fuel and fuel mixtures
  - Contaminated absorbent material
  - Oil/water separator sludge
  - Contaminated rags from maintenance activities
- Spill Cleanup and Debris/RCRA Corrective Action
  - Contaminated soil or other environmental media
  - Absorbent material
- Metal Cutting
  - Coolant oil
- Hospital/Medical Activities
  - Lab packs
  - Expired or off-specification chemicals (e.g., epinephrine)
  - Silver recovery cartridges
- Photographic and photocopying operations
  - Photofixing solution
  - Photo imaging paper
  - Silver recovery cartridges
  - Photocopy waste containing naphtha
- Facility maintenance
  - Spent fluorescent and mercury light bulbs
- Other
  - Off-specification products
  - Expired shelf life products

Activities within a category generate similar types of wastes by virtue of having similar functions. Through the analysis and characterization of numerous waste streams, HAFB has been able to identify the constituents that are likely to be present in each of the major waste streams. This knowledge of the processes and the associated wastes produced is used to select the analytical parameters for sampling and to avoid unnecessary sampling.

HAFB will ensure that all waste characterization information is accurate by making the following determinations:

- Whether the waste was characterized at the point of generation, in compliance with 20.4.1.800 NMAC, incorporating 40 CFR §§ 268.7(a)(3) and 268.9(c);
- Whether routinely generated wastes are re-characterized to ensure the waste's characterization is accurate and up to date 40 CFR §264.13(a)(3);
- Whether generators have appropriately identified when the process or operation generating routinely generated wastes has changed; in compliance with 20.4.1.500 NMAC, incorporating 40 CFR § §264.13(a)(3)(i); and
- Whether generators are trained in the applicable waste characterization requirements as required by 20.4.1.500 NMAC, incorporating 40 CFR §264.16.

The major waste categories, the specific waste type, their respective parameters of concern for analysis and EPA waste codes, and the current analytical test method for each waste type are outlined in Table D-1 in accordance with 40 CFR §264.13(b)(1) and (2). This table may not be a comprehensive list of all specific wastes, but provides the framework for making decisions on chemical analyses for common waste streams. Additionally, many of the waste streams listed in Table D-1 can be characterized by acceptable (process) knowledge, on the basis of historical sampling and analytical data or other appropriate documentation (i.e., TOs, MILSPECs, MSDSs, etc), eliminating the need for additional analyses.

### **D-2.3 Hazardous Waste Tracking Procedures**

HAFB has implemented specific procedures, subject to modification and improvement, for tracking transfer of hazardous wastes. These procedures ensure that hazardous waste is tracked from the time it is generated until the time that it leaves the CSU for disposal. An example description of these tracking procedures is presented in the Waste Flow Diagram provided in Figure D-1. The tracking procedures specify documents that must accompany the waste, and copies are provided as Figure D-2. These documents are provided as examples for informational purposes only and not for incorporation in this permit application. See Section D-4.1 for a discussion of the procedures that will be implemented to ensure that each container of hazardous waste is properly characterized and current in accordance with 20.4.1.900 NMAC, incorporating 40 CFR §270(32)(b)(2).

**TABLE D-1**  
**Major Waste Categories Generated at HAFB and Parameters of Concern**

Process Generating Waste	Waste Generated	Basis for Hazard Classification	Parameters for Analyses and EPA Waste Codes <sup>1</sup>	LDR (WW or NWW)	Current Analytical Test Method <sup>2</sup>
<b><u>Paint-Related Operations</u></b>  <b><u>Locations:</u></b> 49th Civil Engineer Squadron 49th Transportation Squadron 49th Services Squadron German Air Force Hazmart 49th Maintenance Squadron 846th Test Squadron 46th Test Group DynCorp 49th Materiel Maintenance Squadron Newtec 8th Fighter Squadron 9th Fighter Squadron	Waste paint and thinner (C, I, T, listed)	Chemical Analysis, Historical test data, MSDS, Knowledge of Process (KOP)	Cadmium (D006), lead (D008), chromium (D007), selenium (D010), solvents (VOCs and SVOCs), ignitability (D001), corrosivity (D002)	NWW	SW8260, SW8270, SW6010 or 7000 Series, SW-846 1010/1020, SW9040
	Respirator and booth filter elements (T)	Historical test data, Chemical Analysis	Cadmium (D006), chromium (D007), silver (D011)	NWW	SW6010 or 7000 Series
	Spent alodine from painting (C,T)	Historical test data, Chemical Analysis	Chromium (D007), corrosivity (D002)	NWW	SW6010 or 7000 Series, SW9040
	Rags and debris contaminated with paint wastes and solvents (I, T, listed)	Historical test data, Chemical Analysis, KOP	Cadmium (D006), chromium (D007), lead (D008), solvents (VOCs and SVOCs), ignitability (D001)	NWW	SW8260, SW8270, SW7000 series, SW8240, SW-846: 1010/1020 or 1030

<sup>1</sup> RCRA hazardous constituents and/or properties.

<sup>2</sup> These analyses shall be suggested given the properties of the waste; however, other analytical methods may be substituted or included as deemed appropriate.

<sup>3</sup> Medical wastes shall be discarded commercial products and shall be known to be regulated based on their initial composition. No further analysis is required.

**C** = corrosive  
**I** = ignitable  
**T** = toxic  
**R** = reactive  
 Listed = listed waste

**Table D-1  
Major Waste Categories and Parameters of Concern (Cont.)**

<b>Process Generating Waste</b>	<b>Waste Generated</b>	<b>Basis for Hazard Classification</b>	<b>Parameters for Analyses and EPA Waste Codes<sup>1</sup></b>	<b>LDR (WW or NWW)</b>	<b>Current Analytical Test Method<sup>2</sup></b>
<u>Aircraft, Vehicle, and Equipment Maintenance Operations</u>	Fuel filters and absorbent (I, T)	Chemical Analysis, KOP, Historical test data	Cadmium (D006), benzene (D018), ignitability (D001)	NWW	SW8260, SW8270, SW6010 or 7000 Series, SW-846: 1010/1020
<u>Locations:</u> Gas Station 49th Civil Engineer Squadron 49th Transportation Squadron 49th Services Squadron German Air Force DynCorp 49th Maintenance Squadron Newtec 9th Fighter Squadron 8th Fighter Squadron 49th Materiel Maintenance Squadron Newtec 846th Test Squadron	Parts cleaning sludge (I,T)	Historical test data, Chemical Analysis,	Cadmium (D006), chromium (D007), lead (D008), ignitability (D001)	NWW	SW8260, SW8270, SW6010 or 7000 Series, SW-846 1010/1020
	Spent solvent from parts cleaning and equipment maintenance (I,T, listed)	Chemical Analysis, Historical test data	Lead (D008), chromium (D007), solvents (VOCs and SVOCs), ignitability (D001)	NWW	SW8260, SW8270, SW6010 or 7000 Series, SW-846 1010/1020
	Dirty rags with solvents, oil, and grease (I, T, listed)	Chemical Analysis, Historical test data, KOP, MSDS	Cadmium (D006), lead (D008), chromium (D007), benzene (D018), solvents (VOCs and SVOCs), ignitability (D001)	NWW	SW8260, SW8270, SW6010 or 7000 Series, SW-846 1010/1020

<sup>1</sup> RCRA hazardous constituents and/or properties.

<sup>2</sup> These analyses shall be suggested given the properties of the waste; however, other analytical methods may be substituted or included as deemed appropriate.

<sup>3</sup> Medical wastes shall be discarded commercial products and shall be known to be regulated based on their initial composition. No further analysis is required.

C = corrosive  
 I = ignitable  
 T = toxic  
 R = reactive  
 Listed = listed waste

**Table D-1  
Major Waste Categories and Parameters of Concern (Cont.)**

<b>Process Generating Waste</b>	<b>Waste Generated</b>	<b>Basis for Hazard Classification</b>	<b>Parameters for Analyses and EPA Waste Codes<sup>1</sup></b>	<b>LDR (WW or NWW)</b>	<b>Current Analytical Test Method<sup>2</sup></b>
<u>Photographic Equipment Cleaning Operations</u>  <u>Locations:</u> Newtec 846th Test Squadron Newtec	Rags with solvent (I, T, listed)	Chemical Analysis, Historical test data, KOP	Cadmium (D006), solvents (VOCs and SVOCs), ignitability (D001)	NWW	SW8260, SW8270, SW6010 or 7000 series, SW-846 1010/1020
<u>Miscellaneous Organic Liquids</u>  <u>Locations:</u> Hazmart	Expired or off-specification material (C, I, T, listed)	Chemical Analysis, MSDS, Historical test data	Ignitability (D001), corrosivity (D002), metals, solvents (VOCs and SVOCs)	NWW	SW8260, SW8270, SW6010 or 7000 Series, SW9040, SW-846 1010/1020
<u>Metal Cutting Operations</u>  <u>Locations:</u> DynCorp 846th Test Squadron	Rags and debris with oil and metals (C, I, T, listed)	Chemical Analysis, Historical test data, KOP	Cadmium (D006), lead (D008), chromium (D007), selenium (D010), solvents, ignitability (D001), corrosivity (D002)	NWW	SW8260, SW8270, SW6010 or 7000 Series, SW-846 1010/1020, SW9040

<sup>1</sup> RCRA hazardous constituents and/or properties.

<sup>2</sup> These analyses shall be suggested given the properties of the waste; however, other analytical methods may be substituted or included as deemed appropriate.

<sup>3</sup> Medical wastes shall be discarded commercial products and shall be known to be regulated based on their initial composition. No further analysis is required.

C = corrosive  
 I = ignitable  
 T = toxic  
 R = reactive  
 Listed = listed waste

**Table D-1  
Major Waste Categories and Parameters of Concern (Cont.)**

<b>Process Generating Waste</b>	<b>Waste Generated</b>	<b>Basis for Hazard Classification</b>	<b>Parameters for Analyses and EPA Waste Codes<sup>1</sup></b>	<b>LDR (WW or NWW)</b>	<b>Current Analytical Test Method<sup>2</sup></b>
<u>Medical Operation</u>  <u>Locations:</u> 49th Medical Support Squadron 49th Aeromedical Dental Squadron	Expired or off-specification epinephrine or other medical waste (R, Acutely T)	Chemical Analysis, MSDS	Acute toxicity, sodium cyanide, phosphorous (reactivity)	NWW	NA <sup>3</sup>
<u>Weapons Maintenance Operation</u>  <u>Locations:</u> 49th Security Forces Squadron 49th Maintenance Squadron DynCorp German Air Force	Rags and debris with solvent and lead (I, T, Listed)	Chemical Analysis, Historical test data	Lead (D008), ignitability (D001), solvents	NWW	SW8260, SW8270, SW6010 or 7000 Series, SW-846 1010/1020
<u>Facility Maintenance Operations</u>	Spent fluorescent bulbs - crushed (T)	Chemical Analysis, Historical test data	Mercury (D009), cadmium (D006), lead (D008)	NWW	SW6010 or 7000 Series

<sup>1</sup> RCRA hazardous constituents and/or properties.

<sup>2</sup> These analyses shall be suggested given the properties of the waste; however, other analytical methods may be substituted or included as deemed appropriate.

<sup>3</sup> Medical wastes shall be discarded commercial products and shall be known to be regulated based on their initial composition. No further analysis is required.

C = corrosive  
 I = ignitable  
 T = toxic  
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 Listed = listed waste

**Table D-1  
Major Waste Categories and Parameters of Concern (Cont.)**

<b>Process Generating Waste</b>	<b>Waste Generated</b>	<b>Basis for Hazard Classification</b>	<b>Parameters for Analyses and EPA Waste Codes<sup>1</sup></b>	<b>LDR (WW or NWW)</b>	<b>Current Analytical Test Method<sup>2</sup></b>
Locations: 90-Day Facility-49th Civil Engineer Squadron Hazmart	Bulb crusher filter element (T)	Chemical Analysis, Historical test data	Mercury (D009), cadmium (D006), lead (D008)	NWW	SW6010 or 7000 Series
	Spent batteries such as Ni-Cad used in emergency lighting systems (C, T)	Chemical Analysis, MSDS	Cadmium (D006), lead (D008), corrosivity (D002)	NWW	NA

<sup>1</sup> RCRA hazardous constituents and/or properties.

<sup>2</sup> These analyses shall be suggested given the properties of the waste; however, other analytical methods may be substituted or included as deemed appropriate.

<sup>3</sup> Medical wastes shall be discarded commercial products and shall be known to be regulated based on their initial composition. No further analysis is required.

C = corrosive  
 I = ignitable  
 T = toxic  
 R = reactive  
 Listed = listed waste

# Hazardous Waste Tracking Flow Diagram

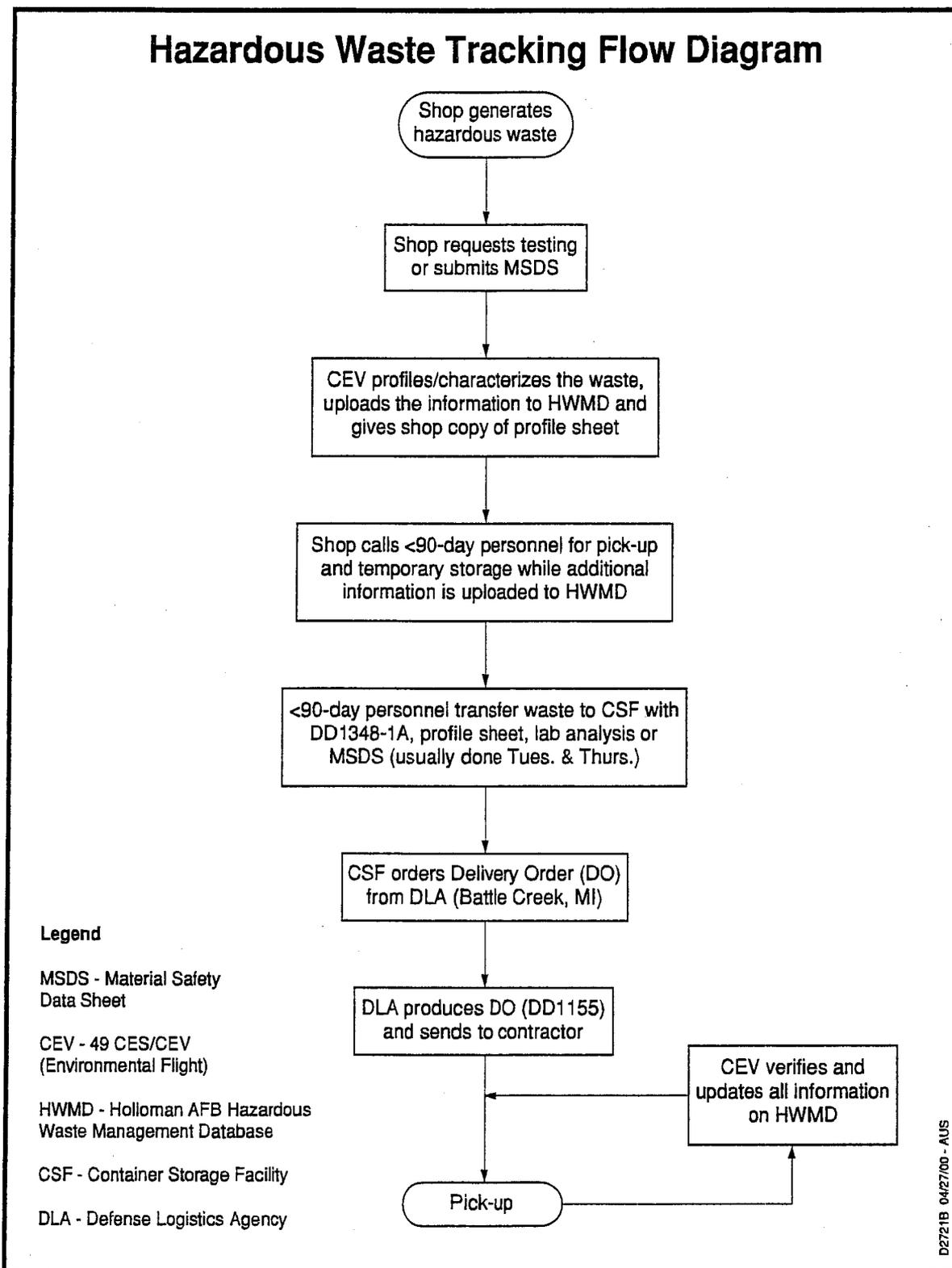


FIGURE D-1: WASTE TRACKING FLOW DIAGRAM

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44
TRIC			DLS/DST JOB/BOX				EX				A. INSPECTOR, NAME, DATE (T/M)												B. INSPECTOR, NAME, STAMP, DATE (T/M)																				
T			I N 8 6 8								SSGT FARRAR/MAFS BLDG 868 X5004												49CES/CEV BLD 55 X3931																				
REQUEST, TIME & DATE (H/SU)												C. PART NUMBER/MGR CODE OR NAME/REMARKS												D. PART NUMBER/MGR CODE OR NAME/REMARKS																			
NSN												STOCK NUMBER												E. T.O. REFERENCE/TECHNICAL PUBLICATION OR END-ITEM APPLICATION/NEXT HIGHER ASSEMBLY																			
9 9 9 9												P H W D 0 2 7 9 4 0 4												R Q. HAZARDOUS WASTE, SOLID, N.O.S. ( D027, D006 ) NA3077																			
UNIT OF ISSUE												QUANTITY												F. T.O. PSC AND/OR ERRC																			
L B 0 0 0 0 1												R G 0 0 - 0 1 0 6 B DRUM#868-448												G. TIME & DATE OF DELIVERY																			
R 4 1 5 M X												DOCUMENT NUMBER												H. DELIVERY TIME																			
00841737												H												I. NOMENCLATURE																			
ONE 55 GALLON DRUM												HAZARDOUS WASTE																															

ISSUE/TURN-IN REQUEST

AF FORM 2005, JUN 86 (EF-V3) (PerFORM PROC)

PREVIOUS EDITION WILL BE USED.

Figure D-2. Example of Tracking Documents



HAZARDOUS WASTE PROFILE SHEET																												
PART I																												
• Generator •		• Waste Profile •																										
<b>Name:</b> Holloman Air Force Base <b>Address:</b> Highway 70 West Holloman AFB, NM 88330	<b>Organization:</b> 9 FS/MAFS <b>Bldg Number:</b> 868 <b>CEV ID:</b> 0106 <b>DODAAC:</b> FB4801	<b>RG00-0106B</b> » Replaces: RG00-0106A « <b>Contact:</b> Robert Farrar <b>Phone:</b> 475-5004																										
<b>1. Name of Waste:</b> Rags, coveralls, absorbent, debris <b>2. CLIN:</b> 9404 <b>3. Generating Process:</b> Aircraft maintenance <b>4. Projected Volume:</b> 55 gallons per month <b>5. Comments:</b> This profile combines results of sample analysis GT998119 and GT008001 <b>6. Is this waste a dioxin listed waste as defined in 40 CFR 261.31 (F020, F021, F022, F023, F026, F027, F028)?</b> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <b>7. Is this waste restricted from land disposal?</b> <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <b>Has an exemption been granted?</b> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No																												
PART II																												
• RCRA Characteristics •		• Material Composition •																										
<b>Physical State:</b> <input checked="" type="radio"/> Solid <input type="radio"/> Liquid <input type="radio"/> Gas <input type="radio"/> Semi-Solid <input type="radio"/> Other	<b>Treatment Group:</b> <input type="radio"/> Wastewater <input checked="" type="radio"/> Non-wastewater <input type="radio"/> Non-RCRA Waste (no other waste codes apply) <input type="radio"/> Ignitable (D001) <b>Flash Point (-F):</b> <b>TOC:</b> <input type="radio"/> High <input type="radio"/> Low <input type="radio"/> Corrosive (D002) <b>pH:</b> <input type="radio"/> Reactive (D003) <input type="radio"/> Water Reactive <input type="radio"/> Cyanide Reactive <input type="radio"/> Sulfide Reactive <input checked="" type="radio"/> Toxicity Characteristic   D027, D006 <input type="radio"/> F-listed waste <input type="radio"/> P-listed waste <input type="radio"/> U-listed waste	<table border="1"> <thead> <tr> <th>Component</th> <th>Concentration</th> </tr> </thead> <tbody> <tr><td>Rags</td><td>&gt;70%</td></tr> <tr><td>Absorbent</td><td>&lt;15%</td></tr> <tr><td>Debris / razor blades</td><td>&lt;15%</td></tr> <tr><td colspan="2">Contaminants:</td></tr> <tr><td>Barium</td><td>1.54 mg/l</td></tr> <tr><td>Cadmium</td><td>1.35 mg/l</td></tr> <tr><td>Chromium</td><td>0.046 mg/l</td></tr> <tr><td>1,4 Dichlorobenzene</td><td>30.4 mg/L</td></tr> <tr><td>Mercury</td><td>0.004 mg/l</td></tr> <tr><td>Lead</td><td>0.063 mg/l</td></tr> <tr><td>Selenium</td><td>0.009 mg/l</td></tr> <tr><td>Silver</td><td>0.013 mg/l</td></tr> </tbody> </table>	Component	Concentration	Rags	>70%	Absorbent	<15%	Debris / razor blades	<15%	Contaminants:		Barium	1.54 mg/l	Cadmium	1.35 mg/l	Chromium	0.046 mg/l	1,4 Dichlorobenzene	30.4 mg/L	Mercury	0.004 mg/l	Lead	0.063 mg/l	Selenium	0.009 mg/l	Silver	0.013 mg/l
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Lead	0.063 mg/l																											
Selenium	0.009 mg/l																											
Silver	0.013 mg/l																											
		• Shipping Information •																										
		This is a Department of Transportation HAZARDOUS MATERIAL <b>Shipping Name:</b> Hazardous waste, solid, n.o.s., 9, NA3077, PGIII, (D027, D006) <b>Waste Codes:</b> D027, D006 <b>Hazard Class:</b> 9 <b>ID No.:</b> NA3077 <b>PG:</b> III <b>CERCLA Reportable Quantity:</b> D027, lbs. <b>1996 North American Emerg. Resp. Guideboo</b> Guide No.: 171																										
PART III																												
• Basis for Information •																												
<input checked="" type="radio"/> Chemical Analysis (attach sampling results) <input type="radio"/> MSDS <input checked="" type="radio"/> User Knowledge <b>sample Number:</b> GT008001 <b>Previous Sample Number(s):</b> GT998119/GT998042/GT978230/GT968185																												
• Generator Certification •																												
I hereby certify that all information submitted in this and all attached documents is to the best of my knowledge an accurate representation of the waste turned into the 90-Day Storage Facility. All known or suspected hazards have been properly identified.																												
<b>49 CES/CEVC Representative</b> TSgt Karen Sinner	<b>Signature</b>	<b>Date</b> 16-Feb-00																										

49 CES/CEVC Form 22

Figure D-2. (Continued)

### **D-3 Selecting Waste Analysis Parameters**

When acceptable (process) knowledge or historical analytical data are not available, testing of CSU waste streams is conducted to obtain a detailed chemical and physical analysis in accordance with 40 CFR §264.13. The objectives of sampling are to:

- Confirm characterizations of wastes for which prior analysis or acceptable (process) knowledge is not available;
- Determine compliance with applicable regulatory requirements, including Land Disposal Restrictions;
- Provide information to aid in the safe management of wastes, such as using biodegradable sorbents, if appropriate;
- Provide relevant data for use in making disposal decisions and,
- Resolve differences associated with inspections and generator descriptions.

The following subsections outline the procedures that will be followed to ensure that the objectives are met and that HAFB complies with all regulatory requirements for waste analysis.

#### **D-3.1 Criteria and Rationale for Parameter Selection**

Characteristics of wastes are identified in several different ways. Visual inspections are conducted for all waste streams. This consists of characterizing the physical form, phase, and appearance (color, odor, etc.) for each container prior to movement. Chemical analysis is conducted to identify specific waste characteristics if a complete waste characterization has not already been performed based on acceptable (process) knowledge or previous analysis. The chemical analyses conducted for a waste stream vary based on the knowledge of the processes generating the waste and the parameters of concern as identified in Table D-1.

Waste analysis parameters are selected to fulfill three criteria: waste identification, identification of incompatible/inappropriate wastes, and process and design considerations for container compatibility. The subsections below, in conjunction with Table D-1, outline the parameters for which each hazardous waste will be analyzed and

the rationale for the selection of these parameters in accordance with 40 CFR 264.13(b)(1).

#### **D-3.1.1 Paint-Related Material Waste**

In general, uncharacterized waste associated with painting activities is analyzed to determine the presence of metals above toxicity characteristic levels. Metals such as cadmium and chromium are found in some types of paints used in specific shops. Paint-related waste is also tested for ignitability. Waste associated with the chemical stripping of paint and the use of paint thinners is also tested for the presence of solvents or other semivolatile or volatile organic compounds (**SVOC or VOC**). Paint thinners, strippers, and rinse water associated with stripping are tested for corrosivity.

#### **D-3.1.2 Oil/Water Separator Sludge**

Sludge from the cleaning of oil/water separators (**O/WS**) can often be characterized based on the activities conducted in the shops that tie into the O/WS. When it cannot be characterized in that manner, it is analyzed for the presence of metals, VOCs and SVOCs. The sludge from an O/WS may contain residual contaminants from any of the materials that passed through it. Uncharacterized sludge should also be analyzed for ignitability due to the potential presence of fuels in the sludge.

#### **D-3.1.3 Aircraft, Vehicle, and Equipment Maintenance Waste**

Maintenance activities generate a variety of waste streams with different characteristics. However, similar constituents are found in these waste streams. Because some waste or used fuels contain lead, cadmium, or other metals, a metals analysis is recommended for all uncharacterized waste streams dealing with aircraft, vehicle, or equipment maintenance. VOCs and SVOCs are also typical components of fuels and lubricants and should be tested for in uncharacterized waste streams associated with fuel or lubricant use. Wastes associated with parts cleaning or that may have come into contact with solvents should also be tested for VOCs and SVOCs, as halogenated and nonhalogenated solvents can be identified by these analyses. The procedures detailed in D-4.1, including frequency of analysis/review, will be followed for characterization of these waste streams. Finally, because many of these waste streams are associated with fuels or ignitable

substances, ignitability is a standard analysis for wastes from aircraft, vehicle, and equipment maintenance.

#### **D-3.1.4 Photographic Operations**

Metals are the primary concern in wastes from photographic operations. Mercury is found in photo imaging paper and should be tested for in uncharacterized waste streams associated with this paper. Other metals such as cadmium, selenium, and silver are found in wastes such as photo-fixing solution and silver recovery cartridges. These metals are often present at levels that make these wastes characteristically toxic. In addition, the corrosivity of uncharacterized waste streams is also tested.

#### **D-3.1.5 Photocopying Operations**

Wastes associated with photocopying operations and maintenance may contain naphtha and/or chlorinated solvents. Uncharacterized waste streams are analyzed for VOCs, SVOCs, and ignitability.

#### **D-3.1.6 Facility Maintenance**

Wastes generated from facility maintenance activities can typically be characterized by reviewing the MSDS for the material. For example, spent fluorescent bulbs are typically hazardous for metals. These waste streams tend to be consistently generated as part of building maintenance.

#### **D-3.1.7 Miscellaneous**

Several other waste streams are identified in Table D-1, including RCRA Corrective Action, Spill Cleanup and Debris, and Miscellaneous Organic Liquids. These wastes are either not generated on a regular basis or the waste characteristics change depending on the type of waste received. For these wastes, it is recommended that VOCs, SVOCs, metals, ignitability, and corrosivity be tested. However, these should be evaluated on a case-by-case basis as the waste types may vary widely.

#### **D-3.1.8 Other Analyses**

In addition to the specific analyses identified in Table D-1, other analyses such as total sulfur or thermal content (BTUs) may be conducted to provide information regarding

treatment alternatives. Current analytical methods are provided, but these are suggested methods and are not meant to be restrictive of the analyses that can be performed. In many cases, for example, SW6010 is the recommended analysis for metals, but additional analytical methods for constituents such as mercury or lead may be appropriate. The methods are intended to serve as a guide and can be substituted for other more relevant or more current methods as they are developed. The analytical laboratory should be consulted prior to sampling events to ensure that the most up-to-date methods are used for analysis.

### **D-3.2 Special Parameter Selection and Procedural Requirements**

Additional waste analysis and procedural requirements for wastes may be necessary in special cases; specifically for ignitable, reactive, and incompatible wastes, and to comply with Land Disposal Restrictions requirements. Procedures to ensure that all of the requirements of 40 CFR 264.13(b)(6) are being met are outlined in the following two subsections.

#### **D-3.2.1 Ignitable, Reactive, and Incompatible Wastes**

The parameters for selecting ignitable, reactive, and incompatible waste analyses at the CSU are outlined in Section D-3.1 for each of the major waste categories and outlined in Table D-1 for each waste stream. These parameters were chosen to ensure the proper storage, and ultimate disposal, of these wastes, in accordance with 40 CFR 264.17(b), by preventing reactions which:

- Generate extreme heat or pressure, fire or explosions, or violent reactions;
- Produce uncontrolled toxic or flammable fumes or gases;
- Damage the structural integrity of the containers or the CSU; and
- Threaten human health or the environment.

The same waste analysis approach is employed for determining the characteristics of ignitable, reactive, and incompatible wastes as outlined in Section D-2 of this Permit Application, as required by 40 CFR §264.17(c).

The procedures for properly handling ignitable, reactive, and incompatible wastes at the CSU are outlined in detail in Section D-5 of this Permit Application as specified by 40 CFR §264.17(a).

### **D-3.2.2 Land Disposal Restrictions**

Before shipping hazardous wastes off site, HAFB will make a determination if the waste has to be treated before it can be land disposed. In accordance with the LDR regulations outlined in 40 CFR §268.7, hazardous wastes must meet the applicable LDR treatment standards contained in 40 CFR Part 268, Subpart D. This determination will be made by either acceptable (process) knowledge or testing. If it is known that the wastes do not meet applicable LDR treatment standards based on acceptable (process) knowledge or historical analytical results, no testing is necessary. Additional testing, if necessary, will be conducted only to certify that the waste meets LDR treatment standards. Each waste for which a treatment standard has been set will be evaluated for the applicable parameters in 40 CFR Part 268, Subpart D. In addition, for any wastes that exhibit the hazardous characteristics of ignitability, corrosivity, reactivity, or toxicity, the underlying hazardous constituents will be determined in accordance with 40 CFR §268.9. All analytical results completed in support of LDR requirements will be retained within the facility operating record.

Wastes resulting from facility operations that exceed the applicable LDR treatment standards will be sent off site to a permitted treatment facility. LDR notifications, and any additional data as required by 40 CFR §268.7(a)(2), will be supplied with the shipment of each waste.

Wastes, if any, that are determined through analysis to meet treatment standards as specified in 40 CFR Part 268, Subpart D will be land disposed in a permitted facility without further treatment. An LDR certification, including data to support the certification as required by 40 CFR §268.7(a)(3), will be prepared and accompany the shipment of waste to the receiving facility.

### **D-4 Sampling and Analysis Plan**

This section presents the Sampling and Analysis Plan (SAP) for wastes managed at the CSU.

#### **D-4.1 Objectives**

The SAP provides procedures for testing the waste streams stored in the CSU requiring analytical characterization. It explains how samples will be collected and the analyses that will be performed. The plan's design is based on U.S. Air Force (USAF) operational procedures and guidelines, knowledge of the materials used at HAFB, and knowledge of the characteristics of categories of waste. Specific topics covered in this plan include:

- Sampling procedures and methodology;
- Health and safety procedures;
- Sampling QA/QC Procedures;
- Sample Container Preservation Requirements; and
- Laboratory procedures.

Samples collected are prepared according to the most current appropriate EPA sample protocol. If EPA methods are not available, ASTM methods are used.

Proper waste identification will be ensured by the following measures:

- An initial analysis will be performed on each new waste stream to identify the process and characterize the waste;
- An annual review of waste stream will be conducted to determine waste inconsistency with the waste profile and whether additional sampling is warranted;
- Initial Accumulation Point (IAP) managers inform 49 CES/CEV if new material is introduced into process for determination of need for re-characterization of the waste stream.
- Waste is identified and tracked according to procedures detailed in Figure D-1.

The total number of samples tested each year will vary depending on the number of waste streams. In the past five years, an average of over 100 samples was collected annually. Nevertheless, each new waste stream will be sampled to obtain an accurate waste determination. HAFB personnel are continually working to reduce the volume of hazardous waste generated by base operations through pollution prevention initiatives.

## **D-4.2 Sampling Procedures and Methodology**

In many cases, samples will be collected from drums containing waste for characterization. This section outlines the procedures and methods to be followed for sampling drums containing liquid and non-liquid organic and inorganic wastes. Sample handling, sample documentation, and sampling quality assurance and quality control are outlined in Section D-4.4. HAFB personnel or their designated contractor will conduct the sampling. The physical, chemical, and waste specific parameters of each waste are considered to determine the most appropriate type of sampling equipment and sampling strategy. Sampling personnel will be knowledgeable of and have experience with the sampling techniques outlined below.

As part of the inventory, a visual inspection of the drum and its contents is conducted and recorded. Once a visual inspection and inventory has been completed, the container to be sampled is opened. Only sampling equipment constructed of materials that are compatible with wastes and not susceptible to reactions that might alter or bias the physical or chemical characteristics of organic and inorganic wastes is used.

The recommended method of drum sampling liquid waste in 40 CFR §264.13(b)(3) is through the use of a disposable glass Composite Liquid Waste Sampler (**COLIWASA**) or equivalent method. Other sampling methods capable of achieving a composite sample are acceptable for waste sampling; however, proper decontamination of equipment is required if disposable equipment is not used. Sampling and analysis will be conducted in accordance with most current EPA's *Test Methods for the Evaluation of Solid Waste, Physical/Chemical Methods*.

For non-liquid waste, the same procedure will be followed for staging and visual inspection. Sample collection can be accomplished using a stainless steel spoon or equivalent method. Contamination control procedures outlined in Section D-4.4.2 will be followed during sample collection.

## **D-4.3 Health and Safety Procedures**

If deemed necessary, personnel performing sampling activities will use personal protective equipment such as rubber gloves, boots, aprons, Tyvek coveralls, and eye protection. Sampling personnel will be trained in hazardous waste sampling and have a minimum of one year sampling experience. If a new hire or other individual has less than

one year of sampling experience, the inexperienced individual must be accompanied by a person who has at least one year of sampling experience. These personnel will also have 40-hour Occupational Safety and Health Administration training as specified in 29 CFR §1910.120. Appropriate medical monitoring and certification will also be conducted.

#### **D-4.4 Sampling QA/QC Procedures**

All sampling conducted for the purpose of characterizing wastes will use appropriate quality assurance/quality control (QA/QC) procedures. Additionally, HAFB will ensure that waste characterization information is accurate by making the following determinations:

- Whether the waste was characterized at the point of generation, in compliance with 40 CFR §§ 268.7(a)(3) and 268.9(c);
- Whether routinely generated wastes are re-characterized to ensure the waste's characterization is accurate and up to date, in compliance with 40 CFR § 264.13(a)(3);
- Whether generators have appropriately identified when the process or operation generating routinely generated wastes has changed, in compliance with 40 CFR § 264.13(a)(3)(i); and
- Whether generators are trained in the applicable waste characterization requirements as required by 40 CFR § 264.16.

Procedures for sample documentation, equipment, handling and custody are discussed below.

##### **D-4.4.1 Documentation of Activities**

Sample containers will be uniquely identified to indicate the generating shop or facility and the date and activities will be documented according to most recent appropriate EPA methods. An adhesive label will be affixed to the sample container containing the following information:

- Collector's initials;
- Sample identification;
- Analytical methods requested;

- Generating facility;
- Sample date; and
- Sample time.

Any other distinguishing characteristics or information required by the laboratory or project personnel will be added to the label.

#### **D-4.4.2 Contamination Control Procedures**

Only compatible sampling tools and containers will be used for sample collection and storage. Sampling tools and equipment will be protected from contamination sources prior to sampling and will be decontaminated before and between samples, if reused. Sample containers will also be protected from contamination sources. Sampling personnel will wear clean chemical-resistant gloves when handling sampling equipment and samples. Gloves will be decontaminated or disposed of between samples.

#### **D-4.4.3 Sample Handling and Chain of Custody**

Chain-of-custody (COC) forms will be used and procedures will be followed to track possession of the samples from the time they are collected until the analytical data from the samples are received and recorded. For all samples, procedures will begin once sampling is complete. The following information will be recorded when samples of waste are collected:

- The type of waste collected, and a brief description;
- The names and signatures of the samplers;
- The sample number and the date and time of sample collection;
- The names of any persons involved in transferring samples; and
- The shipping number (e.g., airbill number) for samples shipped to off-site laboratories.

A sample will be considered under custody if it is:

- In the possession of the sampling team;
- In view of the sampling team; or
- Transferred to a secure area.

An area is considered secure only when it is locked and access is controlled. The sampling team leader is responsible for custody of the samples until they have been properly packaged, documented, and released to a courier or directly to the analytical laboratory. A triplicate COC record form will be used for sample tracking.

#### **D-4.5 Sample Container and Preservation Requirements**

Samples will be collected in pre-cleaned sampling containers and will be kept cold during storage, transportation, and shipping, as necessary. Containers, preservatives, and holding time requirements for sample types that will be collected vary widely and should be coordinated with the analytical laboratory prior to sample collection. In addition, current analytical methods should be verified with the laboratory prior to sample collection.

At the end of each sampling event, samples will be packaged in shipping containers with double-bagged ice packs to maintain a temperature of less than 4 degrees C, as necessary. The samples will be carefully packaged so that they will not break during shipping. Each shipping container will be shipped to the analytical laboratory by an overnight delivery service or transported directly by a contracted laboratory.

The Permittee shall evaluate laboratory analysis by addressing the precision, accuracy, completeness, comparability, and representativeness of the data used to support waste characterizations.

#### **D-4.6 Laboratory Analysis**

Design and execution of the sampling program will be coordinated with an analytical chemist experienced in hazardous waste testing. The laboratory will follow standard analytical and quality assurance/quality control (QA/QC) procedures specified in the most recent appropriate EPA methods. The following is a summary of the laboratory specifications.

Typically, the laboratory report will contain the following:

- Unique laboratory identification;
- Sample identification;
- Sampling date;
- Preparation date;
- Analysis date;

- Preparation batch;
- Preparation method;
- Analysis batch;
- Analysis method;
- Analyte;
- Results;
- Footnotes/data qualifiers;
- Units;
- Sample matrix;
- Sample-specific detection limit;
- Dilution factor;
- Case narrative (if necessary); and
- Laboratory control sample results.

Appropriate EPA methods address most of the procedures proposed in this SAP. The laboratory will be required to achieve the required or estimated detection limits specified in the appropriate EPA methods. If equivalent methods are used, these should be justified and approved in advance. Approval for any equivalent methods employed by the laboratory will be at the discretion of Holloman AFB and the New Mexico Environment Department (NMED).

Laboratory analysis will be evaluated by addressing the precision, accuracy, completeness, comparability, and representativeness of the data used to support waste characterizations.

**ATTACHMENT E**  
**SECURITY PLAN**

## PERMIT ATTACHMENT E SECURITY PLAN

### **Introduction**

This Attachment addresses security procedures and describes available security equipment at the Holloman Air Force Base (**HAFB**) Container Storage Unit (**CSU**), as required by 20.4.1.500 NMAC, incorporating 40 CFR §264.14. These procedures shall prevent the unknowing entry and minimize the possibility for the unauthorized entry of persons and wild life onto the active portion of the CSU.

### **24-Hour Surveillance**

Traffic access to HAFB is provided only by Highway 70 that traverses the southern boundary of the Base and La Luz Gate on the eastern boundary. Access can also be gained from White Sands Missile Range, which is a restricted access government installation. Armed guard's man the entrances to the Base from Highway 70, 24 hours per day. In addition, military police patrol the Base round the clock at regular intervals. These surveillance measures ensure that the CSU is continuously monitored and entry to the site is controlled.

### **Barrier and Means to Control Entry**

The CSU is located within HAFB, a fenced military installation, which has closely controlled points of entry. Active and retired military members and civilian employees are required to either show personal identification or a vehicle identification decal in order to enter one of the two entry gates to the Base. Visitors must sign in and out and carry a visitor's pass.

Entry to the CSU, which, is part of the fenced Defense Re-utilization and Marketing Office (**DRMO**) is monitored during duty hours by trained DRMO personnel. Entry to the CSU may only be gained by passing through the Base Administration building after entering its single lockable entry door. All visitors to the CSU must sign in at the Administration building. Visitors must be accompanied by DRMO personnel at all times while visiting the CSU. During off-duty hours, the DRMO yard gate and the Administration building door are locked. The CSU doors shall remain locked except during loading, unloading, or inspection operations. Keys to these doors are maintained in a locked safe

located in the DRMO Administration building. The safe may be opened only by authorized personnel. If the CSU keys are removed from the safe, the authorized person must sign for their possession and log out when the keys are returned to the safe. Military police specifically patrol the DRMO area. Ample night-lights allow the Military police to check the CSU with ease. Two-way radios allow them to report any incident immediately.

Access to the CSU is further be controlled by a secondary security system that includes a fence around the perimeter of the DRMO complex. The DRMO complex, which includes the CSU, is encircled by a 6-ft high chain-link security fence topped by three strands of barbed wire. The fence abuts the DRMO Administration building (Building 112) at the building's southwest and northeast corners, completely enclosing the DRMO yard. The four openings that interrupt the enclosure include the three lockable entry doors of the DRMO Administration building and the Warehouse (Building 115) along with the lockable yard gate located between these buildings. All of these four openings remain locked during duty hours and are monitored by DRMO personnel. All entrances are locked after duty hours.

### **Warning Signs**

Warning signs stating, "***DANGER UNAUTHORIZED PERSONNEL KEEP OUT***", and "***HAZARDOUS WASTE STORAGE FACILITY***" shall be posted at the entry point of the DRMO and at the south end of the CSU, respectively. "***DANGER, UNAUTHORIZED PERSONNEL KEEP OUT***" signs shall also be posted on the east and north sides of the CSU. The signs shall be legible at distances greater than 25 ft. Both of the above signs shall be written in English and Spanish. In addition, "*No Smoking*" and/or "*Ignition Sources Prohibited*" signs shall be present at the DRMO yard entrance and along all four sides of the CSU building. These signs shall also be all written in both English and Spanish. The west side of the CSU is adjacent to the west fence surrounding the DRMO complex. Consequently, there is no approach from the west side. The only active portion of the CSU where hazardous waste is loaded, unloaded, managed, stored, or otherwise managed, is the south side of the CSU.

**ATTACHMENT F  
INSPECTION PLAN**

## PERMIT ATTACHMENT F INSPECTION PLAN

### General Inspection Requirements

Holloman Air Force Base Defense Reutilization and Marketing Office (**DRMO**) personnel shall perform regular inspections of the Container Storage Unit (**CSU**) as required by 20.4.1.500 NMAC, incorporating 40 CFR §264.15. The inspection schedule for the CSU is provided in Table F-1. During inspections, DRMO personnel shall check for malfunctions, deterioration of structures and equipment, operator errors, and discharges (e.g., leaks or spills).

### Unit-Specific Inspection Requirements

The unit-specific inspection requirements for the CSU are listed below. There are no tanks, waste piles, surface impoundments, incinerators, landfills, land treatment units, or miscellaneous units at this CSU.

### Containers

Inspection of the CSU shall be done in accordance with the requirements specified by 20.4.1.500 NMAC, incorporating 40 CFR §264.174, which requires at least weekly inspections of the areas where containers holding hazardous waste are stored. During these weekly inspections, a DRMO inspector, who is trained in hazardous waste management and storage procedures shall check for leaking containers and deterioration of containers and the containment system caused by corrosion or other factors. Areas subject to spills, such as the staging area where wastes are loaded and unloaded shall be inspected daily when in use.

### Air Emissions

There are separate inspection requirements in 20.4.1.500 NMAC, incorporating 40 CFR §264.1088 to ensure that organic air emissions from containers holding hazardous waste are controlled. Further information regarding compliance with these requirements is presented in Permit Attachment C, *Container Storage Unit Design and Operation*.

### **Written Inspection Schedule**

DRMO personnel shall use the inspection schedule contained in Table F-1 for checking CSU-specific structures; monitoring equipment; safety and emergency equipment; security devices; communications systems; and operating and structural equipment, such as the forklift, curbs, and sumps that are important in preventing, detecting, or responding to potential environmental or human health hazards. The schedule identifies potential problems for which DRMO inspectors shall check during weekly facility inspections. The inspection schedule shall be maintained at the CSU.

### **Inspection Frequency**

The inspection frequencies noted in Table F-1 are based on the rate of deterioration of the equipment and probability of an environmental or human health incident if the deterioration, malfunction, or any operator error goes undetected between inspections. The frequency of inspections may vary for the items listed on the inspection schedule as noted in 20.4.1.500 NMAC, incorporating 40 CFR §264.15(b)(4).

**TABLE F-1**  
**INSPECTION SCHEDULE**

Area/Equipment	Specific Item	Potential Problems	Frequency of Inspection
<b>Safety And Emergency Equipment</b>	Standard industrial absorbents (e.g., sorb-all, vermiculite, etc.)	Insufficient quantity, saturated with water	Weekly
	Spare containers and salvage drums	Corrosion, structural damage, inadequate number	Weekly
	Shovels	Damaged, missing	Weekly
	Emergency shower and eye wash	Water pressure, leaking, drainage	Weekly
	Face shields and extra protective eyeglasses	Broken or dirty equipment	Weekly
	Protective clothing (impermeable full-body coveralls, foot coverings)	Damaged, missing	Weekly
	Fire alarm system	Power failure	Monthly
	Fire extinguishers (Expired?)	Need of recharging?	Monthly
	Fire hydrants	Pressure, flow	Monthly
	Telephone system	Power failure, poor transmission	Monthly
	Panic doors	Easily open	Weekly
<b>Security Devices</b>	Facility fence	Corrosion, damage	Weekly
	Warning Signs	Illegible, missing	Weekly
	Storage building doors	Locks missing	Weekly
	Main gate	Locking mechanism jammed	Weekly
	Lighting	Burned out, switch	Weekly
	Alarms	Inoperable	Weekly
<b>Operating And Structural Equipment</b>	Dikes, berms	Cracks, deterioration, spalling, wet spots	Weekly
	Dikes, cell walls	Cracks, spalling, deterioration	Weekly
	Bases or foundation	Erosion; uneven settlement; cracks or spalling in concrete pads, base rings, and piers; wet spots	Weekly
	Sumps and secondary containment	Erosion, uneven settlement, cracks and spalling in concrete, wet spots deterioration or grating	Weekly
	Floor joints	Cracks, spalling, deterioration	Weekly
	Ramps	Erosion, uneven settlement, cracks and spalling in concrete	Weekly
	Roll up doors	Sticking	Weekly
	Drum racks	Corrosion, deterioration, structural integrity, wet spots	Weekly
	Roofs	Leaks	Weekly

Area/Equipment	Specific Item	Potential Problems	Frequency of Inspection
<b>Communication Equipment</b>	Walls	Cracks, coating deterioration	Weekly
	Telephones	Power failure	Monthly
	Fire alarms	Power failure	Annually
<b>Container Storage Area</b>	Container placement	Aisle space, insecure placement	Weekly
	Container stacking	Containers stacked more than two high	Weekly
	Sealing of containers	Open lids, leaks	Weekly
	Labeling of containers, Odor, Fumes, Loading/Unloading Areas, Debris, Pallets (Broken wood? warping/, nails missing?)	Improper identification, incorrect documentation, identification missing, obscured or incomplete label	Weekly
	Segregation of Incompatible Waste	In same cell, Transfer containers previously used, waste in wrong cell	

**Remedial Action for Inspection Deficiencies**

DRMO personnel shall be responsible for seeing that deterioration or malfunction of equipment or structures revealed during an inspection is repaired on a schedule that ensures that the problem does not lead to an environmental or human health hazard. If inspections reveal that non-emergency maintenance is needed, then DRMO personnel shall initiate actions to preclude further damage and reduce the need for emergency repairs. If a hazard is imminent or has already occurred during the course of an inspection or any time between inspections, then remedial action will immediately be taken. The general nature of the remedial action to be taken shall be noted in the inspection log.

**Inspection Log**

All inspections of the CSU shall be recorded by the DRMO inspectors in an inspection log. The inspection log includes spaces for the date, time of inspection, name of the inspector, a notation of the observations made, and the date and nature of any repairs or other remedial actions. The inspection logs shall be kept on file at the CSU. These records shall be maintained for at least three years from the date of the inspection.

**ATTACHMENT G**  
**PREPAREDNESS AND PREVENTION PROCEDURES**

## PERMIT ATTACHMENT G PREPAREDNESS AND PREVENTION PROCEDURES

The Holloman Air Force Base (**HAFB**) Container Storage Unit (**CSU/the Unit**) is designed, constructed, maintained, and shall be operated to minimize the possibility of a fire, explosion, or any unplanned sudden or non-sudden release of hazardous waste or hazardous waste constituents to air, soil, or surface water which could threaten human health or the environment, as required by 20.4.1.500 NMAC, incorporating 40 CFR §264.30 through §264.37. This Attachment contains a discussion about the following items:

- A list of equipment that is required at the CSU (e.g., portable fire extinguishers);
- An equipment testing and maintenance schedule;
- Description of employee access to communication and alarm systems;
- Aisle space requirements;
- Documentation of arrangements with local authorities (e.g., local fire department); and
- Management procedures for ignitable, reactive, and incompatible wastes.

### Required Equipment

The CSU is equipped with the following equipment:

- **An internal communications system**

The internal communications system consists of an emergency alarm. This alarm system is capable of providing immediate emergency instruction (by sound signal) to facility personnel. The alarm is located along the exterior southeast wall of the indoor storage building. This fire alarm is connected to the Base-wide Fire Department notification system.

- **A telephone** that is immediately available at the scene of operations. Personnel also carry a **hand-held two-way radio** that is capable of summoning emergency assistance.
- **Portable fire extinguishers spill control equipment, and decontamination equipment.** There are four fire extinguishers (two located inside the indoor storage building and two located at the outdoor storage building). Appropriate spill control equipment (including absorbent pads, salvage drums, a non-sparking shovel) and appropriate personnel protective equipment (including face shields, boots, gloves) are readily available at the CSU. On-site

decontamination equipment includes three eyewash and safety shower stations that are accessible from the indoor and outdoor storage buildings.

- **Water at adequate volume and pressure to supply water hose streams.**

Water for fire control is not directly available at the unit. The Base Fire Department trucks are available at all times for emergency response. Fire-fighting vehicles are fitted for connection to the two nearby fire hydrants located approximately 120 yards north and 50 yards southwest of the CSU. These hydrants can deliver 750 gallons per minute of flow at a pressure of 50 psi.

### **Testing and Maintenance of Equipment**

All facility communication and alarm systems, fire protection equipment, spill control equipment, and decontamination equipment shall be inspected, tested, and maintained as necessary to assure its proper operation in time of emergency. Permit Attachment I, Table I-1, *Records Retention Times*, provides time frames for performing these checks.

### **Access to Communications or Alarm Systems**

Whenever employees are handling containerized hazardous waste, they have access to telephones in both the Defense Re-utilization and Marketing Office (DRMO) Administrative Building (Building 112) and the indoor container storage area (Building 118). Employees also wear a two-way hand-held radio when working at the CSU. The fire alarm located at the CSU also provides immediate emergency notice to the Base Fire Department. Each of these pieces of equipment is capable of summoning external emergency assistance. If there is ever just one employee on the premises while the facility is operating, he or she has access to all of the communications and alarm system discussed above.

During non-operational hours (e.g., at night), Holloman Air Force Base Security Forces Squadron provides security checks of the outer fence of the DRMO complex to ensure that the storage building is secure.

External communication capabilities are provided through the Base Operator. Communications systems include the Defense Switching Network and U.S. West Communications, both of which allow communication with other Air Force Bases as well as off-site personnel.

## **Required Aisle Space**

The CSU operators maintain sufficient aisle space to allow the unobstructed movements of personnel, fire protection equipment, spill control equipment, and decontamination equipment to any area of the CSU operation in an emergency.

Each of the three areas in the CSU shall meet these requirements. The outdoor storage area provides adequate aisle space for personnel movement and emergency response activities.

The arrangement of containers in the 20 ft by 50 ft staging area is always configured to meet aisle space requirements and to ensure that the forklifts, personnel, fire protection equipment, spill control equipment, and decontamination equipment can safely access the hazardous waste containers.

Within the indoor storage area, two 10 ft-wide rows span the building length and provide ample space for movement among the containment cells and for immediate response actions. Figure B-6 of Permit Attachment B illustrates the configuration of the indoor storage area.

## **Arrangements with Local Authorities**

The Security Forces Squadron, Base Fire Department, the City of Alamogordo, and on-site Base medical facilities shall respond to emergency incidents at the CSU. The Base Fire Department is the primary emergency response authority (i.e., not the local fire department) and shall respond to any emergency at the CSU.

HAFB Fire Department personnel are familiar with the layout of the facility, properties of hazardous waste handled at the facility and associated hazards, places where facility personnel would normally be working, entrances to and roads inside the Unit, and possible evacuation routes. Personnel at the Base medical facility are trained to respond to emergency incidents involving chemical exposure.

In the event of an emergency, the emergency response procedures outlined in the Contingency Plan, Permit Attachment H of this document will be followed. These procedures include notifying state emergency response teams, emergency response contractors, and equipment suppliers, as necessary.

### **Management of Ignitable, Reactive, and Incompatible Wastes**

The prevention of accidental ignition or unplanned reaction of ignitable, reactive, or incompatible waste is achieved by a combination of facility design and operating practices. The design standards and operating practices related to accident prevention are presented in Permit Attachment C of this Permit.

### **Hazard Prevention Procedures, Structures, and Equipment**

This section provides a description of the handling techniques and facility design standards that prevent hazards from occurring that would endanger human health or the environment. The procedures, structures, and equipment associated with the operation of the CSU are designed to prevent hazards, such as spills, fires, or mixing of incompatible wastes that are posed by the wastes at the facility.

Permit Attachment C of this Permit describes the container management practices, including procedures to prevent spills or ruptures during loading and unloading activities, run-on and run-off prevention measures, and proper management and storage procedures.

### **Drain Lines**

The closest sanitary sewer drain lines are located approximately 100 yards north of the CSU at the DRMO Administration building. The nearest storm sewer is located approximately 50 ft southeast of the facility.

### **Equipment Failure and Power Outages**

The Container Storage Unit only manages and stores containerized waste; therefore no automatic waste feed cutoff systems exist. In the event of a brief power interruption, all waste-handling and inspection activities cease until power shall be restored. Loaded forklifts shall complete a single transfer operation, if so engaged. Otherwise, only spill cleanup activities would continue under the circumstances using natural light that enters the building through the open garage doors.

### **Personnel Protective Equipment**

A description of available protective equipment at the CSU is presented in Table H-1 of the Contingency Plan contained in Permit Attachment H of this permit. The use of protective equipment, discussed in Permit Attachment J, *Personnel Training*, describes the types of training that the CSU operators must complete in order to work at the Unit. The information in the Contingency and Personnel Training Plans indicates that only personnel wearing the appropriate protective equipment will accomplish any operations, such as bulking and consolidating of hazardous wastes. Equipment will generally include, but not be limited to, respirators, protective gloves, eye and face guards, chemical-resistant overalls, and boots.

Personnel must be familiar with the disposal turn-in documentation, Material Safety Data Sheets and/or other references for each waste that will be handled in order to determine which safety equipment is appropriate.

The level of protective equipment used at the CSU is normally referred to as Level D protection equipment. In the event of a spill or other imminent hazard, the Fire Department and Spill Response Team (if necessary) are capable of outfitting in Level A protection equipment (i.e., full encapsulating suit and self-contained breathing apparatus, if necessary).

### **Prevention of Releases to the Atmosphere**

The design of the CSU and operating procedures, including the use of DOT containers shall prevent the releases of hazardous waste to the atmosphere. A detailed discussion of the facility design and operating procedures are presented in Permit Attachment B (General Facility Description). If an incident requiring emergency response occurs, procedures outlined in the Contingency Plan in Permit Attachment H shall be followed to immediately remedy the situation.

**ATTACHMENT H**  
**CONTINGENCY PLAN**

## PERMIT ATTACHMENT H CONTINGENCY PLAN

### Introduction

This Attachment presents a description of the contingency plan and associated emergency procedures for the Holloman Air Force Base (HAFB) Container Storage Unit (CSU), as required by the New Mexico Hazardous Waste Management Regulations 20.4.1.500 NMAC, incorporating 40 CFR §264.50 through §264.56. The CSU is designed, constructed, and shall be maintained and operated to minimize the possibility of fires, explosions, and any unplanned sudden or non-sudden release of hazardous waste or hazardous waste constituents to air, soil, or surface water which could threaten human health or the environment. However, if one of these emergency situations were to occur at the CSU, personnel would follow the procedures specified in the Base *Disaster Preparedness Readiness Plan 32-1*, contained in Appendix H-1 or the most current version. This Base-wide plan meets the requirements of the New Mexico Hazardous Waste Management Regulations 20.4.1.500 NMAC, incorporating at 40 CFR Part 264, Subpart D, and serves as the contingency plan for the CSU. Additional CSU-specific information is included in this Permit Attachment to supplement the Base-wide plan.

### Purpose and Implementation of the Contingency Plan

The CSU contingency plan is designed to minimize hazards to human health or the environment from fires, explosions, or any unplanned sudden or non-sudden release of hazardous waste or hazardous waste constituents to air, soil, or surface water. The provisions of the plan shall be carried out immediately whenever there is a fire, explosion, or release of hazardous waste or hazardous waste constituents that could threaten human health or the environment.

### Content of the Contingency Plan

This contingency plan describes:

- Actions HAFB personnel must take to respond to fires, explosions, and any unplanned sudden or non-sudden release of hazardous waste or hazardous waste constituents to air, soil, or surface water at the facility; and;
- Arrangements with local authorities including local police departments, fire departments, hospitals, and state and local emergency response teams.

The CSU contingency plan lists names, addresses, and phone numbers (office and home) of all persons qualified to act as emergency coordinator, and this list shall be updated as needed to remain

current. Since more than one person is listed, one is named as the primary emergency coordinator and others are listed in the order in which they shall assume responsibility as alternates.

Table H-1 includes a list of all emergency equipment at the Facility (such as fire extinguishing systems, spill control equipment, communications and alarm systems, and decontamination equipment), the location and a description of the equipment, and a description of the capabilities of the equipment. This list shall be kept up to date. In addition, the Base Fire Department is equipped with additional emergency response equipment that shall be transported to any emergency situation that occurs on Base. Figure H-1 is a diagram of the evacuation plan for the CSU personnel. The figure describes the location of fire alarms, evacuation routes, and alternate evacuation routes, in case the primary route is blocked by releases of hazardous waste or fire.

### **Copies of the Contingency Plan**

A copy of the contingency plan and all revisions to the plan shall be maintained at the CSU and copies have been submitted to all organizations that may be called upon to provide emergency services, including the Base Fire Department, Security Forces Squadron, and medical services. *The Disaster Preparedness Readiness Plan* has also been provided to state and local emergency response organizations.

### **Amendment of the Contingency Plan**

- The contingency plan shall be reviewed, and immediately amended, if necessary, whenever:
- The Facility Container Storage Unit Permit is revised;
- The plan fails in an emergency;

The CSU changes in its design, construction, operation, maintenance, or other circumstances in a way that materially increases the potential for fires, explosions, or releases of hazardous waste or hazardous waste constituents, or changes the response necessary in an emergency;

- The list of emergency coordinators changes; or
- The list of emergency equipment changes.

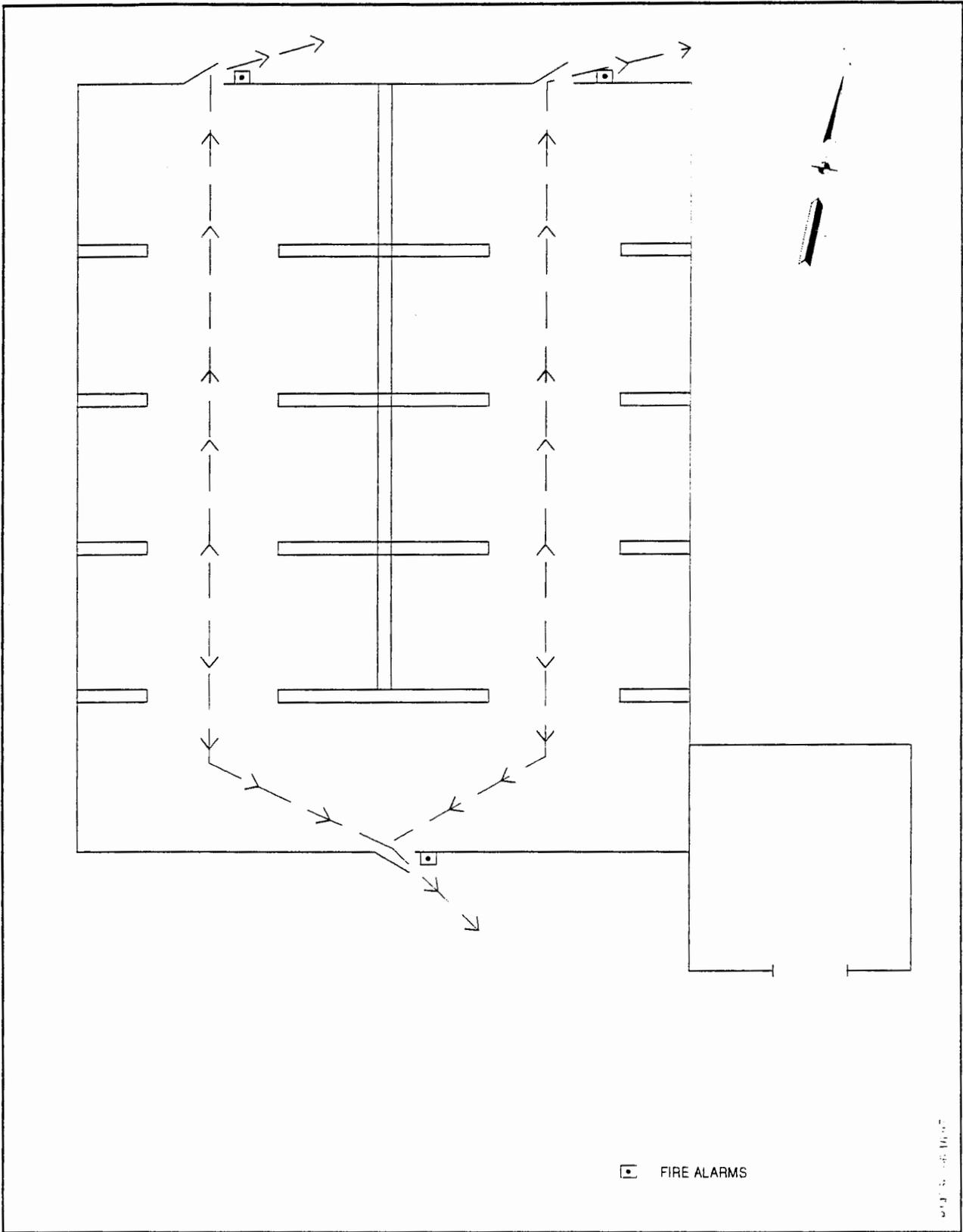


Figure H-1. Fire Evacuation Diagram – DRMO Holloman, Bldg. 118

**TABLE H-1  
 EMERGENCY RESPONSE EQUIPMENT INVENTORY**

<b>Quantity and Name of Equipment</b>	<b>Description</b>	<b>Location</b>	<b>Capabilities</b>
Coveralls	Tyvek	Maintained inside on southeastern side of indoor storage building	Provides protection from toxic/corrosive liquid hazardous wastes
Gloves	Nitrile, latex	Maintained inside on southeastern side of indoor storage building	Provides protection from toxic/corrosive liquid hazardous wastes
One forklift	Non-sparking	Located in annex	Used to move containers of hazardous waste
Two water sources for fire fighting capability	Fire hydrant	120 yards north and 50 yards southwest of the CSF	Provides water in case of emergency
3 fire extinguishers	1 D-rated; 2 A, B, and C-rated	Located inside container storage building and at either end of the outdoor container storage area	Available to extinguish small fires
Salvage drums	85-gallon plastic and/or steel containers	Located in both the indoor and outdoor container storage areas	Used to collect leaking containers or absorbent material contaminated from a spill
Fire alarm	3 activation locations	See Evacuation Plan in Figure H-1	Activate Emergency Response System
3 safety showers with eye washes	Hard piped water source	Two outside at either end of the outdoor storage facility and one inside the indoor container storage building	Provides source of water for employees in the case of emergencies (e.g., contact with hazardous waste in eyes)
Face shields/splash guards	Full-face protection	Inside indoor container storage area	Protect face/eyes from splashed waste
Telephone	N/A	Located inside indoor container storage area	Activate Emergency Response System

Administrative changes such as name changes shall be submitted to the New Mexico Environment Department (NMED) in a letter report and shall be provided to all record holders of this operating Permit including the current Contingency plan. Copies of the plan shall be available at the CSU, and may be obtained on request from the Emergency Coordinator at the Facility.

At all times, there shall be at least one employee either on the CSU premises or on call (i.e., available to respond to an emergency) with the responsibility of coordinating initial emergency response measures. This person shall be the Base Emergency Coordinator. The Base Emergency Coordinator shall be thoroughly familiar with all aspects of the Facility and the CSU's contingency plan, all operations and activities at the facility, the location and characteristics of waste handled, the location of all records within the facility, and the facility layout. The CSU Environmental Coordinator shall assist by conveying all necessary facility information to the Base Emergency Coordinator. The Base Fire Chief, who is the first alternate emergency coordinator, shall fill this role. When the Fire Department arrives at the scene of the emergency, the Fire Chief shall be responsible for coordinating emergency response procedures. The Base Emergency Coordinator and all alternates have the responsibility for committing the resources needed to carry out the contingency plan.

#### **Arrangements with Local Authorities**

Holloman Air Force Base has a mutual agreement with several organizations to provide assistance in the event it should be needed. These organizations include:

1. The City of Alamogordo Fire Department;
2. The Village of Cloudcroft; and
3. Alamo West Fire Rescue;
4. White Sands Missile Range Emergency Control Center.

As stated in the Base *Disaster Preparedness and Readiness Plan 32-1*, the primary and alternate emergency coordinators for all Base operations are:

- Primary ECs: 49<sup>th</sup> Support Group Commander  
Colonel David Curdy, or current person in position
- 1<sup>st</sup> Alternate ECs: Fire Chief  
Mr. Elzie Little, or current person in position
- 2<sup>nd</sup> Alternate ECs: Senior Fire Officials (i.e., Shift Managers)

Mr. Ronald Weathley, or current person in position, and  
Mr. Preston Perry, or current person in position

At Holloman AFB, both the home and work telephone numbers for these individuals can be accessed by calling the Command Post Center at (505) 475-7575. The Base Fire Department shall always be contacted in the event of an emergency. The Fire Department can be reached on Base by dialing extension 1117.

### **Emergency Procedures**

In the event of an emergency, the Base Emergency Coordinator must follow the procedures presented in the Base *Disaster Preparedness Readiness Plan 32-1*, which include the following tasks:

Whenever there is an imminent or actual emergency situation at the CSU, the Environmental Coordinator, or designee, shall immediately:

- Activate internal facility alarms or communication systems (i.e., use two-way radios) to notify all CSU personnel; and
- Notify the Base Fire Department.

If there is a release, fire, or explosion at the CSU, the CSU Environmental Coordinator shall immediately identify the character, exact source, amount, and extent of any released materials and provide this information to the Base Fire Department. This task may be accomplished by observation, review of facility records or manifests, or by chemical analysis.

The Base Emergency Coordinator shall assess possible hazards to human health or the environment that may result from the release, fire, or explosion. This assessment shall consider both direct and indirect effects of the release, fire, or explosion (e.g., the effects of any toxic, irritating, or asphyxiating gases that are generated, or the effects of any hazardous surface water run-off from water or chemical agents used to control fire and heat-induced explosions).

If the Base Emergency Coordinator determines that the Container Storage Unit has had a release, fire, or explosion which could threaten human health, or the environment, outside the Unit, he must report his findings, and immediately notify local authorities if his assessment indicates that evacuation of local areas may be advisable. The EC must be available to help appropriate officials decide whether local areas should be evacuated and he must immediately notify the 49 CES/CEV Environmental Flight Chief of the need to notify the National Response Center (NRC) (using their 24-hour toll free number 800/424-8802). The report to the NRC by 49 CES/CEV must include the following:

- Name and telephone number of reporter;
- Name and address of Unit;
- Time and type of incident (e.g., release, fire);
- Name and quantity of material(s) involved, to the extent known;
- The extent of injuries, if any; and
- The possible hazards to human health, or the environment, outside the facility.

Notification by the 49 CES/CEV shall include:

- All release incidents that require implementation of the contingency plan shall be reported as soon as practicable (by telephone during duty hours or by message during off-duty hours) to the agencies listed in the Disaster Preparedness Plan, including Headquarters Air Combat Command (HQ ACC), Langley AFB, Virginia; the Regional Response Center, EPA Region VI; and the NMED, Santa Fe, New Mexico.

Potential major spills (i.e., spills that exceed a reportable quantity) shall be immediately reported to the EPA National Response Center:

National Response Center  
Environmental Protection Agency  
4007th Street, S.W.  
Washington, D.C. 20590  
Telex 426-0014; 1-(800)-424-8802

During an emergency, the Base Emergency Coordinator must take all reasonable measures necessary to ensure that fires, explosions, and releases do not occur, recur, or spread to other hazardous wastes at the CSU. These measures include stopping processes and operations, collecting and containing release waste, and removing or isolating containers.

If the CSU stops operations in response to a fire, explosion, or release, the Base Emergency Coordinator must monitor for leaks, pressure buildup, gas generation, or ruptures in valves, pipes, or other equipment.

Immediately after an emergency, the CSU Environmental Coordinator shall assist, as necessary, Base hazardous materials clean-up personnel with managing, treating, storing, or disposing of recovered waste, contaminated soil or surface water, or any other material that results from a release, fire, or explosion at the Unit.

The CSU Environmental Coordinator shall ensure that:

- No incompatible wastes are placed in the same container during cleanup and decontamination of the area; and
- All emergency equipment listed in the contingency plan is cleaned and fit for its intended use before operations resume.

After any emergency at the CSU for which the contingency plan is implemented, 49 CES/CEV shall notify the Secretary, NMED that the CSU is in compliance with all applicable regulations before CSU operations resume.

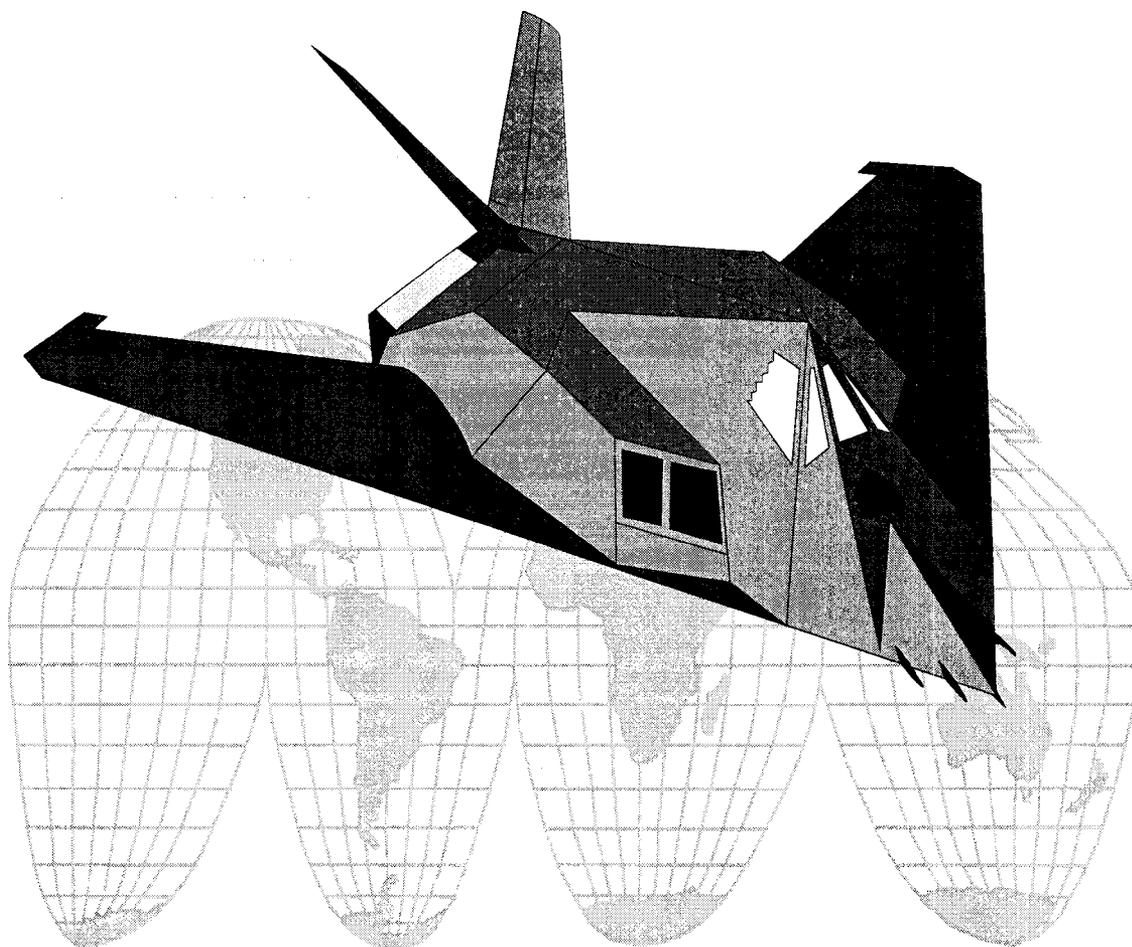
The CSU Environmental Coordinator shall note in the operating record the time, date, and details of any incident that requires implementing the contingency plan. Within 15 calendar days after the incident, HAFB shall submit a written report on the incident to NMED. The report shall include:

- Name, address, and telephone number of the Base point of contact;
- Name, address, and telephone number of the Base and the location of the incident;
- Date, time, and type of incident (e.g., fire, explosion);
- Name and quantity of material(s) involved;
- The extent of injuries, if any;
- An assessment of actual or potential hazards to human health or the environment, where this is applicable; and
- Estimated quantity and disposition of recovered waste that resulted from the incident.

**APPENDIX H-1**

**HOLLOMAN AIR FORCE BASE DISASTER PREPAREDNESS READINESS  
PLAN 32-1**

**HOLLOMAN AFB  
DISASTER PREPAREDNESS  
OPLAN 32-1**



**1 July 2001**

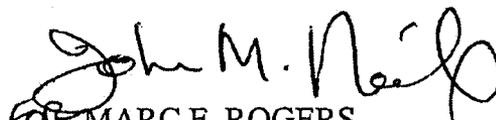
**OPR: 49 CES/CEX**

MEMORANDUM FOR DISTRIBUTION (ANNEX Z)

FROM: 49 FW/CC

SUBJECT: Holloman AFB Disaster Preparedness OPlan 32-1

1. Attached is Holloman AFB Disaster Preparedness OPlan 32-1 formerly known as Holloman Air Force Base Disaster Preparedness Readiness Plan 32-1. It is effective upon receipt and all previous editions of the plan are obsolete.
2. This plan is the wing's primary response plan to disasters that may occur on, or surrounding, Holloman AFB. All other response plans are subordinate to this plan. Checklists written in support of this plan will be reviewed and appropriately revised upon receipt of the basic plan or any changes to this plan. Checklists supporting this plan are due to the 49 CES/CEX in two copies for review within forty-five (45) days of receipt.
3. The Office of Primary Responsibility (OPR) for this document is 49 CES/CEX, Readiness Flight, 550 Tabosa Ave, Holloman AFB, NM 88330-5000, ext. 7312.

  
for MARC E. ROGERS  
Colonel, USAF  
Commander, 49th Fighter Wing

Attachment:  
Holloman AFB Disaster Preparedness OPlan 32-1, 1 July 2001

HEADQUARTERS, 49TH FIGHTER WING (ACC)  
HOLLOMAN AIR FORCE BASE, NEW MEXICO 88330-5000  
1 July 2001

HOLLOMAN AFB PLAN 32-1  
SECURITY INSTRUCTIONS

1. This document is unclassified, but is designated "FOR OFFICIAL USE ONLY" IAW AFMAN 37-139.
2. The provisions of AFI 10-1101, Operations Security (OPSEC) Program, and AFI 33-211, Communications Security (COMSEC), are applicable to this document.
3. No references to discovery of human remains, names of individuals, possible/actual cause factors, aircraft weapons status, and the search for or discovery of classified equipment will be made in the clear via radio communications.
4. Reproduction of this document, in whole or in part, without permission of this headquarters, is prohibited except as required to prepare supporting checklists and briefing documents.
5. All information pertaining to mishap investigation is considered "limited use" information IAW AFI 91-204, Safety Investigations and Reports.
6. If a mishap occurs with an F-117A, members of the Interim/Permanent Investigation Boards will be required to receive Level III (SAR) security clearance. If not current, the individual must hand carry a copy of a current SF 86. The phone number for the F-117 Program Office is X-5308.
7. The office of origin/OPR is 49 CES/CEX, Readiness Flight, Holloman Air Force Base, New Mexico 88330-5000.

HEADQUARTERS, 49TH FIGHTER WING (ACC)  
HOLLOMAN AIR FORCE BASE, NEW MEXICO 88330-5000  
1 July 2001

HOLLOMAN AFB PLAN 32-1  
RECORD OF CHANGE AND REVIEW

RECORD OF CHANGES

<u>CHANGE NUMBER</u> <u>BY</u>	<u>DATE</u>	<u>DATE POSTED</u>	<u>POSTED</u>
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RECORD OF REVIEW

<u>REVIEW BY</u>	<u>DATE REVIEWED</u>	<u>REMARKS</u>
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HEADQUARTERS, 49TH FIGHTER WING (ACC)  
HOLLOMAN AIR FORCE BASE, NEW MEXICO 88330-5000  
1 July 2001

HOLLOMAN AFB PLAN 32-1  
DISTRIBUTION CHANGE LETTER

MEMORANDUM FOR 49 CES/CEX

DATE: \_\_\_\_\_

FROM: \_\_\_\_\_

SUBJECT: Distribution of HAFB Plan 32-1

1. This unit/office is in receipt of \_\_\_\_\_ copy (s) of HAFB Plan 32-1.

2. Change distribution as follows:

- \_\_\_ Discontinue distribution.
- \_\_\_ Change number of copies to \_\_\_\_\_
- \_\_\_ Change office symbol and address to:

OLD OFFICE SYMBOL AND ADDRESS: \_\_\_\_\_

\_\_\_\_\_

NEW OFFICE SYMBOL AND ADDRESS: \_\_\_\_\_

\_\_\_\_\_

3. The listed changes apply to this plan only.

4. Above changes apply to all plans distribution for which \_\_\_\_\_ is OPR.

5. REMARKS:

\_\_\_\_\_  
Signature of Commander or  
Authorized Representative

\_\_\_\_\_  
Unit/Office Symbol

HEADQUARTERS, 49TH FIGHTER WING (ACC)  
HOLLOMAN AIR FORCE BASE, NEW MEXICO 88330-5000  
1 July 2001

HOLLOMAN AFB PLAN 32-1  
PLAN SUMMARY

1. PURPOSE. To provide comprehensive guidance on procedures and support for survival, recovery and safety investigations of 49th Fighter Wing (FW) assigned, attached, and tenant units in an emergency or disaster. This plan is the primary plan for mishap/disaster response.

2. CONDITIONS FOR IMPLEMENTATION. This plan, or portions thereof, will be executed at the discretion of the 49 FW Commander, 49th Support Group (SPTG) Commander, a designated representative, or automatically when a major accident, actual or potential natural disaster occurs. It will also be executed if an enemy attack affecting Holloman AFB resources occurs, or Class A or B Flight, Ground or Weapons mishap (> \$200,000 damage or loss of life). In addition, this plan will be executed when a base aircraft crashes or is declared overdue, regardless of mishap location.

3. OPERATIONS TO BE CONDUCTED.

a. Deployment. Holloman's area of responsibility is southwestern New Mexico. Cannon AFB and Kirtland AFB cover other state areas. Response into other areas of responsibility is possible when directed by proper authority. Normally, deployment of forces will be limited to members of the base Disaster Response Force.

b. Employment. Disaster operations conducted under this plan consist of:

(1) Responses to major accidents involving Air Force resources.

(2) Protection of Air Force resources, members and their dependents, and civilians from natural disasters, major accidents, and conventional attack.

(3) Assistance to local civilian communities during natural disasters and major accidents. This assistance will be provided when it does not interfere with mission accomplishment and is in accordance with federal policy.

(4) Restoration of Holloman AFB services and facilities necessary for survival and continuation of the 49 FW mission.

(5) Preservation of evidence at accident site for Safety Investigation Board. (See Appendix 10)

c. Forces Assigned.

(1) All forces assigned or attached to Holloman AFB are potentially available for use during implementation of this plan. Normally, only those forces necessary to counter the disaster will be used.

(2) Limited augmentation of Holloman AFB forces can be expected to offset mobilization requirements during wartime operations.

d. Supporting Plans.

(1) All tasked units will write supporting checklists within 45 days of receipt of this plan. Forward these checklists to 49 CES/CEX in two copies, one for review and coordination and the other will be maintained for future reference. Review plans and checklists at least annually or when changes occur in directives.

(2) In order to execute the most effective recovery operations possible from any incident or disaster, the following units will ensure their unit specific emergency plans (listed below) and taskings listed by this plan coincide with and are included in:

(a) 49 MDG - Medical Contingency Response Plan.

(b) 49 CES - Contingency Response Plan.

(c) 49 SVS - Shelter Stocking Plan.

4. KEY ASSUMPTIONS. See basic plan and individual annexes.

5. OPERATIONAL CONSTRAINTS. None required.

6. TIME TO COMMENCE EFFECTIVE OPERATIONS. None required.

7. COMMAND RELATIONSHIPS.

a. The 49 FW Commander or designated representative will implement this plan, announcing the condition or portion of the plan to be implemented.

b. The designated On-Scene Commander (OSC) will control the Disaster Control Group (DCG) and equipment dispatched to the scene.

c. When base assigned aircraft are involved, the 49 FW/CC will direct the battle-staff to ensure all steps in their respective checklists are accomplished.

d. Command Relationships During Response Phases:

(1) Phase I – Fire Fighting, Rescue, and Weapons Safing: The OSC will be the Fire Chief. The 49 SPTG Commander, or his designated representative, will assume command upon arrival.

(2) Phase II – Safety Investigation: President of the Mishap Investigation Board (the mishap board interim investigation safety officer, or the interim board president who will preside until the formal board president arrives) will be the mishap investigation commander.

(3) Phase III – Recovery and Restoration: OSC is the 49th Support Group Commander (SPTG/CC) or his appointed representative.

8. LOGISTICS APPRAISAL. This plan is considered logistically supportable.

9. PERSONNEL APPRAISAL. The Commander, Mission Support Squadron, will establish and operate a base manpower pool via 49 MSS/DPMX (Personnel Readiness Unit). Nonessential personnel may be used to support emergency/disaster relief and recovery operations. Units tasked by this plan will provide members to the Personnel Readiness Unit for specialized teams to perform functions required to cope with various disaster/emergency situations.

10. CONSOLIDATED LISTING AND IMPACT ASSESSMENT OF SHORTFALLS AND LIMITING FACTORS. None required.

11. MISHAP CLASSES.

a. Class A Mishap - A mishap resulting in one or more of the following:

- (1) Reportable damage of \$1,000,000 or more.
- (2) A fatality or permanent total disability due to injury or occupational illness.
- (3) Destruction of an Air Force aircraft.

b. Class B Mishap - A mishap resulting in one or more of the following:

- (1) Reportable damage of \$200,000 or more, but less than \$1,000,000.
- (2) A permanent partial disability.
- (3) Inpatient hospitalization of three or more personnel.

c. Class C Mishap - A mishap resulting in one or more of the following:

- (1) Reportable damage of \$20,000, but less than \$200,000.
- (2) An injury resulting in a lost workday case.

(3) Mishaps requiring selected reporting under AFI 91-204 (i.e., engine shutdown, physiological episodes, etc.)

d. Class D Mishap (Weapons) - A mishap resulting in one or more of the following:

- (1) Total cost of \$2,000 or more for property damage, but less than \$10,000.
- (2) A non-fatal injury that does not meet the definition of a Class C.

HEADQUARTERS, 49TH FIGHTER WING (ACC)  
 HOLLOMAN AIR FORCE BASE, NEW MEXICO 88330-5000  
 1 July 2001

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HEADQUARTERS, 49TH FIGHTER WING (ACC)  
HOLLOMAN AIR FORCE BASE, NEW MEXICO 88330-5000  
1 July 2001

HOLLOMAN AFB PLAN 32-1

BASIC PLAN

REFERENCES:

AFPD 32-30	Explosive Ordnance Disposal Program
AFI 32-4001	Disaster Preparedness Planning and Operations
AFI 10-1101	Operations Security Program
AFI 10-206	Operational Reporting
AFI 13-203	Air Traffic Control
AFI 32-2001	Fire Protection Program
AFI 32-3001	Air Force Explosives Ordnance Disposal Program
AFI 33-211	Communications Security
AFI 34-117	Air Force Aero Club Program
AFI 34-242	Mortuary Affairs
AFI 36-2608	Military Personnel Records System
AFI 36-3002	Casualty Services
AFI 33-332	Air Force Privacy Act Program
AFI 91-201	Explosives Safety Standards
AFI 91-202	The US Air Force Mishap Prevention Program
AFI 91-204	Investigating and Reporting US Air Force Mishaps
AFPAM 91-211, Vol 1	US Air Force Guide to Mishap Investigation
AFPAM 91-211, Vol 3	Safety Investigation Workbook
AFI 135-101	Public Affairs Policies and Procedures
AFI 148-125	Medical Investigation of Aircraft Accident Fatalities
AFI 25-101	War Reserve Materiel (WRM) Program Guidance and Procedures
JCS Pub 6, Vol V	US Air Force Reporting Instructions
HAFBI 15-101	Weather Support
HAFBI 32-3	Explosive Ordnance Disposal Program
NRT-1	Hazardous Materials Emergency Planning Guide
NRT-1A	Criteria for Review of Hazardous Materials Emergency Plans
OS-120	A Guide to Emergency Planning and Community Right-to-Know
	Act Superfund Amendments and Reauthorization Act Title III
29 CFR 1910.120	Hazardous Waste Operations and Emergency Response
40 CFR 112	Prevention Control and Countermeasure Plan
40 CFR 264.50	Resource Conservation and Recovery Act
40 CFR 265.50	Resource Conservation and Recovery Act
40 CFR 300	National Oil and Hazardous Substance Pollution Contingency
	Plan
40 CFR 302	FEMA Emergency Planning
40 CFR 355	Emergency Planning and Notification
DOT P5800.5	Emergency Response Handbook

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FEMA 020	Guidance for Hazard Analysis
EIS-5	Hazardous Materials: A Citizen's Orientation
CPG 1-8	Guide for the Development of State and Local Emergency Operations
CPG 1-8A	Guide for the Review of State and Local Emergency Operations Plans
New Mexico State	Area Command, Military Support of Civil Defense Plan

REFERENCES:

New Mexico Hazardous Materials Emergency Response Plan and Procedures Manual  
49 FW Recall Plan  
49 FW Contingency Contracting Support Plan, (CCSP) 70-7  
Base Civil Engineer (BCE) Contingency Response Plan, OPlan 93-2  
49th Medical Group Medical Contingency Response Plan  
Holloman AFB Deployment Plan 10-403  
USAF War Mobilization Plan  
ACC HAZMAT Planning, Response and Training Guide AFI 32-4002

TASKED ORGANIZATIONS: All Holloman AFB host and tenants units.

1. SITUATION. Holloman AFB is subject to emergencies or disasters resulting from major accidents, natural disasters, or general war. Refer to Annex A, Annex B, or Annex C.

a. Primary Forces. Forces listed below will provide material and/or services in support of this plan:

(1) All assigned 49 FW units and tenant units assigned to Holloman AFB.

(2) Joint Nuclear Accident Coordination Center (JNACC) coordinates personnel and material support for nuclear accident response.

(3) Air Force National Security Emergency Preparedness Division (AFNSEP) Fort McPherson, GA, approves Military Support to Civil Authorities (MSCA) by issuing a mission designator number. The AFNSEP duty officer can be contacted via DSN: 367-4342 or COMM: 404-752-4342.

(4) Holloman AFB Emergency Communications Van (ECV) provides communications during disaster operations.

(5) The Otero County Emergency Management Coordinator exchanges information and coordinates with Holloman AFB during natural disasters and general war.

(6) State and local law enforcement agencies, fire departments, and hospitals provide off-base crowd control, emergency evacuation, fire fighting and medical assistance.

(7) Federal Emergency Management Agency (FEMA) Region VI, Denton, TX.

(8) American Red Cross.

(9) Chemical Transportation Emergency Center (CHEMTREC) for information during industrial chemical emergencies. CHEMTREC can be contacted at 1-800-424-9300.

(10) State and County emergency preparedness agencies for sheltering of dependents and coordination of off-base response operations.

(11) Contact Air Force Rescue Coordination Center (AFRCC), Scott AFB, IL, who will dispatch air rescue support from either Kirtland AFB, NM, or Fort Bliss, TX. The AFRCC phone number is DSN 576-4815 or COMM 1-800-851-3051.

b. Assumptions.

(1) Holloman AFB is subject to attack with little or no warning by a variety of weapon systems.

(2) Radiological planning is based on operations under radioactive fallout in the event of a nuclear attack. In nuclear attacks, radiological fallout may be present in hazardous amounts.

(3) Natural disasters affecting Holloman AFB may be severe but they will be of short duration. Localized flooding may occur during heavy rainfall. High winds and tornadoes may also occur.

(4) Major accidents involving Air Force resources, including aircraft, weapons and hazardous materials, may occur both on and off base, and will require response by the HAFB Disaster Response Force.

(5) Local, state or municipal civil authorities may ask for assistance under disaster conditions.

(6) Other federal agencies within New Mexico may request assistance during natural disasters.

(7) Use of chemical or biological warfare agents is unlikely.

(8) HAFB could be utilized as a recovery, repatriation or refugee base.

(9) HAFB may be called upon to render aid and assistance to other military installations and civilian agencies during civil emergencies.

(10) Limited assistance will be available from friendly forces in the event of a nuclear attack.

2. MISSION. Conduct coordinated emergency operations to minimize the loss of life and property. Minimize the loss of operational capability caused by wartime contingency and peacetime disasters. Provide humanitarian assistance to the civilian community without degradation of mission accomplishment and IAW federal policy.

3. EXECUTION.

a. Concept of Operations.

(1) Major Peacetime Accident. Accidents can occur on or off base, involving nuclear, non-nuclear or other hazardous materials. HAFB will respond when military personnel or material are involved if we are the closest military installation. The base will take appropriate action during all phases of accident response (i.e., notification, response, investigation, withdrawal and recovery).

(2) Natural Disasters. Reaction to natural disasters involves the principles of warning/advisory, preparation (if possible), response, and recovery. Survival Recovery Center (SRC) may be activated under control of the Installation Commander for augmentation.

(3) Enemy Attack. The installation's reaction to an enemy attack is organized into pre-attack, trans-attack, and post-attack actions.

b. Tasking. (Also see specific annexes)

c. Deployment/Employment. All available resources of Holloman AFB may be used during disaster operations to save lives, protect property, and return the base to operational capability. Assistance may be provided to civilian communities subjected to disaster or enemy action when this assistance does not interfere with mission accomplishment and is IAW federal policy. Resources of friendly forces may be used to the extent necessary to contain/recover from the emergency situation.

(1) The Disaster Response Force (DRF) consists of the Disaster Control Group (DCG), Unit Control Centers (UCC), Command Post (CP), and specialized disaster preparedness teams.

(2) Recall procedures: See Appendix 1 to Annex A of this plan.

d. Local Characteristic.

(1) Physical Geography. The base is located in the southern part of New Mexico in the Tularosa Basin with mountain ranges to the east and west. The basin is approximately 120 miles long and 35 miles wide, extending from the southern end of Chupadera Mesa almost to the Texas

border. The Tularosa Basin is part of a structural basin, which is more than 200 miles long and 24 to 60 miles wide, extending from southeastern Socorro County, New Mexico, southward to Chihuahua, Mexico. In the vicinity of the base, the Tularosa Basin is bounded 8 miles to the east by the Sacramento Mountains and 20 miles to the west by the San Andres Mountains.

(a) Elevation within the Tularosa Basin ranges from 4,400 feet above mean sea level (ft-msl) at the northeast corner to 4,000 ft-msl in the southwest corner, sloping downward to the southwest. Elevation at the base ranges from 4,028 to 4,100 ft-msl, excluding Tularosa Peak. Elevation in the Sacramento Mountains reaches 12,000 ft-msl and ranges from 7,000 to 9,000 ft-msl within the San Andres Mountains.

(b) The Tularosa Basin is a closed basin with regard to surface drainage. No surface water leaves the basin. Surface water is either lost to evaporation and infiltration or collects in the lowest point in the basin at or near Lake Lucero. This lake is located at the southwest edge of the gypsum dune field, known as White Sands National Monument, west of the base. Surface water within the basin ultimately flows to Lake Lucero that is also a discharge point for groundwater and where sulfate salts are concentrated by evaporation. The prevailing southwest winds then pick up and transport the salts, primarily gypsum, in a northeasterly direction to continue building the dune field of the White Sands National Monument.

(c) The base is crossed by several southwest trending "arroyos" or intermittent stream beds including Lost River (the largest), Dillard Draw, Malone Draw, and several smaller tributaries such as Red Arroyo and Arroyo Cavacita. Lost River is fed by groundwater seeps or springs. The river appears and disappears along its course as springs add water and evapotranspiration and infiltration recapture it.

(2) Meteorology. The climate is arid with low annual rainfall and low relative humidity. The mountain ranges to the east and west have a dramatic influence on the local weather. They provide lifting of the air producing summer thunderstorms and modify approaching weather systems. The base receives most of its total annual rainfall from thunderstorm activity between May and October. The winter season is generally dry, characterized by a strong southerly wind flow and periods of blowing dust and sand. Meteorological data for the base is presented in Table 1-1. Mean annual precipitation is 7.9 inches. The mean annual lake evaporation rate, commonly used to estimate the mean annual evapotranspiration rate, is estimated at 67 inches per year. Therefore, the annual net precipitation (mean annual precipitation minus mean annual evapotranspiration) for the base area is approximately minus 59 inches per year. As a result, site soils are generally dry.

(3) Population. Holloman AFB has approximately 3,250 persons residing in military family housing and approximately 981 personnel residing in base dormitories. During normal duty hours approximately 6,500 persons work on the installation. In addition, there are an unspecified number of personnel who are transient to the installation daily, i.e. delivery vehicle personnel, contractors, TDY personnel and other visitors.

4. ADMINISTRATION AND LOGISTICS.

a. Logistics.

(1) Tasked units will determine and procure the equipment and supplies needed to support tasking in this plan. Commanders must ensure supply and equipment procedures permit expeditious distribution of required equipment. A list of unique support items will be included in each unit's checklists. All existing resources, including War Reserve Materiel, are potentially available for use during disasters, when approved by HQ ACC.

(2) Certain accident or disaster situations may require specialized support that is not normally available within base resources. Most specialized support is available from friendly forces (par 1.a.).

b. Administration. The agency with primary responsibility will prepare reports and coordinate them with the CP.

(1) OPREP-3 (OPR: Command Post).

(2) TEMPEST RAPID (OPR: Command Post - based upon inputs from appropriate agencies).

(3) Daily Summaries (OPR: On-Scene Commander) - this is a local report only.

Table 1-1 Meteorological Data for Holloman AFB

ITEM	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
<i>Temperature (deg F)</i>												
Monthly mean	39	46	52	61	70	79	80	78	71	60	47	40
Mean daily high	54	61	69	76	85	93	93	91	86	76	63	54
Mean daily low	29	34	40	48	55	64	68	67	59	49	37	30
Record high	78	83	91	95	103	110	108	106	102	92	84	75
Record low	-11	0	9	23	26	44	52	54	38	22	3	2
<i>Precipitation (in)</i>												
Monthly mean	0.5	0.4	0.3	0.2	0.4	0.8	1.3	1.5	1.3	0.9	0.4	0.7
Record maximum	1.9	1.4	3.0	1.1	2.9	3.6	3.7	4.4	4.5	4.2	3.3	3.2
Record minimum	0	T	0	0	0	T	T	.2	T	0	0	0

ITEM	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
<i>Relative Humidity (%)</i>												
6 a.m. mean	71	64	75	45	46	47	59	69	70	65	63	71
3 p.m. mean	37	30	22	18	18	19	27	32	30	28	29	39

ITEM	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
<i>Surface wind (Kt)</i>												
Mean velocity	5	5	6	6	6	6	6	5	5	5	5	4
Max Speed	67	49	51	67	69	55	57	60	46	50	58	59

T = Trace

Period of record: Nov 81 to Dec 97.

5. COMMAND AND COMMUNICATIONS.

a. Command Relationships.

(1) The 49 FW Commander, or a designated representative, has primary authority and responsibility for implementing this plan. The commander provides overall command, control, and direction during disaster and attack operations and may activate the Battle Staff/Survival Recovery Center to assist. This plan, or portions thereof, may be executed at the discretion of the 49 FW/CC, 49 SPTG/CC, a designated representative, or automatically when a major accident, actual or potential natural disaster, or enemy attack affecting Holloman AFB resources occurs.

(2) The designated On-Scene Commander (OSC) will direct military operations at the scene of the disaster until relieved by the interim Safety Investigation Board president, owning command, or as directed by HQ ACC.

(3) Unit control centers will activate to control and dispatch unit resources needed to support this plan.

(4) The CP will act as intermediary between the DCG, the UCCs, and the 49 FW Control Center. The 49 SPTG Commander, through the CP conducts command, control, and communications. The CP serves as the focal point for response to disasters and accidents, unless the Wing Commander deems it necessary to activate the SRC. The Wing Commander will also determine composition for the SRC.

(5) All commanders and chiefs of staff agencies will take the necessary actions to ensure that all units under their control provide services as set forth in this plan.

b. Warning and Notification.

(1) The CP will use warning and notification signals IAW Air Force Visual Aid (AFVA) 32-4010, USAF Standardized Alarm Signals, and 49 FW Instruction 10-1. These will be used to alert personnel of disasters/emergencies and to provide essential information.

(2) Other means of notification include:

(a) Mobile public address systems assigned to security forces, disaster preparedness, fire department, explosive ordnance disposal or others with that capability.

(b) Telephone/crash net systems (primary and secondary). Agencies on the primary and/or secondary crash net are required to monitor their phones during duty hours.

(c) Public address systems at major base facilities including the recreation center, officers' club, enlisted club, base exchange, commissary, dining halls, and the hospital.

(d) Land mobile radio nets.

(e) Runners may be used if other communications systems are inoperative.

(f) The CP activates telephone alert/recall. The system can be used to pass on information or to recall (limited or general) personnel to their duty stations.

OFFICIAL



MARC E. ROGERS  
Colonel, USAF  
Commander, 49th Fighter Wing

Annexes

A - Major Peacetime Accident Response

B - Natural Disasters

C - Enemy Attack

Z - Distribution

HEADQUARTERS, 49TH FIGHTER WING (ACC)  
HOLLOMAN AIR FORCE BASE, NEW MEXICO 88330-5000  
1 July 2001

ANNEX A TO HOLLOMAN AFB OPLAN 32-1  
MAJOR ACCIDENT PEACETIME RESPONSE

REFERENCES: See Basic Plan

TASK ORGANIZATION: See Paragraph 3 of this Annex.

1. SITUATION. The commander of the nearest suitable military installation must respond to major accidents involving military resources or resulting from activities conducted or sponsored by agencies of the Department of Defense (DoD), i.e., weapons systems, aircraft accidents, and hazardous materials. Actions required may range from simple suppression or security actions, to a complex, time-consuming, major operation. To provide a rapid and effective response to minimize loss of personnel and resources, and reduce mission and community impact, the Disaster Response Force (DRF) is used.

2. MISSION. To establish and maintain a capacity for rapid and effective response to accidents/emergencies involving DoD resources; to develop procedures for minimizing the effects of these mishaps; and to expedite restoration of damaged material and mission capability.

NOTE: Procedures for the Space Transport System (STS) are located in the HAFB Space Shuttle Plan.

3. EXECUTION.

a. Forces. The DRF is the primary agency used to respond to major peacetime accidents/emergencies. It consists of:

(1) Disaster Control Group (DCG).

(a) Initial Response Element (IRE): Fire Department (CEF), Medical Group (MDG), and Security Forces (SF).

(b) Follow-on Element (FOE): On-Scene Commander (OSC), CE Readiness (CEX), Security Forces (SF), Public Affairs (PA), Bio-environmental (SGGFB), Civil Engineers (CE), Maintenance (MXS), Explosive Ordnance Disposal (EOD), Safety (SE), Legal (JA), Chapel (HC), Transportation (TRNS), Services (SVS), Contracting (CONS), Alert Photo (SCSV), Communications (CS), Environmental (CEV), Comptroller (CPTS), 46th Test Group (TG) and 49th Material Maintenance Group (MMG).

(2) Command Post (CP).

(3) Unit Control Centers (UCC). (See Appendix 3)

(4) Specialized Teams. As required.

b. Concept of Operations. DRF response will be fundamentally the same regardless of the situation. The IRE and FOE normally make responses. Response to a major accident consists of four phases: notification, response, withdrawal, and recovery.

(1) Notification.

(a) Observer. Any individual who sees or becomes aware of a disaster situation will immediately notify one of the following:

1. Security Forces Control Center.
2. Fire Department.

(b) DRF. The base primary and secondary crash networks and telephone recall will be used to alert unit control centers of actual/potential disasters. The unit control centers will dispatch the DCG personnel and any required specialized teams to the assembly area as directed. Recall notification occurs in the following manner:

1. Normal duty hours notification will be performed IAW Annex A, Appendix 1, of this plan.
2. Non-duty hours notification will be performed IAW Annex A, Appendix 1, of this plan.
3. When communications outages occur, runners will be used. The CP is OPR for runners.

(2) Response.

(a) Initial Response Element (IRE). The senior fire officer (SFO) will be the OSC until the arrival and transfer of responsibility to the primary OSC. The fire department will be using the transportation net to communicate at the scene of a major accident. Authorized users of the fire/crash frequency should continue to use fire/crash frequency to communicate with the fire department and not the transportation frequency. The IRE is responsible for:

1. Suppression and/or containment.
2. Entry Control Point (ECP). The ECP will be located upwind on the perimeter of the disaster cordon within 90 degrees either side of the current surface wind direction. The location should be accessible using available roads or be located on ground able to support vehicles.

3. Cordon Establishment. The cordon will be maintained until otherwise directed by the SFO. Cordon size will be determined as follows:

- a. If the hazards are unknown, the cordon will be established at 2,500 ft initially.
- b. Accidents involving nuclear, conventional weapons, missile propellants, or radioactive material require 2,500-ft cordon initially IAW AFMAN 91-201, Explosives Safety Standards. Final cordon distance is determined by hazard evaluation.
- c. Accidents involving Hazardous Materials (HAZMAT) require a 2,500-ft cordon upwind and crosswind. Downwind distance is determined by accident situation. For minor (low risk) accidents, the fire chief or SFO will determine downwind distance after conferring with SGGFB, CEV, CHEMTREC, and base weather, as required. For major accident, (high risk by volume or toxicity) plume-modeling software will be utilized to aid in the determination of downwind distance.
- d. Cordon sizes for a disaster not involving HAZMAT or explosive materials are dictated by area affected and requirement for working space.

4. Evacuation.

- a. Nonessential personnel must evacuate the cordon area or consider in-place sheltering.
- b. If time permits, those evacuating will assist in removing equipment, vehicles, and material from the danger area when leaving the disaster scene.
- c. Security Forces shall be the primary OPR for evacuation.

(b) DCG. When required, the SFO will request the FOE of the DCG. The OSC will determine where the DCG will form; ensuring it will not be located inside a hazardous area. The designated area will be announced over the secondary crash net. CP will contact DCG members not on the crash nets via telephone.

1. DCG members must respond immediately to the designated assembly point with all required equipment to include, but not limited to, a radio/cell phone, spare batteries, chargers, unit specific response checklist, spare clothing (wet/cold weather), and flashlights.

2. Upon arrival at the assembly point, all DCG members will sign in on the designated roster controlled by the CE Readiness representative. 49 CES/CEX will be the site controllers on behalf of the OSC and will also assist the OSC in providing initial information to the DCG. DCG members will establish contact with their UCC. DCG members will also document and brief the CE Readiness representative (and to the OSC as necessary). When requested, DCG members will brief the OSC on the status of support they can provide for the recovery efforts. The OSC will also determine and brief which DCG members will be convoying

to the accident site. DCG members not convoying to the accident site should remain with their UCC until the UCC is directed to shut down.

3. DCG Form Up and Convoy Assembly Areas.

a. Primary: 49th Communications Squadron parking lot or in Bldg 121, Comm Sq. Conference Room.

b. Secondary: Bldg 838, SRC area used during PHASE II.

c. Tertiary: Bldg 855.

4. If the accident is located off base, but close enough to take containment actions, on the commander's approval, the IRE consisting of MDG, SF and CEF, responds immediately to the accident area and takes required action. The situation and individual agency directives will dictate the response distances. The FOE consisting of all other DCG members will report to assembly area as required.

5. If the accident location is such that the IRE could not possibly arrive in time to take life saving and containment actions, the nearest civilian community, government agency, or military installation is requested by the IC to provide fire, medical, and security actions. An initial element consisting of DCG members selected by the OSC proceeds to the accident by the most expedient method. All other DCG members report to the designated assembly area.

(3) Withdrawal. Actions taken when forces engaged in combating an accident are in imminent danger. Safety considerations are paramount.

(a) The Fire Chief announces withdrawal over any available public address system and directs the sounding of vehicle-mounted sirens until withdrawal is completed.

(b) Personnel will depart the cordon in an upwind or crosswind direction by the most expeditious means to reach safety.

(c) Personnel on-scene will take cover until the Fire Chief announces the "ALL CLEAR."

(d) After the "ALL CLEAR" has been announced, personnel will regroup to take a head count. Report missing personnel to the OSC.

(4) Recovery. Major accidents (> \$200,000 in damage or loss of life usually requires investigation by a Safety Investigation Board (SIB). Since recovery operations may destroy evidence, do not start recovery operations without SIB President's approval. \*Hazardous materials incidents require investigation by the Environmental Incident Investigation Board (EIIB).

(a) The Initial Reconnaissance Team (IRT) obtains necessary information to develop the recovery plan. Specific information gathered will depend upon the accident situation and may include:

1. Casualties.
2. Classified material.
3. High Explosive hazards.
4. Hazardous atmosphere or environments.
5. Condition of weapons.
6. Contamination.

(b) The IRT consists of specialists from EOD, CEF, and BIO capable of detecting hazardous materials, assessing conditions at the accident scene and obtaining the desired information.

(c) The IRT is briefed by the OSC prior to departure. They then enter the site, make the required observations, process through contamination control, and return to the ECP. Radios will be used by the IRT with the approval of IC. IRTs must not radio any team findings that could lead to security violations or may unduly alarm outside listeners. Radios shall be approved and appropriate for the atmospheres for which they are to be used (i.e., explosives, explosive atmospheres).

(d) Based upon the findings of the IRT and other known details, a recovery plan is developed.

(e) The ECP and cordon can be moved closer to the site as hazards are removed. The OSC and OPRs will make determination for the hazards involved.

(5) Tasks. The following actions are not sequential and all actions may not apply but should be considered.

\* Take note of anything which was moved, cut or otherwise altered to enhance life-saving operations and pass this information to the SIB President during the handoff from phase 1 to phase 2.

(a) Approve the use of HAFB resources in support of civil and other federal FW/CC agencies.

(b) Approve news releases.

FW/PA

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<u>ACTION</u>	<u>OPR</u>
(c) Recall battle staff/SRC.	FW/CC
(d) Contact civil officials of accidents if it affects or will affect off-base facilities.	SPTG/CC
(e) Retain command authority for actions taken under this Annex with resources respect to unit.	FW/CC
(f) Designate an interim SIB or EIIB IAW this plan.	FW/CC
(g) The following agencies will perform actions found in Accident Response Checklist (AFI 32-4004, Attach 2,3): SPTG/CC, CEX, CEF, CEV, SF, MDG, SGGFB, PA, CE, MXS, WE, OSA, TRANS, HC, JA, SVS, and CS. Add local requirements to these checklist(s) as necessary.	
(h) Coordinate on-scene activities with the battle staff/SRC through the CP.	OSC
(i) Determine when news media representatives may enter the cordon.	OSC
(j) Provide situation and recovery briefings to DCG members.	OSC
(k) Advise OSC on hazardous materials located within the cordon.	CEF
(l) Retain control of the accident site until suppression or withdrawal.	OSC
(m) Establish initial ECP location.	CEF
(n) Report confirmed accident site and ECP location (i.e., grid coordinates) through the fire department control center to the CP.	CEF
(o) Report "weapons engulfment in fire time."	CEF
(p) Prepare estimates of damage to government and private property and data determine capability to restore facilities.	CES
(q) Provide surveying service and topographic, water table and drainage required by the SIB and in preparing the recovery plan.	CES
(r) Dispose of hazardous waste IAW applicable plans, directives and technical orders.	CEV
(s) Secure ambulance route if vehicle is possibly contaminated.	SF

<u>ACTION</u>	<u>OPR</u>
(t) Ensure the on-duty flight chief establishes a vehicle clear zone between the ECP and the mobile command post (MCP) and clearly marks the ECP.	SF
(u) Ensure medical technicians record on-scene treatment.	MDG
(v) Supervise casualty handling.	MDG
(w) Respond with the MCP and report to the OSC at assembly area.	CEX.
(x) Ensure special support requests are made and supervise disaster preparedness augmentees.	CEX
(y) Act as official spokesman of the 49 FW when dealing with the civilian news media.	PA
1. In the event of a major disaster when casualties occur contact the Casualty Assistance Representative (CAR) at MPF through Command Post for Initial accountability of deceased, missing and DUSTWUN (duty status whereabouts unknown). Information concerning the event itself should come directly to the CAR from PA so that a newsworthy casualty message can be cleared for release.	PA/MSS
(aa) Be equipped with, or arrange for, chemical, biological, and radiological monitoring and detection.	SGGFB/CEX/EOD
(bb) Maintain procedures for calculating toxic corridors.	CEV/CEF/CEX
(cc) Advise IRT on protective clothing required, dosimeters, and film badges.	SGGFB
(dd) Determine if any aircraft or mission essential equipment are located within the cordon.	OSS
(ee) Coordinate with CP on aircraft that need to be towed from accident area.	OSS
(ff) Advise OSC of the evacuation of aircraft/support equipment.	MXS
(gg) Provide emergency lighting and electrical power.	CES
(hh) Provide a hydrazine containment team (HCT).	CEF
(ii) Provide detection, protection, spill containment materials, and CEF/CEV coordinate clean up.	CEF/CEV

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<u>ACTION</u>	<u>OPR</u>
(jj) Notify command post of hydrazine spills.	MXS
(kk) Brief the SFO and IC on any explosive hazards.	EOD
(ll) Coordinate with IC concerning re-entry, reconnaissance, and render-safe any weapons.	EOD
(mm) Assign EOD personnel to precede IRT teams during survey where weapons/explosives exist.	EOD
(nn) Ensure accident notification requirements are accomplished.	SE
(oo) Ensure prompt identification of an interim SIB and execute appropriate mishap response checklists (Appendix 4).	SE
(pp) Provide safety investigation information that enhances the OSC's ability to accomplish these tasks while preserving accident information and evidence for the SIB.	SE
(qq) When approved by the OSC, supervise the gathering of preserving of evidence for the SIB or EIIB.	SE/SF/OSI and
(rr) Aid the OSC in the transfer of accident information to the SIB.	SE
(ss) Coordinate all reports with the IC and battle staff/SRC.	SE
(tt) Provide 1 1/2-ton truck and tarp for fatalities and a 26-pax bus for the search and recovery team	TRNS
(uu) Provide mobile maintenance team/wrecker, as required.	TRNS
(vv) Calculate a toxic corridor for industrial chemicals, pass to command post for dissemination.	CEF/HAZMAT
(ww) Determine clean-up requirements for HAZMAT incidents.	CEV
(xx) Provide a representative to the ECP if unit resources are involved to advise and assist the OSC.	ALL
(yy) Commanders of tasked organizations will ensure that all equipment required in support of this Annex is on hand and serviceable.	ALL
(zz) Provide equipment and supplies on a priority basis for support of major accident response.	ALL

<u>ACTION</u>	<u>OPR</u>
(aaa) Submit agency-input reports daily to the OSC for consolidation into the daily summary report.	ALL
(bbb) Each DRF agency will prepare a synopsis of its involvement and forward it to 49 CES/CEX.	ALL
(ccc) DCG members will wear their safety/identification vest provided at scene by CEX.	ALL
(ddd) Consider declaring an off-base accident site a National Defense Area (NDA) to protect classified material or other sensitive resources.	OSC/JA
(eee) Take still or video photos of the accident site or as directed. Do not take video or photos for the SIB unless directed by Interim Safety Investigation Board Investigation Officer (SIBIO).	SCCV
(fff) Arrange for contracting services at the scene.	CONS
(ggg) Arrange payment for personnel or unusual services, as required.	CPTS/FMF
(hhh) Ensure HAZMAT notifications are IAW applicable laws and AF directives.	CEV
(iii) Maintain a crash removal capability of fighter type aircraft and augment heavy aircraft removal.	MXS
(jjj) Provide a 10-ton tractor and 40-foot trailer for aircraft removal from crash site.	TRNS
(kkk) Provide a 65-90 ton crane as required to remove aircraft from crash site.	46 TG
(lll) Provide sandbags, 4x8 feet timbers, and AM-2 matting as required for shoring damaged aircraft at crash site.	CES
(mmm) Arrange/direct disposal of radioactive material.	SGGFB

4. ADMINISTRATION AND LOGISTICS. Not applicable.

5. COMMAND AND SIGNAL.

a. When designated, the 49 SPTG/CC will retain command of all HAFB resources committed by this Annex.

b. The OSC should relinquish site responsibility to the SIB President provided the site is secure and all rescue efforts are completed. The DCG will continue to provide maintenance and security of the accident site until released by the SIB President. After the SIB President transfers site responsibility back to the OSC, all site restoration operations will commence and continue until restoration is complete.

#### Appendixes

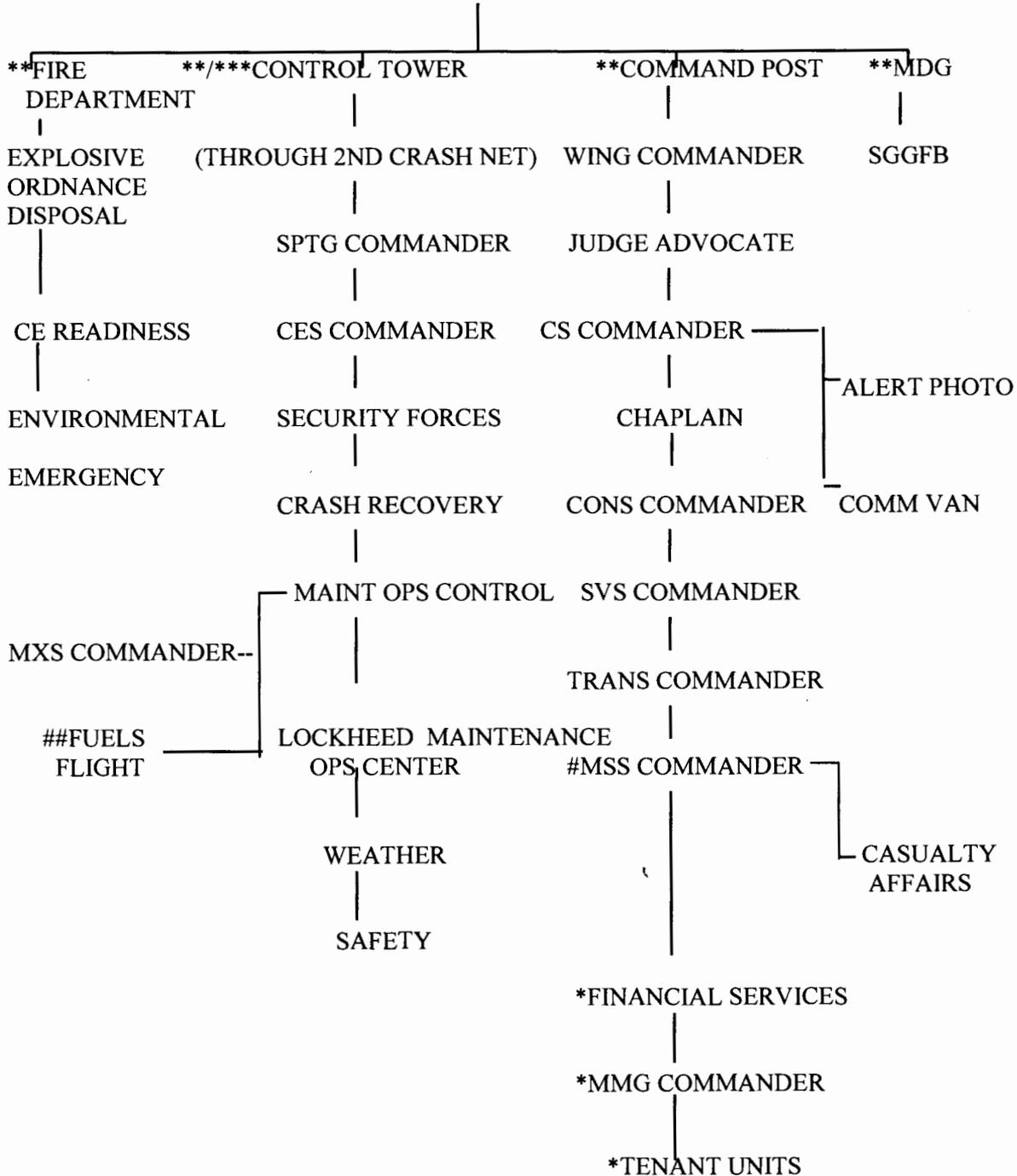
- 1 - DCG Notification
- 2 - Response to Chemical and Biological (CB) Agent Incident in CONUS
- 3 - Unit Control Center
- 4 - Safety
- 5 - Hazardous Materials Emergency Response
- 6 - Major Accident Parking Plan
- 7 - Nuclear Accident Response
- 8 - Safe Haven
- 9 - In-Flight Emergency POL Clean-Up
- 10 - Mishap Response for Aerospace Materials and Composites

HEADQUARTERS, 49TH FIGHTER WING (ACC)  
 HOLLOMAN AIR FORCE BASE, NEW MEXICO 88330-5000  
 1 July 2001

APPENDIX 1 TO ANNEX A TO HOLLOMAN AFB PLAN 32-1  
 DCG NOTIFICATION

1. On-Duty Notification.

\*\*/\*\*AIRFIELD MANAGEMENT (PRIMARY CRASH NET)

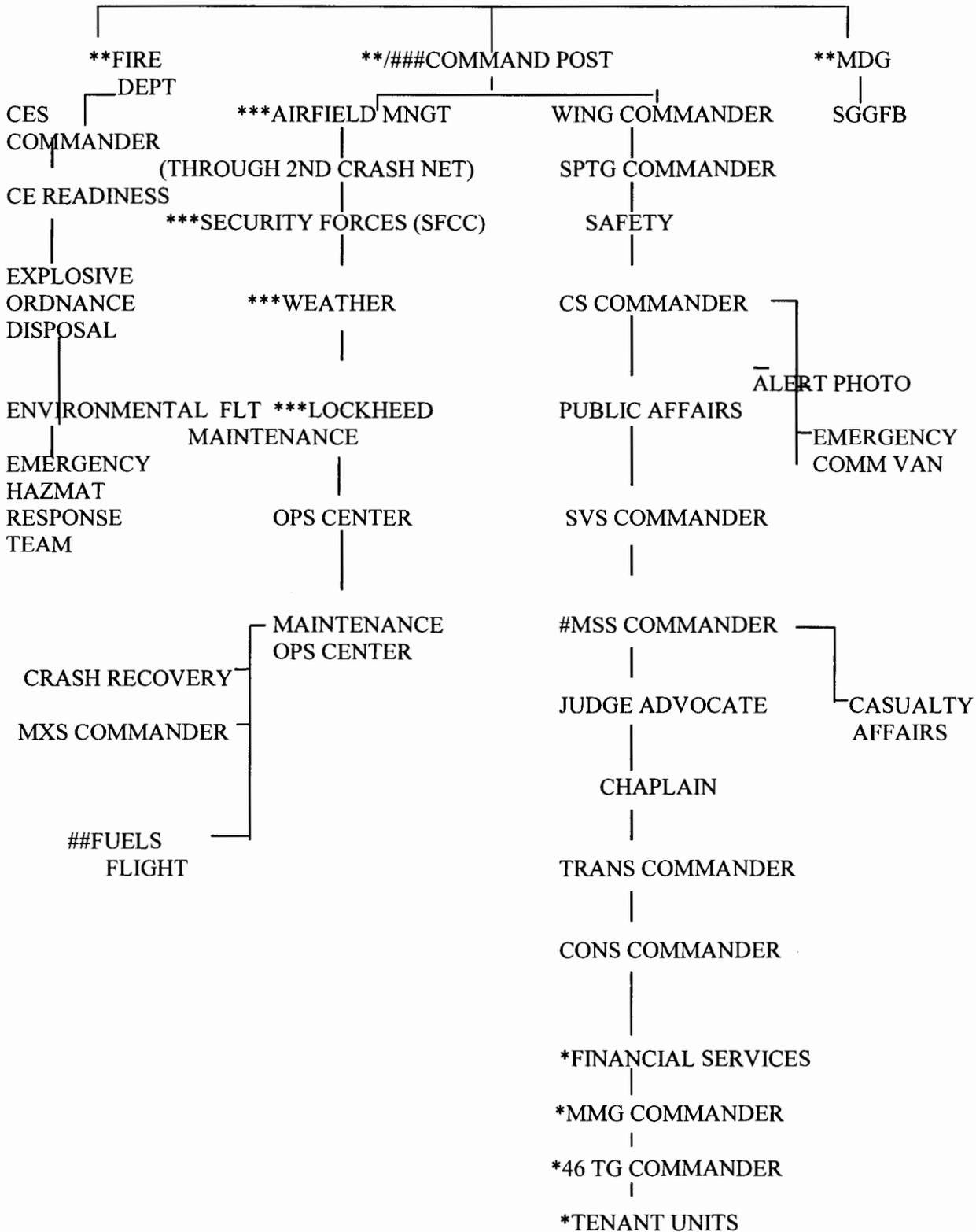


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- \* UNIT/PERSONNEL THAT WILL BE NOTIFIED ON AS-NEEDED BASIS
- \*\* UNITS WITH PRIMARY CRASH NETS
- \*\*\* UNITS NOTIFIED BY CP BETWEEN THE HOURS OF 2300 & 0600 WEEKDAYS, 2100 & 0700 WEEKENDS & HOLIDAYS. AIRFIELD MANAGEMENT ONLY USES PRIMARY CRASH NET FOR AN ACCIDENT AT HAFB WITHIN THEIR AOR.
- # WILL NOT RESPOND/WILL ACTIVATE CASUALTY AFFAIRS PERSONNEL
- ## WILL ONLY BE NOTIFIED IF FUEL SAMPLES MUST BE TAKEN

2. DCG After Duty Hour Notification.

AIRFIELD MANAGEMENT (PRIMARY CRASH NET)



FOR OFFICIAL USE ONLY

- \* UNITS/PERSONNEL NOTIFIED ON AS-NEEDED BASIS.
- \*\* UNITS WITH PRIMARY CRASH NETS.
- \*\*\* UNITS NOTIFIED BY CP BETWEEN THE HOURS OF 2300 & 0600 WEEKDAYS, 2100 & 0700 WEEKENDS & HOLIDAYS.
  - # WILL NOT RESPOND/WILL ACTIVATE CASUALTY AFFAIRS PERSONNEL.
  - ## WILL ONLY BE NOTIFIED IF FUEL SAMPLES MUST BE TAKEN
  - ### COMMAND POST WILL MAKE DCG NOTIFICATION WHEN THE AIRFIELD CLOSSES.

HEADQUARTERS, 49TH FIGHTER WING (ACC)  
HOLLOMAN AIR FORCE BASE, NEW MEXICO 88330-5000

1 July 2001

APPENDIX 3 TO ANNEX A TO HOLLOMAN AFB PLAN 32-1  
UNIT CONTROL CENTER

1. SITUATION. In order to cope with any disaster, each tasked organization should establish a unit control center to control its assigned resources.
2. MISSION. To provide support to the DCG from each functional area; serve as an assembly point for specialized response teams; and direct employment of unit resources when tasked. (See AFI 32-4004, Atch 2, checklist #21, 1-11)
3. CONTROL CENTER REQUIREMENTS. The following actions are not sequential and all actions may not apply but should be considered.

<u>ACTION</u>	<u>OPR</u>
a. Activate unit control centers when the DRF is activated.	ALL
b. Plot accident location on applicable maps.	ALL
c. Notify DCG members of the situation.	ALL
d. Alert assigned specialized response teams.	ALL
e. Evacuate all unit personnel within the danger cordon.	ALL
f. Report non-essential personnel availability to the personnel readiness center.	ALL
g. Ensure personnel, equipment, and resources are available to support operations.	ALL
h. Maintain itemized events log of information concerning the emergency situation.	ALL
i. Report any changes in support capability to the command post, your battle staff representative, or the SRC.	ALL
j. Report casualties and damage to the SRC, if activated, or to the appropriate control center	ALL
k. Alert the DCG IAW Appendix 1 or 2 to this Annex.	CP
l. Maintain contact with unit control centers and shelters, if activated, until SRC is manned	CP

<u>ACTION</u>	<u>OPR</u>
m. Notify DCG and affected agencies of accident site and ECP grid coordinates.	CP
n. Relay weather data from weather to MCP.	CP
o. Request helicopter/aircraft support as directed.	CP
p. Maintain communications with MCP through the SRC.	CP
q. Accumulate information for and submit required reports.	CP
(1) OPREP 3, IAW AFMAN 10-206, AFI 32-4001 and AFMAN 32-4004	
(2) TEMPEST RAPID, IAW AFMAN 10-206	
r. Act as focal point for collection and dissemination of information until relieved by the SIB president.	CP
s. Contact the Chemical Transportation Emergency Center (CHEMTREC) <u>1-800-424-9300</u> CEF for additional information on major accidents involving toxic industrial chemicals.	
t. Notify CEV and MDG/SGGFB of hydrazine spills.	CP
u. Provide fire fighting times for conventional/nuclear weapons.	CEF
v. Pass confirmed accident site and ECP grid coordinates to the command post	CEF
w. Relay new or revised information to dispatched units.	CEF
x. Dispatch security units to evacuate the affected areas.	SF
y. Establish a cordon around the accident site allowing no one to enter except the IRE during initial response.	SF
aa. Ensure the initial ECP is properly established.	SF
bb. Ensure nonessential personnel have been evacuated from the danger area.	SF
cc. Initiate Medical Contingency Response Plan.	MDG

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<u>ACTION</u>	<u>OPR</u>
dd. Provide medical personnel to stand by at the ECP after all known casualties have been transported to the hospital	MDG
ee. Assemble recovery teams and debris removal equipment.	CE/MXS
ff. Provide water, emergency power, and sanitation facilities.	CE
gg. Provide nonessential personnel in support of disaster operations.	MSS
hh. Dispatch personnel as requested by OSC.	MSS
ii. Request transportation for dispatched personnel from the transportation control center	MSS
jj. Ensure casualty reports are coordinated with appropriate agencies prior to submission	MSS
kk. Deliver needed supplies to support operations.	SUPS
ll. Coordinate with contracting division for the requisitioning of supplies/equipment not available on base.	TRANS
mm. Notify fuels management to provide support for vehicles and aerospace AGE at the accident site.	LGSF
nn. Function as the central contact/reporting point for communications outages and restoration actions, and direct maintenance and restoration.	CS
oo. Define communications systems limitations and advise Commander, OSC, and the Command Post of limitations and remaining capabilities.	CS/LGM
pp. Provide long-range communications to support off-base accident response operations	CS/LGM
qq. Provide emergency messing for DCG members and survivors.	SVS
rr. Provide mortuary affairs support to the DCG.	SVS
ss. Provide vehicle operators and vehicles required by the OSC.	TRNS
tt. Provide transportation for higher headquarters response forces to the accident scene.	TRNS

ACTION

OPR

uu. Dispatch one 9-passenger van or a 29/45-passenger bus to the primary assembly area or designated area for off-base response.

TRNS

1. Provide covered 1 1/2-ton truck and tarp to ECP for transporting the deceased

TRNS

xx. Establish communications with the command post.

CEX

yy. Collect and display current data on damage, casualties, ordnance, contamination, status of recovery actions, and support provided

ALL SRC  
MEMBERS/UCC's

Tabs:

A - Unit Control Center Listing

HEADQUARTERS, 49TH FIGHTER WING (ACC)  
HOLLOMAN AFB, NEW MEXICO 88330-5000

1 July 2001

HAFB PLAN 32-1 – ANNEX A, APPENDIX 4  
SAFETY

1. This appendix outlines actions of the wing safety office in response to activation of this plan.
2. Upon activation of this OPLAN, the 49th Fighter Wing Chief of Safety will classify the occurrence as ground, weapons, or flight primary response and form the appropriate response team from the 49 FW safety staff.
3. The following immediate actions will be taken:
  - a. The Chief of Safety (COS) or a designated representative will:
    - (1) Report to the Battle Staff and/or Disaster Control Group as applicable.
    - (2) Advise the on scene commander of critical safety issues in response to the occurrence or its aftermath.
    - (3) Advise wing leadership if a formal investigative process will be required.
    - (4) Activate HAFB Mishap Investigation Plan 91-204, if required.
    - (5) Direct and oversee safety response team actions.
  - b. The safety response team members will develop a plan of action to:
    - (1) Take necessary immediate actions to prevent further injury or damage.
    - (2) Ensure recovery actions follow established operational safety protocols.
    - (3) Preserve evidence for investigative purposes.
4. The greatest risk associated with a disaster response is the possibility that in reacting to an emergency situation, the safe and orderly practices under which units and individuals operate day-to-day are cast aside or disregarded due to improper task prioritization.
  - c. Under no circumstance should the occurrence of a disaster, its repercussions, or the response, be viewed as justification for acting outside normal operational procedures.
  - d. In fact, it is during these times that individuals and units must strive even more than under normal circumstances to ensure proper procedures are adhered to and the necessary risk assessments are accomplished.

HEADQUARTERS, 49TH FIGHTER WING (ACC)  
HOLLOMAN AIR FORCE BASE, NEW MEXICO 88330-5000

1 July 2001

APPENDIX 5 TO ANNEX A TO HOLLOMAN AFB PLAN 32-1  
HAZARDOUS MATERIALS EMERGENCY RESPONSE

1. SITUATION. This appendix is intended to ensure this installation is in compliance with all federal, state, and local Hazardous Materials (HAZMAT) planning requirements. It lists the installation's capability to respond to a HAZMAT release. Roles and responsibilities for various members involved in emergency planning and operations. Hazards analysis, which includes hazard identification, vulnerability analysis, and risk analysis. Preparedness, prevention, and response capabilities. Personnel, equipment, and procedures to be used in case of a release, and plan implementation, training, and exercising.
  - a. This appendix is also intended to fulfill the requirements of an Oil and Hazardous Substance Pollution Contingency Plan.
  - b. A Spill Prevention Control/Countermeasures Plan (SPCC) and Facility Response plan exists for the POL Bulk Fuel Storage Area in accordance with 40 CFR 112.
  - c. Refer to the Multi-Product Emergency Response Plan for Inhalation Hazards of Nitrogen Tetroxide and Liquid Fluorine Shipments.
2. MISSION. To save lives, reduce injuries, protect the environment, preserve property and Air Force assets, and comply with emergency planning and notification provisions of the Emergency Planning and Community Right to Know Act (EPCRA). It will be implemented when a spill or release of a hazardous substance large enough to be considered a major accident has occurred within Holloman's jurisdiction or when requested by local authority for mutual aid assistance.
3. EXECUTION. This Appendix specifies procedures to be followed when responding to releases, accidents and spills involving any hazardous substance or POL product.
4. CONCEPT OF OPERATIONS. Four basic elements of emergency planning:
  - a. Mitigation (prevention) is acting before a disaster strikes to prevent permanently the occurrence of the disaster or to reduce the effects when it occurs. It is also used effectively after a disaster to reduce the risk of a repeat occurrence.
  - b. Preparedness is organization and the responsibilities for emergency response before the event. This will include identification and locations of extreme HAZMAT used on the base, responsibilities of responding agencies, operational functions, evacuation plans, resource inventories, training, and other areas necessary for efficient response operations to a HAZMAT spill or release. Personnel and resources are identified and procedures established. A modest

level of preparedness at the local level is all that can reasonably be expected unless emergencies occur repeatedly. Prior planning and training lead to the flexibility essential to disaster response.

c. Response is the active use of resources to save lives, reduce injuries, protect the environment, and protect property when faced with a HAZMAT incident. In most cases people working with experience as their guide handle the response.

d. Recovery is the restoration of community life. In HAZMAT incidents, recovery is the restoration of essential services to normal operation, returning personnel to their places of work or in some instances to their homes after incident remediation, and the remediation of the environment, which may take years to accomplish depending on the HAZMAT release.

5. ADMINISTRATION AND LOGISTICS. Legal authority for emergency planning.

a. Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA), also known as the Emergency Planning and Community Right-To-Know Act (EPCRA), requires special planning and reporting for HAZMAT. Reports are for use by Local Emergency Planning Committees (LEPC), emergency responders, and the public as required by Title III. Executive Order 12856 signed by President Clinton, Aug 93, requires DoD installations to comply with EPCRA. The federal Facilities Compliance Act of 1992 waives immunity of federal facilities from environmental fines and penalties.

(1) Title III calls for a planning process and a written plan. The National Response Team (NRT) published the "Hazardous Materials Emergency Planning Guide" (NRT-1) to assist that planning.

(2) Section 303 of Title III defines the LEPC. Holloman AFB will support the Otero County LEPC with members from CE readiness, environmental flight, and fire department. A HAZMAT Emergency Response Planning (HERP) team will be used on Holloman AFB to comply with section 303 requirements.

(3) Title III has four major sections: Emergency Planning (301 - 303), Emergency Notification (304), Community Right-to-Know Reporting Requirements (311 and 312), and Toxic Chemical Release Reporting Emissions Inventory (313). In addition to increasing the public's knowledge and access to information about the presence of hazardous chemicals into the environment, the law will make information available that is essential to the planning process. Any facility (of which Holloman AFB constitutes as a facility), that produces, uses, or stores any of the extremely hazardous substances (EHS) as designated by the Environmental Protection Agency (EPA) must report them when the quantity exceeds the threshold planning quantity (TPQ). The LEPC can request, directly from the owner/operator of such facilities, information on facility equipment and emergency response capabilities, facility emergency response personnel, and facility evacuation plans.

b. A copy of this plan and pertinent Tier II reports will be provided to the SERC, LEPC, and EPA by the Installation EPCRA Coordinator which shall satisfy the above requirements.

c. Under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), EPA has promulgated regulations (40 CFR 302) which require notification to EPA whenever there is a release of a reportable quantity of any hazardous substance. The regulations specify reportable quantities of one hundred pounds for all Hazardous Substances other than those with different reportable quantities as listed in Table 302.4 of 40 CFR 302. Refer to Table 302.4 for reportable quantities.

## 6. ASSUMPTIONS.

a. The potential for a major spill or release of a HAZMAT is present at storage facilities and on transportation routes on- and off-base.

(1) US Highway 70 West is the main transportation route into Holloman AFB. Vehicles carrying DOT regulated HAZMAT coming onto HAFB from US Highway 70 West enter through the west gate which passes by a military family housing area. Security forces logs in these vehicles and the information is passed on to the fire department. These vehicles deliver their cargo to various organizations and locations throughout Holloman AFB. JP8 tank trucks primary route onto HAFB is through the LaLuz gate. It is impossible to predict where and when an accident involving HAZMAT may occur.

(2) Site specific information for all sites on base with EHS which exceed the TPQ, Resource Conservation and Recovery Act (RCRA) hazardous waste accumulation points, and all above ground POL bulk storage tanks greater than 660 gallons, should be available from data maintained by CEV.

b. This plan will be implemented when a spill or release of a hazardous substance has occurred within Holloman's jurisdiction or when requested by local authority for mutual aid assistance.

c. The base fire department will have all initial response, direction, and control responsibilities during any on-base HAZMAT response. Off-base HAZMAT incidents direction and control functions fall with the New Mexico State Police Emergency Response Officer (ERO).

d. Many assumptions were made in the calculations for the vulnerability zone; even though worst case scenarios were used, no safe levels for exposure of EHS have been established for the general population. Therefore, it is inappropriate to assume that areas outside this zone, based solely on these estimates, are completely safe.

## 7. PLANNING FACTORS.

a. In calculating evacuation radius, the Aloha, CAMEO, or CHARM Plume Dispersion Model will be used. Current weather data is provided on scene using the Weatherpak portable weather station.

b. A worst case scenario was used for chemical quantities being stored at each site (i.e., when 55-gallon drums were being stored, all were considered in a release scenario). For above ground POL bulk storage tanks greater than 660 gallons, a release of the combined total product being stored in each location was considered in a release scenario.

8. OPERATIONS.

a. Responsibilities

(1) Installation Commander - Provides the necessary resources to:

(a) Conduct planning actions and maintain a competent emergency response and cleanup capability.

(b) Provide through the Environmental Leadership Committee (ELC), a HAZMAT contingency planning team (the HERP), a HAZMAT emergency response team; required OSHA and RCRA training.

(c) Ensure all training records are updated to reflect the training received.

(d) Ensure SARA Title III requirements are completed and complied with.

(2) Base Civil Engineer:

(a) Is the focal point for all emergency response activities.

(b) Implements all phases of HAZMAT spill response.

(c) Provides fire protection and HAZMAT services and ensures that HAZMAT emergency response team personnel are organized, trained, equipped, and supplied in accordance with 29 CFR 1910.120, and meet adequate transportation requirements.

(d) Initiates purchase requests to hire contractors to respond to chemical spill incidents/restore spill sites beyond the capability of base resources to perform the operation safely and efficiently.

(e) Record all response/site restoration costs and submit to the 49 CPTS if collection action is required.

(f) Notify any funded organization generating a HAZMAT spill to provide a direct fund cite and use it to pay for the HAZMAT spill response operations and site restoration contract costs.

(g) Maintain a post emergency response cleanup team.

(3) Fire Chief/Senior Fire Official.

(a) Serves as the Incident Commander (IC), at all on-base HAZMAT incidents and will remain in command while life-threatening or acutely hazardous conditions exist.

(b) Controls and coordinates initial spill response actions, deployment and supervision of the HAZMAT emergency response team.

- (c) Reviews and approves all lesson plans to ensure compatible training is being conducted.
  - (d) Serves as a member of the HERP team.
  - (e) Budgets for training and equipment with the environmental flight.
  - (f) Ensures facility inspections are conducted to include, emergency response requirements as developed by the HERP team.
  - (g) Provides Hazardous Waste Operations and Emergency Response (HAZWOPER) level 3 training to emergency response personnel.
  - (h) Maintains a database of all personnel who have received emergency training and dates the training was received.
  - (i) Reviews hazardous waste storage locations.
- (4) Civil Engineer Readiness Flight: Their specific taskings include:
- (a) Conduct training classes for HAZMAT Level 1 and Level 2 IAW 29 CFR 1910.120 requirements.
  - (b) Monitor training status of all installation emergency response personnel through the HERP team and brief the ELC on the status.
  - (c) Inform the environmental flight when additional training is needed from sources outside of the base capabilities.
  - (d) Budgets through the environmental flight all emergency response training requirements.
  - (e) Coordinate local area planning with the LEPC.
  - (f) Serves as HERP Team Chairperson.
- (5) Environmental Flight.
- (a) Provide a HAZMAT specialist to respond to all HAZMAT incidents and serve as advisor to the IC for technical advice and reporting under the planning section within the ICS structure.
  - (b) Maintain the budget for training, equipment and supplies needed for HAZMAT operations.
  - (c) Write and update the Hazardous Material Emergency Response Plan.
  - (d) Attend HAZMAT training through Level 4.

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(e) Accomplish all HAZMAT reporting requirements. HAZMAT team chief (fire department) will complete an after-action report for 49 MDG/SGPM. This report will list all HAZMAT responders' names and SSAN's, the known HAZMAT, any known exposures and any symptoms developed. HAZMAT responders wearing personal protective equipment are not considered as being exposed.

(f) Serve as a member of the HERP Team.

(g) Provide RCRA required training IAW 40 CFR 262 and 265.

(h) Ensure spill sites are remediated to applicable environmental standards and supervises all hazardous material clean-ups and turn-ins.

(i) Determines if the incident requires an EIIB.

(j) Determines proper packaging and shipping requirements for HAZMAT.

(k) Maintain a listing of emergency response and clean-up contractors who are readily available to respond within short notice.

(l) Approves and controls the locations of hazardous materials and waste storage locations.

(e) Maintains a post-emergency response cleanup team

(n) Serves as EPCRA coordinator

(6) Bioenvironmental Engineering (BIO).

(a) Serves as the base focal point for information on the physiological effects of HAZMAT.

(b) Serves as a member of the HERP team.

(c) Will ensure some BIO personnel are trained to the appropriate HAZMAT Level.

(d) Maintain inventories on HAZMAT used by installation as required by AFOSH Std 161-17 and 161-21.

(e) Advises on health aspects of HAZMAT incidents during response operations.

(f) Collect, prepare and ship environmental samples to an approved analytical laboratory for analysis when requested by the environmental flight.

(g) Review hazardous waste storage locations.

(7) Public Health: Provides "HAZCOM" training for base populace IAW AFOSH 161-21 and 29 CFR 1910.120.

(8) Hazardous Material/Waste Users, Stored, or Generators.

(a) All units that use, store or create HAZMAT and/or hazardous waste, including accumulation point managers, will support the implementation of this plan.

(b) Units causing a HAZMAT release will perform cleanup operations if it is within their capabilities as determined by the IC.

(c) Units shall provide for, within their capabilities, supplies and equipment for HAZMAT spills clean up.

(d) Prior to any modification or movement of a HAZMAT storage area, the unit must first notify 49 CES/CEF, CEV and MDG.

(9) Chief of Safety ensures safety inspectors, while conducting safety inspections, will check all users and generators of hazardous materials or wastes to ensure they:

1. Have the OSHA required training

2. Are aware of the emergency response notification procedures in the case of a HAZMAT release or spill and have a copy of this plan available.

(b) Safety will also review site specific contingency plans during facility inspections as determined by the HERP Team.

(c) Review hazardous waste storage areas.

(10) Fuels Management - In conjunction with the civil engineer liquid fuels maintenance shop:

(a) Maintain equipment and supplies to contain and recover spilled fuels and oil in their facilities.

(b) Assist the HAZMAT emergency response team as requested, in the event of an on- or off-base POL release or spill.

(c) Reports all POL spills to the base fire department.

(d) Provides representatives to serve on the base facility response team.

(11) Public Affairs.

(a) Will be notified of a hazardous release requiring an emergency response.

(b) Will prepare an initial news release for the installation commander's approval.

(b) Depending on the extent of the hazardous release and the actual or potential

involvement, the public affairs officer will either immediately release the information or hold it for response to query. In all cases, the information will not be withheld from the public if queried. News release shall be IAW EIIB criteria.

(d) In cases where civilian injuries exist or property is condemned, the public affairs officer will ensure that timely accurate information is disseminated to the public.

(e) Will report to the IC and assume the command staff role as public information officer for the incident.

(12) Base Supply.

(a) Assist the Bioenvironmental engineer with the identification of all HAZMAT tracked in the environmental management information system (EMIS.)

(b) Ensure Material Safety Data Sheets (MSDS) accompany all HAZMAT purchases.

(c) Ensure all supply personnel who work directly with hazardous materials are trained to 29 CFR 1910.120 Level I.

(13) Comptroller.

(a) Tenant organizations or contractors who generate spills may be required to pay for the direct costs of response to spill incidents, such as expenses for supplies and equipment, equipment rental, site restoration, and contracts for spill response services.

(b) The ELC in coordination with the financial management board will determine if reimbursement is appropriate. A tenant organization will be charged for direct costs IAW the Inter-Service Support Agreement (ISSA). The BCE will submit the cost and appropriate information to the accounting and finance officer for collection action.

(14) Explosive Ordnance Disposal (EOD). EOD personnel are hazardous material technicians for emergency responses involving ordnance. Therefore, they require initial training and annual refresher training as outlined in 29 CFR 1910.120, par (q) (6). Additional training requirements apply when any ordnance treatment sites are regulated as a hazardous waste treatment, storage or disposal (TSD) unit. OSHA regulation 29 CFR 1910.120 (p) applies training requirements to TSD units for environmental protection. EOD personnel should identify all ordnance treatment sites to the installation environmental flight and Staff Judge Advocate to determine whether any specific sites are regulated as TSD units. If so, EOD personnel must meet the aforementioned OSHA and EPA requirements.

(15) Contracting Officer (LGC). Will ensure that all contractors performing work on the installation are aware of and comply with the requirement to notify the environmental flight (ext. 3932/33) of EHS usage/storage and must ensure this requirement is included in the contract. Any amount of EHS used or stored by a contractor must be reported to the environmental flight.

(16) Hydrazine Spill Response Team (when applicable). Members are required to have HAZMAT training up to Level 3 as outlined in 29 CFR 1910.120. This specialized team (when required) responds only to incidents involving the release or spill of hydrazine and may act independently of the HAZMAT emergency response team in the performance of their daily duties. All spills of hydrazine or releases into the environment are required to be reported to the environmental flight. Clean up will possibly be contracted.

(17) Security Forces. Refer to tab G of this appendix

(18) HERP Team. This is a subcommittee to the ELC. This group is chaired by the readiness flight or as selected by the Installation Commander. The HERP team consists of representatives from fire department, environmental, Bioenvironmental engineering, base supply, safety, and security police. Representatives from other agencies involved in emergency response will augment this team when appropriate. The HERP team ensures HAZMAT emergency planning is accomplished and published, ensures the plan is exercised, and training is accomplished.

(19) CE Chief of Operations.

(a) Supports the post-emergency cleanup team by providing personnel from the CE operations flight.

(b) Responds to on-base HAZMAT incidents only after emergency operations have been terminated, to perform site cleanup operations to return the site to pre-emergency conditions.

b. Concept of Operations: In the event of a release or spill of any HAZMAT, the execution of this plan will be accomplished in the following phases:

1. Phase 1, Initial Response: Includes identification, containment of chemical releases following actions to save lives, reduce injuries, and protection of the environment: evacuation of nonessential personnel; cordoning off the danger area; performing fire and rescue operations; stopping the release (if possible); and preventing the spread of spilled substance into the environment (storm drains, sewers, natural drainage areas and groundwater).

2. Phase 2, Recovery of Spilled Chemical Wastes: In this phase, spill response personnel conduct cleanup operations and recover the spilled substance and substance contaminated by the spill.

3. Phase 3, Short-term Site Restoration: The removal of contaminated soil, cleaning of exposed surfaces or taking other immediate actions intended to permit personnel (residents or employees) to resume normal activities near the spill site.

4. Phase 4, Long-term Site Restoration: May require several months to several years to complete. This phase includes spill site restoration where hazardous chemicals have contaminated large quantities of earth or groundwater or where surface water is contaminated. These actions will prevent further contamination, restore contaminated earth and water, and permit productive use of the spill site.

c. Appendix Updates.

(1) The office of primary responsibility (OPR) for writing this appendix is the environmental flight. Any additions, amendments or recommended changes to this appendix must be coordinated through the OPR.

(2) Tabs to the plan are the responsibility of the functional operating agency associated with that tab and are designated as tab coordinators. The tab coordinators are responsible for maintaining and updating their tab(s) as needed.

(2) Each tab coordinator will send changes/updates of their tab to the environmental flight for approval. CE readiness flight will forward copies of approved updates to all agencies listed in Annex Z.

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Tabs/Tab Coordinators:

Tab A	Initial Notification and Response	Base Fire Chief
Tab B	Hazard Analysis	Environmental Flight
Tab C	Base Maps and Building Floor Plans	Engineering Flight
Tab D	Direction and Control	Base Fire Chief
Tab E	Communication and Warning	Civil Engineer Readiness
Tab F	Emergency Public Information	Public Affairs Officer
Tab G	Law Enforcement	Security Police Plan and Programs NCOIC
Tab H	Fire and Rescue	Base Fire Chief
Tab I	Health and Medical	Medial Group
Tab J	HAZMAT Emergency Response Team	Base Fire Chief
Tab K	Resources and Transportation	Environmental Flight
Tab L	Radiological Response	CE Readiness
Tab M	Evacuation/Personnel Protection Action	CE Readiness
Tab N	Reporting and Documentation	Environmental Flight
Tab O	Spill Prevention Procedures	Environmental Flight
Tab P	Training	Environmental Flight

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1 July 2001

TAB A TO APPENDIX 5 TO ANNEX A TO HOLLOMAN AFB PLAN 32-1  
INITIAL NOTIFICATION AND RESPONSE

1. RESPONSIBILITIES AND PROCEDURES.

**NOTE:** The base fire department MUST be notified IMMEDIATELY upon any release of a HAZMAT anywhere on HAFB.

a. The base fire department will dispatch units to the scene and make all necessary notifications as appropriate.

b. DCG notifications will be IAW Appendix 1, ANNEX A to this plan. If a partial DCG recall is directed, consideration should be 49 SPTG/CC, owning organization commander, SE, MDG, CEV, OSI, JA, and the alert photographer.

c. Environmental Flight will make all necessary notifications of the incident required by federal and state laws, and HQ ACC directives.

d. Upon notification of a suspected or known HAZMAT incident, first responders are expected to deny entry and evacuate personnel from the area, identify the material if possible and notify the base fire department. Evacuation and warning of personnel in the immediate affected area of a HAZMAT incident shall be conducted by first responder emergency personnel on scene and/or facility employees in the immediate area.

(1) For fixed site facilities.

(a) The employees shall activate the building fire alarm system.

(b) Ensure evacuating personnel do not enter or proceed through the HAZMAT spill area or inhale fumes, vapors and/or smoke. Ensure evacuated personnel do not go back into the incident area for any reason.

(c) Notify the fire department via the emergency fire reporting number of the nature of the emergency, give the incident location, type of material involved, quantity, description of what the material is doing, i.e. bubbling, fuming, and any injuries.

(2) For areas outside facilities, roadways, etc.

(a) Notify any personnel in the immediate area of the hazard and advise them to move uphill and upwind immediately.

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1

(b) Notify the fire department via the emergency fire reporting number of the nature of the emergency, give the incident location, type of material involved, quantity, description of what the material is doing, i.e. bubbling, fuming, and any injuries.

e. On-Base HAZMAT Emergency Responses.

(1) The Fire Alarm Communications Center (FACC) operator will determine if an emergency response is required during initial notification by the reporting party. If there are no injuries, the material is not fuming, bubbling, spitting, etc., is in a small quantity, and does not pose a threat to people, environment or property the Assistant Fire Chief for Operations will respond to and evaluate the situation. If it is deemed an emergency, the initial response will be with the first-run engine company, rescue squad, and SFO. Fire department shall implement its HAZMAT checklists. If in doubt, assume it is an emergency.

(2) Contact base weather at ext. 3924/3925 for current wind direction and speed.

(3) If the emergency involves the flight line area, contact the tower to initiate a ground emergency.

(4) Notify security forces.

(5) Determine the degree of severity of the incident using Annex A, Appendix 5, Tab H, to classify the incident as Level 1, Level 2, or Level 3.

(6) Plot the incident site on the grid map (Can be modified by the SFO).

(a) Establish an initial cordon appropriate for a known chemical release IAW the North American Response Guide.

(b) Establish a 2,500 feet cordon for unknown chemical releases.

(c) Establish ECP coordinates.

(7) If the incident can be remediated without additional resources, make no more notifications and task no more resources to respond, unless directed by the SFO. If the incident requires more resources, mobilize the HAZMAT response units, HAZMAT trailer from station 1 will respond (Notify assistant Chief of Special Operations if not already on scene).

(8) Notify the Environmental Flight, Fire Chief, Fire Marshal, and the CP.

(9) If requested by the SFO, contact CHEMTREC at 1-800-424-9300, give all available information concerning the chemical(s) involved. Have CHEMTREC fax information to the scene.

(10) Establish the incident CP upwind, uphill of the incident at the edge of the outer cordon.

(11) The incident CP must be identified and secured.

(12) HAZMAT operations will be set up away from the incident CP, inside the cold zone. Internal security must be set up to keep all unauthorized personnel out of the HAZMAT operations area. Only fire department, HAZMAT team personnel, and authorized medical personnel will be allowed inside the HAZMAT operations area.

(13) Only personnel trained and certified to HAZMAT Level III (Technician) are authorized to work inside the warm and hot zones. This includes decontamination (Decon) personnel and the site safety officer.

(14) The IC SFO must designate a qualified person to run the HAZMAT Sector operations. This person must identify their HAZMAT unit staff as soon as possible to effectively manage the HAZMAT unit operations.

(15) All information will be directed up through the incident command general staff to the IC on all incidents.

(16) The HAZMAT site safety officer must be trained and certified to the level of response involved, i.e., Operations, Technicians.

f. Off-Base HAZMAT Emergency Responses.

NOTE: All requests for off-base response shall be coordinated through the CP at ext. 7575.

(1) The on-scene IC for HAZMAT incidents in the state of New Mexico is the State Police ERO.

(2) For any off-base HAZMAT response the SFO and security forces will report directly to and follow the directions of the New Mexico State Police ERO on-scene.

(3) Off-base incidents must be reported to the closest state police district office. District 8, Alamogordo, must be notified for any HAZMAT incident/accident occurring in Otero County.

(a) Notification of the Otero County Sheriff's office must also be accomplished to activate the county emergency plan.

(b) The first on-scene county SFO for that fire district will assume on-scene IC until relieved by an ERO.

(4) US highway 70 West adjacent to Holloman's main and west gate falls under the jurisdiction of the NM State Police and the Otero County Fire District 1.

(5) HAFB Fire Department has a mutual aid agreement with the City of Alamogordo, Village of Cloudcroft, and the Alamo West Fire Rescue and may respond to off-base

accidents/incidents if requested. The installation commander will be the final approving authority for off-base responses.

(6) Off-base security forces responses require approval of the installation commander.

(7) Upon notification of an approved mutual aid request from off base, the FACC will notify the assistant chief of operations. He will determine which of the fire department's resources are to be sent off base.

(8) Notify CE Environmental Flight at ext. 3931; for after duty hours requests refer to the recall checklist.

(9) Notify fire marshal and advise only.

(10) New Mexico State Police are responsible for incident command functions at all off-base incidents. A specially trained state police ERO is tasked as the IC. HAFB resources will report to the ERO on all off-base HAZMAT incidents.

(11) If additional resources, such as medical or security police are required, contact the CP to request them.

(12) County district SFO will assume major command roles under the New Mexico State Police ERO.

(13) The National Interagency Incident Management System (NIIMS) has been declared as the state system standard and will be used at all incidents within the state of New Mexico.

(14) Command net for off-base will be the state Law Enforcement Net (LEN).

(15) Tactical control nets will be Otero County Fire and state fire radio nets.

(16) HAFB HAZMAT Emergency Response Team will utilize Law Enforcement 2 and Transportation frequencies 173.4375/165.4875 for tactical operations while on-scene.

(17) Off Base HAZMAT response operations will require an organized and coordinated effort between HAFB emergency response personnel and local officials.

(18) All agencies responding to off-base incidents should provide a radio and operator to the local on-scene communications sector officer to ensure adequate lines of communication are kept open.

## 2. PLAN MAINTENANCE AND DISTRIBUTION.

a. Responsibility for maintaining and updating this tab belongs to the base fire chief, or his designee.

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b. This tab will be updated as needed and reviewed annually. Changes or revisions will be distributed as outlined in Annex A, Appendix 5, Section 7(c).

c. This tab will be exercised at least annually IAW AFI 32-4002 and HQ ACC (HAZMAT planning, training, and implementation guidance), in conjunction with the basic plan and other tabs to this plan.

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ENCLOSURE 1 TO TAB B TO APPENDIX 5 TO ANNEX A TO HOLLOMAN AFB PLAN 32-1  
HAZARD IDENTIFICATION/RISK ANALYSIS

1. SUMMARY. Hazards Identification provides information on the facility and transportation situations that have the potential for causing injury to life, or damage to property and the environment due to a Hazardous materials spill or release. The risk analysis provides information on the likelihood of a release and the severity of consequences to humans. Due to the constant changes in HAZMAT used and stored on HAFB this information is added, changed and updated on a continuous basis. This information is located in the Environmental flight.

2. RISK ANALYSIS DEFINITIONS.

a. Probability of Occurrence.

(1) Low: Probability of occurrence considered unlikely during the expected lifetime of the facility assuming normal operation and maintenance.

(2) Medium: Probability of occurrence considered possible during the expected lifetime of the facility.

(3) High: Probability of occurrence considered sufficiently high to assume event will occur at least once during the expected lifetime of the facility.

b. Consequences to People.

(1) Low: Chemical is expected to move into the surrounding environment in negligible concentrations. Injuries expected only for exposed over extended periods or when individual personal health conditions create complications.

(2) Medium: Chemical is expected to move into the surrounding environment in concentrations sufficient to cause serious injuries and/or deaths unless prompt and effective corrective action is taken. Deaths and/or injuries expected only for exposure over extended periods or when individual personal health conditions create complications.

(3) High: Chemical is expected to move into the surrounding environment in concentrations sufficient to cause serious injuries and/or deaths upon exposure. Large numbers of people expected to be affected.

3. LISTING OF KNOWN FIXED SITE HAZMAT.a. Above ground storage tanks

<u>Building Number or Location</u>	<u>Capacity (Gallons)</u>	<u>Contents</u>
15, Medical Treatment Facility	3,880	Diesel
18, BX Service Station	6,000	Unleaded
18, BX Service Station	6,000	Unleaded
18, BX Service Station	6,000	Unleaded Premium
51, Water distribution Station	2000	Diesel
136-1	20,000	Diesel
136-2	20,000	Mogas
288	1,500	Diesel
500	6,000	AVGAS
639	4,700	JP-8
702	750	Diesel
756	4,000	Diesel
828-1	6,000	Diesel
828-2	6,000	Diesel
828-3	6,000	Diesel
845-1	5,000	Diesel
845-2	5,000	Unleaded
845-3	5,000	Unleaded
863	2,500	Diesel

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<u>Building Number or Location</u>	<u>Capacity (Gallons)</u>	<u>Contents</u>
892-N	750	Diesel
892-S	750	Diesel
906-1	1,000	Diesel
906-2	1,000	Diesel
911	750	Diesel
933	5,250	JP8
1103AR	3,050	MOGAS
1166-1	1,034	MOGAS
1166-2	1,000	Diesel
1180-1	2,100	MOGAS
1180-2	1,000	Diesel
1254	2,000	Diesel
1272	2,000	Diesel
5007	2,000	Diesel
T12401	50,000	JP8
T12402	50,000	JP8
T12403	50,000	JP8
T12404	50,000	JP8
TK 14	635,000	JP8
TK 15	398,000	JP8
TK 16	11,000	Diesel
TK 18	12,000	MOGAS

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TK 19	12,000	Diesel
TK 20	12,000	Diesel
TK 22	866,000	JP8
TK 23	12,000	Diesel
TK 24	25,000	JP8
TK 25	25,000	JP8
TK 26	25,000	JP8
TK 27	25,000	JP8
RATSCAT	2,000	Gasoline
RATSCAT	2,000	Gasoline
RATSCAT	2,000	Diesel
Oscura	1,000	Diesel
Oscura	1,000	Diesel
12303-1	1,600	Gasoline
12303-1	1,600	Gasoline
12303-1	1,600	Gasoline
11646	2,500	JP8
11646	2,500	JP8

b. Storage locations for EHS exceeding the total TPQ.

<u>Chemical</u>	<u>Building Number or Location</u>	<u>Quantity in Pounds</u>	<u>Probability of Occurrence</u>	<u>Consequences to People</u>
CHLORINE	Bldg 51, Water Pump Station	1,350	M	M
CHLORINE	Bldg 448, Olympic Swimming Pool	1,350	M	M
CHLORINE	Waste Water Treatment Plant	8,000	M	M
SULFUR DIOXIDE	Waste Water Treatment Plant	1,350	M	M
SULFURIC ACID	Bldg. 956 MMG	3,640	M	M

c. Hazardous materials major storage facilities - Location and building numbers.

(1) Base Supply

(a) Flammable storage warehouse, Bldg 806 (HAZMART)

1. Open storage area, Bldg. 140 – 145
2. Central receiving warehouse, Bldg 310

(2) Hazardous Materials (HAZMART) center, Bldg 806

(3) Materiel Maintenance Group storage facilities, Bldg 902

(4) Civil Engineer Entomology Shop, Bldg 374

(5) Defense Reutilization Marketing Office (DRMO), Bldg 112

d. RCRA hazardous waste accumulation points. Holloman Accumulation Site (HAS): Building 149, 49 CES/CEV.

e. Satellite accumulation points. Due to the continual changes in the satellite accumulation points, this information is kept up to date by CEV on a computer database.

4. HAZMAT TRANSPORTATION ROUTES.

a. Primary Transportation Routes

(1) US Highway 70 West is the main road transportation route coming into Holloman AFB. This highway borders the base on the south and runs parallel to a military family housing area.

(2) Vehicles carrying DOT regulated hazardous materials coming onto HAFB from US Highway 70 West enter through the West Gate which passes by a military family housing area. The security police logs in these vehicles and the information is passed on to the fire department. These vehicles deliver their cargo to various organizations and locations throughout Holloman. The following is a list of the main thoroughfares taken:

- (a) West area drive to Mesquite Road.
- (b) Mesquite Road to the west area of the base via 49er Ave.
  - 1. 49er Ave. to Eagle Keeper Road
  - 2. 49er Ave. to Iron Knight Ave.
  - 3. 49er Ave. to Gopher Ave.
  - 4. 49er Ave. to Kelly Road (this continues out to the north area of the base via West Perimeter Road).
- (c) Mesquite Road to the main base area via W. New Mexico Ave.
- (d) Mesquite Road to the main base flightline area via W. 11th Street.
- (e) West 11th Street to Delaware Ave.

(3) Tank trucks (8,000 gallons) carrying JP-8 aviation fuel onto HAFB from highway 70 enter through the LaLuz gate and proceed to bulk storage in the fuels compound.

b. Secondary Transportation Routes

- (1) Main Gate entering the main base via First Street to West New Mexico Ave or to Delaware Ave.
- (2) La Luz Gate entering the north area of the base via La Luz Gate Road.

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TAB C TO APPENDIX 5 TO ANNEX A TO HOLLOMAN AFB PLAN 32-1  
BASE MAPS AND BUILDING FLOOR PLANS

1. SUMMARY. This information is maintained at the engineering flight and fire department.
2. PLAN MAINTENANCE AND DISTRIBUTION.
  - a. Responsibility for maintaining and updating this tab belongs to the Engineering Flight.
  - b. This tab will be updated as needed and reviewed annually. Changes or revisions will be distributed as outlined in Annex A, Appendix 5, Section 7(c).
  - c. This tab will be exercised at least annually in accordance with AFI 32-4002 and HQ ACC HAZMAT planning, training and implementation guidance in conjunction with the basic plan and other tabs to the plan.

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TAB D TO APPENDIX 5 TO ANNEX A TO HOLLOMAN AFB PLAN 32-1  
DIRECTION AND CONTROL

1. PURPOSE. This tab outlines the requirement for all direction and control functions, responsibilities, and procedures for all on- and off-base hazardous materials incident response.

2. ORGANIZATION AND RESPONSIBILITIES.

a. Requirements

The Code of Federal Regulations 29 CFR 1910.120 requires the establishment of a site specific ICS to handle emergency responses. Pursuant to state of New Mexico Executive Order 91-10, dated 22 April 1991, the NIIMS ICS has been established as the state standard command and control system during all emergency operations, which includes HAZMAT incidents.

b. Responsibilities

(1) In accordance with Headquarters Air Combat Command (ACC) the SFO will assume on-scene incident command during all on-base HAZMAT incidents. When deemed necessary by FW/CC or SPTG/CC, the DCG will be activated and assume incident command functions.

(2) If the DCG is activated, all direction and control responsibilities will shift to the DCG. The SFO will assume the role of operations section chief under the ICS system. Hazardous substances response operations will not be affected by the transfer of command and continue to function as outlined in the Hazardous Substances Emergency Response Plan.

(3) For off-base HAZMAT incidents within the state of New Mexico, the New Mexico State Police have been assigned, by state law, with incident command responsibilities. A specially trained state police officer with the title of ERO will be dispatched to the scene and assume the on-scene Incident Commander position.

c. Organization

(1) The ICS organizational chart in Tab A, Enclosure 1, shows the key positions required to use the ICS system for any type of major incident response operation.

(2) For the initial response to a HAZMAT incident the SFO assumes the role of incident commander. All the positions listed on the ICS organizational chart would not normally be filled. Only if the DCG is activated will all the positions be required. The SFO would transition from the IC role to the Operations Section Chief position.

- (3) The HAZMAT operation should not be affected by the transition in change of command.

### 3. CONCEPT OF OPERATIONS.

a. Direction and control is absolutely essential in any emergency and increases in importance with each increase in severity of a disaster. The ICS will be used to control all on-scene emergency operations.

- (1) The CP will be contacted simultaneously with the activation of the DCG for on- or off-base responses.

- (2) The SFO will recommend to FW/CC and SPTG/CC if the DRF needs to be activated based on the severity of the HAZMAT incident.

#### b. Emergency Operations Center (EOC)

- (1) The EOC is the civilian equivalent to a military CP. Emergency direction and control is performed by senior government officials. They operate from a center with sufficient communications to provide direction to emergency response forces essential to saving lives, making decisions concerning the protection of property, and coordinating rescue and recovery actions.

- (2) The EOC from which key officials operate is located so as to provide for maximum protection from normal hazards of the jurisdiction. In addition, it is secured from entry by unauthorized personnel.

- (3) The EOC provides a central point for coordinating the operations, logistics, and administrative support needs of response personnel, other disaster site personnel, public shelters and functional area control/dispatch centers.

#### c. HAZMAT Sector Operations Area

- (1) The HAZMAT sector operations area has an outer cordon established by the IC and secured by the security police. Cordon size will be in accordance with guidance in the North American Emergency Response guide. The incident commander will adjust as necessary with advice from SGGFB and CEV.

- (2) The on-scene command post will be located within the outer cordon at a location upwind and uphill of the spill site.

- (3) A cold, warm and hot zone will be established by HAZMAT specialists from the fire department and/or Bioenvironmental engineering.

- (4) The fire department HAZMAT emergency response team will set up operations inside the cold zone.

(5) An ECP will be established for the cold zone and entry into this zone will be strictly controlled to trained HAZMAT emergency response personnel only.

(6) The HAZMAT emergency response team will have a security officer assigned from within the team to supervise site security within the cold zone.

(7) Refer to page A-5-D-4 of this tab for a drawing of a typical scene layout.

4. PLAN MAINTENANCE AND DISTRIBUTION.

a. Responsibility for maintaining and updating this tab belongs to the base fire chief.

b. This tab will be updated as needed and reviewed annually. Changes or revisions will be distributed as outlined in Annex A, Appendix 5, Section 7(c).

c. This tab will be exercised at least annually in accordance with AFI 32-4002 and HQ ACC (HAZMAT planning, training and implementation guidance) in conjunction with the basic plan and other tabs to the plan.

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TAB E TO APPENDIX 5 TO ANNEX A TO HOLLOMAN AFB PLAN 32-1  
COMMUNICATIONS AND WARNING

1. PURPOSE. This tab outlines the requirements for all communications and warning functions, responsibilities, and procedures for all hazardous materials incident responses by HAFB.

2. SITUATION AND ASSUMPTIONS.

a. Primary and secondary emergency communications systems are composed of commercial telephones, land mobile radio networks, and cellular telephones located in all dispatch centers and mobile command post vehicles on HAFB.

b. The CP, fire alarm communications center, security police law enforcement and security control dispatch centers operate 24-hour emergency dispatch centers.

c. The base utilizes a Federal Emergency Management Agency (FEMA) approved base-wide warning and notification system for peacetime emergencies.

d. Off-base mutual aid responses will require the coordination between local officials and base personnel. Local communications capabilities are limited. It is safe to assume that local officials will require additional communications resources from base, if available.

3. COMMUNICATIONS.

a. During a hazardous materials incident, all official radio systems may be used to control the situation.

b. The following is the standard arrangement during incidents:

<u>Frequency Name</u>	<u>Frequency Use</u>	<u>Frequency Number</u>
Fire Crash	Tactical Net	173.5875
Law Enforcement-2/Trans*	Incident Command	Recv 173.4375/Trans 165.4875
Commanders Net	Commander and WOC	Recv 165.1125/Trans 173.5375

\*Note: This frequency is owned by security forces and is recalled during an emergency.

c. All other responding agencies' operating radio frequencies not listed above will provide a radio to the communications center in the emergency operations center to ensure adequate lines of communications are kept open during the operation.

d. Maximum use will be made of pagers, commercial telephones, and cellular phones for recalling key personnel.

e. Keep radio transmissions to a minimum during emergency operations and use plain text, no "ten codes."

f. Phase 2 considerations:

(1) The 49 FW/CP is the communications center for all inbound and outbound communications immediately after a major mishap occurs.

(2) CE Readiness personnel, supported by the 49th Communication Squadron (CS), will (if required) provide and maintain communications equipment for the temporary CP at the mishap site. Equipment must be capable of communicating with the CP either directly or via relay. Secure communication may be required.

(3) If the mishap site is in an area that precludes direct communications with the CP, the OSC may request a communications relay aircraft at specified, prearranged times. Request for aircraft support will be coordinated through the 49 OG/CC (X-7092). **(HAMMER ACE Support can be requested through Scott AFB Command Post: emergency standby communications)**

#### 4. PLAN MAINTENANCE AND DISTRIBUTION.

a. Responsibility for maintaining and updating this tab belongs to CE readiness.

b. This tab will be updated as needed and reviewed annually. Changes or revisions will be distributed as outlined in Annex A, Appendix 5, Section 7(c).

c. This tab will be exercised at least annually IAW AFI 32-4002 and HQ ACC (HAZMAT planning, training, and implementation guidance), in conjunction with the basic plan and other tabs to this plan.

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TAB F TO APPENDIX 5 TO ANNEX A TO HOLLOMAN AFB PLAN 32-1  
EMERGENCY PUBLIC INFORMATION

1. PURPOSE. This tab outlines the release procedures and requirements for emergency public information during hazardous materials accidents or incidents on HAFB.

2. RESPONSIBILITIES.

a. Air Force units will provide maximum cooperation, consistent with national security responsibilities, to properly identify U.S. news media representatives desiring to cover military accidents.

b. The Public Affairs Officer (PAO) or designated representative will be the liaison between the OSC and the media. The PAO will report directly to the OSC as a command staff position (Public Information Officer).

c. Due to the dangers involved during hazardous material accidents or incidents, the only personnel authorized into the HAZMAT operations area will be HAZMAT team members and fire/rescue personnel. All other personnel will remain outside of this area.

d. Media may be allowed into the staging and/or incident command post area only if authorized by the IC. If the IC does not desire the media into those areas another designated area must be established for them.

3. RELEASE PROCEDURES.

a. In the event of a release or possible release of a hazardous substance that endangers the public, lifesaving and health preservation instructions will be disseminated to the public as soon as possible, but no later than 1 hour after the incident occurs. These instructions will include evacuation procedures and shelter locations, PA shall respond, report and release info IAW EIIB criteria.

b. If classified defense material is involved, the OSC will inform members of the media of the presence of such material until it is removed or covered. Media will be advised that taking photographs may violate federal law. Air Force personnel will not physically restrain the media from taking pictures.

(1) If the media takes photographs, tell them that they are in violation of federal criminal statutes (18 U.S.C. 795 and 797) and request their cooperation in turning over their film for security review.

(2) If they cooperate, give them a receipt for their film. Process, clear, and return their film as soon as possible.

(3) If media representatives refuse to cooperate, Air Force personnel will refrain from using force but will request:

(a) The assistance of appropriate civil law enforcement officials in preventing compromise of such material and in recovering all photographs, negatives, and sketches which are presumed to contain classified information.

(b) Request the cooperation of supervisors of news media representatives concerned through public affairs.

(c) Bodies should be removed or covered, if possible .

(d) Access to the incident site will not be granted until the area has been cleared of the hazardous materials involved and declared safe by the OSC.

#### 4. RELEASE REQUIREMENTS.

a. The first release is initiated by the PAO and is not held for query. It must be made no later than one hour after the incident is reported, and only after coordination with the OSC or designated representative.

b. Information in the initial release should contain a general description of the type of accident, time, and location. Subsequent releases will detail the chemical(s) involved, hazards to the public and environment and number of casualties (if any). Never speculate about the cause of the accident.

##### c. Information on deceased.

(1) Coordinate with the casualty officer prior to releasing the names. Notification of the next-of-kin is the casualty officer's job.

(2) Once the next-of-kin is notified, you may release the following: name, rank, age, home of record (but not specific addresses), unit of assignment, and military specialty or job title. Release of names of foreign nationals must first be approved by the appropriate embassy or country liaison office.

(3) The following information may be released on the deceased if queried: education, training background, military honors and decorations, assignment history, base pay and allowances (except BAQ), date of rank, extended active duty date, duty status, pay date and source of commission.

(4) Releasable information of civilian employees includes: name, sex, job title, duty location, and past assignments.

NOTE: All the above information is available from numerous public sources; its release, therefore, does not conflict with provisions of the Privacy Act.

d. Information on survivors.

(1) Release the names of survivors immediately except when, by identifying survivors, you will also identify deceased members.

(2) Withhold names of survivors if they are not expected to live until next-of-kin are notified.

(3) The same information on survivors can be released as that for deceased members, except home of record.

e. Release of hospital/clinic patient information.

(1) Hospital information that is releasable includes: a general statement of condition such as fair, good, serious, stable, critical, conscious, semi-conscious, and unconscious. A physician must determine this information.

(2) The following information cannot be released without the patient's consent: description of disease or injury; the general area of the body suffering injury.

(3) Do not presume consent. A patient who is conscious and competent must be given a chance to object to a release of any of the information listed in item 2. If the patient objects, information will not be released. If the patient is not conscious or not mentally competent, information may not be released until the patient is sufficiently improved to object or give consent to the releasing of the information. Consent to release information about the circumstances surrounding a suicide must come from the next-of-kin.

(4) Never release the prognosis (50-50 chance of recovery, etc.). The attending physician may give a more specific medical report, if the patient does not object.

5. PLAN MAINTENANCE AND DISTRIBUTION.

a. Responsibility for maintaining and updating this tab belongs to the Public Affairs office.

b. This tab will be updated as needed and reviewed annually. Changes or revisions will be distributed as outlined in Annex A, Appendix 5, Section 7(c).

c. This tab will be exercised at least annually IAW AFI 32-4002 and HQ ACC (HAZMAT planning, training, and implementation guidance) in conjunction with the basic plan and other tabs to this plan.

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TAB G TO APPENDIX 5 TO ANNEX A TO HOLLOMAN AFB PLAN 32-1  
LAW ENFORCEMENT

1. PURPOSE. This tab outlines responsibilities and operational procedures for HAFB security forces personnel during hazardous materials incident responses.
2. RESPONSIBILITIES. Security forces are responsible for the following actions during any HAZMAT incident on base.

- a. Provide traffic control and deny entry of all vehicles into the evacuation zone (established by the OSC). Fire department, emergency medical personnel under the direction of the fire department and HAZMAT response team personnel will be the only authorized personnel allowed into the incident scene.

- b. Assist with evacuation notification and evacuation procedures as directed by the OSC.

- c. Establish an outer cordon and an ECP as determined by the OSC. Cordon size will be in accordance with guidance in the NARG and be adjusted as necessary by the OSC with the advice of SGBP. Security forces shall detain vehicles inside the cordon until cleared by the SFO.

3. CONCEPT OF OPERATIONS.

- a. Fixed site HAZMAT incidents.

- (1) The base fire department will normally have all initial response actions to fixed site (facility) HAZMAT incidents on base.

- (2) The law enforcement desk will be notified on all facility emergency responses by the fire department's FACC.

- b. Vehicle accidents involving hazardous materials.

- (1) Security forces may be the first to be notified or first on scene for vehicle accidents. It is imperative that security forces personnel use their HAZMAT Awareness Level training to identify whether or not HAZMAT is involved in a vehicle accident.

- (2) If HAZMAT are involved and security forces personnel are the first on the scene:

- (a) The senior ranking person assumes the role of the OSC until relieved by a senior fire officer or someone more qualified. They will report directly to the first arriving SFO.

(b) Perform a size-up of the incident and communicate all pertinent information to the law enforcement or security control desk (notify the base fire department for all on-base accidents).

(c) Stay upwind, uphill and keep back a safe distance from the accident, secure the scene, deny entry and wait for trained fire department HAZMAT personnel to arrive.

(d) Upon arrival of the fire department, brief the SFO on-scene of the situation, relinquish command and assist as directed.

c. For Off-Base Accidents.

(1) The first on-scene performs the same procedures as above.

(2) The on-scene OSC for HAZMAT incidents in the state of New Mexico is an ERO from the State Police.

(3) Off-base incidents must be reported to the closest State Police district office. District 8, Alamogordo, must be notified for any HAZMAT incident/accident occurring in Otero County. Notification of the Otero County Sheriff's office must also be accomplished to activate the county emergency plan.

(4) The first on-scene county fire chief for that fire district will assume OSC until relieved by an ERO.

(5) HAFB Fire Department has a mutual aid agreement with Alamogordo Department of Public Safety, Cloudcroft, and Alamo West Fire Rescue and may respond to off-base accidents/incidents if requested. The installation commander will make the final approving authority for off-base responses.

4. PLAN MAINTENANCE AND DISTRIBUTION.

a. Responsibility for maintaining and updating this tab belongs to the security police plans and programs NCOIC.

b. This tab will be updated as needed and reviewed annually. Changes or revisions will be distributed as outlined in Annex A, Appendix 5, Section 7(c).

c. This tab will be exercised at least annually IAW AFI 32-4002 and HQ ACC (HAZMAT planning, training, and implementation guidance) in conjunction with the basic plan and other tabs to this plan.

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TAB H TO APPENDIX 5 TO ANNEX A TO HOLLOMAN AFB PLAN 32-1  
FIRE AND RESCUE

1. PURPOSE. This tab outlines requirements for HAFB organizational functions, responsibilities, and procedures for all on- and off-base HAZMAT incident responses.

2. ORGANIZATION AND RESPONSIBILITIES.

a. Organizational Development

(1) Priorities.

(a) The priorities at a HAZMAT incident are life (responders then public), property, and the environment.

(b) Responding personnel must stabilize the incident scene and prevent further escalation of the incident with minimum personal risk. Only personnel with appropriate HAZMAT training will be authorized within the outer cordon.

(c) The fire department's response efforts should be directed toward protecting life, then property and minimizing or lessening the impact on the environment. After the incident is mitigated, CEV will be contacted to implement clean up operations.

(2) Incident Characterization. HAZMAT incidents are designated by the degree of severity for various types of releases. Levels of response are dictated by fire department actions. Response planning, procedures, and notifications to federal, state and local agencies will be determined by the following designations:

(a) Level 1: An incident that can be controlled by the responding units operating under the command of an SFO, and does not require evacuation of other than the involved structure or the immediate outdoor area. The incident is confined to a small area and does not pose an immediate threat to life or property. Security forces may be requested to provide traffic control.

(b) Level 2: An incident involving a greater hazard or a larger area which poses a potential threat to life or property and which may require a limited evacuation of the surrounding area. A level 2 incident requires the response of the fire chief. Security forces will respond to assist in evacuation and traffic control. Medical resources would also be requested.

(c) Level 3: An incident involving a severe hazard or a large area which poses an extreme threat to life and property and will probably require a large-scale evacuation. A level 3

incident requires the response of the fire chief and may require the activation of the DCG through the implementation of Annex A of this plan.

b. Response Organization.

(1) Under the Incident Command System, the incident organization will develop in a modular progression depending on the exact nature and specific conditions prevailing at the scene.

(a) The first response of the fire department will be managed by the senior ranking officer on the initial alarm who will be the IC. Responsibility for command will be transferred to succeeding commanders using the established lines of authority within the ICS structure.

(b) The IC on the first alarm will implement Appendix 5, Hazardous Materials Emergency Response, of this plan and assume responsibility for all command and command staff functions necessary to manage the initial response. The OSC will call additional resources as incident needs dictate.

(c) If an incident is beyond the capability of the first responders, the ICS will be expanded to include the HAZMAT Emergency Response Team and other responders with more specialized skills and equipment.

(d) As the incident progresses it may be necessary to modify/expand the organization structure so tasks can be accomplished as efficiently and safely as possible.

(2) The ICS Organizational Charts in this tab depict an initial HAZMAT incident response and an expanded version response chart. The expanded version would be used during a Level 3 incident with DCG response. As the incident progresses so does the ICS structure. It should increase or decrease in direct relation to the incident, however, it should not interfere with ongoing operations.

3. CONCEPT OF OPERATIONS.

a. Initial notification

(1) Upon initial notification of a possible HAZMAT incident, the FACC will take all pertinent information from the reporting party per initial response checklist.

(2) The FACC will advise the reporting party to evacuate the immediate area and keep other personnel from entering.

b. Response

(1) Initial response will be made by the first-run engine company, rescue squad and SFO.

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- (2) Respond to the emergency utilizing upwind and uphill expeditious routes.
  - (3) Establish an outer cordon at 2,500-ft. minimum to 4,000 ft. when unknown hazardous materials are involved.
  - (4) Determine the type and quantity of chemical/material involved, container condition and environmental conditions prior to entry into the spill/incident area.
  - (5) Determine incident level (1, 2, or 3). If level 2 or 3, notify the fire chief or SFO and other key installation personnel as directed.
  - (6) Perform emergency fire-fighting and rescue operations as the situation permits. NOTE: Standard fire-fighting turnout gear normally does not protect responders from hazardous substances.
  - (7) Notify security forces to assist in evacuation, traffic control and security, if required.
  - (8) Establish an incident CP and ECP within the outer cordon, upwind and uphill of the incident.
  - (9) Determine the hot, warm and cold zones.
  - (10) Establish a cold zone cordon and ECP. Only fire department, HAZMAT emergency response team, and medical personnel (when requested) will be allowed in the cold zone.
  - (11) Establish HAZMAT sector operations inside the cold zone, upwind and uphill of the incident.
  - (12) Establish a HAZMAT sector/unit leader, HAZMAT safety officer, decon officer, entry team officer, site security officer, equipment monitor, and recorder.
  - (13) Position both HAZMAT response trailers inside the cold zone, upwind and uphill of the incident site.
  - (14) Establish a warm zone cordon, ECP and decon area, upwind and uphill of the incident site.
  - (15) Establish an action plan and site safety plan.
  - (16) Follow all standard operating procedures and checklists established for HAZMAT sector operations.
- c. Off-Base Responses. Refer to Tab A of this appendix.

4. PLAN MAINTENANCE AND DISTRIBUTION.

- a. Responsibility for maintaining and updating this tab belongs to the base fire chief.
- b. This tab will be updated as needed and reviewed annually. Changes or revisions will be distributed as outlined in Annex A, Appendix 5, Section 7(c).
- c. This tab will be exercised at least annually IAW AFI 32-4002 and HQ ACC (HAZMAT planning, training, and implementation guidance) in conjunction with the basic plan and other tabs to this plan.

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TAB I TO APPENDIX 5 TO ANNEX A TO HOLLOMAN AFB PLAN 32-1  
HEALTH AND MEDICAL

1. PURPOSE. This tab outlines the requirements for emergency medical services personnel in pre-hospital responses and in the hospital setting for patient care of the injured during HAZMAT incidents.

2. RESPONSIBILITIES.

a. Public Health (MPH) will ensure medical responders receive additional training in patient decontamination.

b. MDG will provide ambulances and emergency technicians for transporting patients during HAZMAT accidents or incidents.

3. CONCEPT OF OPERATIONS.

a. Responsibilities for emergency medical service (EMS) Responders (ref. NFPA 473).

(1) All EMS response personnel shall be certified to the EMT-B level or higher and have Level II, HAZMAT operations training.

(2) The goal of this training shall be to provide the Level II EMS responder with the knowledge and skills necessary to perform and/or coordinate patient care activities and medical support of HAZMAT response personnel in the cold zone. The Level II EMS responder shall be able to:

(a) Analyze a HAZMAT incident to determine the magnitude of problem in terms of outcomes by completing the following tasks:

1. Determine the hazards present to the Level II responder and the patient in a HAZMAT incident.

2. Assess the patient to determine the patient care needs and the risk of secondary contamination.

(b) Plan a response to provide the appropriate level of emergency medical care to persons involved in HAZMAT emergency response.

b. Secondary Contamination. A substance is considered to pose a serious risk of secondary contamination if it is likely to be carried on equipment, clothing, skin or hair in sufficient quantities to be capable of harming personnel outside the hot zone.

c. EMS controls activities at a HAZMAT incident to include:

- (1) Identification of EMS needs including appropriate level of protection for EMS personnel and equipment, and resources for patient care.
- (2) Securing of resources to meet EMS needs.
- (3) Assignment of personnel, in the cold zone, to coordinate triage, treatment, disposition, and transport as required.
- (4) A flight surgeon or Bioenvironmental engineer or 49 CES/CEV should advise the OSC of the need for alternative means of assessing HAZMAT exposure and risk.

(a) When a casualty should be expeditiously evacuated from the cordoned area to receive medical care.

(b) Patients with inhalation or dermal injuries may continue to off-gas contamination for prolonged periods of time. If the HAZMAT exposure is deemed low risk to medical personnel due to acceptably low level and/or hazard of the off-gassing substance, through containment practices (e.g., putting a plastic wrap on a contaminated extremity) or through the use of personal protective equipment, then the OSC may consider evacuating the casualty to the cold area for life/limb saving medical care beyond the scope of fire rescue personnel. A new cold area should thereafter be designated.

NOTE: Warm zone operations will be conducted by only HAZMAT emergency response team members trained to Level III, HAZMAT technician. Registered EMT-B's from the fire department are assigned to the team to accomplish this requirement.

d. Recommended Support Resources. Emergency medical service personnel who respond to HAZMAT incidents must operate within a network of support resources. The following presents a recommended minimum level of support necessary for adequate emergency medical response.

(1) Poison Control Centers (PCC). In addition to providing support to the general HAZMAT response, the goal of the PCC is to provide the emergency medical personnel who respond to HAZMAT with medical guidance, information, and advice during incidents involving toxic chemical releases and associated injuries. The PCC should be considered in the following activities together with the EMS component of the HAZMAT incident response:

- (a) Training.
- (b) EMS HAZMAT standard operating procedures review.
- (c) EMS references materials.
- (d) Technical advice.

1. Identify ingredients.
2. Toxicity of substances involved.
3. Level of protective clothing recommended.
4. Recommended decontamination procedures
5. Specific treatment and/or antidotes

(2) Chemical Injury Treatment Centers. The emergency medical responders to HAZMAT incidents should transfer chemically injured patients to facilities having adequate chemical injury treatment capability downtown. HAZMAT team will be responsible for gross decontamination of casualties and fatalities. All such facilities should have a minimum level of competency to receive those patients including:

(a) Patient decontamination capabilities.

1. Decontamination area
2. Proper ventilation system
3. Restricted access
4. Runoff containment

(b) A cadre of trained in-house HAZMAT incident injury treatment personnel.

(c) Personal protective equipment for hospital personnel that may treat HAZMAT patients.

(d) Formal HAZMAT incident response procedures directed to EMS providers and hospital personnel.

(e) The network of emergency medical response resources to HAZMAT incident should be linked by an adequate communications system within the CP, to include: radio, cellular phone, and computer.

NOTE: The HAZMAT emergency response team operations van is equipped with all the above. Hospital EMS personnel should become familiar with this equipment during joint training exercises.

e. Medical treatment considerations.

(1) The assessment and pre-hospital care of patients involved in HAZMAT incidents and who are potentially chemically contaminated, should include the following steps:

- (a) Provide for the safety of the EMS provider by securing the scene, ensuring appropriate decon of patient, and protecting against exposure to communicable diseases and HAZMAT.
- (b) Patient's airway should be secure and regularly monitored.
- (c) Patient's breathing should be monitored and assisted when necessary.
- (d) Supplemental oxygen should be administered if the surrounding environment safety permits.
- (e) Bleeding should be controlled.
- (f) In general, avoid all prophylactic invasive procedures unless required by life-threatening conditions. This includes the establishment of IV lines.
- (g) Direct medical control should be established.

NOTE: The military public health officer, the OIC of the Ambulance Response Element and the chief, aerospace medicine should ensure that written pre-hospital protocols are in place to provide direction to the EMS personnel who respond to and provide treatment to victims of HAZMAT incidents.

#### 4. PLAN MAINTENANCE AND DISTRIBUTION.

- a. Responsibility for maintaining and updating this tab belongs to the Military Public Health Officer, the OIC of the Ambulance Response Element and the Chief, Aerospace Medicine.
- b. This tab will be updated as needed and reviewed annually. Changes or revisions will be distributed as outlined in Annex A, Appendix 5, Section 7(c).
- c. This tab will be exercised at least annually IAW AFI 32-4002 and HQ ACC (HAZMAT planning, training, and implementation guidance) in conjunction with the basic plan and other tabs to this plan.

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TAB J TO APPENDIX 5 TO ANNEX A TO HOLLOMAN AFB PLAN 32-1  
HAZMAT EMERGENCY RESPONSE TEAM

1. PURPOSE. This tab outlines the requirements, responsibilities and procedures for the Base Hazardous Materials Emergency Response Team.

2. ORGANIZATION AND RESPONSIBILITIES.

a. The base fire department will maintain the Initial HAZMAT Response Team. This team will consist of firefighters trained in Awareness, Operations and Technician Levels.

3. CONCEPT OF OPERATIONS.

a. Initial response and stabilization actions will be made by the base fire department. Refer to Tab H, Fire and Rescue, for initial procedures.

b. HAZMAT Sector/Unit Operations.

(1) HAZMAT response team personnel have been predesignated to fill key positions. The following is a listing of those positions:

(a) HAZMAT Sector/Unit Leader: responsible for all HAZMAT unit operations.

(b) HAZMAT Site Safety Officer: responsible for completing a site safety plan and ensuring on-site safety during the entire operation. Reports to the incident safety officer.

(c) Site Security Officer: Responsible for securing the HAZMAT sector operations area to only authorized fire/rescue, and medical personnel and ensuring site personnel accountability during the incident.

(d) Entry Team Officer: Responsible for primary and backup entry crew members, ensures proper dress up procedures are complied with and briefs crews on task(s) to be accomplished. Also maintains communication contact with entry crews during hot zone operations.

(e) Decon Officer: Responsible for all decon operations, ensures proper decon solutions, PPE and techniques are utilized for the hazardous material involved and proper disposal methods are used for contaminated equipment.

(f) Recorder: Responsible for record keeping and documentation throughout the entire operation.

(g) **Emergency Medical Technician:** Responsible for entry crew(s) medical profiles both before and after entry into the hot zone and providing emergency medical care to all on-site personnel during the operation. Reports to the Entry Team Officer.

(h) **Equipment Monitor:** Responsible for all HAZMAT equipment accountability throughout the operation and ensuring all equipment is returned to operational ready status upon termination of the incident.

(i) **Bioenvironmental and Environmental Specialist:** Advises unit leader on the chemical(s) involved (dangers, compatibility, etc.) and ensures all necessary reporting procedures to federal and state agencies is accomplished.

(j) **Bioenvironmental Specialist:** Responsible for air, water and soil sampling (monitoring) during the operation.

(k) **Environmental Specialist:** Responsible for supervising cleanup and waste packaging/labeling.

(2) Only authorized HAZMAT team members, fire department personnel and ambulance personnel will be allowed into the HAZMAT operations area. All other support personnel will remain out of the area. (A designated staging area will be established for all support personnel, Incident Command, and DCG personnel (if activated) during HAZMAT operations.)

(3) Standard operating procedures and checklists established for HAZMAT sector operations will be used during all HAZMAT operations. (Checklists are located on the HAZMAT van.)

(4) A decontamination area will be established and decon personnel will be ready to conduct decon operations prior to entry team entering hot zone.

(a) Standard decon operating procedures will be used on all HAZMAT operations.

(b) Decon solutions, compatible with the hazardous material involved, will be verified with SGGFB.

(c) Specific decon Standard Operating Procedures (SOPs) are located in the HAZMAT Emergency Response trailer.

(5) An evacuation alarm signal consisting of three consecutive blasts on a siren will be the standard during all HAZMAT operations. The safety officer will establish a predesignated evacuation staging area and all site personnel will be briefed prior to starting operations.

4. POST EMERGENCY CLEANUP OPERATIONS. Post emergency cleanup by contract should begin as soon as possible after emergency operations have been completed.

a. CEV shall establish/determine cleanup standards

b. If spill exceeds capabilities of base personnel, then cleanup should be turned over to a trained, certified HAZMAT response/cleanup contractor. The OSC, Bioenvironmental and CEV will coordinate with the using agency on what appropriate actions to take.

NOTE: If the responsible agency is capable of performing cleanup (as determined by the IC), cleanup operations will be conducted by that agency under supervision of 49 CES/CEV.

5. PLAN MAINTENANCE AND DISTRIBUTION.

a. Responsibility for maintaining and updating this tab belongs to the Base Fire Chief, or his designee and the environmental flight.

b. This tab will be updated as needed and reviewed annually. Changes or revisions will be distributed as outlined in Annex A, Appendix 5, Section 7(c).

c. This tab will be exercised at least annually IAW AFI 32-4002 and HQ ACC (HAZMAT planning, training, and implementation guidance) in conjunction with the basic plan and other tabs to this plan.

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TAB K TO APPENDIX 5 TO ANNEX A TO HOLLOMAN AFB PLAN 32-1  
RESOURCES AND TRANSPORTATION

1. PURPOSE. This tab lists available resources and transportation sources available for hazardous materials incident responses on HAFB.

2. RESOURCES.

a. Fire Department

(1) Pumpers: 3

(2) Crash Trucks: 6

(3) Tankers: 2

(4) Rescue Vehicles: 2

(5) HAZMAT Response Equipment.

(a) Two, 23 ft. HAZMAT Trailers, one initial response and one support trailer.

1. Both are generators equipped with combination heat and air conditioner units.

2. Trailers are completely stocked with all required HAZMAT equipment.

(b) One, metro van used to pull the initial response trailer. Used as the HAZMAT sector/unit Operations Center.

(c) Portable command post package consisting of an enhanced Toshiba T4400DX computer, digital logitech camera, Motorola cellular phone with modem capability, bubble jet printer, Plume modeling software and other essential software installed. Comes in waterproof hard plastic case and additional 16" color monitor and full size keyboard which is installed in the metro van.

(d) Augmentee team members used to supplement the fire department: 0

(6) Salvage Drums.

(a) 85 gal. open head: minimum of 5 kept in CEV storage

(b) 55 gal. open head: minimum of 5 kept in CEV storage

(c) 35 gal. open head: minimum of 2 kept in CEV storage

(d) 95 gal. plastic overpaks: 3 on Response Trailers 2 in CEV storage

b. Medical.

(1) Ambulances: maximum of 3 (duty hours); maximum of 2 (after duty hours)

(2) Emergency Medical Technicians: 12 (duty hours); 2 (after duty hours)

(3) Doctors: 8 (duty hours); 0 (after duty hours)

(4) Nurses: 7 (duty hours); 0 (after duty hours)

(5) Radiological Safety Officer (RSO): 2

(6) Additional medical personnel may be recalled after duty hours if required for a major incident response involving mass casualties.

c. Civil Engineer Operations.

(1) Front End Loader: 4

(2) 5-ton Dump Truck: 5

(3) 10-ton Dump Truck: 5

(4) Backhoe: 3

(5) 1,500 gal. Water Tanker: 1

(6) Portable Air Powered Pump 100 GPM (for POL spills): 2 (located at liquid fuels shop)

(7) Portable Diesel Air Compressor (to run item 6): 3

3. TRANSPORTATION.

a. Transportation of personnel during evacuations will normally be accomplished utilizing privately owned vehicles (POV's). If it is necessary to provide additional transportation sources, the 49th Transportation Squadron will be tasked to provide buses.

(1) Buses available:

- (a) 29 Passenger: 5
- (b) 44 Passenger: 2
- (c) 50 Passenger: 1

b. Evacuation routes will be recommended by the SF.

4. PLAN MAINTENANCE AND DISTRIBUTION.

a. Responsibility for maintaining and updating this tab belongs to CE readiness flight.

b. This tab will be updated as needed and reviewed annually. Changes or revisions will be distributed as outlined in Annex A, Appendix 5, Section 7(c).

c. This tab will be exercised at least annually IAW AFI 32-4002 and HQ ACC (HAZMAT planning, training, and implementation guidance) in conjunction with the basic plan and other tabs to this plan.

HEADQUARTERS, 49TH FIGHTER WING (ACC)  
HOLLOMAN AIR FORCE BASE, NEW MEXICO 88330-5000  
1 July 2001

TAB L TO APPENDIX 5 TO ANNEX A TO HOLLOMAN AFB PLAN 32-1  
RADIOLOGICAL RESPONSES

1. PURPOSE. This tab outlines requirements and procedures for response to nuclear weapons accidents and HAZMAT incidents involving radioactive materials.

2. REQUIREMENTS.

a. Accidents Involving Nuclear Weapons. The Nuclear Accident Response Procedures (NARP), DoD 5100.52-M, requires numerous emergency response activities during an accident involving nuclear weapons. All operations for nuclear weapons accidents will be conducted IAW the NARP; AFI 32-4001, Chapter 4.4.

b. Radioactive material accidents involving other than nuclear weapons will follow the procedures listed in section 3, Concept of Operations, of this tab.

3. CONCEPT OF OPERATIONS.

a. Emergency response to accidents involving radioactive materials shall be conducted using the same procedures of all HAZMAT incident responses with the addition of:

(1) CE readiness and Bioenvironmental respond with radiological monitoring equipment.

(2) Explosive Ordnance Disposal (EOD) technicians respond for the purpose of performing the initial site survey (utilizing the radiological monitoring equipment). If unavailable, this task may be performed by trained members of the HAZMAT team.

(3) Standard evacuation cordon will be 2,500 ft. Do not allow anyone, including emergency responders, into the area until proper radiological monitoring equipment is available.

NOTE: As with any HAZMAT emergency response operation, no person will be allowed into the warm or hot zones without proper PPE and training.

b. Conduct an initial site survey using radiological monitoring equipment and determine the extent of contamination. This information will be used to determine the size of the cordons required for safe on-scene operations.

c. Initial emergency response vehicles could inadvertently enter the contamination area. Ensure these vehicles (and personnel) are thoroughly checked for contamination and properly decontaminated before allowing them out of the area.

d. Consideration of contamination control should receive the highest priority. Consider wetting down dusty areas within the hot zone to prevent the wind from spreading particulate contamination. Refer to the NARP, chapter 7, for detailed information.

f. CE readiness will set up and operate a contamination control line to reduce the spread of contamination.

g. All radioactive incidents will be reported to the USAF Radioisotope Committee (RIC) at Brooks AFB, TX.

#### 4. PLAN MAINTENANCE AND DISTRIBUTION.

a. Responsibility for maintaining and updating this tab belongs to CE readiness.

b. This tab will be updated as needed and reviewed annually. Changes or revisions will be distributed as outlined in Annex A, Appendix 5, Section 7(c).

c. This tab will be exercised at least annually IAW AFI 32-4002 and HQ ACC (HAZMAT planning, training, and implementation guidance) in conjunction with the basic plan and other tabs to this plan.

HEADQUARTERS, 49TH FIGHTER WING (ACC)  
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1 July 2001

TAB M TO APPENDIX 5 TO ANNEX A TO HOLLOMAN AFB PLAN 32-1  
EVACUATION/PERSONNEL PROTECTIVE ACTIONS

1. PURPOSE. This tab outlines general responsibilities and operational procedures for personnel protective actions during accidents/incidents involving HAZMAT. There are two types of protective actions:

a. Evacuation. The rapid escape from an area in the face of an acute threat. In many HAZMAT incidents, only evacuation can prevent unnecessary deaths and serious injury. This action would be used as a result of a long-term release where a sustained continuous release may filter into a structure and endanger the occupants.

b. In-place Sheltering. Acquiring some protection against HAZMAT by staying inside (building or vehicle). If this option is chosen, inform occupants to shut down cooling/heating systems that draw outside air into the facility, to close all windows and doors, and seal all openings. Tapes, weather stripping, and wet paper or cloth can be used to seal cracks where air enters a building. This action should be considered:

(1) If there is not a sustained continuous release, i.e., toxic vapors may pass over structures with little or no penetration.

(2) When a HAZMAT spill occurs and personnel cannot be evacuated from an area prior to impact of a toxic cloud.

(3) If for any reason there is a loss of commercial power, the base power grid is structured so that the MMG compound can be electrically isolated. MMG has the capability to power its entire compound with generators. Buildings in the MMG compound can be used as "warm Havens" during the winter months.

2. RESPONSIBILITIES.

a. Security forces are responsible for the following actions during a HAZMAT incident that requires the evacuation of base populace personnel:

(1) Recommend primary and secondary evacuation route(s) to the operations section chief or IC if no operations section chief is assigned.

(2) Ensure adequate personnel/resources required to handle the evacuation effort are made available and coordinate all evacuation efforts.

(3) Ensure evacuation announcements made over public address systems include safe travel routes and the location(s) of reception/care area(s).

(4) Provide adequate traffic control to support evacuation efforts.

b. Services squadron in conjunction with Family Support Center, will function as reception/care coordinators and will be responsible for the following actions:

(1) Report to the designated reception/care center(s) with adequate personnel and resources to handle the situation.

(2) Check evacuees in and document their names at the reception/care center with adequate personnel and resources to handle the situation.

(3) Notify the American Red Cross for assistance as follows; American Red Cross Service Center-Otero County, Alamogordo NM, 505-437-4421; American Red Cross Rio-Hondo Chapter, Roswell NM, 888-622-4370

(4) Coordinate all food and lodging requirements, and special needs through the logistics officer.

(5) Inform arriving personnel of symptoms of exposure to the HAZMAT. This information can be obtained from the HAFB Medical Group Hospital, ext. 3260.

c. Transportation will provide buses, vans, and vehicle operators to transport special populations such as school children, etc., and wrecker service to clear any disabled vehicles from evacuation routes (if required).

d. CP will coordinate public address announcement information over the "giant voice."

e. Medical group (MDG) will provide medical coverage, as needed, to the reception/care center(s) or area(s) and also provide transportation to evacuate non-ambulatory persons and persons with special needs.

f. Civil engineer squadron (CES) will provide traffic signs, barricades and personnel required to assist in evacuation efforts.

### 3. CONCEPT OF OPERATIONS.

a. The primary evacuation mode will be by private vehicles. In addition, military vehicles may be used to transport evacuees to ensure expedient evacuation.

b. If at all possible, two-way traffic will be maintained on evacuation routes to permit continued emergency vehicle access. Traffic control points will be located as needed for anticipated traffic volume and complexity of evacuation routes.

c. Traffic control devices such as signs and barricades will be provided and installed by CES, at the request and direction of security forces.

d. Security forces personnel will request wrecker service (if required) from transportation to clear disabled cars from evacuation routes.

e. MDG will advise the IG/OSC on the feasibility of protecting in place.

(1) If in-place sheltering is a viable option, the facility ventilation system may be required to be shut down to prevent pulling outside air contaminants into and throughout the facility.

(2) If in-place sheltering is not a viable option, clinic evacuation standard operating procedures will be activated. Transportation resources required for this operation will take priority over other requirements. Patients will be transported to Gerald Champion Memorial Hospital in Alamogordo and William Beaumont Army Medical Center in El Paso, Texas.

f. Other base agencies may be requested to augment security police personnel in traffic control duties as required.

g. Facilities which can be utilized as reception/care centers in the event evacuation of military family housing is required. The number of reception/care centers used will depend on the number of evacuees:

- (1) Fitness Center capacity: 400 persons.
- (2) Base Community Center capacity: 200 persons.
- (3) Enlisted Club capacity: 400 persons.
- (4) Officer's Club capacity: 100 persons.
- (5) Elementary School capacity: 1,000 persons
- (6) Hospital (patients only) capacity: 25 persons.
- (7) Hanger 500 capacity: 300 persons.

h. In the event evacuation of office and/or industrial areas of the base is required, utilize other like facilities outside the outer cordon area for these personnel to report to. If evacuation of these types of facilities is required for any lengthy period of time, those employees may either be sent home or relocated to a temporary place of business.

i. If it becomes necessary to house military family housing occupants overnight, or for a short-term duration (not to exceed one week), in a reception/care center the following sources may be contacted to supply sleeping cots:

- (1) CE readiness flight; (Prime BEEF assets) maximum cots available: 130.

(2) Material Maintenance Group (MMG); large quantity of cots available upon request. If WRM is utilized, 49 MMG will work authorization issues with HQ ACC, IAW AFI25-101.

j. In addition to cots, it may be necessary to obtain sleeping bags. Contact base supply for this resource. Maximum number of sleeping bags available: 2,117. Utilization of these assets requires wing commander's approval.

k. If it becomes necessary to house some military family housing occupants for an extended length of time, arrangements should be made for them to use local motels. This will be accomplished by contracting.

#### 4. PLAN MAINTENANCE AND DISTRIBUTION.

a. Responsibility for maintaining and updating this tab belongs to CE readiness.

b. This tab will be updated as needed and reviewed annually. Changes or revisions will be distributed as outlined in Annex A, Appendix 5, Section 7(c).

c. This tab will be exercised at least annually IAW AFI 32-4002, 32-4005 and HQ ACC (HAZMAT planning, training, and implementation guidance) in conjunction with the basic plan and other tabs to this plan.

HEADQUARTERS, 49TH FIGHTER WING (ACC)  
HOLLOMAN AIR FORCE BASE, NEW MEXICO 88330-5000  
1 July 2001

TAB N TO APPENDIX 5 TO ANNEX A TO HOLLOMAN AFB PLAN 32-1  
REPORTING PROCEDURES AND DOCUMENTATION

1. PURPOSE. To provide general guidance for the reporting and documentation of a HAZMAT incident.

2. RESPONSIBILITIES.

a. Upon notification of a suspected or known HAZMAT incident, first responders are expected to deny entry and evacuate personnel from the area. Identify the material if possible and notify the base fire department.

b. The base fire department will dispatch units to the scene and make all necessary notifications.

c. DCG notifications will be IAW Annex A, Appendix A to this plan. If a partial DCG recall is directed, consideration should be 49 SPTG/CC, owning organization commander, FW/SE, CEV, Bioenvironmental, and alert photographer.

d. Environmental flight will make all necessary notifications of the incident required by federal and state laws, and ACC directives.

3. CONCEPT OF OPERATIONS.

a. Environmental reporting procedures.

(1) Reporting requirement information on HAZMAT spill categories

(2) In the event a spill or release of a hazardous material/substance exceeding the reportable quantity (RQ) listed in 40 CFR Part 302, Table 302.4 and 40 CFR Part 261, RCRA Hazardous Wastes, or 49 CFR 172 Annex 1, for transportation accidents the following agencies must be notified immediately:

(a) National Response Center (NRC), phone 800-424-8802.

(b) Otero County Local Emergency Planning Committee (LEPC), phone 439-0747, leave message with the County Emergency Services Manager.

(c) New Mexico State Emergency Response Commission (SERC), through New Mexico State Police, District 8, phone 437-1313/14 or 827-9126.

(d) New Mexico Environment Department, phone 505-827-9329.

(e) Headquarters ACC/CEVC, phone 804-764-3553, DSN 574-93001.

b. Required Documentation.

(1) Complete the field spill report. This report will be maintained and updated as required by CEV.

(2) Within 24 hours of the incident notify the New Mexico Environment Department (by phone) with the following information:

(a) Name, address and telephone number of the person in charge of the facility as well as the owner/operator of the facility. "Facility" means any structure, installation, operation, storage tank, transmission line, motor vehicle, rolling stock or activity of any kind, whether stationary or mobile.

(b) Name and address of the facility.

(c) Date, time, location and duration of the discharge. "Discharge" means spilling, leaking, pumping, emitting, emptying, or dumping into water or in a location and manner where there is a reasonable probability that the discharged substance will reach surface or subsurface water.

(d) Source and cause of discharge.

(e) A description of the discharge, including its chemical composition.

(f) The estimated volume of discharge and any actions taken to mitigate immediate damage from the discharge.

(3) Perform EIIB reporting within 24 hours of incidents.

(4) Within one week of the incident submit a written notification to the New Mexico Environment Division (NMED) verifying the above oral notification if required.

(5) No later than 15 days after the discharge, submit a written report to the NMED Bureau Chief describing any corrective actions taken and/or to be taken relative to the discharge if required.

(6) Written notification should be provided to the LEPC as soon as possible after the initial notification is made. This must include:

(a) Actions taken by base personnel to respond to and contain the release.

(b) Known or anticipated acute or chronic health risks associated with the release.

(c) If appropriate, advise on medical attention necessary for exposed individuals.

(7) Within one week of the incident complete an after-action report for 49 MDG/SGPM listing all HAZMAT responders' names and SSANs, the known HAZMAT, any known exposures, and any symptoms developed.

(8) Submit written follow-up progress reports to HQ ACC/CEVC following any significant changes in status. A final report should be sent once cleanup or other corrective actions have been taken.

4. PLAN MAINTENANCE AND DISTRIBUTION.

a. Responsibility for maintaining and updating this tab belongs to CEV.

b. This tab will be updated as needed and reviewed annually. Changes or revisions will be distributed as outlined in Annex A, Appendix 5, Section 7(c).

c. This tab will be exercised at least annually IAW AFI 32-4002 and HQ ACC (HAZMAT planning, training, and implementation guidance) in conjunction with the basic plan and other tabs to this plan.

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1 July 2001

TAB O TO APPENDIX 5 TO ANNEX A TO HOLLOMAN AFB OPLAN 32-1  
SPILL PREVENTION

1. PURPOSE. This tab provides guidance pertaining to spill prevention techniques for the prevention of hazardous materials, including POL products, from being released into the environment.

2. POL BULK STORAGE TANKS.

a. Above ground bulk storage tanks (660 gal. capacity or greater).

(1) All above ground bulk storage tank installations (660 gal. capacity or greater) should be constructed so that a secondary means of containment is provided for the entire contents of the largest single tank plus sufficient freeboard to allow for precipitation.

(2) Diked areas should be sufficiently impervious to contain spilled material.

(3) Drainage of rainwater from diked areas will be conducted under responsible supervision. Drainage of rainwater may be accomplished provided that there has been no spill or release of POL product into the diked area.

(4) Above ground tanks should be subject to periodic integrity testing, taking into account tank design and using such techniques as hydrostatic testing, visual inspection or a system of non-destructive shell thickness testing. Comparison records should be kept where appropriate, and tank supports and foundations should be included in the inspection.

b. Facility Drainage.

(1) Valves or other positive means to prevent a spill or other excessive leakage of material into the drainage system (locked when not draining) shall restrain drainage from diked storage areas.

(2) Flapper-type valves shall not be used to drain diked areas, valves should be of manual, open and closed design.

(3) Drainage from undiked areas should, if possible, flow into ponds, lagoons or catchment basins designed to retain spilled material or return it to the facility.

(4) Whatever techniques are used, facility drainage systems should be adequately engineered to prevent spilled material from reaching navigable waters in the event of equipment failure or human error at the facility.

### 3. HAZARDOUS MATERIALS STORAGE.

#### a. Storage Procedures.

(1) Store only compatible materials together. Incompatible materials when combined can result in potentially lethal consequences. Examples: Chlorine combined with antifreeze results in a violent heat generating reaction; potassium combined with battery acid results in a fire or explosion; lithium combined with spent caustic will result in a fire or explosion, etc.

(a) Refer to DoD 4145.19-R-1, NFPA 491M or environmental flight (CEV) for chemical compatibility tables.

(b) If in doubt about which materials can be stored together, contact Bioenvironmental at extension 7810 or the environmental flight at extension 3931.

(2) Closely examine all containers for any sign of damage, leaks, seepage, etc., before storing them.

(3) Use secondary containment devices such as spill containment pallets to store large quantities of liquid materials. Contact the environmental flight, hazardous waste section at extension 3931, for ordering information on the spill containment pallets.

(4) Use approved flammable storage lockers to store flammable materials. Refer to AFOSH Std 127-43 for locker criteria. Contact the fire department, technical service section at extension 5942, for more information regarding flammable storage.

(5) Ensure all containers are labeled IAW 29 CFR 1910.1200 and AFOSH STD 161-21.

#### b. Good Housekeeping Practices.

(1) Keep storage areas clean, organized and inventoried.

(2) Keep areas free from accumulations of materials that create a hazard from tripping, explosion, fire, or pest harborage.

#### c. Employee Information and Training.

(1) Keep Material Safety Data Sheets (MSDS) current and readily available at all times.

(a) Brief all employees on the location and use of MSDS, as well as all pertinent safety precautions required for safe handling of all the hazardous materials.

(b) Ensure those only trained users handle hazardous materials (IAW 29 CFR 1910.1200).

(2) Establish an emergency plan of action in the event of a release or spill of hazardous material.

(a) Evacuate immediate area. Do not attempt to clean up the material unless you can be absolutely sure that it is not a health or safety hazard to the person(s) doing the cleanup.

(b) Notify the base fire department of all spills.

(c) Give location, type of incident, material(s) involved, and any other information pertinent to the incident which may help the responders.

(3) All employees should be aware of the emergency notification and evacuation procedures in case of an accidental release or spill.

4. HAZARDOUS MATERIALS TRANSPORTATION.

The ground movement of hazardous materials shall be in compliance with 49 CFR 172.

5. PLAN MAINTENANCE AND DISTRIBUTION.

a. Responsibility for maintaining and updating this tab belongs to CEV.

b. This tab will be updated as needed and reviewed annually. Changes or revisions will be distributed as outlined in Annex A, Appendix 5, Section 7(c).

c. This tab will be exercised at least annually IAW AFI 32-4002 and HQ ACC (HAZMAT planning, training, and implementation guidance) in conjunction with the basic plan and other tabs to this plan.

HEADQUARTERS, 49TH FIGHTER WING (ACC)  
HOLLOMAN AIR FORCE BASE, NEW MEXICO 88330-5000  
1 July 2001

TAB P TO APPENDIX 5 TO ANNEX A TO HOLLOMAN AFB PLAN 32-1  
TRAINING

1. PURPOSE. This tab provides general guidance on HAZMAT training, organization and responsibilities, statements of competency for refresher training, and the overall scope of HAZMAT training.

2. ORGANIZATION AND RESPONSIBILITIES.

a. Requirements.

(1) HAFB is required to comply with AFI 32-4002 and 29 Code of Federal Regulations (CFR) 1910.120. This is an OSHA regulation covering required training criteria for all personnel engaged in HAZMAT.

(2) ACC requires all HAZMAT courses meet the National Fire Protection Association (NFPA) Standard 472, "Standards for the Professional Competence of Responders to HAZMAT Incidents." All HAZMAT training will be conducted in accordance with the DoD Hazardous Materials Certification Program and only instructors who have attended the DoD Hazardous Materials Train-the-Trainer course are authorized to train personnel in HAZMAT Awareness, Operations and Technician Levels.

(3) The state of New Mexico requires that HAZMAT course lesson plans incorporate the New Mexico Hazardous Materials Emergency Response Plan and Procedures Manual into the lesson plans. Lesson plans should be approved by the New Mexico Hazardous Materials Review Board. A record of review must be maintained inside the front cover of all HAZMAT lesson plans.

b. Responsibilities.

(1) HAFB units that require and receive HAZMAT training as dictated by AFI 32-4002 and ACC HAZMAT planning, training and response implementation guidance will:

(a) Review the quarterly "HAZMAT LISTING" and make appropriate updates to the information contained in the listing. New or additional personnel requiring training will be added to the listing.

(b) Maintain a special HAFB overprint of AF Form 55, Employee Safety and Health Record, for each individual who receives HAZMAT training. The AF Form 55 overprint must be maintained on file in the work place for as long as the employee is on station and maintained on file in the unit for a period of three years after the employee has PCS, separated or retired from active duty.

(c) Maintain a copy of the HAZMAT training certificate(s) in each student's training record.

(d) Ensure personnel identified for HAZMAT training accomplish all required initial training courses within 90 days of employment or assignment and refresher training as required.

(e) Commanders will ensure personnel that have an emergency response role attend all required training before they are permitted to take part in an actual hazardous materials incident response operation.

(2) HAZMAT certified instructors providing required training will:

(a) Provide students who successfully complete a course with an International Fire Service Accreditation Congress certificate for the level of completion. The course instructor is responsible for completing the Hazardous Materials Certification Request and Certification Statement and submitting them to HQ AFCESA/CEXF. Once the certificates are sent back, the instructor will ensure the students receive them.

(b) Maintain database.

(c) Forward a copy of each spill response team member certification package to CEV upon course completion.

(d) Maintain original class rosters.

(e) Ensure each student receives a student record.

c. Organization.

(1) Fire department will provide Operations, Technician, and Incident Command Level HAZMAT training for Holloman personnel.

(2) The HERP will oversee the HAZMAT training program.

3. STATEMENTS OF COMPETENCY FOR TRAINING.

a. First Responder Awareness Level Training--29 CFR 1910.120, par (q)(6)(i).

(1) Training Requirements. This level of training shall be given to all emergency responders who are likely to witness or discover a hazardous substance release and who have been trained to initiate an emergency response sequence by notifying the proper authorities. They would take no further response action beyond notifying the authorities of the release. First responders at the awareness level shall have sufficient training to objectively demonstrate competency in the following areas:

- (a) An understanding of what Hazardous Materials are and the risks associated with them in an incident.
- (b) An understanding of the potential outcomes associated with an emergency created when HAZMAT are present.
- (c) The ability to recognize the presence of HAZMAT in an emergency.
- (d) The ability to identify the HAZMAT, if possible.
- (e) An understanding of the role of the first responder awareness individual in the emergency response plan.
- (f) The ability to realize the need for additional resources and to make appropriate notification.

(2) Employees requiring training.

- (a) Security forces personnel.
- (b) Fire department personnel.
- (c) Medical personnel (per 32-4002, note 2).
- (d) Select members of the DCG; OSC, BCE, CEX, EOD.

b. First Responder Operations Level Training--29 CFR 1910.120, par (q)(6)(i).

(1) Training Requirements. This level of training shall be given to individuals who respond to releases or potential releases of hazardous substances as part of the initial response to the site for the purpose of protecting nearby persons, property, or the environment from the effects of the release. Their function is to contain the release (a.k.a. dike/berm) from a distance, keep it from spreading, and prevent exposures. First responders must have completed Awareness Level training and shall have sufficient training to objectively demonstrate competency in the following areas:

- (a) Knowledge of the basic hazard and risk assessment techniques.
- (b) Know how to select and use proper personnel protective equipment provided to the first responder operational level.
- (c) An understanding of the basic hazardous materials terms.

(d) Know how to perform basic control, containment and/or confinement operations within the capabilities of the resources and personnel protective equipment available with their unit.

(e) Know how to implement basic decontamination procedures.

(f) An understanding of the relevant standard operating procedures and termination procedures.

(2) Requiring training.

(a) Fire protection personnel.

(b) HAZMAT post-emergency Response Team.

(c) Medical responders. Medical responders will have additional training in patient decontamination. This training will be provided by Military Public Health personnel.

c. Hazardous Materials Technician Training--29 CFR 1910.120, par (q)(6)(i).

(1) This level of training shall be given to individuals who respond to releases of hazardous substances with the intent of aggressively stopping the release by plug, patch, dike, berm or other means.

(2) Training Requirements. Initial and refresher training requirements for this level are detailed in 29 CFR 1910.120 (q) (6) (iii). HAZMAT technicians are individuals who respond to releases for the purpose of stopping the release. They assume a more aggressive role than a first responder at the operation level in that they will approach the point of release in order to plug, patch or otherwise stop the release of a hazardous substance. HAZMAT technicians shall complete Awareness and Operations Level training and in addition shall receive sufficient competency training in the following areas:

(a) Know how to implement employer's emergency response plan.

(b) Know the classification, identification and verification of known and unknown materials.

(c) Be able to function within an assigned role within the Incident Command System.

(d) Know how to select and use proper specialized chemical Personal Protective Equipment (PPE) provided to the HAZMAT technicians.

(e) Understand hazard risk assessment.

(f) Be able to perform advance control, containment, and/or confinement operations within the capability and resources and PPE available.

(g) Understand and implement decontamination procedures.

(h) Understand termination procedures.

(i) Understand basic chemical and toxicological terminology.

(3) Employees covered.

(a) Members of HAZMAT Post Emergency Response Teams.

(b) Select members from Environmental Management.

(c) Explosive Ordnance Disposal personnel.

d. On-Scene Incident Command System (ICS)--29 CFR 1910.120, par (q)(6)(i).

(1) This level training shall be given to personnel who will assume control of the incident beyond the first responder awareness level. Training records will be maintained respectively by CES/CEX and CEF.

(2) Training Requirements. Initial and refresher training requirements for this level are detailed in 29 CFR 1910.120 (q)(6)(v). Incident commanders, who will assume control of the incident scene beyond the first responder awareness level, shall receive training through the first responder operations level and in addition shall have competency in the following areas:

(a) Know and be able to implement the ICS.

(b) Know how to implement the emergency response plan.

(c) Know and understand the hazards and risks associated with employees working in chemical protective clothing.

(d) Know how to implement the local (off-base) emergency response plan.

(e) Know of the state emergency response plan and the federal regional response team.

(f) Know and understand the importance of decontamination procedures.

(3) Employees covered.

(a) Senior fire officers.

e. Refresher training. Those employees who are trained in accordance with paragraph (q)(6) of 29 CFR 1910.120 shall receive annual refresher training of sufficient content and duration to maintain their competencies, or shall demonstrate competency in those areas at least yearly. A statement shall be made of the training or competency, and if a statement or competency is made, the employer shall keep a record of the methodology used to demonstrate competency.

f. Trainers. Trainers who teach any of the above subjects shall have satisfactorily completed the Train-the-Trainer Course at Goodfellow AFB, TX.

g. Post Emergency Response Operations.

(1) This level of training applies to personnel assigned only to the cleanup elements of a response team.

(2) Training Requirements. Upon completion of the emergency response, if it is determined necessary to remove hazardous substances, health hazards, and materials contaminated with them (such as contaminated soil or other elements of the natural environment) from the site of the incident, the employer conducting the cleanup shall comply with the following:

(a) Emergency Action Plans, 29 CFR 1910.38(a).

(b) Respiratory Protection, 29 CFR 1910.134.

(c) Specific training from the generator regarding the safe handling of the hazardous substance(s) involved.

(3) Employees covered.

(a) Personnel assigned to cleanup teams (these personnel will be selected from CE Heavy Repair Flight).

(b) Fuels Management.

(c) Personnel who handle hazardous waste.

#### 4. PLAN MAINTENANCE AND DISTRIBUTION.

a. Responsibility for maintaining and updating this tab belongs to 49 CES/CEF and CEX.

b. This tab will be updated as needed and reviewed annually. Changes or revisions will be distributed as outlined in Annex A, Appendix 5, Section 7(c).

c. This tab will be exercised at least annually IAW AFI 32-4002 and HQ ACC (HAZMAT planning, training, and implementation guidance) in conjunction with the basic plan and other tabs to this plan.

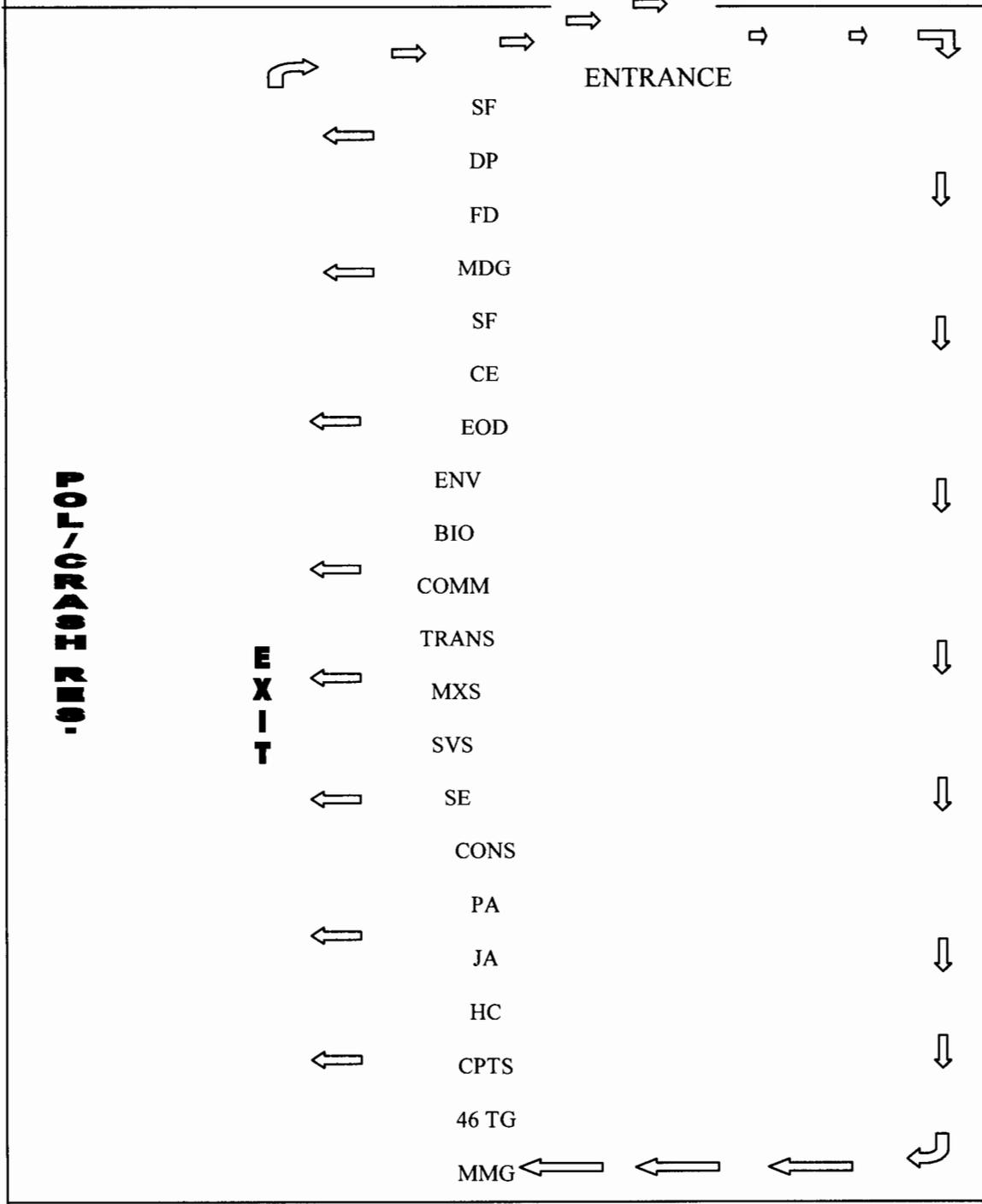
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HOLLOMAN AIR FORCE BASE, NEW MEXICO, 88330-5000  
1 July 2001

APPENDIX 6 TO ANNEX A TO HOLLOMAN AFB PLAN 32-1  
PARKING PLAN

1. MAJOR ACCIDENT PARKING PLAN (OPEN AREA)



CONVOY ASSEMBLY PARKING PLAN



HEADQUARTERS, 49TH FIGHTER WING (ACC)  
HOLLOMAN AIR FORCE BASE, NEW MEXICO 88330-5000  
1 July 2001

APPENDIX 7 TO ANNEX A TO HOLLOMAN AFB PLAN 32-1  
NUCLEAR ACCIDENT RESPONSE

1. PURPOSE. This appendix outlines procedures for response to a nuclear weapons/materials accident/incident referred to as a Broken Arrow.
2. MISSION. Prevent or minimize damage and contamination caused by a Broken Arrow event. In addition, action must be taken to safeguard and secure any nuclear weapon/components involved in an accident.
3. EXECUTION. This appendix or pertinent portions thereof will be implemented at the direction of the 49 FW/CC. Prompt reporting of the Broken Arrow to the ACC Command Center is required so that a Response Task Force (RTF) and specialized nuclear response personnel can be dispatched. Ensure support requirements for the Response Task Force (RTF) are carried out IAW the requirement in ACC OPlan 32-1.

- a. Accidents involving nuclear weapons or components. The Nuclear Weapons Accident Response Procedures (NARP), DoD 5100.52-M, requires numerous emergency response activities during an accident involving nuclear weapons. All operations for nuclear weapons accidents will be conducted IAW the NARP; and AFM 32-4004.

- b. Accidents involving radioactive materials (excluding nuclear weapons/components). Radioactive material accidents involving other than nuclear weapons/components will follow the same procedures listed in Appendix 5 of this Annex A, Hazardous Material Response. In addition, the following actions will be taken:

- (1) CE readiness and Bioenvironmental will respond with radiological monitoring equipment.
    - (2) Cordon (if necessary) will be determined by the OSC.
    - (3) EOD will carry out all necessary render-safe procedures.

4. CONCEPT OF OPERATIONS.

- a. The DCG will respond as follows:

- (1) Initial Response Phase.

(a) An initial response force will respond to the accident location to provide command and control, rescue, and fire-fighting support. This force will consist of personnel from the fire department, security forces, and hospital.

(b) The SFO will designate the ECP location and direct the establishment of a standard evacuation cordon of 2,500 feet.

(c) All follow-on DCG members will proceed to the ECP after reporting to the assembly area. Under no circumstances should they enter the cordon unless it is to perform lifesaving actions or other actions as specified below.

(d) Security forces will take immediate action to establish the cordon and evacuate personnel within it.

1. Supervisors, commanders, or first person notified to evacuate, must in turn ensure all personnel evacuate their area(s).

2. Building occupants must evacuate the cordon and assemble in a pre-designated area for monitoring, decontamination (if needed) and accountability. Do not allow anyone, including emergency responders, into the area until proper radiological monitoring equipment is available.

(e) Maintenance Control Function (MCF) will take immediate action to evacuate aircraft and AGE within the cordon after coordination with the OSC and SFO.

(f) Fire-fighting actions will continue until the fire department has either extinguished the blaze or has lost control of it as determined by the SFO.

(2) Withdrawal Phase. This phase can occur under two scenarios. First, the fire is extinguished and all responding forces withdraw in an orderly manner to an upwind location to be checked for contamination and be decontaminated, if required. Second, the fire can go out of control requiring the rapid withdrawal of responding forces due to possible high explosive detonation. The likelihood of a nuclear detonation is extremely remote due to safeguards in weapons design.

(a) All initial response personnel will withdraw in an upwind direction to a point no closer than 300 ft from and inside the edge of the cordon. The fire chief will direct withdrawal. For an orderly withdrawal, the public address system may be used. For an emergency withdrawal, the public address system will be used to sound "WITHDRAWAL, WITHDRAWAL, WITHDRAWAL" followed immediately by turning on all emergency vehicle lights and sirens.

(b) Upon hearing the signal for emergency withdrawal, all personnel at the ECP will immediately take cover behind the most solid object available. Personnel with the initial response force inside the cordon will take cover behind their vehicles or any solid object when they reach the point 300 ft within the cordon.

(3) Re-Entry Phase. Following withdrawal, either orderly or emergency, the accident area will remain secured by the security police and unless otherwise directed by the OSC, reentry is prohibited until command and control responsibilities are handed to a higher headquarters response unit and initial reconnaissance has been performed.

(a) CE readiness (CEX) will conduct a radiological survey of the edge of the cordon, on the upwind side, and select a suitable location for the Contamination Control Station (CCS).

1. Initial response force personnel will still proceed to the CCS at the direction of CEX. CEX and EOD personnel will perform IRT procedures, to include any render-safe procedures.

2. Personnel and equipment will be monitored for contamination.

3. Sentries will be monitored to ensure they are not in contaminated areas.

(b) Bioenvironmental (SGGFB) will establish their STAPLEX air samplers to detect airborne contamination.

(c) Medical vehicles transporting critically injured personnel will be allowed to exit the cordon to proceed to the medical facilities without processing through the CCS. The route will be cordoned off and monitored and decontaminated (if required).

(d) Entrance of the cordon prior to the arrival of the HQ ACC SRF must be approved by the OSC and then only to rescue injured personnel. The initial reconnaissance team will be used to detect, then withdraw and await arrival of the SRF.

(4) Recovery Phase. Recovery planning is a jointly coordinated effort of all parties involved in the operation based on experience gathered concerning the incident. Recovery operations are the responsibility of the SRF.

(5) Termination. Termination cannot occur until all parts of the weapon(s) have been recovered, contamination has been positively shown not to exist, or if contamination was present, it has been completely removed.

b. The Survival Recovery Center (SRC) will:

(1) Immediately activate when notified that a Broken Arrow has occurred.

(2) Provide liaison services between the DCG and other support agencies.

(3) Ensure all necessary reports are submitted.

(4) Follow the progress of the DCG to ensure all required actions are accomplished.

4. LOGISTICS AND ADMINISTRATION. See Basic Plan and Annex A.

5. COMMAND AND CONTROL.

a. The RTF on-scene incident commander will exercise control over all base DRF personnel upon arrival and transfer of responsibility from the initial IC.

b. All Disaster Preparedness Support Team and Decon teams will be under the direct control of the IC.

c. See Basic Plan and Annex A.

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APPENDIX 8 TO ANNEX A TO HOLLOMAN AFB PLAN 32-1  
SAFE HAVEN

1. PURPOSE. To establish procedures and assign tasks to support requests by the Military Traffic Management Command (MTMC) to temporarily store government agency-sponsored shipments. Refer to 49 FW Plan 91-101 Temporary Storage of DOE Shipments (SAFEHAVEN) Plan.

2. SITUATION.

a. The Air Force provides temporary storage for government agency sponsored shipments at DoD installations. The shipment may include nuclear material, non-nuclear classified material, hazard 1.1, 1.2, 1.3 explosives, or dinitrogen tetroxide. SAFE HAVEN requests are made only under emergency conditions where the safety or security of a shipment is jeopardized. Rail, air, or motor vehicles make shipments. Response to a temporary storage request will be as rapid as possible.

(1) DOE or DoD shipments that consists of classified material that may include nuclear material, non-nuclear classified material, or high explosives. The convoy consists of commercial trucks or vans escorted by specially trained DOE/DOD and the Joint Nuclear Accident Coordination Center (JNACC) will coordinate on notification of expected SAFE HAVEN to the military installation nearest the location of the shipment.

(2) DOT may request a SAFE HAVEN for a dinitrogen tetroxide shipment. The convoy consists of two tank trailers and a trained Technical Escort Team (TET). Through coordination with the Air Force Operations Support Center (AFOSC) MTMC will make notification to the nearest military installation nearest the location of the shipment.

b. The procedures contained in 49 FW Plan 91-101 SAFE HAVEN are designed as a result of courier illness, natural disaster, mechanical difficulty, or weather delay or any circumstance beyond the carriers' control that would delay travel to its destination. If the convoy is threatened by hostile or terrorist activity, these procedures may be modified or changed as necessary to provide maximum security to the convoy.

c. In the event of a mishap, the installation commander will implement action from Appendix 7 and 5 of this Annex and 49th FW OPlan 31. Mishap of Dinitrogen Tetroxide (N<sub>2</sub>O<sub>4</sub>) refer to Directorate of Aerospace Fuels Management's Emergency Response Plan for the Highway Transportation of Dintitrogen Tetroxide.

3. MISSION. Provide temporary storage of DOE classified material when requested. Provide any necessary security, firefighting, or logistics support required while the convoy is at Holloman AFB.

4. EXECUTION. All tasked agencies will develop the necessary checklists and operating instructions to ensure all actions in Plan 91-101 (SAFE HAVEN) are accomplished in a timely manner.

a. Concept of Operations. A request for SAFE HAVEN may be made in advance allowing some preliminary actions to be taken prior to the arrival of the convoy. The MTMC is the primary point of contact for a request for SAFE HAVEN. MTC will call the Holloman AFB Command Post (49 FW/CP) and pass estimated shipment arrival time, verify courier identification, and if necessary obtain/provide funding information to reimburse Holloman for any expenses incurred in the SAFE HAVEN effort. A convoy may arrive unannounced. If the arrival is no-notice, the security forces gate guard will immediately inform the security forces controller and escort the convoy on the base, directing the convoy to hold on First Street to await escort and credential verification. The security forces controller will notify the command post. The command post will call the appropriate agency to confirm SAFE HAVEN information.

b. Command and control. Command and control of the DOE convoy will remain with the DOE convoy commander. 49 FW/CC and all forces assigned to HAFB, if tasked, will operate in support of the DOE convoy commander.

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APPENDIX 9 TO ANNEX A TO HOLLOMAN AFB PLAN 32-1  
IN-FLIGHT EMERGENCY POL CLEAN-UP

1. PURPOSE. To ensure proper clean up of petroleum product spills post in-flight emergencies (i.e., aircraft arresting system engagements).

2. SITUATION.

a. Petroleum products, i.e., light oil, jet fuel, hydraulic fluids, etc., when spilled on improved surfaces such as concrete and asphalt, possess the ability to cover approximately .15 gallon per square foot, therefore, a one gallon spill will cover approximately 6.77 square feet.

b. One 16 1/2" x 20" absorbent pad, properly used, will absorb one quart of refined petroleum product. 50 pads will absorb 12.5 gallons of the same product.

3. RESPONSIBILITIES.

a. The SFO is responsible to direct and control proper and timely clean up of petroleum spills.

b. All primary responding agencies will maintain and store the appropriate amount of absorbent pads/clean-up materials in response vehicles. Contact 49 CES/CEV at ext. 3931 for information on the proper amount and ordering information for absorbent pads.

c. Primary responding agencies.

(1) Fire protection.

(2) Crash recovery.

(3) Power production (barrier maintenance).

(4) Grounds (sweeper).

(5) Airfield management.

(6) Flight surgeon (ambulance).

(7) Transient alert.

4. PROCEDURES.

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- a. Petroleum product spills covering less than 15 square feet in any plain dimension will be cleaned up immediately by the using organization as directed by the SFO.
- b. For petroleum product spills covering an area larger than 15 square feet, clean up will be deferred until the emergency has been terminated, aircraft arresting system reset and the runway reopened. Airfield management will notify transit alert, and 49 CES/CEV of the spill. The runway will be closed for clean up and the appropriate user that is responsible for the spill will perform clean up under the supervision and direction of 49 CES/CEV.
- c. Petroleum spills of continuing nature or larger than 45 square feet will constitute a Hazardous Materials Emergency Response. Procedures outlined in Appendix 5 to Annex A of this plan will be implemented.
- d. In the event of a spill as result of an in-flight emergency the SFO will:
  - (1) Determine the aircraft fire safe.
  - (2) Direct the pilots to remain in the aircraft to ride brakes to the appropriate dearm area.
  - (3) Direct the senior crash recovery person to initiate spill clean up. (One person will perform spill clean-up leaving three crash recovery personnel to pin the landing gear, hook up tow, and escort the aircraft to the appropriate dearm area.) The crash recovery individual charged with clean-up duties will expedite clean up and drive the general purpose 6-pak off the runway.
  - (4) In the unlikely event crash recovery personnel cannot effectively clean-up due to priority work requiring four crash recovery personnel in addition to the pilot brake rider, the SFO will direct Airfield Management to summon the airfield sweeper driver to respond and conduct clean-up operation prior to sweeping debris from the runway. The sweeper driver will not sweep up POL.
  - (5) In the event (3) and (4) are not feasible, the SFO will direct one of the power production fairlead beam inspectors to respond and clean up the spill, replacing the power production fairlead beam inspector with a firefighter to perform tape inspection during rewind.

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APPENDIX 10 TO ANNEX A HOLLOMAN AFB PLAN 32-1  
MISHAP RESPONSE FOR ADVANCED AEROSPACE MATERIALS/COMPOSITES

1. PURPOSE. Provide critical mishap response procedures for aircraft mishaps involving advanced aerospace materials, especially composites, in order to minimize the associated environmental, safety, and health hazards.

2. SITUATION. Aircraft mishaps involving advanced aerospace materials/composites are possible at HAFB. General rapid-response procedures and precautions recommended for personnel involved in all phases of fire, explosion, or high energy impact damaged composite aircraft mishap response, including fire fighting, investigation, recovery, clean-up and material disposal, must be followed.

3. RESPONSIBILITIES.

a. Fire Chief.

(1) Conduct a survey for signs of fire damaged composites.

(2) Determine the degree of site exposed to fire/impact/explosions.

(3) Extinguish fire and cool composites to below 300 degrees F (149 degrees C). Only firefighters equipped with SCBA are authorized in the immediate vicinity of a burning/ smoldering mishap site until the fire chief declares the area fire safe. (If possible, care should be taken to avoid high-pressure water break-up and dispersal of composite materials).

(4) The fire department shall decontaminate firefighters exposed or possibly exposed to burning/smoldering advanced aerospace materials/composites. Decontamination usually consists of a water wash and collection of the run-off. CEV shall be notified for assistance on disposal of runoff.

b. Bioenvironmental Engineer.

(1) Determine the presence of loose/airborne fibers and particles.

(2) Determine local/proximal equipment; assess damage and hazards.

(3) Determine if there are potentially exposed personnel for further medical evaluation.

c. Security Forces.

(1) Establish control at the site.

(2) Evacuate areas in the immediate vicinity of the mishap site. Restrict all unprotected personnel from assembling downwind of the site.

(3) Cordon the mishap site and establish a single entry/exit point. Only sufficiently protected individuals are authorized in the immediate mishap site and contamination reduction zone.

4. REQUIRED EQUIPMENT.

a. DRF gear.

b. Radiation monitors.

c. PPE Guidelines.

(1) Burning or smoldering composite.

(a) SCBA.

(b) Full protective clothing (NFPA 1971/76).

(c) Do not use rubber gloves.

(2) Broken or splintered composites.

(a) Full Face respirator with dual cartridge (High Efficiency Particulate Air (HEPA) & organic dust/mist) filters or SCBA (AFOSH STD 48-1).

(b) Coated, hooded tyvek suit with booties.

(c) Leather work gloves (outer).

(d) Nitrile rubber workgloves (inner).

(e) Hard-soled work boots (steel toe and shank recommended).

(3) Contamination reduction area composite exposure.

(a) BDUs or long-sleeve work uniform.

(b) HEPA filter respirator or SCBA.

(c) Safety glasses with side shields.

- (d) Leather work gloves (outer).
- (e) Nitrile gloves (inner).
- (f) Hard-soled work boots (steel toe and shank recommended).

5. CONTAMINATION REDUCTION PROCEDURES.

a. No ground or flight operations are to be permitted within 500 feet above ground level (AGL) of the site and 1,000 feet horizontally.

b. The fire chief and bioenvironmental engineer and/or the on-scene commander designate a contamination reduction zone in a coordinated effort. The contamination reduction area should be defined as more than 25 feet away from damaged composite parts, although it may vary depending upon environmental conditions (rain, dry, high winds, remote site, etc.).

c. If personnel other than those at the accident site have been directly and significantly exposed to material and smoke hazards, the medical staff will be consulted for evaluation and tracking. If time permits, advise the otherwise unthreatened populace in affected or fallout areas to:

- (1) Remain indoors.
- (2) Shut external doors and windows.
- (3) Turn off forced air intakes.
- (4) Await further notifications.

d. Access to the crash site to conduct a more thorough survey will be coordinated with the OSC. Identify specific aircraft hazards by inspection and consulting with Crash Recovery Team chiefs or weapons system manager, reference documents, contractor or aircraft specialist. Indicate composites and other hazardous materials to response personnel. Advise the OSC of all findings and recommendations.

e. Avoid excessive disturbance of the dust caused by walking, working, or moving materials at the crash site to minimize airborne particulate fibers and dust.

f. Entry/exit from the ECP will be monitored. The following guidelines apply:

(1) When exiting the crash site, personnel should use High Efficiency Particulate Air (HEPA) filtered vacuums, if available, to remove advanced composite contaminants from their outer clothing, work gloves, boots, headgear, and equipment. If unavailable, efforts must be made to wipe, brush, or wash off as much contamination as possible.

(2) Clean sites (i.e., tent or trailer) for donning/removal of PPE should be set up as practical.

(3) No eating, drinking, or smoking is permitted in the contamination reduction or exclusion zone of the crash site, or as otherwise determined by the OSC. Personnel must be advised to wash hands, forearms, and face prior to eating, drinking, or smoking.

(4) Wrap and seal contaminated protective clothing and dispose of properly. 49 CES/CEV will determine if other specific handling procedures are required.

(5) Personnel should shower (in cool water) prior to going off duty to preclude injury from loose fibers. Portable showers may need to be provided for this.

(6) When practical, remove contaminated outer garments of victims/response personnel at the scene to protect the medical staff. Advise the local medical staff of any ill effects believed to be related to exposure to advanced composite materials. All contaminated footwear should be cleaned to limit the spread of debris in the area and inside support vehicles. Symptoms of ill effects include but are not limited to:

(a) Respiratory tract irritation and reduced respiratory capacity.

(b) Eye irritation.

(c) Skin irritation, sensitization, rashes or infections.

NOTE: Material Safety Data Sheet (MSDS) information should be made available to responding personnel.

## 6. CONTAMINATION CONTAINMENT

a. Secure burned/mobile composites fragments and loose ash/particulate residue with:

(1) Plastic.

(2) Fire fighting agent.

(3) Fixant materials.

(4) Tent.

NOTE: Application of fixants other than Aqueous Film Forming Foam (AFFF) firefighting agent and clean up are the responsibility of crash recovery once the SFO transfers responsibility to the OSC.

b. Carefully wrap the coated parts and/or materials with plastic sheet/film or place in a plastic bag that is a minimum of 0.006 inches (6 mils) thick. Generic garbage bags are generally

inadequate unless several are used as plies.

**CAUTION:** Fire must be completely out and the composite cooled to below 300 degrees F (149 degrees C) before any recovery is attempted.

c. Consult specific aircraft authority and the investigators before applying fixant. Safety concerns may override any delayed application. Two types of fixants are used; one for burned composites and debris, and the other for land surfaces. Fixant is usually not needed for open terrain and improved surfaces (concrete or asphalt) unless high concentrations exist.

(1) Obtain a fixant or "hold-down" solutions, such as Polyacrylic Acid (PAA) or acrylic floor wax and water. Light oil is not recommended because it may become an aerosol and collect on equipment, hamper material investigations, and present a health hazard. Generic acrylic floor wax, available at a wide variety of stores, should be mixed in a 10:1 water to wax ratio, although this may vary.

(2) Apply (preferably spray) a heavy coating of the fixant solution to all burned composite materials and the areas containing scattered/settled composite debris. Completely coat the material until wet to ensure the particulate fiber/dust is immobilized. Allow the coating to dry.

**NOTE:** Stripping ability of fixant coating is required where coatings are applied to debris that must later undergo microscopic analysis by incident investigators. Care must be exercised in the use of stripping solutions since they can react with some materials and the process of stripping may damage the parts. PAA may be removed by a dilute solution of household ammonia (about 1% by volume of ammonium hydroxide in water) or trisodium phosphate (approximately one 8 ounce cup trisodium phosphate per 2 gallons of water).

d. If deemed necessary, agricultural soil tackifiers may be used to hold materials on sand or soil. Most solutions, including Polychem, J-Tack, or Tera Tack can be sprayed onto the ground at a rate of 0.5 gal/sq. yd.

e. Improved hard surfaces should be vacuumed with an electrically protected HEPA vacuum. The effluent should be collected via plastic or burlap coated trenches or drainage ditches. Sweeping operations should be avoided as they disseminate/suspend the particulate debris.

f. Immediately flush/clean fixate-application equipment with a dilute solvent to avoid clogging.

g. Pad all sharp projections from damaged composite parts to prevent accidental injuries.

**NOTE:** The entire impact or accident site must be diked to prevent run off of AFFF firefighting agent if used.

h. Firefighting vehicles and equipment must be decontaminated at the accident site by washing with water or use of vacuums.

7. CLEAN-UP AND DISPOSAL CONCERNS.

a. The environmental flight office should be contacted for relevant disposal procedures for the advanced composite parts/materials that do not require accident investigation evaluation, repair, or are not needed. Ensure the SIB releases the parts before disposal is authorized.

b. Place hazardous waste in proper containers. For disposal procedures, contact the environmental flight for guidance and assistance. A HEPA vacuum should be used to clean up the local area. All crash debris, vacuum bags, coveralls, gloves, and other contaminated materials should be properly disposed and labeled appropriately with the following: "Composite Waste. Do Not Incinerate. Do Not Sell For Scrap. Composite Waste."

NOTE: Demilitarization may be required prior to material disposal if done through private contract. Coordination with the specific weapons system manager is required.

c. For open terrain mishap areas, the appropriate soil and surface restoration will be completed.

d. If an aircraft is subject to smoke and debris of the immediately affected area, the following should be under taken:

(1) Vacuum the air intakes with an electrically protected vacuum cleaner.

(2) Visually and electronically inspect all compartments for debris and vacuum thoroughly.

(3) Prior to flying, perform electrical checks and engine run-up.

e. For significantly affected structures and equipment.

(1) Thoroughly clean all antenna insulators, exposed transfer bushings, circuit breakers, etc. Inspect air intakes and outlets for signs of smoke or debris and decontaminate, if necessary.

(2) Consult more detailed electrical reference material and specific decontamination instructions for more information.

f. Continue to monitor affected personnel, equipment, and mishap site.

8. COMPOSITE MISHAP RAPID-RESPONSE CHECKLIST.

a. With proper PPE donned, conduct an initial survey.

b. Establish site control.

c. Evacuate from smoke plume/alter flight operations/restrict downwind assembly.

d. Extinguish fire and cool to 300 degrees F (149 degrees C). Only firefighters with SCBA until fire safe.

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- e. No flying or taxing ground operations within 500 ft AGL and 1,000 ft horizontally.
- f. Cordon mishap site with a single entry/exit point. The peripheral area should be a minimum 25-ft upwind away from any damaged composite materials. The OSC, SFO, and bioenvironmental may change the distance depending on the environmental conditions.
- g. Advise populace on actions.
- h. Enter mishap site/identify hazards/avoid disturbance.
- i. Follow entry and exit guidelines.
- j. Secure composite materials.
- k. Containment.
  - (1) Temporarily secure small particulate/fibers/ash/with water mist.
  - (2) Use soil tackifiers, if necessary.
  - (3) Clean improved surfaces/collect effluent/avoid sweeping.
  - (4) Flush or clean fixant application equipment.
  - (5) Pad sharp projections.
  - (6) Decontaminate vehicles/equipment.
- l. Clean up and Disposal. The Hazardous Material Response Team is not responsible for clean up or disposal. Consult with bioenvironmental and 49 CES/CEV for disposal procedures. Crash recovery is responsible for clean up and fixant application activities.
  - (1) Dispose materials within local, state, and federal guidelines and regulations.
  - (2) Properly dispose of hazardous waste/demilitarize materials, if necessary.
  - (3) Properly clean open terrain mishap areas.
  - (4) Properly clean aircraft
  - (5) Properly clean affected structures and equipment
  - (6) Monitor affected personnel, equipment, and mishap site.

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APPENDIX 11 TO ANNEX A TO HOLLOMAN AFB PLAN 32-1  
UNMANNED DRONE MISHAP

REFERENCE: See Basic Plan

TASKED ORGANIZATIONS: See Basic Plan

1. PURPOSE. To establish procedures and assign tasks to support critical mishap response procedures for aircraft mishaps involving unmanned drones, in order to minimize the associated environmental, safety and health hazards.

2. SITUATION. Unmanned drone operations are conducted on Taxiway 22/04 during daylight hours. Unmanned drones have flight termination systems (FTS) consisting of a MK-8 warhead (10.6 pounds of explosive).

3. MISSION. To minimize the danger and potential for loss of life, drone control experts will advise the OSC should an unmanned drone crash. Personnel must never approach the impact site without clearance from the OSC.

4. EXECUTION. All tasked agencies will develop the necessary checklists and operating instructions to ensure all actions are accomplished in a timely manner.

5. CONCEPT OF OPERATIONS.

a. If a drone crashes, the Launch Control Destruct Officer (LCDO) on the Mobile Control Station (MSC) will: Control drone operations; Advise the IC of mishap status and Coordinate follow-on actions with the IC.

NOTE: Coordination between LCDO and IC using command net or relay via tower. LCDO call sign is "MIKE" or Attila Mobile.

b. The IRE, including members of fire department (CEF) and Security Forces (SF), shall coordinate with the LCDO prior to approaching the crash site. They will establish a cordon as directed (initially 2000 ft).

c. If additional drones are airborne, drone personnel and equipment may need to remain in or enter the cordon to recover remaining drones. The LCDO will coordinate the recovery plan with the IC.

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- | 6. <u>TASKS.</u>   | <u>OPR</u> |
|--|------------|
| a. Report the crash of an unmanned drone, technically called a “missile” for reporting, through the tower communication net.                                     | LCDO/MCS   |
| b. Determine the status of the FTS and report same to IC.  | LCDO/MCS   |
| c. If within 2,000 ft of crash site, withdraw unless recovery of additional drones are necessary.  | LCDO/MCS   |
| d. Upon recovery of the last unmanned drone, withdraw as coordinated with IC   | LCDO/MCS   |
| e. If crash is within 2,000 ft of any runway, close runways (s) involved unless required to recover additional drone (s) (close after last drone (s) recovered). | OSAA       |
| f. Direct all actions of the IRE until the arrival of the IC.  | CEF        |
| g. Ensure firefighters do not enter the cordon around the crash site until the FTS is confirmed safe by LCDO, and cleared by the IC.                             | CEF        |
| h. Assemble and evacuate all personnel in the 2000 ft cordon of the crash site, except those personnel required to recover additional drone(s).                  | SF         |
| i. Maintain 2000 ft cordon for runway 22/04 until all airborne drones are recovered and safed i.e. road block on Kelly Rd.                                       | SF         |
| j. Keep personnel clear of the cordon until instructed otherwise by the IC.  | SF         |
| k. If unsure of warhead status, a 24- hour wait period will be observed before approach will be made.  | CED        |

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APPENDIX 12 TO ANNEX A TO HOLLOMAN AFB PLAN 32-1  
FAMILY SUPPORT PLAN SUMMARY / FAMILY ASSISTANCE CENTER (FAC)

1. PURPOSE. To outline how the Holloman Air Force Base Family Support Center (FSC) will respond to peacetime emergencies and to wartime contingencies to ensure that Holloman Air Force Base personnel and their families receive effective support. Every possible means will be used to ensure that the well being, morale, and welfare of Air Force families, both active duty and reserve are maintained. The family support center is the focal point for helping commanders address family issues.

2. SITUATION. See Family Support Center Deployment and Contingencies Guide.

a. During a mass disaster or civil disturbance, when people are not evacuated from the local area, they may come to the base seeking safety. Most of the people will probably be active duty members and their families, but retirees and civilian employees may also come. Even some non-base connected civilians may seek sanctuary on the base. This plan, however, focuses on active duty members and their families, wherever they reside.

b. In the event of mass casualty, civil disturbance or natural disaster it may be necessary to activate a Family Assistance Center (FAC). When command determines the need it becomes prudent to activate the FAC to provide standardized, centralized and managed services. The FAC is not designed to be permanent; it will handle crisis situations as long as there is a need for the function. When the need lessens, the FAC should be deactivated.

c. During disasters, communication and accurate information are among the most critical elements in containing the situations and providing the quickest possible recovery time. The FAC is a key link to provide communication and information through both personal contact and telephone information services in a centralized place.

d. If a FAC is established, Mental Health and the Family Support Center will take the lead role in Critical Incident Stress Management (CISM). The FSC and FAC functions will not be to feed or provide sleeping areas for people. The function will be to provide for their informational, social and emotional needs. It may, however, be collocated with a shelter facility. There may be occasions, however, where food and shelter are not required but emotional assistance is, and the FAC will stand-alone.

3. RESPONSIBILITIES:

a. A FAC may be activated when recommended by the Family Support Center Director in conjunction with the 49 MSS Commander. The FSC Director will be responsible for facilitating the intra-staff coordination of resources required beyond the capabilities of the FSC. The

Personal and Family Readiness NCO will assist the Director by effecting any necessary coordination with base or local civilian agencies. The FAC will be operational, at the direction of the 49 FW Commander. Primary location of the FAC will be the Family Support Center, Building 40. The alternate location will be the Chapel Annex, Building 784. It has a three-fold provisional purpose:

(1) Essential services: The FAC will be a friendly, warm, caring place where family members can be with others who need similar essential services.

(2) Professional help: Basic assistance during crisis situations. Helping professionals will be available to oversee groups and offer services for individuals who need to talk one on one.

(3) Information: A central clearinghouse for authorized public information and rumor control by phone or in person.

b. The FAC will ordinarily include the following functions:

(1) Sign-in/Triage: People will sign in and out and be directed to the appropriate area depending on the needs they express. It critical to know who is physically in the FAC in the event that notification needs to be made due to mass casualties.

(2) General Services Center: Once activated, the FAC is an area where people can congregate, watch television, or engage in conversation. It needs to contain telephones, a television, comfortable seating, an area with mats and toys where children can play under parental supervision, a separate room where parents can feed and diaper babies, and an area suitable for serving light refreshments (donuts, coffee, etc.). Staff should be present at all times. At least one staff member should have counseling skills.

(3) Information and Personal Assistance: This area will have an Information and Referral specialist from the FSC, as well as tables staffed by experts in their fields to include legal, finance, clinic, personnel, etc., who can answer questions. PA will provide periodic briefings, news bulletins, etc.

(4) Children's Activity Room: Older children may need a place to play games, watch videos, read books, etc. It is only for children whose parent is present in the FAC. Services Squadron staff experienced in dealing with children and sensitive to their needs are recommended to staff this area.

(5) Emotional Needs: This function will require one group room, and at least two private counseling rooms. Two trained counselors will be available to assess individuals in crisis to determine their needs. Individuals whose needs can be met with simple support will be referred to the scheduled support groups or seen individually in the FAC. FSC and Mental Health Staff at the site will directly handle those needing intense critical incident stress debriefing. During each shift the FAC will need at least two people to run groups and assess personnel in crisis.

4. ADMINISTRATION AND LOGISTICS.

a. The FAC will require a minimum of 8 people to run each shift (at least 2 crisis management personnel per shift will be required: one to assess the needs of personnel and run groups, one to provide crisis intervention counseling).

b. This may be accomplished by combining forces with base agencies such as the Chapel, FSC, Social Actions, Mental Health, Family Advocacy, Services or other qualified agencies identified in the FSC FAC operating instructions. Reinforcements may be required if the crisis continues for an extended time. If the crisis goes for an extended period of time, reinforcement in the form of augmentees from other bases or trained volunteers from the local area may be required. The American Red Cross may be asked to coordinate offers of volunteer assistance and donations from the civilian community.

c. FSC will maintain a supply of equipment and materials that will allow them to become fully operational in an area dislocated from the Family Support Center should the need arise. The following items have been identified as priority: Cellular Phones (2), Laptop Computer, Charged Battery Packs, Flashlights with backup batteries, Paper, Pens, Tablets, Assessment Forms (200), FAC Duty Book, other equipment as deemed necessary.

HEADQUARTERS, 49TH FIGHTER WING (ACC)  
HOLLOMAN AIR FORCE BASE, NEW MEXICO 88330-5000  
1 July 2001

APPENDIX 2 TO ANNEX A TO HOLLOMAN AFB PLAN 32-1  
RESPONSE TO TERRORIST WEAPONS OF MASS DESTRUCTION (WMD) INCIDENT IN  
CONUS

**REFERENCES:**

Joint Pub 3-07.2	Joint Tactics, Techniques and Procedures for Antiterrorism
AFMAN 10-206	Operational Reporting
AFI 10-211	Civil Engineer Contingency Response Planning
AFPAM 10-219	Volumes 1-3 Contingency and Disaster Planning, Pre-attack and Pre-disaster Planning, and Post-attack and Post-disaster Procedures
AFI 10-801	Assistance to Civilian Law Enforcement Agencies
AFI 10-802	Military Support to Civil Authorities
AFI 31-210	The Air Force Antiterrorism/Force Protection (AT/FP) Program Standards
AFI 32-2001	Fire Protection Operations and Fire Prevention Program
AFI 32-4001	Disaster Preparedness Planning and Operations
AFI 32-4002	Hazardous Materials (HAZMAT) Emergency Response Planning and Response Program
AFMAN 32-4004	Emergency Response Operations
AFMAN 32-4005	Personnel Protection and Attack Options
AFVA 32-4010	USAF Standardized Alarm Signals for the US, Its Territories, and Possessions
AFMAN 32-4013	Hazardous Materials (HAZMAT) Emergency Planning and Response Guide
AFH 32-4014	USAF Operations in a Chemical and Biological (CB) Warfare Environment, Defense Equipment
AFPAM 32-4019	Chemical and Biological Commander's Guide
AFI 41-106	Medical Readiness Planning and Training
AFJMAN 44-151	NATO Manual on the Medical Aspects of NBC Defensive Operations AmedP-6(B), Part 2
ATP 45	Reporting Nuclear Detonations, Biological and Chemical Attacks, and Predicting and Warning of Associated Hazards and Hazard Areas
NORAD 55-39	Nuclear, Biological, Chemical Warning and Reporting System
AFM 160-11	Treatment of Chemical Agent Casualties and Conventional Military Chemical Injuries
AFM 355-6	Technical Aspects of Biological Defense
AFR 355-7	Potential Military Chemical/Biological Agents and Compounds
DoD Dir 2000.12	Combating Terrorism Program
USAF CONOPS	Chemical and Biological Defense Concept of Operations
FEMA Guide	Emergency Response to Terrorism (Self-Study)

1. Situation: In general, Weapons of Mass Destruction (WMD) or Chemical/biological agents (CB) could be used at any time, against any target, and by various delivery methods.

a. The Air Force response to the potential use of weapons of mass destruction against a CONUS military base, or within the community near the base, needs to be adequately addressed. Weapons of mass destruction or chemical agents could be used directly against the base for military targeting reasons, or indirectly affect base operations as a result of their use against civil, government, or economic targets near the base. Delivery methods could include, but are not limited to trucks, air sprayers, ground sprayers, and other vehicle or hand-carried containers.

b. CB agents have been used recently by terrorists, as was the case when Sarin gas was released in a Tokyo subway. Chemical and/or biological agents, to include agents of limited capabilities such as tear gas, are available in threat nations throughout the world.

2. Mission: Based on current DoD policy, plans, and funding, ACC response to CONUS WMD/CB incidents will be limited to evacuation, containment, first aid, and logistical support to federal response agencies.

3. Concept of Operations:

a. Pre-Incident Planning

(1) Intelligence: The best defense against a threat is to identify it before it can be delivered. Use the base Threat Working Group (TWG) to evaluate possible threats against the base. This group normally comprises the following members as a minimum: Intelligence (IN), Office of Special Investigations (OSI), and Security Forces (SF). For CB issues, Civil Engineering (CE), Medical (MDG), Legal (JA), and Public Affairs (PA) should be consulted. These units are not part of the TWG since most topics covered by the group do not require representation from these organizations. The TWG does, however, include organizational representatives in their meetings who can provide valuable insight to certain incidents when necessary.

(2) Planning: The second best defense against a threat is to be prepared. Identify unit responsibilities, notifications and accountability procedures, response capabilities, and resources required for responding to a WMD/CB incident during the following possible scenarios:

(a) On-Base:

1 Response to package(s) suspected or confirmed to have CB agent, with or without explosives.

2 Response where a WMD/CB agent has been employed, either deliberately (terrorism) or accidentally.

(b) Off-base:

1 Response to Civil Authorities' request for assistance with package(s) suspected or confirmed to have CB agent, with or without explosives.

2 Response to Civil Authorities' request for assistance where a WMD/CB agent has been employed, either deliberately (terrorism) or accidentally.

3 Assistance to the FBI in a situation where they are planning to track and apprehend suspects with WMD/CB agents.

4 Provide Safe Haven by FBI for WMD/CB agents and/or contaminated vehicles/containers.

(c) Coordinate your base plan with the following where possible:

1 Local agencies such as law enforcement, medical, rescue, and Local Emergency Planning Commission (LEPC). Consider a Memorandum of Agreement (MOA) with each agency.

2 State agencies such as State Emergency Response Commission (SERC) and National Guard.

3 National agencies and their local offices where possible:

a Federal agencies such as Federal Emergency Management Agency (FEMA), and Federal Bureau of Investigation (FBI).

b The following Department of Defense (DoD) agencies may deploy when requested through the MAJCOM and Air Staff:

(i) US Marine Corps ChemBio Incident Response Force out of Indian Head Naval Surface Warfare Center, MD

(ii) US Army's Technical Escort Unit out of Aberdeen Proving Ground, MD. Telephone # (410) 671-3044, Emergency (410) 671-2773/2148.

(3) Base Education: The third best defense against a WMD/CB threat is a population educated in the threat and response actions. CE Readiness Flights will add a section to the base education pamphlets outlining the threat and response actions with inputs from Public Health on personal preventive measures. This information will be presented as a supplement to HAZMAT procedures, and be coordinated with the Bioenvironmental Flight. This information should be provided during newcomer Base Populace Orientations and other regular base population education programs.

b. Initial Response (On-Base): This section provides guidance where a CB incident is discovered on base.

(1) Identification:

(a) There will likely be some indications if a chemical or biological agent has been dispersed or may be dispersed. These indicators may be reported to or observed by any agency, including Security Forces, Civil Engineers, Medical, OSI, AF Intelligence, and the Tower.

1 Active indicators:

- a Explosions on-or off-base.
- b Illegal fly over of base, with or without observed releases.
- c Suspicious vehicles attempting entry, spilling liquids on roads or in water supplies.
- d Personnel or vehicle mounted sprayers on-or off base used by suspicious or non-uniformed personnel, at night or during unscheduled times.
- e Personnel reporting unusual odors, tastes, or low clouds.
- f Mass casualties without obvious physical trauma.
- g Panic in potential target areas, such as people running out of buildings.
- h Suspicious materials discovered during traffic stops or checks at gates.

2 Passive Indicators:

- a Many dead animals, birds, or fish observed in an area.
- b Absence of insect life in warm weather.
- c Hospital receiving many patients with common and/or unusual symptoms.
- d Abandoned spray devices.
- e Abandoned facilities off-base with lab equipment.

(2) Initial Response:

(a) The following teams will respond as an Initial Response Force (IRF):

- 1 Fire Chief: May respond to an explosion that disperses a CB agent.

a If the incident is fire/rescue, and there are no hostile criminals/terrorists, then the Fire Chief will assume duty of OSC until relieved by the designated OSC.

b Will assess the incident and set-up an initial cordon area.

c Initiate gathering information and identifying hazard(s) using protective equipment.

2 Security Forces: May discover, or be notified, of WMD/CB incident indicators.

a If the incident is a result of a hostile act, the security forces will respond to neutralize the threat to resources and personnel. The senior security forces member on scene will assume duties as the OSC until the threat is eliminated.

b Upon termination of hostilities, the security forces will provide initial site security through implementation of a cordon of the affected area. Based on the situation, the security forces may require augmentation using non-security forces personnel to complete posting of the cordon. Technical evidence of all terrorist and criminal acts will be secured in coordination with 49 MDG, 49 CES, and Det 225, AFOSI.

c Security forces may use available non-security forces personnel for posting and placement of barriers to complete the initial cordon posting. All personnel assisting/augmenting security forces will fall under the operational control of the Chief, Security Forces (CSF) until released back to their unit by the CSF.

(b) If unable to identify the hazard(s), the Fire Chief will have the IRF withdraw to a safe distance and call in additional support to respond in full chemical warfare defense ensembles (CWDE).

1 EOD: Will respond to any situation involving actual or suspected explosive devices. This includes explosives intended to disperse or booby-trap the CB agents.

a Provide guidance on explosive hazards, standoff distances, and controls.

b Render safe any munitions as situation dictates.

c Provide limited identification of some chemical.

d In any situation, consider the possibility of “sucker punch” (secondary) explosions.

2 CE Readiness:

a Provide the Mobile Command Post for command, control, and communication.

b Provide chemical agent identification through one or more detection tools.

c Provide advice on health risks of CB agents and Contamination Control.

d Provide limited decontamination materials for very small areas as needed for emergency access to suspect vehicles, containers, or buildings.

3 49th Medical Group's Bioenvironmental Engineering (BEE) Team:

a Assist CE Readiness with liquid or vapor chemical agent detection at the incident site.

b As directed by the OSC, take water samples for suspected chemical agent contamination using M-272 Chemical Agent Water Testing Kit.

c As directed by the OSC, take water samples for suspected biological agent contamination. Analysis will be limited to the resources available at 49th Medical Group.

d Provide advice to the OSC on health risks and characteristics of CB agents.

e Provide technical information to the OSC on CB agent protective measures.

f Provide advice to the OSC concerning contamination disposal.

(3) Emergency Medical Care:

(a) Depending upon the incident, medical care may be required for injured personnel. The OSC will determine the safety of the situation before allowing medical personnel to enter the scene.

(b) Medical personnel will need to pre-plan how to provide/obtain decontamination of injured personnel and prevent cross-contamination to their personnel and vehicles.

(4) Hazard Area Identification:

(a) The current version of the North American Emergency Response Guidebook provides initial guidance for evacuation distances for possible hazards. The worst case is ½ mile in all directions for isolation, and 7+ miles downwind for protection or evacuation.

(b) CE Readiness may assist the OSC in plotting the affected area and downwind hazard area. They may need assistance from Weather if they do not have a Weather Pak. Agent persistency, temperature, and winds can determine the downwind hazard.

(c) The OSC may change the hazard areas based upon conditions and developments.

(5) Alarms/Evacuation:

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(a) Once the threat has been identified as a possible CB agent, the base and local community should be warned of the threat immediately. The Installation Commander will authorize all announcements.

1 For the base, use any or all of the following:

a Peacetime Emergency Warning of the USAF Standardized Alarm Signals to indicate that personnel need to tune into local stations or other public address systems for information.

b Giant Voice, Security Forces vehicles using loudspeakers, and Public Affairs releases.

2 For notification of hazard to off-base, use any or all of the following:

a Direct contact with the LEPC and other agencies for coordination on the hazard areas.

b Public Affairs releases.

(b) Provide information on area(s) to avoid and evacuate from. Provide evacuation route information.

1 Prior coordination with LEPC will determine possible evacuation routes and procedures.

2 Security Forces will establish a contamination control route from the incident site to the designated on-base medical treatment facility. Coordinate off-base contamination control routes with local law enforcement agencies.

3 Consider personnel inside the cordon that may already be contaminated and/or require medical attention. Control contamination spread to people and areas outside of hazard areas.

(6) Notifications:

(a) Through the Command Post, report the WMD/CB incident to the MAJCOM via OPREP-3 Pinnacle or Beeline. Request federal and DoD assets to provide support as needed.

(b) Notify the nearest FBI office.

1 Notify the nearest FEMA office.

2 As time permits, notify the various state and federal environmental agencies.

(7) Cordon Control:

(a) Based on the OSC's determination of the hazard area, Security Forces will set-up a cordon to prevent unauthorized personnel from entering it. Depending on available equipment, they can also funnel personnel inside the cordon to Contamination Control Areas (CCA).

(b) Consider materials (CWDE, markings, etc.) and personnel (augmentees) to guard the cordon.

(c) Maintaining the cordon will control and limit any spread of contamination.

(d) Consider other actions on base to anticipate wind change:

1 Initiate and maintain unit control centers for immediate communications.

2 Facility preparations: Building managers to shut down building ventilation systems to prevent sucking in any contamination. Close all exterior windows and doors.

(e) Consider set-up of CCA for IRF and others.

c. Assistance to Civil Authorities (Off-Base): This section provides guidance where a WMD/CB incident is discovered off base.

(1) Requests for military support to local authorities may come as a result of any of the scenarios discussed in the Pre-Incident Planning phase.

(2) These scenarios and the possible requests should be pre-discussed and coordinated with the local, state, and federal (local office) agencies. Possible requests for support may be similar to the items discussed in the Initial Response (On-Base) section.

(3) Under emergency conditions, commanders may commit military resources to save lives, prevent suffering, and mitigate great property damage. Local or state authorities must make the requests. Coordinate requests through the following.

(a) MAJCOM Battle Staff.

(b) Air Force Operations Support Center (AFOSC).

(c) Air Force National Security Emergency Preparedness (AFNSEP).

d. Sustained Response: Federal Agency Response:

(1) General guidance can be found in the Emergency Response to Terrorism (Self-Study) Guide published by the Federal Emergency Management Agency (FEMA) and can be downloaded from: <http://www.usfa.fema.gov/pdf/ertss.pdf>. This guide provides unclassified information from the Federal Response Plan that implements the classified Presidential Decision Directive/NSC-39 (S).

(2) The following federal agencies will respond to a WMD/CB Incident:

(a) FBI: The FBI will respond according to their classified Weapons of Mass Destruction or Chemical and Biological Incident Contingency Response Plan.

1 The FBI has the option to assume command of the situation at a military installation, but may choose not to do so. If assuming command, the following applies:

2 The senior FBI official will assume command of the scene from the military OSC.

3 FBI will also deploy to the site with the Domestic Emergency Support Team (DEST). The DEST will report to the OSC and merge as part of the Joint Operations Center (JOC).

(b) FEMA:

1 FEMA may activate a Regional Operations Center (ROC) to work with the OSC.

2 The FEMA Consequence Management Group will become part of the JOC.

(c) The base's Initial Response Force (IRF) will report to the JOC.

(3) Containment:

(a) Until the Federal and DoD agencies can respond, the base will need to provide containment where possible.

(b) If the agent has not been released upon discovery:

1 Contain the agent until disposal and/or transportation can be arranged with the Army Tech Escort Unit.

2 Consider various materials and methods for layered containment, including, but not limited to: plastic sheeting, duct tape, empty cargo containers, etc.

(c) If the agent has been released:

1 If the agent is a chemical, weather and persistence conditions may preclude the need for containment. If not, avoidance of the plumes is the best method for prevention of further contamination.

2 If the agent is biological, avoidance is the best method until Federal and DoD agencies, like the Center for Disease Control and Army Tech Escort Team, can respond.

e. Recovery Actions:

(1) General:

(a) This phase of the incident may be delayed due to various factors, i.e., extent and severity of incident, on-going investigation efforts by Federal law enforcement agencies, etc.

(b) FEMA will lead or provide assistance in consequence management.

(c) Consider roles of Legal, Chaplain, Medical, Public Affairs, and others during this phase.

(2) Decontamination/Clean-up:

(a) Trained detection teams must sample all actual and possible contaminated areas to determine extent of contamination.

(b) Base assets are only capable of limited decontamination. Request support through the Army for comprehensive decontamination. Provide support, materials, and beddown as needed. Coordinate with Bio Team and CE for requirements to control and dispose of all contamination and/or run-off.

(3) Determination of "Clean":

(a) Trained detection teams and proper sampling will need to be performed of all actual and possible contaminated areas to determine effect of decontamination.

(b) CE and Bio Team will have the responsibility of determining the safeness of these areas based on CB agents and safety concerns.

(4) Determination of Re-occupying Evacuated Areas: Based on the determination of areas decontaminated, the installation commander will have the authority to re-occupy and reconstitute evacuated areas.

(5) After Action Report/Lessons Learned: Compile inputs from all participating units and submit per AFI 32-4001 (Atch 4), and AFMAN 10-206.

4. Roles and Responsibilities:

a. 49th Fighter Wing Commander:

- (1) Responsible for planning, preparation, and exercise for this capability on an annual basis.
- (2) Controls all military personnel and assets of the base. Can authorize support to civil authorities. Any military personnel used for local, state, or federal support will remain under military control.
- (3) Authorizes the release of any information to local community.
- (4) Assign, train, and equip personnel to augmentee duties and other specialized teams as needed.

b. 49th Support Group Commander: Provides command, control, and resources of the following capabilities:

(1) Base Fire Marshall and/or Fire Chief:

- (a) Assumes initial command of scene if there are no hostile criminals/terrorists.
- (b) Assesses the incident and set-up an initial cordon area.
- (c) Gathers information and identifying hazard(s) using protective equipment.
- (d) May direct rescue of personnel involved in incident at discretion of risks.

(2) Explosive Ordnance Disposal:

- (a) Respond to situations involving actual or suspected explosive devices. This includes explosives intended to disperse or booby-trap the CB agents.
- (b) Provides guidance on explosive hazards, standoff distances, and controls.
- (c) Renders safe any munitions as situation dictates and if other authorities cannot respond in reasonable time.
- (d) Provide limited identification of some chemical agents through M18 detection kits and sampling (only) of possible biological agents.
- (e) Provide emergency thermal disposal of CB agents.

(3) Readiness:

- (a) Provide the Mobile Command Post for OSC's command, control, and communication.
- (b) Provide chemical agent identification through one or more detection tools: M256 kits, Chemical Agent Monitors (CAM), M8 & M9 paper, M8A1 detector/alarms, and M22 Automatic Chemical Agent Alarm (ACAA).
- (c) Provide advice on health risks of CB agents.
- (d) Provide assistance on setup/coordination of Contamination Control and Contamination Control Areas.
- (e) Provide limited decontamination materials for very small areas as needed for emergency access to suspect vehicles, containers, or buildings.
- (f) Provide plots of hazard areas.
- (g) Provide training to base population and specialized teams, including adding sections to the base education pamphlets outlining the threat and response actions.
- (h) As a member of the base TWG for WMD/CB issues, determine possible threats, scenarios, and capabilities.

(4) CE Environmental: At the direction of the Installation Commander, provide notification of incident to local, state, and federal environmental agencies.

(5) CE Operations:

- (a) Provide personnel, equipment, and materials as needed for containment of WMD/CB agents, releases, and decontamination.
- (b) Provide training to facility managers in handling facility air handlers.

(6) Security Forces:

- (a) Through the TWG, determine possible threats to the installation, using available intelligence data. Include representatives from 49 CES, 49 MDG, 49 FW/JA and 49 FW/PA in TWG meetings when Chemical/Biological threat issues are involved.
- (b) If the incident is a result of a hostile act, the security forces will respond to neutralize the threat to resources and personnel. The senior security forces member on scene will assume duties as the OSC until the threat is eliminated.

(c) Technical evidence of all terrorist and criminal acts will be secured in coordination with 49 MDG, 49 CES and Det 225, AFOSI.

(d) Upon termination of hostilities, the security forces will provide initial site security through implementation of a cordon of the affected area. Security forces may use available non-security force personnel for posting and placement of barriers to complete the initial cordon posting, pending recall response of off-base routes with local law enforcement agencies. These personnel will fall under the operational control of the CSF until released back to their unit.

(e) Assist in evacuations through route controls.

c. 49th Medical Group:

(1) Medical Team:

(a) Provide medical care and transportation for injured personnel.

(b) Pre-plan with Bio and Public Health how to provide/obtain decontamination of injured personnel and prevent cross-contamination to own personnel and vehicles.

(2) Bioenvironmental Engineering (BEE) Team:

(a) As a member of the base TWG for Chemical/Biological issues, determine possible threats, scenarios, and capabilities.

(b) Assist CE Readiness with liquid or vapor chemical agent detection at the incident site.

(c) Provide capability to sample water for chemical agents using the M-272 Chemical Agent Water Testing Kit.

(d) Provide capability to sample water for biological agents. Analysis will be limited to the resource available at the 49th Medical Group.

(e) Provide advice on health risks and characteristics of CB agents.

(f) Provide technical information on CB agent protective measures.

(g) Provide advice on contamination disposal.

(3) Public Health Team:

(a) As a member of the base TWG for WMD/CB issues, determine possible threats, scenarios, and capabilities.

(b) Assist CE Readiness, upon request, in developing education and training for base personnel on biological agent preventive health measure, including immunizations, to be incorporated into NBC training.

(c) Supervise decontamination efforts at the Medical Treatment Facility. Decontamination should be small-scale, residual contamination brought in by patients who were initially decontaminated in the field.

(d) Provide limited CB detection capabilities at the Medical Treatment Facility.

(e) Coordinate with BEE Team to help provide health risk information to the Medical Treatment Facility.

(f) Assist medical care providers with occupational health services (medical screening and follow-up illness investigation) for personnel potentially exposed to CB agents.

d. Supply:

(1) Provide Chemical Warfare Defense Ensembles (CWDE) and other materials to base units in the Initial Response Force (IRF) when the emergency occurs.

(2) At the direction of the Installation Commander, provide CWDE and other materials to the following with written issue receipts on a cost reimbursable basis:

(a) Federal and DoD response agencies: FBI, FEMA, Army, etc.

(b) Local and state Civil Authorities.

e. Transportation:

1. Provide all available vehicles and equipment, including WRM, to base responding units.

(2) At the direction of the Installation Commander, provide vehicles and equipment to the following with written issue receipts on a cost reimbursable basis:

(a) Federal and DoD response agencies: FBI, FEMA, Army, etc.

(b) Local and state Civil Authorities.

f. Command Post:

(1) Recall the DRF at the direction of the Installation Commander.

(2) Make the required notifications to MAJCOM, AFOSC, AFNSEP, etc.

(3) Provide the required initial, follow-up, and after-action reports.

g. Office of Special Investigations (OSI):

(1) As a member of the base TWG for WMD/CB issues, determine possible threats, scenarios and capabilities.

(2) Assist law enforcement agencies in follow-on investigations of the incident.

h. Intelligence: As a member of the base TWG for WMD/CB issues, determine possible threats, scenarios, and capabilities.

i. Staff Judge Advocate:

(1) As a consultant to the base TWG for WMD/CB issues, determine possible threats, scenarios, and capabilities.

(2) Provide advice on legal issues of WMD/CB incidents on and off base.

(3) Refer to AFPD 10-8, Air Force Support to Civil Authorities; AFI 10-801, Assistance to Civil Law Enforcement Agencies (Posse Comitatus; also see 10 USC Sec 1385); AFI 10-802, Military Support to Civil Authorities; and, AFI 31-101, The Air Force Physical Security Program (National Defense Areas).

j. Public Affairs: At the direction of the Installation Commander, provide information releases to news agencies on the following:

(1) Nature and extent of the incident.

(2) Hazard areas and evacuation routes.

(3) Extent of damages and injuries.

k. 49th Operations Support Squadron: Report any unauthorized fly-over of the base to Civil Engineering, Fire and Readiness, to investigate for possible CB agents.

l. Chaplain: Provide comfort and counseling to victims and families of victims as needed.

m. OSS Weather: Provide weather information for hazard plotting as requested.

n. Federal Bureau of Investigations (FBI): According to the PDD/NSC-39 and Joint Pub 3-07.2, the FBI will normally be the lead agency for crisis management response to any acts of terrorism. The FBI has the option of declining command of a situation on a military installation, but would still provide guidance.

o. Federal Emergency Management Agency (FEMA): According to the PDD/NSC-39, FEMA will normally be the lead agency for recovery and consequence management. They also have the option of declining lead, but would still provide assistance.

5. Administration and Logistics:

a. Consider equipping your Initial Response Force (IRF) units for CONUS-based WMD/CB incidents:

(1) General: CWDE and M256 Detection kits. Any equipment required for these incidents should be used from base supply stocks and mobility kits, with backfills made after the incident. Also, HQ ACC/CE is requesting additional funds for FY00-05 to buy three (3) M256 detection kits for each ACC base. These kits are intended for 3 Fire/Rescue vehicles at each base to assist with initial chemical agent identification.

(2) EOD: CWDE, SCBA, tyvex suits, nitro gloves, real-time visuals (fiber optics, real-time x-ray), smaller disruption devices, etc.

(3) Readiness: Available detection equipment and CWDE.

(4) HAZMAT Team/Fire: M256 detection kits, supply of plastic sheets and tape.

(5) Medical Group (Bioenvironmental, Public Health, and Flight Medicine): CWDE for medical responders, sampling kits, etc.

b. Consider training initial response force in FEMA's "Emergency Response to Terrorism" course.

HEADQUARTERS, 49TH FIGHTER WING (ACC)  
HOLLOMAN AIR FORCE BASE, NEW MEXICO 88330-5000  
1 July 2001

ANNEX B TO HOLLOMAN AFB PLAN 32-1  
NATURAL DISASTER OPERATIONS

1. SITUATION. Fires, severe thunderstorms, snowstorms, flash floods, high winds, tornadoes, heavy rainfall, hail, earthquakes, and other acts of nature could seriously disrupt the operational capabilities of the 49 FW or its tenant units. This annex establishes procedures to protect base assets and provide aid to civil authorities during disaster relief operations.

a. A natural disaster could inflict great damage to HAFB or the surrounding communities. The 49 FW/CC must be prepared to assist in rescue, fire suppression/containment, medical aid, and security for on- and off-base disasters.

b. DoD policy directs military installations to provide assistance in the form of personnel, equipment, or services where disasters are beyond the capabilities of the civil authorities and support will not impact the military mission. See Appendix 2 to this Annex for specific procedures.

2. MISSION.

a. To establish procedures to minimize damage to personnel, equipment, and facilities at Holloman AFB, and recover from damage.

b. To assist civil authorities in natural disaster relief operations in accordance with established directives. Support rendered to civil authorities will be limited by the mission of Holloman AFB.

3. EXECUTION.

a. Concept of Operations. The 49 FW/CC and the 49 SPTG/CC will determine which disasters warrant US Government relief to a civilian government. They will determine the agency to furnish the relief, provide funds, and act as the US Government's point of contact with the civil authorities being supported. Channel all requests for assistance to the command post and/or the SRC.

b. Guiding Principals. Personnel may not have sufficient warning to evacuate to shelters during a natural disaster. Normally natural disasters do not give any warning, especially earthquakes and tornadoes, which HAFB is most susceptible to. During a natural disaster, when there is not sufficient time to evacuate personnel, the structure personnel are occupying will be used as their temporary shelter. When the disaster has passed, personnel whose homes have been damaged or destroyed will be relocated to one of the reception care centers.

c. Tasks. These tasks are in addition to taskings in the Basic Plan and Annex A. The following actions are not sequential and all actions may not apply, but should be considered:

<u>ACTION</u>	<u>OPR</u>
(1) Direct the implementation of this Annex, when required.	SPTG/CC
(2) Duty hours: Determine if operations should cease and personnel take cover.	SPTG/CC
(3) Non-duty hours: Determine if recall of personnel is necessary and, if so, at what level.	SPTG/CC
(4) Support civilian disaster operations when requested by Fifth US Army.	SPTG/CC
(5) Provide emergency disaster relief under the following conditions or limitations:	SPTG/CC
(a) Local authorities have requested action and immediate action is required to prevent loss of life, extreme suffering, or great damage.	
1. Actions to be taken will not replace the functions and responsibilities of the civil authorities.	
(c) The disaster area is in the immediate vicinity of HAFB.	
(d) The disaster is at a critical phase where time is of the essence.	
(e) Circumstances prevent obtaining prior permission from HQ ACC either by message or telephone. Ensure permission is obtained once communications become available.	
(f) Local authorities are clearly unable to cope with the situations.	
(6) Furnish resources in support of disaster relief operations, as directed by higher headquarters, for other than emergency conditions described above.	SPTG/CC
(7) Activate shelters, as necessary.	TG/CC
(a) Facilities that could possibly be used for shelters are listed in Appendix 3 to this Annex and could be used for natural disasters and major accident evacuations/post disaster sheltering.	
(b) All listed supplies and equipment could be needed.	
(8) Activate the SRC to coordinate support operations, as necessary.	SPTG/CC

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<u>ACTION</u>	<u>OPR</u>
(9) Coordinate disaster relief operations with all assigned agencies as required by this Annex.	SPTG/CC
(10) Monitor reports submitted in connection with the disaster.	SPTG/CC
(11) Coordinate disaster relief operations support through CP.	SPTG/CC
(12) Accomplish public affairs policy and procedures requirements and coordinate news releases with HQ ACC/PA.	PA
(13) Assist in the preparation of final reports of AF participation in disaster relief operations, required by AFMAN 32-4004.	PA
(14) Establish and maintain contact with CP/SRC.	PA
(15) Provide communications for disaster and recovery operations.	CS
(16) Establish communication restoration priorities for base communications systems	CS
(17) Provide transportation and emergency supplies and equipment.	LG
(18) Notify commanders, units, and agencies as directed.	CP
(19) Relay directives to indicated agencies.	CP
(20) Maintain an events log for duration of the disaster.	CP
(21) Notify the DRF, as directed by the 49 FW Commander.	CP
(22) Request helicopter support, as directed.	CP
(23) Prepare and forward required reports to HQ ACC, info to HQ 12 AF, concerning requests for aircraft support in relief operations.	CP
(24) Forward TEMPEST RAPID reports, based upon information received from 49 CPTS and other agencies.	CP
(25) Provide the Mobile Command Post for response and recovery operations.	CEX
(26) Advise the DCG on natural disaster operations.	CEX
(27) Establish procedures for emergency feeding, billeting, and clothing.	SVS

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|--|------|
| (28) Provide humanitarian services for survivors.  | SVS  |
| (29) Implement mortuary affairs and graves registration.   | SVS  |
| (30) Assist the CP and PA in notifying base populace of impending weather conditions.  | SF   |
| (31) Provide law enforcement support to civil authorities, as requested. This support will be limited to the preservation of order at the disaster area, and only with the express consent of civil authorities and approval of higher headquarters. | SF   |
| (32) Implement the BCE Contingency Response Plan and provide support.  | CES  |
| (33) Provide medical assistance and transportation of casualties.  | MDG  |
| (34) Coordinate with local, civil and/or federal medical health service activities for required support.   | MDG  |
| (35) Initiate USAF Medical Contingency Response Plan.  | MDG  |
| (36) Supervise medical activities relative to the disaster.  | MDG  |
| (37) Provide weather support to CP, battle staff, and airfield management.   | OSW  |
| (38) Activate the personnel readiness control center to establish and operate a base manpower pool.  | MSS  |
| (39) Notify units, agencies, and tenants via the Secondary Crash Net of weather changes.   | OSS  |
| (40) Develop procedures for identification of net additive cost incurred in support of emergency operations.   | CPTS |
| (41) Provide budget/management analysis personnel to compile cost estimates and special reports.   | CPTS |
| (42) Prepare billing for reimbursable costs incurred in disaster relief operations   | CPTS |
| (43) Ensure separate accounting and reporting is accomplished to identify costs incurred during emergency operations.  | CPTS |
| (44) Establish a special supply account number for equipment and supplies expended in support of disaster relief operations to civil authorities.  | CPTS |

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<u>ACTION</u>	<u>OPR</u>
(45) Establish a counseling center in or near the refugee billeting location.	HC
(46) Visit refugee billeting and dining areas to maintain good morale and intra-group relationships.	HC
(47) Activate control centers as directed.	ALL
(48) Maintain internal notification procedures.	ALL
(49) Release information to the public only through PA.	ALL
(50) Ensure records are maintained for resources committed to relief. Coordinate response actions through the CP and/or SRC (see Appendix 1 of this Annex). Maintain a chronological log of assistance requested and rendered by the unit.	ALL
(51) Ensure all personnel and their dependents are educated/aware of weather conditions and precautions to take during weather warning situations.	ALL
(52) Ensure dependents of military members who are TDY, hospitalized, or on leave is assigned personnel to care for them, before, during, and after a natural disaster.	ALL
(53) Direct request for off-base support to CP.	ALL
(54) Initiate procedures for protection of facilities and personnel during natural disasters.	ALL
(55) In the event of forecasted natural disaster or severe weather:	ALL
(a) Evacuate aircraft.	
(b) Protect non-flyable aircraft, support equipment and facilities.	
(c) Secure loose equipment.	
(d) Account for all personnel.	
(56) After the natural disaster, perform damage assessment of their area and advise CE of damages.	ALL
(57) Determine if the base should be evacuated.	FW/CC
(58) Unit Control Centers will: (These tasks are in addition to the Basic Plan and Annex A, Appendix 3).	ALL

- (a) Recall personnel when directed.
  - (b) Keep assigned personnel informed of the situation.
  - (c) Provide nonessential personnel to the base manpower pool when directed by the Personnel Readiness Control Center.
  - (d) Complete recovery actions possible within area of responsibility.
  - (e) Furnish completed expenditure reporting worksheet to the CP/SRC as directed by the commander; refer to Appendix 1 of this Annex.
4. LOGISTICS AND ADMINISTRATION. See Basic Plan.
5. COMMAND AND CONTROL. See Basic Plan.

Appendixes

- 1 - TEMPEST RAPID Cost Reporting
- 2 - Military Assistance to Civil Authorities
- 3 - Natural Disaster/Major Accident Personnel Protective Actions

HEADQUARTERS, 49TH FIGHTER WING (ACC)  
HOLLOMAN AIR FORCE BASE, NEW MEXICO 88330-5000  
1 July 2001

APPENDIX 1 TO ANNEX B TO HOLLOMAN AFB PLAN 32-1  
TEMPEST RAPID COST REPORTING

1. GENERAL. All units that provide support during disaster relief operations will furnish 49 CPTS/FMA with a comprehensive report of costs in excess of normal operating expenses. This will be accomplished within 24 hours after termination of assistance.

2. EXPENSES INCURRED IN DISASTER RELIEF OPERATIONS IN EXCESS OF NORMAL OPERATING EXPENSES TO BE REPORTED ARE:

a. Pay of additional civilian personnel temporarily hired for disaster operations and overtime pay of civilian personnel. Include names, job grades, SSANs and hours involved in disaster relief operations.

b. Travel and per diem expenses of AF military and civilian personnel (exclude per diem of aircrew members reimbursable under d.(2)). The 49 CPTS/FMA will be provided with the special order number for all personnel performing travel in conjunction with the disaster relief operation.

c. Consumable items of supply requisitioned for issue to civilian disaster refugees. Report:

(1) Number and description of items issued.

(2) Federal stock number of items used.

(3) Price of each individual item issued.

d. Transportation of personnel, supplies, and equipment:

(1) Airlift provided by Airlift Services Industrial Fund (ASIF) resources of Air Mobility Command (AMC) are billed to the agency requesting airlift services.

(2) Airlift provided by non-ASIF aircraft, including AF reserve aircraft, unless specifically approved as non-reimbursement airlift under provisions of AFR 76-11, US Government Rate Tariffs, are billed at the rate specified by Non-US Government Rate Tariffs.

(3) When aircraft are used for support of disaster relief operations, report the following:

(a) Type of fuel.

(b) Amount (in gallons).

(c) Cost of Fuel.

e. Repair/reconditioning of non-consumable items that have been returned. Report an estimate of repairs to include the following:

- (1) Number and description of parts to be used.
- (2) Federal stock number.
- (3) Cost of parts.
- (4) Projected labor costs.

f. Repair parts used to repair end items located at the disaster area (excluding depot or field maintenance on a time compliance basis). Report the cost of repairs to include the following:

- (1) Number and description of parts used.
- (2) Federal stock number of parts.
- (3) Cost of parts.
- (4) Labor costs.

g. Supplies and equipment furnished and not returned. Report:

- (1) Number and description of items issued and not returned.
- (2) Federal stock number of items issued.
- (3) Price of each individual item issued.

h. Packing and crating supplies and equipment. Report:

- (1) Number and description of items used.
- (2) Federal stock number, if applicable.
- (3) Price of packing and crating material.

i. Items of supply and equipment lost, destroyed, or damaged beyond economical repair. Report:

- (1) Number and description of the item.
- (2) Federal stock number.

(3) Price of each individual item.

j. For fuel and oil used in ground vehicles, report:

- (1) Type and grade of fuel.
- (2) Amount of fuel used (in gallons).
- (3) Cost of fuel.

k. Report the costs of any major rehabilitation or modification of real property required by the FEMA which alters the property to an extent that affects its future use to the Air Force, and restoration costs of such property.

l. Report charges for medical supplies consumed in providing medical care and medical supplies to individuals or organizations for disaster relief. The cost of medical supplies consumed in providing patient care may be computed using a recent unit cost per outpatient visit and per inpatient day. For supplies report:

- (1) Number and description of item.
- (2) Federal stock number of each item.
- (3) Price of each item.

3. FOR GOVERNMENT PROPERTY DAMAGED, LOST OR DESTROYED. The lending Air Force organization uses the principle set forth below to determine the amount of reimbursement.

a. Damaged Property. If the loaned property is damaged and can be repaired, reimbursement is for the cost of repairs as well as for any reduced utility value of the item.

b. Lost or Destroyed Property. The amount to be charged for property lost or destroyed is the market value of the property immediately before the loss. This value is based on estimate of those familiar with selling prices or by price lists. If the property does not have an estimated market value, use the cost of reproducing or replacing it less any depreciation and salvage value.

4. NON-REIMBURSABLE COSTS ARE:

a. Regular pay and allowances of Air Force military personnel (except travel and per diem cost). Accumulate statistical military personnel cost for historical and other purposes only.

b. Administrative overhead costs.

c. Annual and sick leave, retirement, and other military or civilian benefits.

d. List of telephones, telegraph, or other means of electrical transmission used to requisition items for support of the disaster area, or to replenish depot stocks.

e. Surplus personal property.

5. UPON RECEIPT AND TABULATION OF ALL INFORMATION. 49 CPTS/FMA will forward results to the command post. CP will prepare the TEMPEST RAPID report.

HEADQUARTERS, 49TH FIGHTER WING (ACC)  
HOLLOMAN AIR FORCE BASE, NEW MEXICO 88330-5000  
1 July 2001

APPENDIX 2 TO ANNEX B TO HOLLOMAN AFB PLAN 32-1  
NATURAL DISASTER MILITARY ASSISTANCE TO CIVIL AUTHORITIES

1. SITUATION. Upon request for assistance from civil agencies and with the approval/direction of USAF Office of National Security Emergency Preparedness (AFNSEP), the 49 SPTG/CC will provide assistance in the form of personnel, equipment, or services where disasters are beyond the capabilities of civil authorities. However, the primary responsibility for alleviating the conditions created by a natural disaster rests with the individuals, families, private industry, local and state governments, American Red Cross, and various non-military federal agencies.

2. MISSION. To provide Air Force assistance to civil request for natural disaster relief which is consistent with current policies and mission requirements.

a. Primary Forces.

(1) HQ 5th Continental US Army is the DoD executive agent for military support in major disasters or emergencies within New Mexico.

(2) AFNSEP, Ft McPherson, GA, (DSN 367-4342/Comm 404-752-4342) is responsible for tasking Air Force installations within New Mexico and the western United States for assistance requested. They also provide mission designator when requested by the commander.

b. Assumptions.

(1) City, county and state government resources will be exhausted prior to receipt of Air Force assistance.

(2) HAFB will support civil authorities as directed by higher headquarters.

(3) The 49 SPTG/CC will provide assistance to civil requests (within capabilities) during imminently serious conditions.

3. CONCEPT OF OPERATIONS.

a. Air Force resources are used as a supplement to civil resources. Their use is subject to these conditions:

(1) Air Force resources for Military Support to Civil Authorities (MSCA) will be limited to those resources not immediately required for executing HAFB's primary mission.

(2) Military personnel will not be used to enforce or execute civil law.

(3) Military personnel will be used under the command of, and responsible to, their military superiors.

(4) Resources will not be procured, stockpiled, or developed for the sole purpose of MSCA.

(5) Military resources will not be used to restore or rehabilitate private or civil property, except when authorized by the President, DoD or FCO during presidential declared MSCA relief operations.

(6) The Air Force will seek public recognition for MSCA.

(7) The support rendered will not compete with private enterprise

(8) Support will be ended when Air Force support is no longer required or life imperiling, human suffering, or property damaging threat no longer exists.

b. Air Force support of MSCA will fall under one of these categories:

(1) Presidential Declared Peacetime Natural Disaster or Other Civil Emergency. HAFB may be tasked to support local and state governments. Air Force commanders only provide MSCA for FCO taskings coordinated by the Defense Coordinating Officer (DCO), unless support is required under imminently serious conditions criteria.

(2) Presidential Declared Peacetime Catastrophic Disaster. HAFB may be tasked to support local and state governments during a PRESIDENTIALLY declared peacetime catastrophic natural event. Air Force commanders only provide MSCA for FCO taskings coordinated by the DCO, unless support is required under imminently serious condition criteria.

(3) Undeclared peacetime natural disaster or other civil emergency.

(a) Imminently Serious Conditions. In situations within the local community requiring immediate support to save lives, prevents human suffering, or mitigates great property damage.

(b) Undeclared Civil Emergencies. In any peacetime natural disaster or civil emergency that warrants a national level response by the DoD before a Presidential declaration, the Executive Secretary for the DoD, acting on behalf of the Secretary of Defense, may authorize the DoD to provide specific support to civil authorities.

4. LOCAL POINT OF CONTACT.

a. Otero County Emergency Manager/Local Emergency Planning Committee (LEPC) - (505) 439-0747

b. White Sands Missile Range Emergency Operations Center - (505) 678-4700

c. Mescalero Fire Marshal - (505) 671-4511

d. American Red Cross Service Center Otero County, Alamogordo NM, 505-437-4421  
 American Red Cross Rio-Hondo Chapter, Roswell NM, 888-622-4370

e. New Mexico Emergency Manager - (505) 827-9241

5. TASKS. The following are not sequential and all actions may not apply but should be considered.

ACTION

OPR

a. Appoint a task force commander to exercise operational control over US Air Force resources employed and: SPTG/CC

(1) Evaluate the situation and recommend resources needed to support civil agencies.

(2) Direct operations of personnel and resources at the scene.

b. Convene various staff agency chiefs to devise a plan to alleviate the situation without seriously affecting the base mission. SPTG/CC

c. Furnish necessary relief and supplies to Air Force personnel. SPTG/CC

d. Require Air Force agencies providing support to civil agencies to submit daily activity reports of their actions. SPTG/CC

e. Coordinate with civil agencies in the use of military resources. SPTG/CC

f. Furnish command and control support to OSC. SPTG/CC

g. Establish command and control at the disaster site. OSC

h. Collect and report information to CP. OSC

i. Direct requests for additional support to proper authority and provide support. CP

j. Submit required reports to higher headquarters. CP

k. Maintain a log of events to indicate who, what, when, why, and how. CP

l. Submit OPREP-3 Reports as required. CP

m. Produce internal information coverage of support for civil agencies. PA

n. Maintain liaison with news media. PA

<u>ACTION</u>	<u>OPR</u>
o. Document Air Force operations supporting civil agencies.	HO
p. Dispatch the MCP to provide command, communication, and control support.	CEX
q. Provide medical support to civil agencies.	MDG
r. Provide buses, trucks, and operators.	TRNS
s. Provide emergency food to relief forces.	SVS
t. Provide water buffalo with potable water to relief forces (with approval from ACC to use WRM assets).	MMS
u. Respond to the disaster area as directed/required by the commander and assist local law enforcement officers. Brief security forces personnel on the requirements of the Posse Commitatus Act prior to deployment.	JA
v. Furnish supply items to relief forces.	SUPS
w. Furnish consumable items of supply to civil authorities as required by AFMAN 23-110V2CD USAF Supply Manual (FOUO.)	SUPS
x. Ensure each organization has procedures to identify resources provided to civil agencies in support of natural disasters. Accounting and Finance will follow procedures in AFI 10-213 for reimbursement.	CPTS
y. Keep accurate records of all actions for follow-up reporting.	CPTS
z. Provide communications and communications maintenance.	CS
aa. Keep records of REIMBURSABLE items furnished to ALL civil authorities and to participating Air Force personnel.	ALL
bb. Provide daily activity reports to OSC.	ALL
cc. Assist the OSC.	ALL
dd. See Appendix 1 to Annex B for reimbursable costs that are directly related to Air Force participation in natural disaster relief operations.	ALL
6. <u>LOGISTICS AND ADMINISTRATION</u> . As required by the situation.	
7. <u>COMMAND AND CONTROL</u> . Responding forces are under the direct control of the OSC or designated representative.	

HEADQUARTERS, 49TH FIGHTER WING (ACC)  
HOLLOMAN AIR FORCE BASE, NEW MEXICO 88330-5000  
1 July 2001

APPENDIX 3 TO ANNEX B TO HOLLOMAN AFB PLAN 32-1  
NATURAL DISASTER/MAJOR ACCIDENT PERSONNEL PROTECTIVE ACTIONS

1. PURPOSE. This appendix outlines general responsibilities and operational procedures for evacuation and sheltering of displaced persons due to a natural disaster or major accident.

2. ASSUMPTIONS.

a. In many incidents, only evacuation can prevent unnecessary deaths and serious injury. Depending on the severity of the incident, evacuation may be limited or require total evacuation of the installation.

b. Personnel may not have sufficient warning to evacuate to shelters during a natural disaster. Normally natural disasters do not give any warning, especially earthquakes and tornadoes, which HAFB is most susceptible to. During a natural disaster, when there is not sufficient time to evacuate personnel, the structure personnel are occupying will be used as their temporary shelter. When the disaster has passed, personnel whose homes have been damaged or destroyed will be relocated to one of the reception/care centers.

3. RESPONSIBILITIES.

a. Security forces are responsible for the following actions during a natural disaster or major accident that requires the evacuation or relocation of base personnel:

(1) Recommend primary and secondary evacuation route(s) to the OSC.

(2) Ensure adequate personnel/resources required to handle the evacuation/relocation effort are made available and coordinate all evacuation efforts.

(3) Ensure evacuation announcements made over public address systems include safe travel routes and the location(s) of reception/care area(s).

(4) Provide adequate traffic control to support evacuation efforts.

(5) Restrict access to the evacuated area.

b. Services Squadron, in conjunction with the Family Support Center, will function as reception/care center coordinators and will be responsible for the following actions:

c. Family Support Center, will activate the Holloman Air Force Base Family Support Center Deployment and Contingencies Plan 10-403.

(1) Identify facilities that can be utilized as reception/care centers in the event evacuation of military family housing is required. Report to the designated reception/care center(s) with adequate personnel and resources to handle the situation. The number of reception/care centers used will depend on the number of evacuees. The following facilities can accommodate personnel as indicated below:

- (a) Fitness Center capacity: 400 persons.
- (b) Base Community Center capacity: 200 persons.
- (c) Enlisted Club capacity: 400 persons.
- (d) Officer's Club capacity: 100 persons.
- (e) Elementary School capacity: 1,000 persons
- (f) Hospital (patients only) capacity: 25 persons
- (g) Hanger 500 capacity: 300 persons

(2) Check evacuees in and document their names at the reception/care center(s).

(3) Activate the Red Cross Disaster Response Plan for Otero County, Contacts:  
American Red Cross Service Center Otero County, Alamogordo NM, 505-437-4421  
American Red Cross Rio-Hondo Chapter, Roswell NM, 888-622-4370

(4) Coordinate all food and lodging requirements, and special needs.

c. Transportation.

(1) Transportation of personnel during evacuations will normally be accomplished utilizing privately owned vehicles (POV's). Transportation squadron will provide buses, vans, and vehicle operators to transport special populations such as school children, etc., and wrecker service to clear any disabled vehicles from evacuation routes (if required).

(2) If it is necessary to provide additional transportation sources, the transportation squadron will be tasked to provide buses. There are four 29-passenger and three 45-passenger buses available.

d. Command Post.

- (1) Will coordinate public address announcement information over the "giant voice."
- (2) Will coordinate cable TV access as a means of communicating instructions.

e. Hospital will provide medical coverage, as needed, to the reception/care center(s) or area(s) and also provide ambulance(s) and personnel to evacuate non-ambulatory persons and persons with special needs.

f. CE will provide traffic signs, barricades and personnel required to assist in evacuation efforts.

#### 4. CONCEPT OF OPERATIONS.

a. The primary evacuation mode will be by privately owned vehicles. In addition, military vehicles may be used to transport evacuees to ensure expedient evacuation.

b. If at all possible, two-way traffic will be maintained on evacuation routes to permit continued emergency vehicle access. Traffic control points will be located as needed for anticipated traffic volume and complexity of evacuation routes.

c. Traffic control devices such as signs and barricades will be provided and installed by CE, at the request and direction of law enforcement/security forces.

d. Security forces personnel will request wrecker service (if required) from the transportation squadron to clear disabled cars from evacuation routes.

e. Other base agencies may be requested to augment security forces personnel in traffic control duties as required.

f. In the event evacuation of office and/or industrial areas of the base is required, utilize other like facilities outside the outer cordon area for these personnel to report to. If evacuation of these types of facilities is required for any lengthy period of time, those employees may either be sent home or relocated to a temporary place of business.

g. If it becomes necessary to house military family housing occupants' overnight, or for a short-term duration (not to exceed one week) in a reception/care center, the following sources may be contacted to supply sleeping cots:

(1) Civil Engineer Prime BEEF; maximum cots available: 130.

(2) Materiel Maintenance Group (MMG); large quantity of cots available upon request. If WRM is utilized, 49 MMG will work authorization issues with HQ ACC, IAW AFI 25-101.

h. In addition to cots, it may be necessary to obtain sleeping bags. Contact base supply for this resource. Maximum number of sleeping bags available: 2,117. Utilization of these assets requires wing commander's approval.

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i. If it becomes necessary to house some military family housing occupants for an extended length of time, accommodations should be arranged for them to use local motels. This will be accomplished by contracting.

j. If for any reason there is a loss of commercial power, the base power grid is structured so that the MMG compound can be electrically isolated. MMG has the capability to power its entire compound with generators. Buildings in the MMG compound can be used as "warm Havens" during the winter months.

k. Should evacuation of the whole base populace be required, the CP will contact Otero County Sheriff (437-2210) who will in turn notify the Otero County Emergency Manager and local officials. The Otero County Emergency Manager will initiate the Otero County All-Hazards Plan and make appropriate notifications. The temporary reception/care center/staging area off base is the Otero County Fairgrounds. The Otero County Local Emergency Planning Committee will determine further reception/care areas.

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HAFB PLAN 32-1 – ANNEX B, APPENDIX 4  
SAFETY

1. This appendix outlines actions of the wing safety office in response to activation of this plan.
2. Upon activation of this OPLAN, the 49th Fighter Wing Chief of Safety will classify the occurrence as ground, weapons, or flight primary response and form the appropriate response team from the 49 FW safety staff.
3. The following immediate actions will be taken:
  - a. The Chief of Safety (COS) or a designated representative will:
    - (1) Report to the Battle Staff and/or Disaster Control Group as applicable.
    - (2) Advise the on scene commander of critical safety issues in response to the occurrence or its aftermath.
    - (3) Advise wing leadership if a formal investigative process will be required.
    - (4) Activate HAFB Mishap Investigation Plan 91-204, if required.
    - (5) Direct and oversee safety response team actions.
  - b. The safety response team members will develop a plan of action to:
    - (1) Take necessary immediate actions to prevent further injury or damage.
    - (2) Ensure recovery actions follow established operational safety protocols.
    - (3) Preserve evidence for investigative purposes.
4. The greatest risk associated with a disaster response is the possibility that in reacting to an emergency situation, the safe and orderly practices under which units and individuals operate day-to-day are cast aside or disregarded due to improper task prioritization.
  - a. Under no circumstance should the occurrence of a disaster, its repercussions, or the response, be viewed as justification for acting outside normal operational procedures.
  - b. In fact, it is during these times that individuals and units must strive even more than under normal circumstances to ensure proper procedures are adhered to and the necessary risk assessments are accomplished.

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HOLLOMAN AIR FORCE BASE, NEW MEXICO 88330-5000  
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ANNEX C TO HOLLOMAN AFB PLAN 32-1  
ATTACK ACTIONS

REFERENCE. See Basic Plan.

TASKED ORGANIZATIONS. See Basic Plan.

1. SITUATION.

a. General. Although the current threat of a nuclear strike against the United States is low, military installations should preserve up-to-date defensive plans. Preparations must be made well in advance of attack to minimize the effects on the unit's operational capability to provide survival for military, civilian, and dependent personnel and restore the base to operational status in minimum time. This annex prescribes actions that must be accomplished before, during, and after a nuclear attack.

b. Forces. Holloman AFB host/tenant units will support this annex. Available personnel will be used to meet support requirements.

c. Assumptions.

(1) Deteriorating relations with a potential enemy will permit the declaration of a "strategic warning" and allow 12 hours or more for orderly implementation of this plan. However, a missile attack may come with no more than 15 minutes "tactical" warning.

(2) Existing buildings will be used to shelter the base populace. If provided with a tactical warning, on-base dependents will be sheltered on base. If provided with a strategic warning, on-base dependents will be included in local evacuation and sheltering programs.

(3) Local emergency preparedness plans will provide for shelter and evacuation of Air Force dependents and non-essential DoD/DAF civilians residing off base.

2. MISSION. Establish procedures to improve survivability of Holloman personnel and retain a wartime support capability.

3. EXECUTION.

a. Concept of Operations. ACC Emergency Action Plan, Vol. I (ACC EAP), Survival and Recovery/Reconstitution, as supplemented, provide detailed procedures and preliminary actions to take under various Defense Readiness Conditions (DEFCON). Although

the ACC EAP establishes procedures for an orderly progression of DEFCON, it cannot be assumed that an orderly progression would take place. ATTACK WARNING may be sounded at any DEFCON, requiring simultaneous implementation of actions for all preceding DEFCONs.

b. Tasks for Pre-attack. These actions include both contingency planning and preparations as well as the actions required immediately preceding a nuclear attack. These are not in sequential order but should be considered.

<u>ACTION</u>	<u>OPR</u>
(1) Complete prescribed DEFCON actions.	ALL
(2) Accomplish pre-attack actions on a priority basis.	ALL
(3) Provide nonessential personnel to the base manpower pool, when directed by the Personnel Readiness Center.	ALL
(4) Ensure equipment/resources and personnel are dispersed and protected.	ALL
(5) Secure classified material not required during trans-attack or post-attack.	ALL
(6) Prepare assigned shelters for occupancy.	ALL
(7) Place contamination avoidance covers on unsheltered critical assets.	ALL
(8) Review recovery plans and procedures.	ALL
(9) Brief personnel on alert warning signals, protective shelter arrangements, and basic sheltering procedures.	ALL
(10) Prepare to implement base recall.	FW/CC
(11) Prepare to activate wing battle staff, unit control centers, specialized response teams, and shelters.	FW/CC
(12) Implement other plans, as necessary.	FW/CC
(13) Prepare to implement expedient hardening of shelters, increased security measures, protection of facilities and utilities, and repositioning of equipment and supplies to include stocking of shelters.	FW/CC
(14) Activate shelters.	FW/CC
(15) Relocate unit control centers to unit shelters.	FW/CC

<u>ACTION</u>	<u>OPR</u>
(16) Begin sheltering nonessential personnel.	FW/CC
(17) Monitor and direct execution of this Annex and operations to cope with a nuclear attack.	FW/CC
(18) Direct activation of alert warning systems.	FW/CC
(19) Establish radiation dosage limits during radioactive fallout.	FW/CC
(20) Issue conventional individual protective equipment.	FW/CC
(21) When attack is imminent suspend all operations performed outside of the shelter and seal shelters.	FW/CC
(22) Through the SRC:	SPTG/CC
(a) Direct SRC operations.	
(b) Provide a master base situation map to reflect situations affecting recovery efforts.	
(c) Monitor base/unit personnel strength, casualty information, recovery actions, and post situation boards.	
(d) Collect, display, prepare, and submit to HQ ACC reports required by JCS Pub 6, Vol. V.	
(e) Maintain DEFCON checklists for the battle staff and disseminate DEFCONs upon receipt.	
(23) Protect essential heavy support equipment. Disperse equipment as required.	CES
(24) Safeguard utility system and water supplies, ensure emergency generators are serviced and direct actions to minimize the hazard of secondary fires and damage from blast or high winds.	CES
(25) Monitor status of radiological equipment and supplies to ensure serviceability.	CEX
(26) Plot NUDETs; monitor, compute, and plot fallout patterns and intensities.	CEX
(27) Issue radiation detection kits to base shelter teams.	CEX
(28) Disseminate disaster information IAW AFI 32-4004.	PA

<u>ACTION</u>	<u>OPR</u>
(29) Coordinate with local media to broadcast information of interest to military and civilian personnel.	PA
(30) Keep commanders and staff of all assigned and attached units informed of current situation/events.	CP
(31) Direct dispersal IAW the SR-55 Plan and concealment of equipment and critical resources.	FW/CC
(32) Implement security measures commensurate with the current DEFCON or situation.	SF
(33) Stock shelters with food and clothing from available resources (i.e., base exchange, clothing sales, commissary, etc.).	SVS
(34) Coordinate with the transportation control center for support.	SVS
(35) Activate the personnel control center to establish and operate the base manpower pool.	MSS
(36) Establish personnel accounting procedures to identify base personnel strength by AFSC and emergency operations assignment.	MSS
(37) Through the civilian personnel office, maintain the National Post-attack Civilian Registration System.	MSS
(38) Advise commanders on environmental health, emergency sanitation requirements, and medical aspects of nuclear warfare.	MDG
(39) Check the safety and adequacy of food and water stocks in protective shelters.	MDG
(40) Ensure contamination control teams (CCT) are on standby, and their equipment is operationally checked and serviceable.	MDG LG/CC SPTG/CC
(41) Activate appropriate medical rescue and recovery teams.	MDG
(42) Provide medical supplies (e.g., first aid kits) to shelters.	MDG
(43) Procure commercial chemicals; i.e., soap used in decontamination operations using unit IMPACT credit card.	ALL

<u>ACTION</u>	<u>OPR</u>
(44) Close warehouse openings, sealing as many as practical against penetration of fallout into the interior. Move material in outside storage areas to protected warehouses.	SUPS
(45) Purchase soap and detergents for decontamination. If stocks are insufficient, purchase through IMPACT	ALL
(46) Purchase sleeping bags, blankets, field clothing, trashcans, plastic bags, flashlights, batteries, etc. to shelters through impact.	ALL
(47) Provide transportation support.	TRNS
(48) Move as many vehicles as possible into maintenance bays to limit the effects of blast or fallout.	TRNS
(49) Provide, maintain, and operate communications systems to support attack/recovery operations.	CS
(50) Develop procedures for priority restoration of essential communication systems following an attack.	CS
(51) Provide current weather reports to CE readiness on request.	OSW
(52) Activate shelters IAW Shelter Management Guide.	SHELTER TEAM
c. <u>Tasks for Trans-attack.</u>	
(1) Activate "Attack Warning" signal.	CP
(2) Take shelter, when directed, and remain sheltered until ordered to leave by competent authority.	ALL
(3) If outside, take the best cover available in immediate area and don all protective equipment issued. Seek protection from blast, projectiles, heat, and contamination.	ALL
d. <u>Tasks for Post-attack.</u> Exposure control procedures will be in effect in all shelters. Operate shelters IAW guidance provided by disaster preparedness.	
(1) Until hazards are assessed, non-critical mission activities should be suspended. Wear individual protective equipment when outside the shelter.	ALL
(2) Implement contamination avoidance measures.	ALL

NOTE: Post-attack actions are dependent on the following:

<u>ACTION</u>	<u>OPR</u>
(a) Fallout, if any.	
(b) Intensity of the fallout.	
(c) The need to complete a task. If the need is there, expose minimum number of people for the least amount of time.	
(3) Survey immediate area for casualties, unexploded ordnance, damage, indicators of fallout or other hazards. Report finding to the SRC/squadron control center.	ALL
(4) The CE readiness representative to the SRC will implement NUDET plotting, predict radiation intensities, and submit required reports.	CEX
(5) Report personnel strength (including nonessential personnel) to the personnel control center.	ALL
(6) Coordinate recovery operations to ensure unit mission accomplishment.	ALL
(7) Assess and minimize facility and property damage.	ALL
(8) Personnel required in support of emergency operations will continue their duties.	ALL
(9) Dispatch CCTs as required.	MDG LG/CC SPTG/CC
(10) Personnel assigned to base manpower pool will be used as necessary.	ALL
(11) Provide assistance to civil authorities as directed by higher headquarters and/or 49 FW/CC.	ALL
(12) Implement exposure control procedures.	FW/CC
(13) Dispatch damage assessment teams to survey the base.	CES
(14) Direct restoration of utilities.	CES
(15) Provide water to decontamination teams.	CES
(16) Implement recovery plans based on priority of resources and danger to personnel.	CES

<u>ACTION</u>	<u>OPR</u>
(17) Decontaminate vital facilities and areas.	CES
(18) Mark structurally unsound buildings and potential hazard areas "off-limits."	CES
(19) Minimize the exposure of fire fighting and damage recovery team members.	CES
(20) Provide emergency electrical power, water, heat and sanitation for base shelters and medical facilities.	CES
(21) Provide emergency lighting at medical triage/treatment sites in the field.	CES
(22) Transport rendered safe unexploded ordnance to designated holding area.	CES
(23) Perform lifesaving and emergency rescue operations.	CEF
(24) Provide radiation-monitoring teams.	CEX
(25) Provide information on radiation levels.	CEX/BIO
(26) In coordination with the base weather officer, use NUDET information to plot fallout.	CEX
(27) Advise the battle staff on decontamination procedures.	CEX/CEV
(28) Disseminate information on radiation intensities and radiological survey information to shelters.	CEX/BIO
(29) Complete and send NORAD reports.	CEX
(30) Advise commanders on disaster recovery actions, implement decontamination procedures, and review recovery operations.	CEX
(31) Administer treatment to affected personnel who are beyond the capability of self aid or buddy care within shelters.	MDG
(32) Provide security of resources as required.	SF
(33) Implement traffic control within unit capability to support movement of personnel.	SF
(34) Provide clothing and supplies to work details as directed. Purchase through IMPACT if needed.	ALL

<u>ACTION</u>	<u>OPR</u>
(35) Keep a running inventory of available resources.	ALL
(36) Assess damage to vehicles.	TRNS
(37) Provide transportation support to agencies as directed.	TRNS
(38) Submit required reports.	CP
(39) Provide NUDET information to the CE readiness SRC representative.	CP
(40) Provide damage assessment and operational capability to the battle staff and SRC.	CP
(41) Announce "All Clear" when fallout has dropped to an acceptable level.	CP
(42) Determine the operational status of aircraft and relay to the battle staff.	MXS
(43) Provide maintenance support for base recovery or assistance to civilian communities.	MXS
(44) Shelter occupants will transport casualties with approval from the SRC during fallout conditions.	SHELTER OPR
(45) Maintain individual exposure control records.	SHELTER OPR
(46) Provide emergency communications/repair of communication systems	CS
(47) Assist in dissemination of information to the base populace.	PA
(48) Provide assistance and equipment to establish temporary cemeteries.	CES/SVS
(49) Feed personnel using available supplies and rations.	SVS
(50) Issue uncontaminated clothing and supplies from commissary, base exchange, and clothing sales.	SVS
(51) Provide a list of nonessential personnel available for work details.	MSS
(52) Initiate casualty-reporting procedures.	MSS
(53) Provide assistance in the area of greatest spiritual need.	HC

4. ADMINISTRATION AND LOGISTICS.

a. Administration.

(1) During fallout conditions, essential operations must continue whether or not they are in shelters. Exposure control must be exercised and shift work employed so that personnel do not exceed allowable dosage. For planning purposes, the maximum allowable dose is 150 centigrey, adjustable by the 49 FW/CC.

(2) Personnel off base when the attack warning signal is sounded should seek immediate cover. Military personnel will return to base as soon as possible after the attack.

(3) Dependents residing on base will be advised of required actions by sponsors and public address systems. Dependents and civilian employees who are residing off-base and are not emergency essential will be released from base prior to attack, time permitting, for integration into the local Civil Defense System.

(4) Personnel away from their home duty station when war occurs, must report to the nearest: Air Force Base, Air Force Recruiting or Reserve Officer Training Corps Detachment, US Army, Navy, or Marine installation, or any other Federal Government installation.

(5) Dependents residing off base may take shelter in their homes or go to Civil Defense shelters.

b. Logistics. See Basic Plan.

5. COMMAND AND CONTROL.

a. Command. The 49th Fighter Wing Commander directs implementation of this Annex and establishes command and control of operations.

b. Control.

(1) When sufficient time is available, military and mission-essential civilian personnel will be recalled to duty. Base personnel will be notified of sheltering instructions by their unit control centers.

(2) When there is insufficient time, the ATTACK WARNING signal is sounded and personnel will take cover in the nearest shelter or suitable structure. Stay alert for public address announcements and additional instructions.

FOR OFFICIAL USE ONLY

HEADQUARTERS, 49TH FIGHTER WING (ACC)  
 HOLLOMAN AIR FORCE BASE, NEW MEXICO 88330-5000  
 1 July 2001

ANNEX Z TO HOLLOMAN AFB PLAN 32-1  
DISTRIBUTION

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IG	2		
XP	1	49 MMG	3
HO	2	49 MDG	5
49 OG/CC	1	49 SPTG/CC	2
OSS/CC	6	CES	10
OSA	4	CEX	15
7 CTS	1	CEV	10
8 FS	1	CEF	5
9 FS	1	CED	1
20 FS	1	CS	4
		MSS	6
		SVS	4
		SF	6

ASSOCIATE UNITS

DET QD3F	1	Det 1, 57 FW	1
AFOSI, Det 225	1	Det 4, AFSFC	1
		46 TG	8
STEWS-AA-O	2	DET 1,147 FG	1
DET 1, PHILLIPS LAB	1	DIS	1
DET 1, 475 WEG	1	DET 230, AFAA	1
AFOTEC/OL-DS	1	AEROSPACE FUELS LAB	1
AF LEGAL SVC CE	1	NATIONAL IMAGERY	
RED CROSS	1	MAPPING AGENCY (NIMA)	1
(49 MSS/MSF)		DEFENSE LOGISTICS AGENCY	2
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STEW-PL-ECC (WSMR Emergency Control Center)

1

Alamogordo/Otero County Local Emergency

1

Planning Committee Chairman

1013 New York Ave

Alamogordo NM 88310



DEPARTMENT OF THE AIR FORCE  
49TH CIVIL ENGINEERING SQUADRON (ACC)  
HOLLOMAN AIR FORCE BASE, NEW MEXICO

15 August 2001

MEMORANDUM FOR DISTRIBUTION LIST

FROM: 49 CES/CC

SUBJECT: Review Change 1 to 49FW OPLAN 32-1, Holloman AFB Disaster Preparedness

1. Forward any comments regarding this plan to 49CES/CEX, MSgt Goss 572-7312
2. Please annotate the following changes to your copy(ies) of the 49 FW OPLAN 32-1:

Page Changes:

Insert

A-3-A-1

A-3-A-2

Pen and Ink changes:

<u>Page</u>	<u>Paragraph</u>	<u>Action</u>
IV	3. b. (5)	Add after first sentence " Evidence will not be disposed of until after the president of the accident investigation board (AIB), pursuant to AFI 51-503, has released it."
1		Add "AFI 51-503" to the References
A-5-5	3g	Delete item g
A-5-A-3	13	Delete first sentence and replace with "Only personnel authorized by the incident commander may enter the warm and hot zones."
A-5-I-2	(4)(b)NOTE:	Delete last sentence "Registered EMT's B's...accomplish this requirement."
A-12-1	Appendix 12	Change all references "Family Assistance Center (FAC)" to "Family Assistance Control Center (FACC)" <i>used to write in</i>
A-12-1	3. a.	Add sentence "The FACC will be operational, at the direction of the 49 FW Commander..."
A-12-1	3. a.	Add A FAC may "also" be activated....
A-X-1	Appendix 2	Change APPENDIX 2 to read APPENDIX X

//SIGNED//

EDWARD PIEKARCZYK, Lt Col, USAF  
Base Civil Engineer

*Global Power For America*



**DEPARTMENT OF THE AIR FORCE**  
HEADQUARTERS 49TH FIGHTER WING (ACC)  
HOLLOMAN AIR FORCE BASE, NEW MEXICO

MEMORANDUM FOR DISTRIBUTION LIST

31 Jan 02

FROM: 49 CES/CC

SUBJECT: 32-1 Addition "DCG Recall Location"

1. After a review of the 32-1 OPLAN the need for the following changes was identified.
2. Please make the following pen and ink changes to your copy of the Holloman AFB Disaster Preparedness OPLAN 32-1.

Page A-4, Paragraph 3a:

Primary: Bldg 59, CEX classroom (chemical warfare classroom)

Page A-4, Paragraph 3b:

Secondary: 49<sup>th</sup> Communications Squadron parking lot or in Bldg 121, Comm Sq.  
Conference room

Page A-4, Paragraph 3c:

Tertiary: Building 838

3. The OPR for this plan is 49 CES/CEX. Any questions regarding this CHANGE 1 to 32-1 should be directed to Lt Eyle at ext. 2-3066.

  
EDWARD PIEKARCZYK, Lt Col, USAF  
Base Civil Engineer

**CUT AND PASTE FOR 49 CES/CEX OPLAN 32-1**

-----  
Evidence will not be disposed of until after the president of the accident investigation board (AIB), pursuant to AFDI 51-503, has released it.

-----  
AFI 51-503  
-----

(13) Only personnel authorized by the incident commander may enter the warm and hot zone. This includes decontamination (Decon) personnel and the site safety officer.

-----  
The space above is to delete (4)(b) NOTE:  
-----

**FAMILY SUPPORT PLAN SUMMARY / FAMILY ASSISTANCE CONTROL CENTER (FACC)**

- a. Primary : Building 59, CEX classroom (chemical warfare classroom).
  - b. Secondary: 49<sup>th</sup> Communications Squadron parking lot or in Bldg 121, Comm. Sq. Conference room.
  - c. Tertiary: Building 838
-

**ATTACHMENT I  
RECORDKEEPING**

## PERMIT ATTACHMENT I MANIFESTING, RECORD KEEPING, AND REPORTING

### **Manifesting**

The Holloman Air Force Base Container Storage Unit (CSU) personnel shall include a hazardous waste manifest whenever hazardous waste is shipped off-site to other treatment, storage and/or disposal facilities. All specific manifest requirements shall be completed in accordance with all applicable requirements of 20.4.1.500 NMAC, incorporating 40 CFR §264.70 through §264.77.

### **Record Keeping**

The following information shall be recorded as it becomes available and maintained in the operating record until closure of the CSU.

Description and quantity of hazardous waste received and the methods and dates of its storage at the Unit. This information shall include:

- Common name of the waste.
- Applicable EPA waste codes from 40 CFR Part 261.
- Physical form of the waste.
- Description of the process generating the waste if the waste is not a waste listed in 20.4.1.300 NMAC, incorporating 40 CFR §261, Subpart D.
- Estimated or manifest-reported weight, or volume and density in one of the units specified in Appendix I of 20.4.1.500 NMAC, incorporating 40 CFR §264.
- Applicable handling code specified in Table 2, Appendix I of 20.4.1.500 NMAC, incorporating 40 CFR Part 264 (e.g., S01).
- Dates of storage.
- Records and results of waste analyses and waste determinations, including:
  - a. Waste characterizations as per 20.4.1.500 NMAC, incorporating 40 CFR §264.13.
  - b. Additional information regarding waste analysis and characterization records is provided in Permit Attachment D, Table D-1.
  - c. General requirements for ignitable, reactive, or incompatible wastes as required by 20.4.1.500 NMAC, incorporating 40 CFR §264.17.
  - d. Air emission analyses as applicable under 20.4.1.500 NMAC, incorporating 40 CFR §264.

### **Land Disposal Restriction (LDR), Waste Analysis, and Record Keeping.**

For each off-site shipment of hazardous waste, the CSU personnel shall prepare an LDR notification form in accordance with 20.4.1.800 NMAC, incorporating 40 CFR '268.7(a)(1). The notification form shall contain documented treatment standards required by 20.4.1.800 NMAC, incorporating 40 CFR '268.40 for the specific hazardous wastes in the off-site shipment. A copy of the LDR notification form shall be sent to the designated off-site treatment, storage, or disposal facility (TSDF) that will receiving the wastes, and a copy shall be maintained at the CSU for at least five years.

If the hazardous waste already meets applicable LDR treatment standards, the CSU personnel must prepare and provide to the receiving TSDF an LDR notice and certification, as required by 20.4.1.800 NMAC, incorporating 40 CFR §268.7(a)(2), and the following information:

- Summary reports and details of incidents requiring the implementation of the contingency plan, as required by 20.4.1.500 NMAC, incorporating 40 CFR 264.56(j).
- Records and results of facility inspections including:
  - a. Date and time of inspection;
  - b. Name of the inspector;
  - c. Notation of the observations made, and date and nature of any repairs or other remedial action.
  - d. The CSU shall maintain these records for a minimum of three years.
  - e. Monitoring, testing, or analytical data for any applicable 20.4.1.500 NMAC, incorporating 40 CFR §264 requirements.
  - f. Documentation of corrective action taken under 20.4.1.500 NMAC, incorporating 40 CFR §264, Subpart F.
  - g. Annual Waste Minimization Certification.
  - h. Records of the quantities and date of placement for each shipment of hazardous waste placed in land disposal units under an extension to the effective date of any land disposal restriction granted pursuant to 20.4.1.800 NMAC, incorporating 40 CFR §268.5.
  - i. Personnel Training Records documenting storage facility personnel training as described in Permit Attachment J, *Personnel Training* must be maintained at the Container Storage Unit.

### **Availability, Retention, and Disposition of Records**

The Defense Utilization and Marketing Office retains all records for the time frames shown below in Table I-1.

**TABLE I-1**  
**RECORDS RETENTION TIMES**

<b>RECORDS</b>	<b>RETENTION TIMES</b>
Manifest and exception reports	At Least 3 Years
Biennial reports	At Least 3 Years
Waste minimization certification	At Least 3 Years
Land Disposal Restriction certification forms	At Least 5 Years
Waste analysis data	At Least 5 Years
Training Records for each individual currently handling or Occupationally exposed to hazardous waste at the Unit	Until the Unit closes
Training records for personnel who no longer work at the Container Storage Unit	At least 3 years from the date the employee left his/her position handling or occupationally exposed to hazardous waste
Incident reports	At least 3 years
Weekly inspection records	At least 3 years

**Record Keeping Associated with Permit Application**

All data used to complete this permit application and all supplemental information shall be kept at the CSU for at least three years from the date the application is signed.

**Biennial Report**

A biennial report shall be submitted to NMED by March 1 of each even-numbered year. If a copy of a manifest is not received with a handwritten signature of the designated TSDF within 45 days, HAFB shall complete an exception report, as required by 204.1.300 NMAC, incorporating 40 CFR §262.42.

**Incident Report**

Incident reports shall be submitted to NMED as required by 20.4.1.500 NMAC, incorporating 40 CFR 264.56(j).

**ATTACHMENT J**  
**PERSONNEL TRAINING**

## PERMIT ATTACHMENT J PERSONNEL TRAINING

### Introduction

Holloman Air Force Base (HAFB) personnel that manage and store hazardous wastes shall successfully complete a program of classroom instruction and/or on-the-job training to prepare them to operate and maintain the Container Storage Unit (CSU) in a safe manner and ensure the Facility's compliance with New Mexico Hazardous Waste Management Regulations 20 NMAC 4.1. No employee shall work unsupervised until he/she has completed either the formal training course or equivalent on-the-job training. This training shall be completed within six months of assignment to working with hazardous waste at the CSU.

Defense Re-utilization Marketing Service (DRMS) Headquarters offers a complete environmental training program in managing, storing, and transporting hazardous wastes. That training program shall comply with the training requirements of 20.4.1.500 NMAC, incorporating 40 CFR §264.16(a)(3). All HAFB employees involved in waste management and storage at the CSU or who manage and store hazardous wastes shall be required to participate in the program. HAFB personnel shall be enrolled in the DRMS hazardous waste training program by their regional DRMS office.

### Job Titles and Duties for Which Training is Required

The duties, responsibilities, and qualifications related to the positions responsible for managing and storing hazardous wastes at the CSU are as follows:

**Position/Title:** Defense Re-utilization and Marketing Office (DRMO) Chief.

**Responsibilities:** This individual shall direct the operations of the surplus property program at the HAFB, administer the disposal program at the HAFB, provide assistance and guidance to commands served, and shall be the technical authority on all disposal matters. The DRMO Chief shall ensure that personnel receive adequate training.

**Major Duties:** The major duties of the DRMO Chief also include:

- Interpreting regulations and developing necessary operating procedures.

- Processing an extremely wide variety of materials ranging from commonly used items to highly specialized items, including hazardous waste;
- Determining requirements for manpower, space, or equipment, and initiating necessary requisitions;
- Determining the need for modifications to existing facilities and initiating action to improve economy, efficiency, safety, and physical security of operations;
- Developing operating requirements and initiating requests for work;
- Maintaining personal contacts with Local and State government agencies, military commands, and the General Services Administration; and
- Delegating workload of subordinate employees based on difficulty and the degree of training. The HAFB Chief shall be invested with decision-making authority for resolution of work-related problems.

**Position/Title:** Environmental Protection Specialist

**Responsibilities:** The Environmental Protection Specialist shall serve as the HAFB hazardous waste management and storage focal point and shall advise the DRMO Chief on hazardous waste matters. He/she shall be responsible for ensuring compliance with requirements related to receiving, managing, storing, packaging, and disposing of hazardous waste. This specialist shall provide technical guidance to HAFB personnel in all aspects of hazardous waste processing.

**Major Duties:** The primary duties of the Environmental Protection Specialist shall include:

- Conducting periodic inspections to ensure that hazardous waste storage areas are maintained in accordance with pertinent State and Federal government regulations, and that hazardous waste turned in by generating activities is properly identified and packaged;
- Acting as the Emergency Coordinator at the CSU; reacting to spillage by containing, cleaning up, and decontaminating the spill site;
- Analyzing data and preparing hazardous waste reports as required; and
- Assisting DRMS personnel in providing on-the-job training for HAFB personnel involved with hazardous waste management operations.

**Position/Title:** Material Sorters and Classifiers

**Responsibilities:** These personnel shall be responsible for proper receipt, management and storage of hazardous waste. In this capacity, they shall verify the nomenclature, description, quantities, and conditions of hazardous waste containers against those listed on the documentation; and classify items based on inspection log data. These individuals shall also operate forklifts and bailing machines, as required, to manage and store hazardous waste.

**Major Duties:** Primary duties of the Material Sorters and Classifiers shall include:

- Receiving and unloading all incoming excess materials, surplus property, and hazardous waste authorized for turn-in to the HAFB;
- Ensuring that a properly prepared turn-in document accompanies each property transaction;
- Routing property in a manner that permits required processing with a minimum of handling and transportation;
- Warehousing all property physically received in HAFB from time of receipt until final disposition;
- Evaluating type of hazardous waste handling equipment needed, fire and safety hazards involved, protection requirements, and ease of movement;
- Arranging storage facilities for property to ensure segregation of property by type, condition, and sales appeal;
- Checking source document files and other records to determine the basis for over, short, or misplaced items;
- Assisting other personnel in conducting sales of surplus property including lotting, displaying; and
- Segregating property for sale.

## **Training Content and Frequency**

The training program employed by DRMS for employees managing and storing hazardous wastes shall combine supervised on-the-job instruction and formal classroom training. Each employee shall learn about the particular dangers associated with hazardous wastes typically stored at HAFB and proper management and storage requirements. The on-the-job training shall provide HAFB employees working at the CSU with experience in the following areas:

- Physical layout of the CSU buildings, particularly the location and use of emergency equipment and systems (i.e., how to operate alarm systems);
- Basic hazardous waste disposal policies of HAFB (turn-in requirements, analysis, packaging, and record keeping);
- Basic procedures in handling, storing, and manifesting of hazardous waste;
- Inspection techniques and corrective action techniques for potential inadequacies;
- Emergency response procedures for spills, fires, explosions, shutdown of operations, evacuation procedures; and
- Procedures for how to use and inspect facility emergency and monitoring equipment.

The topics covered in the training course shall provide the employee with an understanding of potential hazards inherent in the job, as well as with the precautions necessary to minimize these hazards. In addition, HAFB personnel who manage and store hazardous wastes will meet annually to discuss the effectiveness of their training programs and recommend program needs. The initial training shall be reviewed annually to update personnel on regulatory changes, review requirements, and review operating procedures. The Spill Response Plan described in Permit Attachment H, *Appendix H-1*, shall be executed at least once annually for training purposes.

## **Personnel Training**

Training shall be required for all HAFB personnel involved with hazardous waste management and storage at the CSU as outlined in the previous sections. The courses discussed shall provide instruction in the safe management and storage of hazardous wastes. Training shall also be provided in emergency response actions, in the use of protective gear, and personal safety. The course shall focus on regulatory compliance. In addition to these minimum training requirements, all on-site/on-Base transporters of hazardous waste shall be provided with specific training for transporting

hazardous wastes. The training course shall include fundamental hazardous waste management concepts and shall provide information on how to implement the contingency plan outlined in Permit Attachment H. The DRMS environmental/safety training program shall fulfill regulatory requirements for the environmental/safety training program. The DRMS training course, at a minimum, shall consist of:

- |                                  |                               |
|----------------------------------|-------------------------------|
| < Hazardous waste identification | < Hazardous waste profiles    |
| < Accumulation time frames       | < Operating records           |
| < Container management           | < Recordkeeping/documentation |
| < Emergency Plan                 | < Waste analysis              |
| < Inspections                    | < Land disposal restrictions  |
| < Applicable OSHA requirements   | < Applicable DOT requirements |

The Facility Environmental Flight shall also provide annual training for its hazardous waste satellite and 90-day accumulation point managers. The same program shall be used for all hazardous waste managers, including those at the CSU. The training shall be offered monthly. Training program course materials shall be maintained on file and shall be available upon request.

### **Implementation of Training Program**

All current HAFB employee and future employees assigned to manage and store hazardous wastes shall complete the initial and annual refresher-training program within six months from their date of employment.

No employee shall work with hazardous wastes unsupervised until he/she has successfully completed on-the-job training. Formal training programs shall be attended by personnel as required by their duties.

### **Retention of Records**

All records documenting the job title for each position, job description, employee's names, and completed training programs (both introductory and review) shall be kept on-site in the HAFB Administration Office located adjacent to the CSU. These records shall be kept until closure of the CSU for current employees and for three years from the date of termination for former employees.

**ATTACHMENT K  
CLOSURE PLAN**

## PERMIT ATTACHMENT K CLOSURE PLAN

### Overview of the Closure Plan

This Closure Plan for the Holloman Air Force Base (HAFB) Container Storage Unit (CSU) is designed to meet the following performance standards:

- To protect human health and the environment;
- To remove all hazardous waste and hazardous waste residues from the CSU at the time of closure and to decontaminate or remove any remaining containers, liners, bases, and soil containing or contaminated with hazardous waste or hazardous waste residues; and
- To minimize or eliminate the need for future maintenance or monitoring.

This plan identifies the steps that HAFB shall take to close the subject hazardous waste management unit at the end of its intended operation life and achieve clean closure. The Holloman Air Force Base Environmental Coordinator shall maintain a copy of the submitted Closure Plan and all revisions to the plan. Revisions shall be made whenever any modifications are made to the existing equipment, structures, instruments, or procedures related to the management of the CSU. The procedures for meeting these goals are outlined in this section.

### Applicability

The Defense Re-utilization and Management Office shall provide management and storage capacity for containerized hazardous waste generated on-site (i.e., at HAFB). Treatment of wastes shall not be performed at the CSU, and wastes generated off-site shall not be accepted for management and storage. The CSU consists of a staging area, outdoor storage area, and indoor storage building. The staging area and outdoor storage area consist of diked concrete pads that are outdoors. These portions of the CSU are intended only for waste-handling and accumulation-type activities. Also, because the CSU contains only containers (e.g., steel drums) that hold hazardous waste, ground water monitoring requirements shall not be applicable. However, if HAFB fails to achieve clean closure or cannot demonstrate equivalency clean closure, the CSU shall be closed in place as a landfill, and detection ground water monitoring shall be conducted as required by 20.4.1.500 NMAC, incorporating 40 CFR §264.98. This shall be done using the procedures submitted with the post-closure care plan. This Closure Plan identifies the steps necessary to close the CSU at any point during its active life.

### **Closure Performance Standard**

This Closure Plan is designed to ensure that the CSU shall not require further maintenance and shall eliminate or minimize the threat to human health and the environment by preventing the escape of hazardous waste, hazardous constituents, leachate, contaminated rainfall, or waste decomposition products. This standard shall be achieved through removal of wastes and waste residues from the CSU. Rinsate from any decontaminated secondary containment, along with samples of surrounding soils shall be tested to ensure that decontamination has been completely effective and that hazardous wastes and hazardous constituents have not migrated from the CSU. Equipment used to perform the closure activity shall be decontaminated. On completion of the decontamination and demonstration that the CSU has been effectively decontaminated, the closure shall be certified by a professional engineer registered in the state of New Mexico.

### **Partial and Final Closure**

There shall be no partial closure of the CSU. Complete closure of all CSU storage buildings, including any additions made through appropriate permit shall occur concurrently. The anticipated date for closure of the CSU is 2012.

### **Maximum Waste Inventory**

The maximum inventory of waste stored at this CSU (i.e., in the staging area, outdoor storage area, and indoor storage area) shall not exceed 47,960 gallons. Most wastes at this CSU shall be managed in containers of 55 gallons or smaller volume. Exceptions shall include transformers containing polychlorinated biphenyls (PCBs), containers of solid waste, and salvage drums. PCB items shall not be in storage at the expected closure date.

### **Description of Decontamination and Removal Procedures**

All wastes at the CSU shall be removed from their respective management and storage locations and transferred to transport vehicles for reclamation or treatment and disposal at an approved off-site recycling facility or permitted treatment, storage, and disposal facility. The procedures described in Permit Attachments D and G shall be followed during closure activities to ensure safe handling, prevent mixing of incompatible wastes, and prevent accidental ignition and spills. The maximum volume of waste from the transfer operation shall not exceed 47,960 gallons.

## **Decontamination of Soil, Equipment, and Structures**

Prior to the initiation of closure activities, a notice of intent to close the CSU shall be sent to NMED. At the time formal notification to proceed with closure is submitted, no additional wastes shall be accepted at the CSU. Any waste inventory in the CSU at this time shall be sent off-site for treatment and disposal in accordance with all applicable regulatory requirements.

Trained personnel wearing appropriate personal protective equipment, as required by 40 CFR 1910.120, Appendix B, shall decontaminate all structures, equipment, and related items. Representatives of the following organizations shall determine the level of protective equipment to be used by the personnel involved in closure activities collectively:

- Defense Re-utilization and Marketing Office;
- Defense Re-utilization and Marketing Service/Operations West;
- Holloman AFB Civil Engineering Squadron/Environmental Flight; and
- Holloman AFB Bioenvironmental Engineering Office.

All visible signs of contamination shall be removed using water and detergent. All waste storage area floors, containment trenches, and walls shall be cleaned using high-pressure steam cleaning equipment. All washings (rinsates) shall be collected, stored, and analyzed. If the analysis indicates that the wash is hazardous, it shall be placed in appropriate containers, appropriately labeled, and disposed of as hazardous waste. If the analysis indicates there is no evidence of contamination, the water shall be discharged into the sewer system. Other areas in which the hazardous wastes were handled and the associated containment facilities shall be decontaminated in a similar manner.

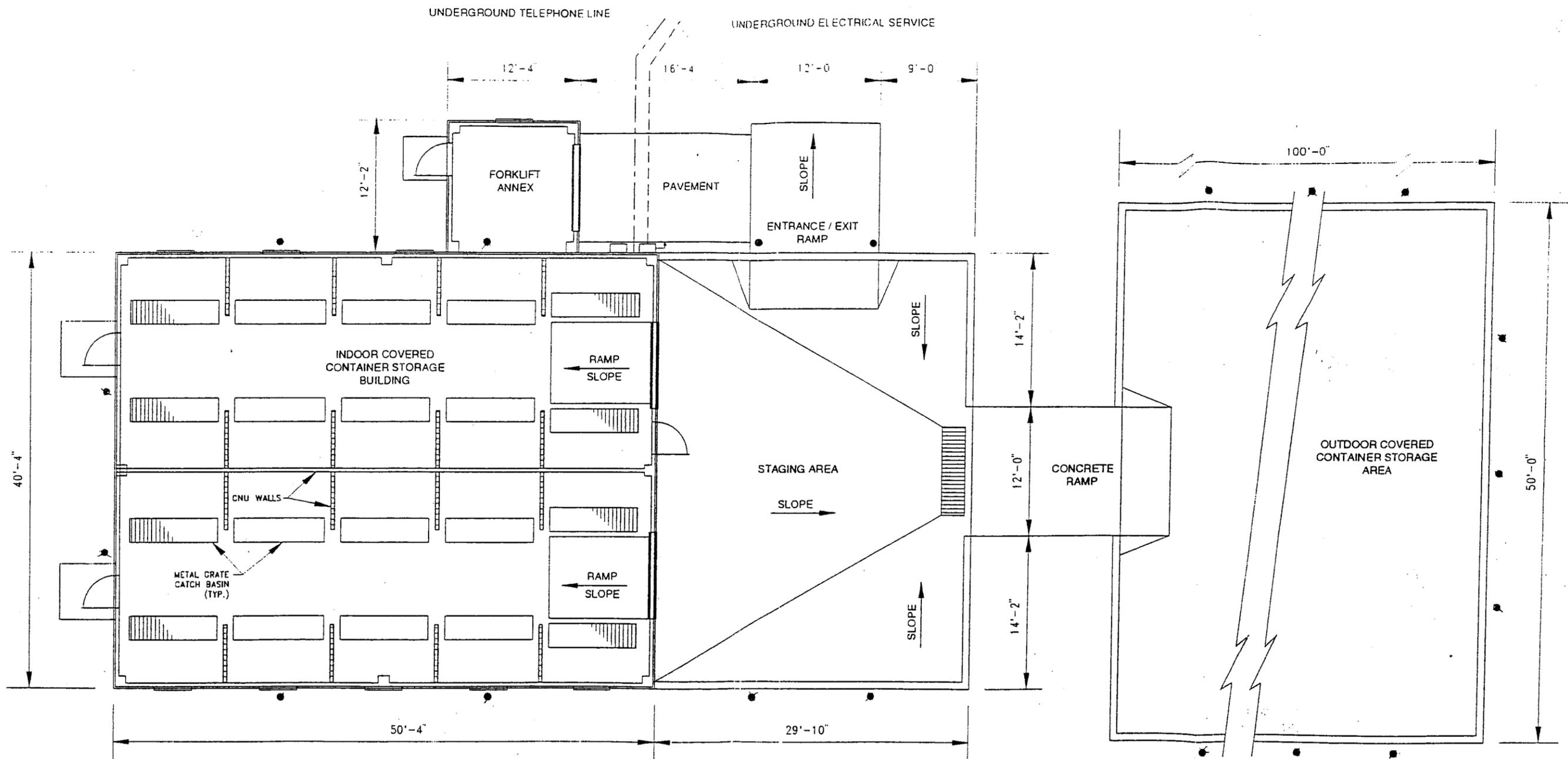
## **Decontamination and Closure Criteria for Rinsate and Soil**

A composite sample, as defined in *Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, EPA Publication SW-846*, shall be collected and analyzed from the collective samples of each decontamination phase. The analysis shall include procedures designed to detect possible contamination that could have resulted from those hazardous chemicals that have been included on the chemical inventory lists of the CSU over its operation lifetime. The specific analytical method shall be indicated in the initial notice of intended closure when it is submitted to NMED for approval.

The rinsate from decontamination of equipment and structures shall be managed as hazardous waste if analytical results indicate that it is hazardous. Inorganic constituents in soil shall be compared to background levels. Surrounding soils shall be sampled to ensure that chemicals handled at the CSU have not migrated from the area. The proposed acceptable decontamination and closure criteria for rinsate and soil shall be based on practical quantitation limit concentrations specified under 20.4.1.500 NMAC, incorporating 40 CFR §264, Appendix IX.

### **Soil Sampling at the Container Storage Area**

Soil samples shall be taken to verify that hazardous constituents have not migrated from the CSU during its active life. Soil samples shall be taken from all sides of the containment area, approximately one foot from the curbing. Figure K-1 shows the location where closure soil samples shall be taken during closure of the CSU. Two equally spaced sets of soil samples shall be taken from each side of the indoor storage facility, one set of soil samples shall be taken from each side of the staging area, and three equally spaced sets of samples shall be taken along each side of the outdoor storage area. Each set of soil samples shall consist of a spoon-collected surface-level sample and a soil core to a depth of 3 ft. Each soil log shall be composited at 1-ft intervals for analysis of the decontamination criteria. If the decontamination criteria cannot be met, the surrounding soils shall be excavated to the indicated depth and replaced with clean fill material. If excavation is required in an area, a second coring shall be taken at the width of the excavation zone. It is considered extremely unlikely that contamination would be found at depths below 3 ft. However, in the unlikely event that such contamination is found, the soils in the affected area shall be sampled and excavated at 1-ft intervals. Each one-foot increment shall be analyzed for constituents of concern. If necessary, additional depth samples shall be taken until a level is established in which no contamination occurred. All contaminated soil shall be removed and disposed of in accordance with the applicable regulatory requirements. A site Health and Safety Plan shall be submitted for the closure activities at the time of the closure notice. This plan shall follow the requirements contained in 29 CFR 1910.120, *Hazardous Waste Operations and Emergency Response*.



NOTE:  
 • - BORING LOCATIONS (APPROXIMATED)

Scale: 1" = 10'

FIGURE K-1: CLOSURE SOIL SAMPLE LOCATIONS AT THE CSU

### **Equipment Decontamination**

All CSU equipment shall be moved into the storage building for decontamination. Pallets that were used for container placement shall be dismantled, containerized, and disposed of as hazardous waste if any visible signs of contamination are present. Pallets that do not exhibit visible signs of contamination shall be retained for future use at Holloman AFB. Storage racks from the outdoor storage area shall be dismantled, moved inside the storage building, and initially decontaminated by a high-pressure rinse consisting of hot water or steam and anionic surfactant. This rinsate shall be collected and disposed of as hazardous waste if necessary. On completion of the initial wash, a second rinse shall be applied. The second rinse shall be collected and sampled for the decontamination criteria. Forklifts and tools used during the active life of the CSU shall be moved into the storage building and decontaminated in a similar fashion.

After completion of the initial two-rinse decontamination sequence, a subsequent rinse of hot water or steam followed by cold tap water shall be applied. These rinsates shall be collected and sampled for the decontamination criteria. No further decontamination efforts shall be undertaken until analytical results are received that indicate such actions are warranted. If the decontamination criteria are not being met, these steps shall be repeated. When the criteria are met, these items shall be transferred to the DRMO zone for re-utilization.

During the closure activities, workers shall wash down equipment and instruments, remove protective clothing, and undergo decontamination in this area on a daily basis. Entrance to or exit from the CSU during the closure activities shall occur through this zone. Upon completion of CSU decontamination efforts, all equipment shall be moved to this zone for final cleaning. The final cleaning shall be performed using steam, followed by tap water rinse.

After equipment decontamination, the outdoor portions of the CSU shall be demolished if necessary. Rubble shall be collected for disposal as non-hazardous solid waste.

### **Outdoor Storage Area Decontamination**

After decontamination of the storage racks and operating equipment, the staging area and covered outdoor storage area shall be decontaminated. The curbs, pad surfaces, and containment basins of these areas shall be steam cleaned with water containing surfactant. If necessary, a vacuum nozzle attachment shall be fitted to the suction line to remove all freestanding liquids in the containment

areas. The entire area shall subsequently be rinsed with tap water that shall be collected and sampled as previously described.

In addition to the collection of rinsate samples, standard wipe samples for PCBs shall be taken in the staging area. Wipe samples for PCB contamination shall not be proposed for the outdoor storage pad because PCBs or PCB-contaminated items shall not be placed in that portion of the CSU. The sampling methodology to be used is the 7-point hexagonal grid technique delineated in EPA's Publication titled *Verification of PCB Spill Cleanup by Sampling and Analysis, EPA 560/5-85-016*. The containment sump shall be sampled by a single wipe taken along each wall and the sump bottom.

If the decontamination criteria are met, no further closure action shall be taken in these areas. If the criteria are not met, the affected area shall be scuff sanded along the surfaces. All residues from the sanding shall be collected and disposed of as hazardous waste. After completion of this step, the area shall be rinsed with fresh tap water. The rinsate shall be collected and sampled for the decontamination criteria. If the violated criteria involved PCBs, wipe samples shall be taken in the same fashion as in the preceding step. This procedure shall be repeated until the criteria are met in the rinsate and wipe samples.

#### **Indoor Storage Area Decontamination**

The indoor storage area shall be decontaminated in a manner similar to that used for the outdoor portions of the CSU. The initial step in this decontamination cycle shall be swipe sampling of the cells used to sort PCB items and their associated sumps. After collection of the swipe samples, these cells shall be decontaminated by steam cleaning with a water surfactant mixture followed by a water rinse. The initial wash solution shall be collected for disposal as a Toxic Substances Control Act (TSCA) and RCRA regulated constituents. The second rinsate shall be sampled to verify that the decontamination criteria are met. If the decontamination criteria have been met in both the rinsate and swipe samples, further sampling for PCBs shall not be performed. If these criteria cannot be met, the surfaces of these cells and associated sumps shall be scarified by sanding, the residues shall be collected for TSCA/RCRA-regulated disposal, and the rinse step shall be repeated until decontamination has been achieved. After each cycle, both the swipe and rinsate sampling shall be repeated. The remaining portions of the building shall be decontaminated in a similar fashion.

Decontamination shall be performed step-wise for each cell and its associated sump by steam cleaning and rinsing as described above. If the criteria cannot be met, the second rinsate shall be disposed of, as hazardous waste and secondary decontamination by scarification and rinsing shall be performed in the affected cells or sumps. Rinsates that do not exceed the decontamination criteria shall be released to the sewer system.

Any grates, aisle spaces, or forklift ramps that are near a cell shall be decontaminated as a portion of that cell. CSU walls to a height of 10 ft shall also be considered a portion of the corresponding cell.

### **Groundwater Monitoring, Leachate Collection, and Run-on and Run-off Control**

Because the CSU shall be clean closed and no hazardous waste or hazardous constituents shall remain on-site, groundwater monitoring, leachate collection, and run-on/run-off controls shall not be necessary. However, if HAFB cannot achieve clean closure of the CSU, groundwater detection monitoring shall be conducted, as required by 20.4.1.500 NMAC, incorporating 40 CFR §264.98.

### **Closure Plan Amendments**

HAFB shall submit a written notification or request for a permit modification to authorize a change in operating plans, facility design, or the approved Closure Plan in accordance with the applicable procedures in 20.4.1 NMAC. The notification shall be submitted to NMED at least 60 days in advance of the proposed change and no later than 60 days after an unexpected event has occurred. The written notification or request shall include a copy of the amended Closure Plan for review and approval by NMED.

### **Closure Notification Requirements**

HAFB shall notify NMED at least 45 days prior to the date that closure of the CSU shall begin.

### **Closure Schedule**

The anticipated date of closure is 2012. This date is based on the expected service life of the CSU design. Closure of Holloman AFB and its tenant DRMO is not anticipated by this date as the Department of Defense components at Holloman AFB are an integral part of the defense system of the United States. Table K-1 presents a schedule for accomplishment of the closure action. The closure activities shall be completed within 180 days of receipt of the final volume of hazardous waste. If Holloman AFB is unable to complete closure activities in accordance with the approved closure plan and within 180 days, as stipulated under the regulations, an extension shall be requested from the NMED in accordance with 40 CFR 264.113(b).

### **Certification of Closure**

After closure activities are completed, an independent professional engineer registered in the State of New Mexico shall certify the closure. This engineer shall be provided access to the Closure Plan, the site during the closure activities, and all analytical results. Certification of closure of the CSU shall be provided to NMED by registered mail or hand delivered within 60 days of completion. The

closure certification for the CSU shall document that no hazardous wastes or hazardous constituents remain on the site, based upon the laboratory analytical results of soil samples taken from the Unit.

### **POST CLOSURE PLAN**

A post-Closure Plan shall not be needed because the permit application only addresses a CSU. All wastes shall be removed, and the storage areas shall be decontaminated upon closure. However, if HAFB cannot clean close the CSU or cannot demonstrate equivalency closure, the Facility shall be subject to post-closure permitting requirements.

TABLE K-1

Schedule for Closure Holloman Air Force Base  
 Container Storage Unit

Step	Action	Day Completed
1	Closure notice	-15
2	Receipt of final waste volume	0
3	Conduct final inventory, inspect, and repackage for shipment	30
4	Remove all waste for disposal or reclamation	60
5	Initial outdoor drum rack decontamination and verification sampling	60
6	Initial equipment decontamination and verification sampling	65
7	Receipt of analytical results (Step 7)	85
8	Secondary decontamination of equipment and storage racks <sup>a</sup>	90
9	Initial decontamination of outdoor storage areas/verification sampling	90
10	PCB sampling of storage building	90
11	Initial PCB decontamination of storage building/verification sampling	100
12	Receipt of analytical results (Step 9)	110
13	Receipt of analytical results (Step 10 and 11)	105
14	Secondary decontamination of outdoor areas <sup>a</sup>	115
15	Secondary PCB decontamination in storage building <sup>a</sup>	120
16	Initial decontamination of storage building/verification sampling	130
17	Begin soil sampling	135
18	Complete soil sampling	150
19	Receipt of analytical results (Step 16)	150
20	Secondary decontamination of storage building <sup>a</sup>	155
21	Receipt of soil sample results	165
22	Soil excavation <sup>a</sup>	170
23	Demolition/equipment decontamination	175
24	Shipment of closure residuals	180
25	Certification	240

Notes:

<sup>a</sup>: If required

PCB = Polychlorinated biphenyl

**ATTACHMENT L**  
**CORRECTIVE ACTION FOR SWMUs and AOCs**

**PERMIT ATTACHMENT L**  
**CORRECTIVE ACTION FOR SOLID WASTE MANAGEMENT UNITS**  
**[40 CFR 264.101]**

This Attachment outlines the corrective action conditions associated with issuance of Holloman Air Force Base's (HAFB's) Corrective Action Part 4. This Part was formerly called HSWA Permit before January 2, 1996 when NMED was authorized to administer corrective action.

Many of the requirements in this section have been completed by HAFB and submitted to NMED. The documents describing the corrective actions taken by HAFB are pending approval or comment by NMED. The Tables previously titled Tables 1, 2, and 3 have been reorganized into Tables A, and B. The latter have been incorporated into Permit Part 4 of this Permit. This section has been revised to reflect previous permit modifications and conditions completed by Holloman AFB. A separate request for a Class 3 modification will be submitted by HAFB to NMED when the Secretary, NMED, deems solid waste management units appropriate for no further action. [See Permit Part 4 for the Conditions governing the standards by which HAFB shall conduct Corrective Action].

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