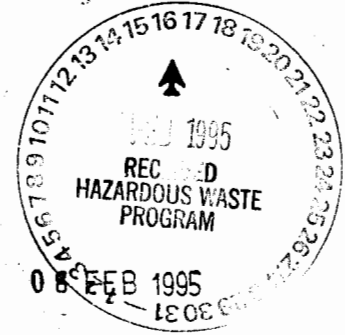




DEPARTMENT OF THE AIR FORCE

HEADQUARTERS 49TH FIGHTER WING (ACC)
HOLLOMAN AIR FORCE BASE, NEW MEXICO



MEMORANDUM FOR DISTRIBUTION

FROM: 49 FW/CC
490 First Street, Ste 1700
Holloman Air Force Base, NM 88330-8277

SUBJECT: Restoration Advisory Board Meeting

1. Holloman Air Force Base (AFB) invites you to participate in a Restoration Advisory Board (RAB) meeting. The purpose of this meeting is to inform you of the ongoing activities associated with the Installation Restoration Program (IRP), allow you the opportunity to provide recommendations to improve our program, and appropriately prioritize our remediation efforts.
2. Presented at this meeting will be the new format for the RAB, which will include the introduction of a new community co-chair concept. The RAB will also offer an open discussion segment for comments and questions regarding restoration efforts on Holloman AFB.
3. The first RAB meeting (seventh informational meeting) has been scheduled for 0900 on 27 February 95 in the 49th Fighter Wing Conference Room, Bldg. 29. Agenda items are listed in Attachment 2. A map to assist you in locating Bldg. 29 is provided at Attachment 3.
4. Environmental issues consistent with the base mission are at the forefront of our concerns. It is our desire to manage our program with the best available technical advice we can obtain. A fact sheet providing information on the status and nature of the base IRP program is located at Attachment 4.
5. If you have any questions, please contact Warren Neff at (505) 475-5395.

JOHN F. MILLER, JR.
Brigadier General, USAF
Commander

Attachments:

1. Distribution List
2. Agenda
3. Map
4. IRP Fact Sheet

DISTRIBUTION LIST

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HSD DynCorp
Lockheed (LSSI/MAQE)
EG&G

OFF-BASE:

HQ ACC/ESVR
129 Andrews Street, Ste 102
Langley AFB, VA 23665-2769

Honorable Daniel R. King
Mayor of Alamogordo
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Alamodordo City Commissioner
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Alamogordo, NM 88310

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Alamodordo City Commissioner
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Tracy H. Johnson
Alamodordo City Commissioner
753 Stafford
Alamogordo, NM 88310

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Alamodordo City Commissioner
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Alamodordo City Commissioner
2510 Jeane Court
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Mr. Jerry B. Poole
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Chairman, County Commission
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Mr. Ronny Rardin
Vice-Chairman, County Commission
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Alamogordo, NM 88310-6935

Mr. Timothy McGinn
County Commissioner
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Honorable Diana Duran
917 Indigo Loop
Alamogordo, NM 88310

Honorable Don Kidd
State Capitol Bldg, Rm 423
Santa Fe, NM 87503

Honorable Leonard Lee Lawson
State Capitol Bldg, Rm 423
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Rep. Terry Marquardt
State Capitol Bldg, Rm 203B
Santa Fe, NM 87503

Rep. Dub Williams
State Capitol Bldg, Rm 204
Santa Fe, NM 87503

Rep. Gloria Vaughn
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Hazardous and Radioactive Materials Bureau
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Mr. Bill Fuchs
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Mr. Robert Myers
U.S. Geological Survey
Water Resources Division
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Las Cruces, NM 88003-0001

Mr. Thomas Custer
Bureau of Land Management
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Las Cruces, NM 88005

State Historic Preservation Officer
228 Villa Riveria, Room 101
Santa Fe, NM 87503

Mr. Hector Magallanes (STEWS-ES-E)
U.S. Army White Sands Missile Range
White Sands Missile Range, NM 88002-5076

Ms. Yvette McKenna (ATZC-DOE-M)
U.S. Army Defense Artillery Center
Fort Bliss, TX 79734-0400

Mr. Bob Barnett
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New Mexico State University
Fishery and Wildlife Sciences Department
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Las Cruces, NM 88003

Mr. Clent Bailey
U.S. Fish and Wildlife Service
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Albuquerque, NM 87107

Mr. John Pittenger
New Mexico Game and Fish Department
State Capitol, Villagra Building
P.O. Box 25112
Santa Fe, NM 87504

Ms. Gwen Wardwell
President, Rio Grande Chapter Sierra Club
P.O. Box 9191
El Paso, TX 79983

Dr. Gordon Ewing
Mesilla Valley Audubon Society
P.O. Box 3127 UPB
Las Cruces, NM 88001

Ms. Mary Schmitt
Alamogordo Public Library
920 Oregon Avenue
Alamogordo, NM 88310

Mr. Harry Loper
2318 19th Street
Alamogordo, NM 88310

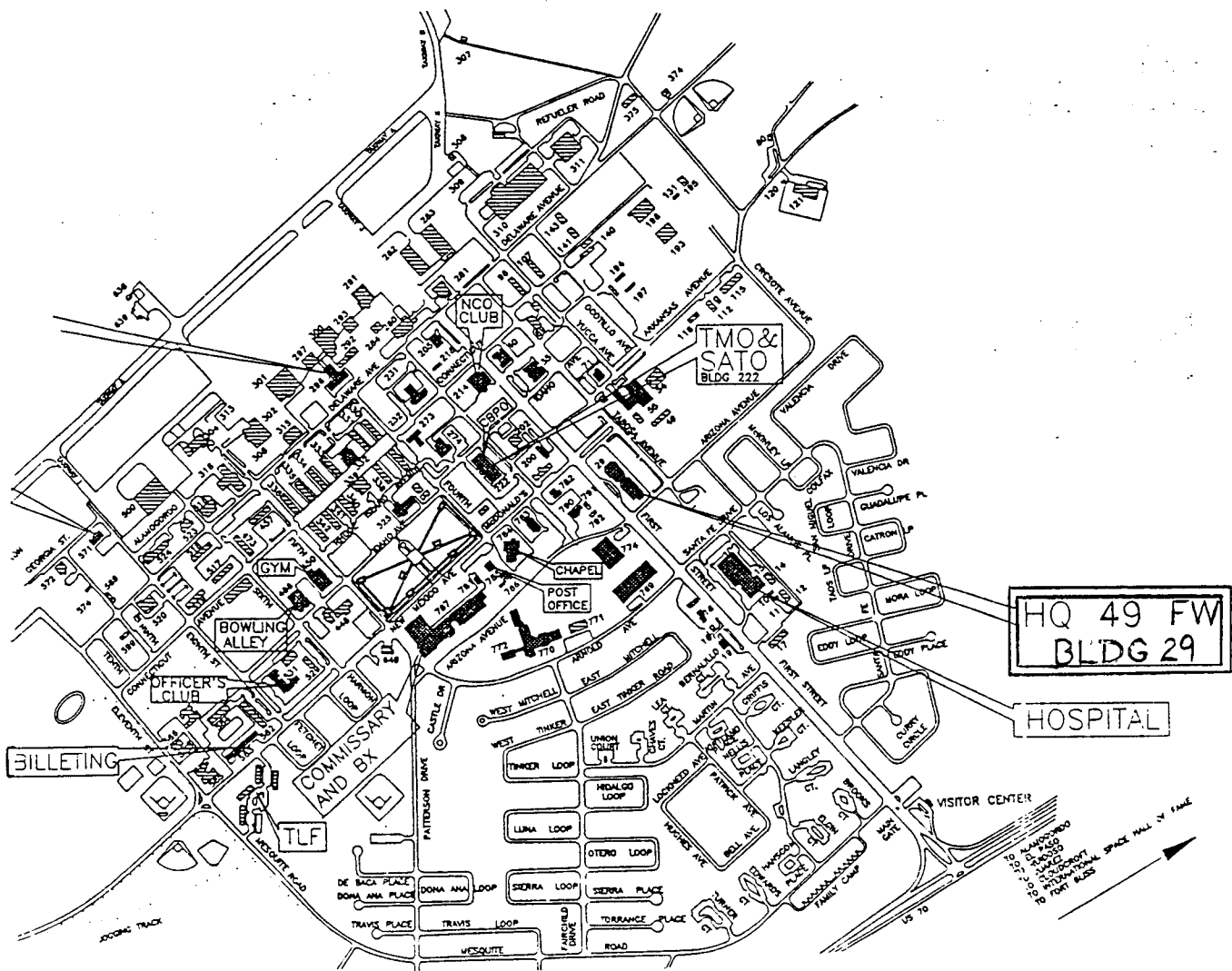
Mr. Fred Flores
1513 Arizona Avenue
Alamogordo, NM 88310

Restoration Advisory Board

MEETING AGENDA

- 0900** Welcome by Commander, 49th FW and Community Co-Chair
- 0915** Introduction to RAB Format
- 0925** Technical Discussion
 - Installation Restoration Program (IRP) Overview
 - IRP Site Status
 - Restoration Budget
 - Ongoing Projects
 - Upcoming Projects
- 0950** Open Discussion/Action Items
- 1000** Adjourn

HOLLOMAN AIR FORCE BASE



INSTALLATION RESTORATION PROGRAM UPDATE

**HOLLOMAN AIR FORCE BASE
OTERO COUNTY, NEW MEXICO**

January 1995

INTRODUCTION

This fact sheet for Holloman Air Force Base (AFB) in Otero County, New Mexico, has been prepared by the US Air Force to inform local officials and citizens on the status and nature of the Installation Restoration Program (IRP) activities at the base. Specifically, this fact sheet provides a brief history of all IRP sites, discusses the IRP process, and a method for obtaining further information. A list of acronyms is included on page 8 to assist the reader with unfamiliar words and terms.

BACKGROUND AND HISTORY

Holloman AFB is located on approximately 51,000 acres of land in Otero County in south-central New Mexico, approximately 95 miles north-northeast of El Paso, Texas. The base lies in the northern portion of the Chihuahuan Desert in a trough area called the Tularosa Basin, bounded on the east and west by the Sacramento and San Andres Mountains, respectively. The nearest population center is the city of Alamogordo, located seven miles east of the base boundary. The major highway serving the base is US Highway 70 which runs in a southwesterly-northeasterly direction along the southern base boundary.

Built in 1942, Holloman AFB, formerly known as Alamogordo Army Air Field, was originally intended to be a temporary facility. After a brief post-war period of deactivation, the base served under various commands as a guided missile research and test facility from 1947 until 1971. The current Air Combat Command (ACC) organizations at Holloman AFB include the 49th Fighter Wing, 49th Operations Group, 49th Logistics Group, 49th Support Group, 49th Medical Group and the 49th Materiel Maintenance Group. The principal aircraft are the T-38, F-117A and F-4E.

Wastes have been generated and disposed of at Holloman AFB since the beginning of base operations

in 1943. The primary wastes generated were engine oils, lubricating oils, waste fuels, hydraulic and transmission fluids, paints and spent solvents. Prior to 1969, these wastes were burned during scheduled Fire Department training exercises at the Fire Training Area. Between 1969 and 1979, wastes were transported to the petroleum, oil, and lubricants (POL) Drum Storage Area for disposal. From 1979 to the present, waste oils, hydraulic and transmission fluids, and waste cleaners have been stored in color-coded drums. Following storage, the wastes are either reused or disposed of according to Resource Conservation and Recovery Act (RCRA) guidelines.

PROGRAM STATUS

Since the initiation of the IRP at Holloman AFB in 1983, several IRP reports have been published. At this time, most of the sites are in the remedial design/remedial action (RD/RA) stage or have been approved for site closeout. A table (pages 2 through 4) is provided that summarizes information on the sites. More detailed information on each site is available at the Holloman AFB Information Repository located in the Alamogordo Public Library.

Holloman AFB has committed over \$3.5 million (M) in FY95 to its restoration effort. Another \$5.5M is expected to be awarded by mid-year. The Air Force will continue to remediate contaminated sites in order to protect human health and the environment.

MEETING ANNOUNCEMENT

The Air Force will be hosting an informational meeting to discuss the status of the IRP at Holloman AFB.

Date: 27 February 1995

Time: 9:00 am

**Location: Bldg 29 Conference room
Holloman AFB**

SUMMARY OF HOLLOMAN AFB IRP/SWMU SITES

IRP/ SWMU #	Site Description	Material Disposed	Dates of Operation	Status
1/106	Main Base Landfill	Construction rubble, small quantities of solvents, waste oil, and pesticides	1958-Present	SC/LTM
2/AOC-T	POL Spill Site No. 1	JP-4 and other fuels	1960-1970s	RA
3/114	POL Tank Sludge Burial Site	Sludges, rags, iron fragments	1955-1975	SC
4/102	Acid Trailer Burial Site	Acid trailer, lab equipment, bottles, spent rockets	1958	SC
5/AOC-T	POL Spill Site No. 2	JP-4	1978	RA
6/AOC-R	Fuel Line Spill Site No. 2	JP-4	1979	PA/SI
7/110	Rubble Disposal Site	Wood, nails, sheet metal	1965 - Present	SC
8/82	Refuse Collection Truck Washrack	Pesticides	1970s	RD
9/42	POL Drum Storage/Spill Area	Waste oils, solvents, hydraulic fluid, fuels	1965-1980	SC
10/101,109	Old Main Base Landfill	Domestic waste, incinerator ash, solvents, waste oil	1942-1958	SC/LTM
11/107	Main Base Electrical Substation	PCBs	Unknown-1979	IRA/SC
12/AOC-K	Fuel Line Spill Site No. 1	JP-4	1975	PA/SI
13/AOC-J	Sodium Arsenite Spill Site	Sodium Arsenite	1979	SC
14/197	Former Entomology Shop	Pesticides	1968-1977	RD
15/80	Refrigeration/Heat Shop Washrack	Sulfuric Acid	1971-1981	PA/SI
16/132,118 AOC-A	Existing Entomology Shop	Pesticides	1977-Present	RI/FS
17/AOC-Q	BX Service Station Fuel Leak	Gasoline	1950s-Present	RD/RA
18/AOC-H	Chromic Acid Spill Site	Chromic Acid	1970s	SC
19/105	Golf Course Landfill	Grass clippings, rodenticides	1968-1978	SC/LTM
20/113A	WWTP Grit Burial Site	Sludge from grit chamber	1947-Present	SC
21/116	West Area Landfill No. 2	Paper bags, boxes, boards	1970-1977	SC/LTM

IRP/ SWMU #	Site Description	Material Disposed	Dates of Operation	Status
22/115	West Area Landfill No. 1	Plastic sheets, boxes, cans	1974-1978	SC/LTM
23/108	MOBSS Landfill	Diazinon, dibromochloromethane, construction debris, drums, buckets	1976-1979	SC/LTM
24/134	Former Equipment Maint. Area	Cleaners, waste solvents, oils	1959-1970	RI/FS
25/166	Possible Drainage Lagoon Disposal Site	Pesticides, HTH, solvents	1977	SC
26/AOC-D	Possible Missile Fuel Spill Site	Waste fuels	1976	SC
27/141	Pad 9 Washrack Area	Radioactive Materials	1940s	PA/SI
28/212	Former North Area Washrack	Oils, detergents, fuels	1950s	SC
29/104	Former Army Landfill	Spent munitions and missiles	1950s-1975	RI/FS
30/113B	Grease Trap Disposal Pits	Wastes from grease trap	1959-Present	SC/LTM
31/170,171, 127,135,39	Fire Department Training Area	Waste oils, solvents, fuels	Unknown-1990	RI/FS/IRA
32/PRI-A	Sewer line from Primate Research Lab	Carbon-14, iodine, tritium, solvents	1960s-1981	SC
33/113B	Cooking Grease Disposal Pits	Cooking grease	Unknown- Present	SC/LTM
34	Spent Munitions Burial Site	Spent munitions	Unknown	SC
35/PRI-5	Spent Solvent Disposal Area	Radioactive tracers, solvents	1950s	SC
36/129,178	Unconventional Fuels Storage Site	JP-X, nitric acid, UDMH, aniline, JP-4	1950s	RI/FS
37/AOC-L	Early Missile Testing Site	Fuels, lead oxide, nitrate compounds, acids	1947-1955	SC
38/137,138	Sled Test Maintenance Area	Waste oils, solvents, paint, strippers	1951-1979	SC
39/165,167, 177,179,181	Missile Fuel Spill Area	Oxidizers, fuels	Unknown-1975	RI/FS
40/103	Causeway Rubble Disposal Site	Concrete rubble	Unknown- Present	SC
41/192	Coco Block House Borehole Disposal Site	Propellants, oxidizers	1960s	SC
42/111	Radioactive Material Burial Site	Radioactive material	1950s	SC

IRP/ SWMU #	Site Description	Material Disposed	Dates of Operation	Status
43/AOC-G	Atlas Electrical Substations	PCBs	Unknown-1979	IRA/SC
44/AOC-P	Bldg. 301 Aircraft Maintenance Hangar	Heating oil, fuel	Unknown	RI/FS
45/AOC-O	Old AGE Refueling Station	Gasoline, JP-4, diesel	Unknown-1980s	RI/FS
46/130,AOC-S	JP-4 Spill Site	Waste JP-4	1978-1990	SC
47/21,22	POL Washrack Discharge Area	Waste JP-4	1953-1993	RI/FS
48/AOC-N	Military Gas Station	Gasoline	Unknown-Present	SC
49/148-154	Sewage Lagoons	Hazardous wastes	1943-Present	RI/FS
50	Waste Disposal Pit	Can, drums	Unknown	SC
51/PRI-S	Primate Research Lab Borehole Disposal Site	Radioactive material, solvents	1950-Present	SC
56	West Ramp Fuel Spill	Fuels	Unknown-Present	SC
57	Officer's Club	Diesel, sulfurous compounds	1960-Present	RI
58/231	Incinerator/Landfill	Ash from unconventional fuels, film	Unknown-Present	RI/FS
59/19,20,229	T-38 Test Cell Fuel Spill Site	JP-4	1966-1991	IRA/RD
60/230	Bldg 828 Fuel Spill Site	Diesel, gasoline, JP-4	1977-1991	RD
AOC-BBMS	Bare Base Mobility Squadron	JP-4	Unknown	PA/SI
AOC-RR	Buried RR Cars	Waste oil, fuel	Unknown	PA/SI

FFCA Federal Facility Compliance Agreement
 IRA Interim Remedial Action
 PA/SI Preliminary Assessment/Site Investigation
 RA Remedial Action
 RI/FS Remedial Investigation/Feasibility Study
 SC Site Close-Out
 SI Site Investigation
 LTM Long Term Monitoring

INTERIM REMEDIAL ACTION UNDERWAY AT THE T-38 TEST CELL

This fall, a dual-phase vapor extraction (DPVE) system was installed at the T-38 Test Cell (IRP Site SS-59). The system was started up in early January. The DPVE system applies a high vacuum to ten wells installed throughout the contaminated zone in order to remove soil gas containing hydrocarbon vapors and liquid phase product. Contamination concentrations are reduced as the hydrocarbons volatilize and are removed. Recovery rates have ranged from 2,000 to 3,000 gallons per day.

TOTAL ENVIRONMENTAL RESTORATION CONTRACT UPDATE

A little over a year ago, Holloman AFB was among three Air Force bases to be selected as "anchor bases" for the initiation of an innovative contracting style. Two bases, Ellsworth and Shaw, were selected due to their National Priority List (NPL) status. Holloman was selected due to its proactive remediation style and its partnering efforts with the Environmental Protection Agency (EPA) and the New Mexico Environment Department (NMED). The contracting style, known as the Total Environmental Restoration Contract (TERC), is a cornerstone to the Air Force Accelerated Cleanup Program (ACP). What makes the TERC so innovative is that it allows for one contractor to conduct all phases of investigation and remediation at contaminated sites compared to the old contracting style which required each phase of remediation to be done separately. In the past, this has resulted in delays in remediation and increased cost.

Holloman is working actively with the Omaha and Albuquerque Districts of the US Army Corps of Engineers (USACE), HQ Air Combat Command, and Foster-Wheeler (Holloman's TERC contractor) to get the FY95 projects off and running. Already, \$3.5M of Defense Environmental Restoration Account (DERA) and compliance funds have been awarded for FY95. Holloman expects that approximately \$9M will be committed to environmental restoration projects via the TERC in FY95 in an attempt to accelerate the remediation of contaminated sites on Holloman and the continued protection of human health and the environment.

BIOVENTING INITIATIVE SCHEDULED TO BEGIN THIS SPRING

Two IRP sites, the POL Washrack (IRP Site SD-47) and the Fire Training Area (IRP Site FT-31), will undergo a bioventing initiative this spring. Bioventing is the term used to describe the process of providing air to naturally occurring micro-organisms to enhance the degradation of hydrocarbons (fuel). This initiative was started at the Air Force Center for Environmental Excellence (AFCEE) in San Antonio, TX. The concept has been recognized for both its simplicity and its effectiveness.

Bioventing has several advantages over other remedial alternatives. First, the cost of bioventing is often 10% the cost of other technologies due to decreased equipment costs and monitoring costs. Second, with bioventing, the "bugs" break down the fuel into its simplest components: carbon dioxide and water. Therefore, no hazardous volatile organic compounds, such as benzene, are released during remediation. This alleviates the requirement for air monitoring and treatment of remediation offgases.

Important information will be gained by these pilot studies, which will be key to future projects. The soil below Holloman tends to have a low permeability (low flow capability) which could restrict air flow to the "bugs". Without oxygen, the "bugs" can't break down the fuel. Also, a previous study conducted on Holloman detected only small numbers of naturally occurring microorganisms in the soil. This could be due to a lack of nutrients, lack of oxygen, or an overall poor soil environment. The bioventing initiative should answer these questions. Data from the pilot study will be used to optimize bioventing efficiency and to design larger scale bioventing systems, if bioventing proves to be a feasible remediation technique for Holloman AFB.

Field activities are scheduled to start in February 1995. The bioventing pilot study will be run for approximately six months if the preliminary data indicates the technology is effective.

TECHNICAL REVIEW COMMITTEE BECOMES RESTORATION ADVISORY BOARD

In an effort to increase public involvement in the remediation process, the Air Force, in conjunction with EPA, developed guidance to modify the existing Technical Review Committee (TRC) to the Restoration Advisory Board (RAB). The purpose of the RAB is to provide opportunities for community involvement, participation, consultation, and advice. The RAB will continue to fulfill all requirements under the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) and the Superfund Amendments and Liability Act (SARA). The RAB provides a framework for establishing a partnership between the Air Force, the regulatory agencies, and other stakeholders, resulting in a more efficient, cost effective and focused approach to environmental restoration.

Holloman has tailored the proposed RAB format to suit the Tularosa Basin area. As a result, there will be some minor changes to the existing TRC format. The installation commander will continue to serve as the chair, and Mayor King has been asked to co-chair the RAB. There will not be a RAB committee, however, due to difficulty in filling the committee positions. The RAB will instead be conducted in an open format to allow participation from interested parties including natural resource trustees, local residents, and other federal agency representatives. Regulatory officials currently involved in remediation at the installation will also be requested to participate, as well as base group commanders, base public affairs officials, service center and contractor representatives, and base judge advocate officials.

RAB meetings will initially be held twice a year. Future meetings will potentially be held in the evenings at the Alamogordo Civic Center to allow for more public involvement. All RAB meetings will be advertised in the local newspaper and other media outlets.

LIST OF ACRONYMS

ACC	Air Combat Command
ACP	Accelerated Cleanup Program
AFB	Air Force Base
AFCEE	Air Force Center for Environmental Excellence
CERCLA	Comprehensive Environmental Response, Compensation and Liability Act
DERA	Defense Environmental Restoration Account
DPVE	Dual Phase Vapor Extraction
EPA	Environmental Protection Agency
FS	Feasibility Study
IRA	Interim Remedial Action
IRP	Installation Restoration Program
LTM	Long Term Monitoring
NMED	New Mexico Environment Department
NPL	National Priority List
PA	Preliminary Assessment
POL	Petroleum, Oil and Lubricants
RA	Remedial Action
RAB	Restoration Advisory Board
RCRA	Resource Conservation and Recovery Act
RD	Remedial Design
RI	Remedial Investigation
SARA	Superfund Amendments and Liability Act
SC	Site Close-out
SI	Site Investigation
TERC	Total Environmental Cleanup Contract
TRC	Technical Review Committee
USACE	United States Army Corps of Engineers

MAILING LIST REQUEST

To be placed on the mailing list concerning restoration activities at Holloman Air Force Base, please complete this form and mail to

49 CES/CEVR
Attn: Mr. Warren Neff
550 Tabosa Avenue
Holloman AFB, New Mexico 88330-8458

Name _____

Representing _____

Address _____

City _____ State _____ Zip _____

Daytime Phone (_____) _____

{ } Add or { } Delete my name.
{ } I have moved. My new address is given above.

Cut along line and mail to the address given above

FOR MORE INFORMATION

If you have any questions or would like more information about Holloman AFB environmental programs, please call or write to:

**49 CES/CEVR
Attn: Mr. Warren Neff
550 Tabosa Avenue
Holloman AFB, NM 88330-8458
(505) 475-5395**

- MISSION STATEMENT for T2A3 (RON)