

SACB 2003

CAFB 03-003



DEPARTMENT OF THE AIR FORCE
HEADQUARTERS 27th FIGHTER WING (ACC)
CANNON AIR FORCE BASE NEW MEXICO

Colonel Robert Yates
Commander
100 S DL Ingram Blvd Suite 100
Cannon AFB, New Mexico 88103-5214

13 SEP 2003

Ms. Sandra Martin
Acting Chief, Hazardous Waste Bureau
New Mexico Environment Department
Hazardous Waste Bureau
2905 Rodeo Park Drive East, Building 1
Santa Fe, New Mexico 87505-6303

Dear Ms. Martin

Transmitted herewith is the final closure report of the Cannon Air Force Base hazardous waste storage facility in accordance with New Mexico Hazardous Waste Facility Permit number NM7572124454-1.

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

Thank you for the opportunity to work with your staff to ensure our mutual commitments to environmental stewardship and pollution prevention efforts. If questions arise, please contact Mr. Don White or Mrs. Vera Wood of my Environmental Flight at (505) 784-2739 and 784-1097 respectively.

Sincerely

ROBERT YATES, Colonel, USAF

Attachment:
Closure Report for Hazardous Waste

cc:
NMED HWB (Mr. von Gonten)
DRMO (Mr. Greene)

CAFB 03-003

LIBRARY COPY

**CLOSURE REPORT FOR
HAZARDOUS WASTE STORAGE
FACILITY (BUILDING 226)**

Prepared for
Cannon Air Force Base
New Mexico

August 2003

URS

12120 Shamrock Plaza, Suite 300
Omaha, Nebraska

TABLE OF CONTENTS

Section 1	Introduction	1-1
Section 2	Facility Description	2-1
	2.1 Cannon Air Force Base	2-1
	2.2 Hazardous Waste Storage Facility	2-1
Section 3	Closure Activities	3-1
	3.1 Concrete Surface Cleaning	3-1
	3.2 Sample Handling	3-1
	3.3 Decontamination	3-1
Section 4	Analytical Results	4-1
	4.1 Discussion of Analytical Results	4-1
	4.2 Data Quality	4-1
Section 5	Conclusions	5-1
Section 6	References	6-1

List of Tables

Table 4-1	Summary of Analytical Results
Table 4-2	Comparison of Maximum Chemical Detections to TCLP Regulatory Limits
Table 4-3	Comparison of Other Analytical Results to Regulatory Threshold

List of Figures

Figure 2-1	Location of Cannon Air Force Base
Figure 2-2	Location of Former HWSF
Figure 2-3	General Site Plan
Figure 2-4	Topographic Map
Figure 2-5	Utilities Plan
Figure 2-6	Pre-Closure Floor Plan of Former HWSF

List of Appendices

Appendix A	Analytical Laboratory Report
Appendix B	Sample Collection Field Sheets
Appendix C	Photograph Log

Acronyms

AFB	Air Force Base
ANOVA	Analysis of Variance
ASTM	American Society for Testing and Materials
CFR	Code of Federal Regulations
CMS	Corrective Measures Study
COPC	Chemical of Potential Concern
DQCR	Daily Quality Control Report
DRMO	Defense Reutilization and Marketing Office
DRMS	Defense Reutilization and Marketing Service
EPA	Environmental Protection Agency
FID	Flame-Ionization Detector
HSWA	Hazardous and Solid Waste Amendments
HWPS	Hazardous Waste Profile Sheet
HWSF	Hazardous Waste Storage Facility
IRP	Installation Restoration Program
NM	New Mexico
NMED	New Mexico Environment Department
NPDES	National Pollutant Discharge Elimination System
OSHA	Occupational Safety and Health Administration
PID	Photoionization detector
PPE	Personal Protective Equipment
RCRA	Resource Conservation and Recovery Act
RFI	RCRA Facility Investigation
SCFS	Sample Collection Field Sheet
SVOCs	Semi-volatile Organic Compounds
SWMU	Solid Waste Management Unit
SW-846	EPA Publication, "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods"
TAL	Target Analyte List
TCLP	Toxicity Characteristic Leaching Procedure
TOC	Total Organic Carbon
TOX	Total Organic Halogens
TSDF	Treatment, Storage, and Disposal Facility

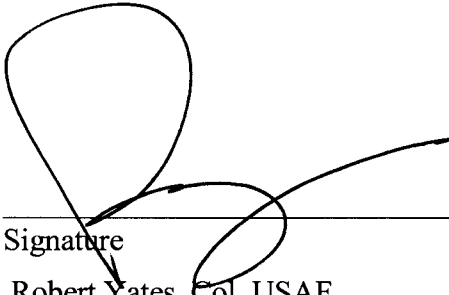
Acronyms

URS	URS Corporation
US	United States
USEPA	United States Environmental Protection Agency
VOA	Volatile Organic Analysis
VOCs	Volatile Organic Compounds

Closure Certification

The Hazardous Waste Storage Facility (Building 226) has been closed in accordance with Section I of Permit Number NM 7572124454-1.

Owner:



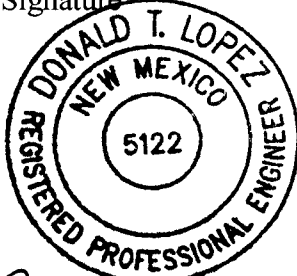
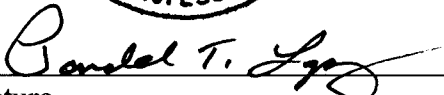
Signature
Robert Yates, Col, USAF

Typed Name
Commander, 27th Fighter Wing

Title
18 SEP 2003

Date of Signature

Registered Professional Engineer:

Signature
Donald T. Lopez, P.E.

Name of Registered Engineer
URS Corporation

Company
August 19, 2003

Date of Signature

5122

Registration Number

Cannon Air Force Base (AFB) has completed the closure of a Hazardous Waste Storage Facility (HWSF), which is located at 110 "W" Street, Building 226 within the Defense Reutilization and Marketing Office (DRMO) facility. Cannon AFB is a large quantity hazardous waste generator and the HWSF was operated under a Resource Conservation and Recovery Act (RCRA) Hazardous Waste Facility Permit. The Environmental Flight within the 27th Civil Engineering Squadron is responsible for compliance with this permit and the closure process.

Cannon AFB was issued a hazardous waste permit under I.D. Number NM7572124454 on December 17, 1989 by Region 6 of the United States Environmental Protection Agency (USEPA). The New Mexico Environment Department (NMED) issued Permit Number NM 7572124454-1 on October 16, 1989.

This report details the closure of the HWSF in accordance with the requirements of 40 Code of Federal Regulations (CFR) 270.14(b)(13), 270.14(b)(15-18), 264.110-264.115, 264.351, 264.178 and 264.197. Final closure was completed on July 25, 2003.

This Closure Report documents waste removal and decontamination procedures, and includes a brief narrative of the field activities and analytical results, investigation-derived waste disposal summary, recommendations and conclusions, and copies of laboratory reports, chain-of-custody forms, and sample collection field sheets.

2.1 CANNON AIR FORCE BASE

Cannon AFB is an Air Combat Command installation located in eastern New Mexico, near the Texas Panhandle (approximately 34°24' latitude and 103°19' longitude). The base is located in Curry County, approximately 7 miles west of Clovis and 15 miles north of Portales and is surrounded by agricultural land use. Figure 2-1 shows the location of the base in relation to Clovis.

Cannon AFB is home to the 27th Fighter Wing. Cannon AFB's primary mission is to support a fighter aircraft wing that is capable of day, night, and all-weather combat operations and is available for worldwide deployment. As such, the primary hazardous waste generation activities at Cannon AFB are associated with aircraft painting and corrosion control.

Cannon AFB has several projects that are actively investigating the presence or absence of RCRA-regulated hazardous materials that resulted from previous disposal practices and/or spillage. These on-going projects consist of RCRA Facility Investigations (RFI) and Corrective Measures Studies (CMS) at several designated Solid Waste Management Units (SWMU).

2.2 HAZARDOUS WASTE STORAGE FACILITY

The Defense Reutilization and Marketing Service (DRMS) operated the HWSF. The HWSF consisted of a 4,000-square foot building where DRMO-Cannon stores containerized waste. An estimated 10,720 gallons in 85-gallon drums and smaller containers was the maximum permitted storage capacity at the HWSF. The HWSF stored only hazardous wastes generated within the base boundaries, and disposed of the waste off-site through licensed treatment, storage or disposal contractors. Figure 2-2 shows the location of the former HWSF at Cannon AFB and Figure 2-3 shows the location of the former HWSF within the DRMO compound. The former HWSF is not considered a SWMU.

Hazardous wastes generated at Cannon AFB were stored in the HWSF for less than one year while arrangements are made for transport to an appropriate treatment, storage, and/or disposal facility. If problems arose concerning the disposal of wastes (i.e., no permitted disposal facility, backlog at a permitted disposal facility, or contractual problems), the storage limit of one year may have been reached. In that event, Cannon AFB requested a storage extension from NMED, on a case-by-case basis.

Due to the variability of maintenance activities, the Cannon AFB HWSF had the potential for receiving a variety of material classified as hazardous waste by both the USEPA and NMED. The hazardous wastes generated at Cannon AFB include waste paint-related products, solvents, lead-acid storage batteries, and other wastes that are RCRA-listed hazardous wastes or that are characteristically hazardous as defined in 40 CFR Part 261.

Additionally, as part of a pollution prevention program, the HWSF stored small containers of hazardous materials to be reused or sold. These materials were placed in storage bays with similar materials until they were consumed or become hazardous wastes because a decision was made to discard. Non-RCRA regulated wastes (i.e., non-hazardous wastes and Toxic Substances

Control Act-regulated wastes) were also stored in the facility with other wastes that had similar properties until vendors removed them for recycling, treatment, or disposal. These wastes were not identified using RCRA waste labels, nor did the labels contain the words "Hazardous Waste".

A topographic map showing the area around the former HWSF is included in Figure 2-4. There are no areas of Cannon AFB within the 100-year flood plain, nor are there any surface water features within 1,000 feet of the HWSF. Land use within this 1,000-foot radius is related to military industrial and flight line operations. There are no agricultural, residential or recreational areas within 1,000 feet of the HWSF. The nearest legal boundary of Cannon AFB is approximately 2,000 feet north of the HWSF. Figure 2-5 includes the location of storm water, sanitary sewers and potable water utilities in the vicinity of the former HWSF.

After the closure activities were completed, Building 226 was left standing so that it may be put to another use. The HWSF building is elevated so that all drainage is away from the building. The building is completely enclosed on all four sides and covered with a roof to prevent rainfall from entering the facility. The building entrance thresholds are raised to prevent run-on and run-off, and the surrounding area graded to drain into two storm drains located on the west side of the facility. The interior storage areas are surrounded by a 6-inch curb and sloped to containment trenches. The capacity of the containment trenches satisfy the spill containment requirement of 40 CFR 264.175(b)(3). A diagram illustrating the pre-closure storage compartments within the HWSF is included in Figure 2-6. The building is divided into three sections that were used as follows:

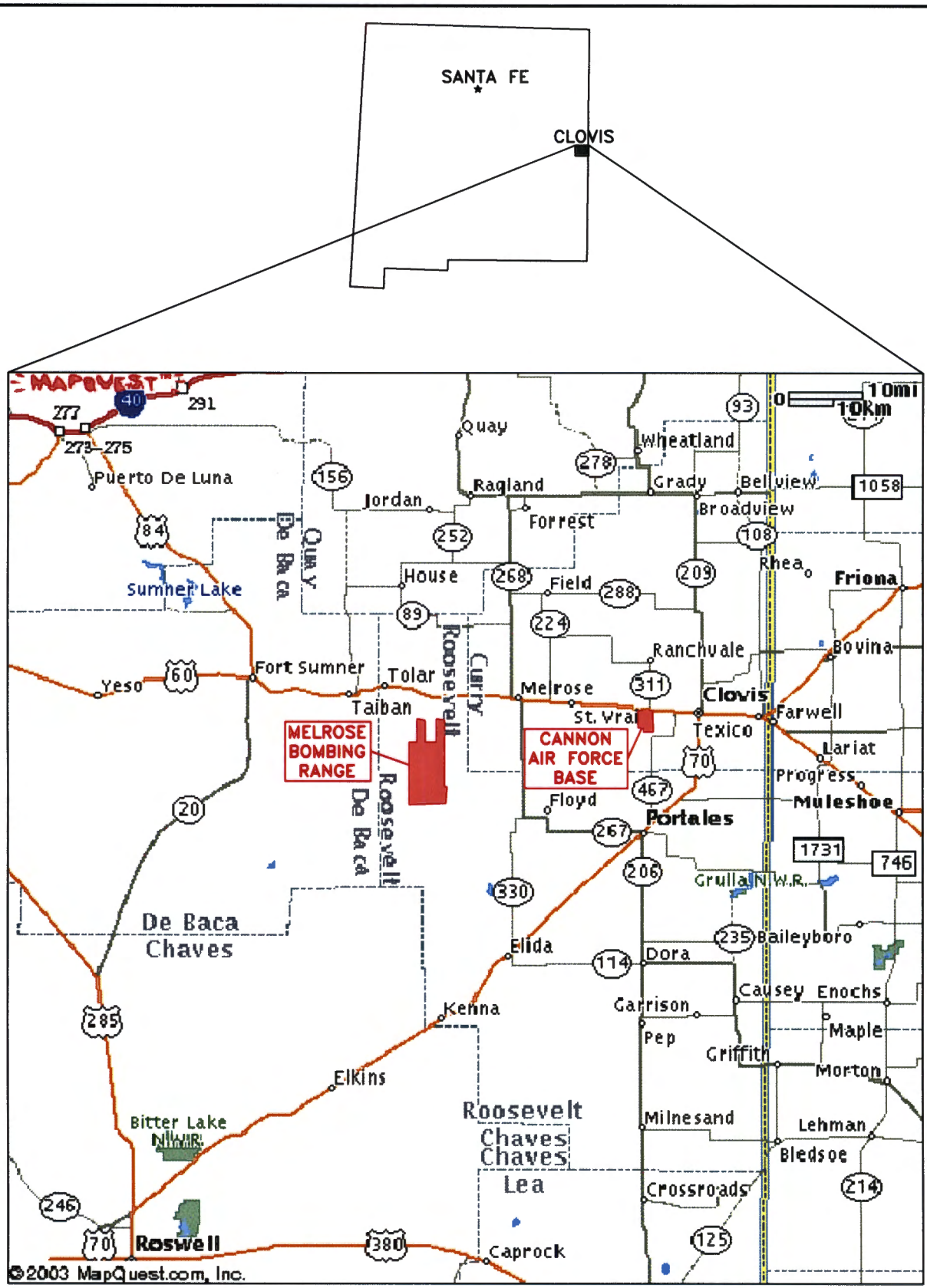
- A former ignitable storage area – 2,400 square feet
- A former loading and unloading area – 800 square feet
- A former toxic and reactive waste area – 800 square feet

The loading and unloading bay separated the former flammable area from the former toxic and reactive area. The floor of the loading and unloading bay slopes to a 150-gallon grated collection trench in the center.

In the former ignitable storage area, there are six 13- by 20-foot storage bays, three to a side, with a 10.5-foot aisle down the center. The floor of each storage bay slopes toward one of six 150-gallon grated containment trenches. The maximum amount of waste stored in each bay is 1,320 gallons.

The former toxic and reactive waste storage area contains eight 6- by 9-foot storage bays with 4 feet of aisle space. The bays were divided for the storage of bases, acids, toxic and reactive wastes, oxidizers, and low-hazard materials. Each bay slopes toward one of eight 82.5-gallon grated containment trenches. The maximum amount of materials and wastes stored in each bay is 350 gallons.

Drums and containers were stored on pallets and placed in a bay using a forklift. This storage configuration elevated the wastes from the floor, prevented contact with any spilled materials, and facilitated inspections.



© 2003 MapQuest.com, Inc.



LOCATION OF CANNON AIR FORCE BASE

August 20, 2003 9:36:12 a.m.
 Drawing: T:\CANNON\16169329\07000\2-1.dwg

DRN. BY: DAC	DATE: 05/27/01	PROJECT NO. 16169329	FIG. NO. 2-1
CHK'D. BY: .	DATE: .		