

DEPARTMENT OF THE AIR FORCE
Headquarters 377th Air Base Wing (AFMC)



23 April 1996

MEMORANDUM FOR MEMBERS, BERNALILLO COUNTY/KIRTLAND AIR
FORCE BASE ENVIRONMENTAL WORKING GROUP

FROM: 377 ABW/EMR
2000 Wyoming Blvd SE
Kirtland AFB NM 87117-5659

SUBJECT: Minutes of the Bernalillo County/Kirtland Air Force Base Environmental
Working Group (EWG)

1. PLACE: Loma Linda Community Center, 1700 Yale SE, Albuquerque, NM
2. TIME/DATE: 1830, 22 February 1996
3. CHAIRPERSON: Mr. Stephen Pullen, Hazardous & Radioactive Materials Bureau, New Mexico Environment Department (NMED)
4. ATTENDANCE: See Attachment 1
5. INTRODUCTION/APPROVAL OF NOVEMBER MINUTES: Mr. Pullen called the meeting to order and asked attendees to introduce themselves. The 16 November 1995 meeting minutes were approved as written. Mr. Pullen stated NMED has taken on a new role from the U.S. Environmental Protection Agency (EPA) Region 6 and now manages Kirtland's hazardous and solid waste permit.
6. ENVIRONMENTAL BASELINE STUDY OF McCORMICK RANCH:
 - a. Ms. Michelle Hedrick (Chief of Safety and Environmental Quality at Air Force Phillips Laboratory) presented information about the Air Force's environmental baseline study of McCormick Ranch. This 750-acre area is not a part of the base, but has been leased from the State of New Mexico since 1963 for high explosives testing. It is located at the southwest corner of Kirtland. Phillips Laboratory must clean up the site before turning it back to the state when the current lease runs out in the year 2000.
 - b. The Air Force Phillips Laboratory and its predecessor, the Air Force Weapons Laboratory, conducted 374 high explosive tests at McCormick Ranch until 1992. All but three tests were performed near the surface or at shallow depths less than 15 feet. In the 1970s, one test was conducted at 300 feet below the surface. The other two tests were conducted at depths less than 30 feet. The test performed at 300 feet involved placing ammonium nitrate explosives in 16

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boreholes, then trying to explode them. Some of the explosions were incomplete and the holes were backflushed, spilling explosives onto the surface soil. The soil was cleaned up, but there is some concern that explosives at the bottom of the boreholes might not have been flushed out completely. More investigation is needed to determine if groundwater in that area may have been affected. The depth to groundwater at McCormick Ranch is 350 - 380 feet below the surface, with the underground water flowing to the north-northwest. A regional hydrology analysis indicates past activities conducted at the surface or near surface have not resulted in migration of contaminants to the groundwater.

c. The environmental study involved a records search, interviews with knowledgeable individuals, soil sampling, and geophysical studies. Two unexploded artillery rounds from the World War II era were discovered on the surface; further investigation for unexploded ordnance is needed. Phillips Laboratory is requesting funds to clean up surface debris (concrete, cables, etc.) left over from test operations. Any cleanup money will have to come out of the lab's research and development budget since the lab doesn't have environmental cleanup dollars.

d. There are five groundwater monitoring wells around the perimeter of McCormick Ranch managed by the base's Restoration Branch, with two more wells to be installed this year. More groundwater monitoring and soil sampling will be done this year. During the Phase II Environmental Baseline Study, 310 soil samples were evaluated and, so far, results show no explosives in the soil. The soil sampling results show nitrates below action levels, high levels of manganese, and traces of semi-volatile organic compounds. Soil samples show only naturally occurring levels of radioactivity. (Radioactive materials were not used in any of the testing at McCormick Ranch.) Phillips Laboratory is working with the New Mexico Land Commission and NMED on the status of the cleanup efforts and the state's plan to develop the Mesa del Sol area north of McCormick Ranch when the cleanup and land transfer are completed for McCormick Ranch (year 2000).

7. DEPARTMENT OF ENERGY (DOE) CITIZENS' ADVISORY BOARD (CAB) PROCESS: Dr. Jeremy Brown from The East Manzano Alliance presented his views about the CAB and how it works. He presented his personal opinion and stated he had resigned from the CAB because he wasn't happy with the CAB process. Dr. Brown praised the way the EWG works.

8. DOE/AF FUTURE LAND USE STUDY: Mr. Christopher DeWitt, Chief of Restoration, stated DOE is spearheading the Future Land Use effort for the entire base. DOE has a working group and Air Force has representatives on the group who review and comment on all the workbooks for the different sectors of the base. The DOE CAB has a separate committee reviewing the Future Use workbooks. Because DOE is located on some Air Force-owned land at Kirtland, the final DOE Future Land Use Plan will need Air Force approval, in addition to citizen/stakeholder input. Mr. DeWitt considers the DOE plan will also be the Air Force's future land use plan for Kirtland. Mr. Pullen suggested a discussion at the May 1996 EWG meeting about how EWG members can get involved with the DOE/AF Future Land Use process.

9. STATUS OF AIR FORCE CLEANUP ACTIVITIES AND FUNDING:

a. Mr. DeWitt said originally all Kirtland sites were placed into three separate appendices under the base's Resource Conservation and Recovery Act (RCRA) Permit. Each appendix is in

a different stage of investigation. The second investigative phase for Appendix II sites (primarily oil/water separators) will start soon. The base turned in the Phase I report for the Appendix III sites to the EPA and NMED in November 1995. All potential mixed-waste sites (those potentially having both hazardous and radioactive contaminants) are in a separate Appendix IV and are on a separate investigation schedule. The seven new sites discovered in 1994 were placed on the RCRA permit as solid waste management unit sites, and the investigative report will be submitted to the U. S. Environmental Protection Agency (EPA) Region 6 and NMED on 29 February 1996. One of those sites may need a corrective measures study. He said all pertinent Air Force documents relating to environmental cleanup are at the Albuquerque Technical Vocational Institute, main-campus library reference desk, for citizens to read.

b. Kirtland identified about 20 projects totaling \$14 million for FY96; however, the base only received \$2.5 million--a dramatic cut. Due to budget cuts this year, Air Force Materiel Command (Kirtland's headquarters) has said it will only fund 70% of Priority 1A sites/projects at its bases. (Priority 1A requirements are those ranked high relative risk with corrective action required by regulators.) The only cleanup money Kirtland received for FY96 is for the Manzano Fire Training Area (FT-14). The base will remove lead-contaminated soil there. Voluntary cleanup efforts continue this year with removal of the slag piles at the radium dump. This is probably the last voluntary corrective measure the base will be able to perform since funding is no longer available for this type of cleanup. (Higher headquarters will only consider Priority 1A sites for funding in the future because money has become so tight.)

c. An updated list of Kirtland's Installation Restoration Program (IRP) sites and a map were passed out at the meeting (Attachments 2 and 3).

10. RELATIVE RISK EVALUATIONS:

a. Mr. DeWitt explained relative risk evaluations are a prioritization process to determine funding of cleanup efforts within the Department of Defense (DOD). The process came about in 1995 when DOD foresaw big budget cuts and wanted to make sure money is channeled to the worst sites first. Under the relative risk process, a contaminated site's impact on groundwater, surface soil, and surface runoff/sediment is examined. Each site is evaluated for its contaminant hazard factor (how harmful the specific chemical, etc., might be), which direction the contaminant may migrate, and whether human or ecological receptors are in the pathway. Kirtland officials also consider the windblown hazard of a contaminant, even though this isn't a DOD criterion. In 1995 a dozen citizens and regulators met for training and a base tour and helped Kirtland officials rank the base's Installation Restoration Program (IRP) contaminated sites. Mr. DeWitt asked for volunteers interested in participating in future relative risk evaluations. He mentioned another training session and base tour could be made available if citizens are interested.

b. Mr. Pullen highlighted the importance of the relative risk process and encouraged citizens to get involved in the effort. He cited examples where citizen/stakeholder input had "upped" the relative risk rankings for some Kirtland sites last year and helped get funding for cleanup. He asked for more discussion of the relative risk determinations and process at the next EWG meeting. He said the relative risk process has been very successful and Kirtland is further ahead on its relative risk evaluations than other bases in the state.

11. JOINT AIR FORCE/DOE PROJECTS AND ISSUES:

a. Mr. DeWitt cited the Kirtland Future Land Use Study as a joint effort. He also mentioned the joint work by Sandia National Laboratories (a DOE contractor) and Kirtland's Restoration Branch on the Kirtland Site-Wide Background Study. Sandia led the effort, with half the funding provided by Kirtland. The study establishes the base's distribution of naturally occurring concentrations of metals, inorganic chemicals and radionuclides in the soil and groundwater. The background levels will help determine if contamination has occurred at a site, which remediation process to select, and if remediation has been completed.

b. Mr. DeWitt explained the newest joint project underway is the trichloroethylene (TCE) study.

12. TCE IN GROUNDWATER:

a. Mr. Mark Holmes, hydrologist in the Restoration Branch, stated he is attending meetings with Sandia, DOE, City of Albuquerque, and the State of New Mexico to assemble/share data and try to determine the source of the TCE found in Sandia monitoring wells in and near Sandia Technical Area II last year. Sandia is leading the investigation. Kirtland will be looking for the presence of TCE in Air Force monitoring wells in the future as part of its long-term groundwater monitoring plan.

b. Capt Mike Martin of the base Bioenvironmental Engineering Office said the base found a trace amount of TCE last year in an Air Force drinking water well (Well #3) just north of the commissary, but the level was well within the safe drinking water standard. This was the first time TCE was detected in the base quarterly sampling of drinking water wells. He pointed out that the trace amount of TCE found was barely at the detection level that a laboratory can identify with current equipment.

13. NITRATES IN AIR FORCE DRINKING WATER WELL #7: Capt Martin provided information about the Air Force's discovery of nitrates in Well #7 on base. The well was shut down in December 1995. Water from this well had been mixed with other wells and sampling of the mixed water showed the nitrate level was within the EPA and state standard for safe drinking water. Capt Martin said Well #7 would be sampled again. The base analyzed the nitrates to determine what kind they were. The tests ruled out explosives as a potential source, but did not definitively determine whether the nitrates came from sewage or fertilizer. The base doesn't know the source of the nitrate contamination. Air Force officials will be sampling for nitrates in the base's long-term groundwater monitoring plan.

14. OTHER:

a. Ms. Dyan Jojola, an Isleta Pueblo resident, requested information about the old military bombs Isleta residents find on pueblo property. She said sometimes Isleta people pick up the munitions and take them home as souvenirs. She wants to know the type of munitions and how safe they are so she can pass on this information to Isleta people. Mr. DeWitt told her the munitions cleanup for Isleta is being handled by the Albuquerque office of the U.S. Army Corps of Engineers, who can answer her questions.

b. Citizen attendees brought up questions about Sandia's proposed Molybdenum 99 project on Kirtland. Air Force officials stated that DOE is currently conducting an Environmental Impact Statement study on this proposed project. The Air Force is commenting on the proposal and is involved in the process.

15. NEXT EWG MEETING:


a. The next meeting will be held Thursday, 16 May 1996 at the Loma Linda Community Center, 1700 Yale SE, Albuquerque, from 6:30 - 8:30 pm. Ms. Kari Paseur, environmental public affairs officer, will contact the Southwest Organizing Project (SWOP) to see if they wish to host the meeting. SWOP last hosted an EWG meeting in March 1994. If SWOP is unable, Ms. Nancy Morlock (EPA Region 6) volunteered to be the host/chairperson.

UPDATE: EPA will host the May EWG meeting.

b. Suggested items for discussion at the May meeting include the status of Kirtland's cleanup program, DOE/AF future land use plans, the relative risk process/determinations, and results from the Kirtland background study.



KARI J. PASEUR
Recorder



CHRISTOPHER B. DeWITT, R.P.G.
Chief, Restoration Branch
Environmental Management Division

Attachments:

1. Attendance List
2. Fact Sheet: IRP Sites
3. Map: Kirtland IRP Sites

ATTENDANCE LIST

BERNALILLO COUNTY/KIRTLAND AIR FORCE BASE
ENVIRONMENTAL WORKING GROUP MEETING,
LOMA LINDA COMMUNITY CENTER, ALBUQUERQUE, NEW MEXICO
22 FEBRUARY 1996

<u>NAME</u>	<u>ORGANIZATION</u>
Rod Arnold	Air Force Center for Environmental Excellence
Jeremy Brown	The East Manzano Alliance
Pepa Brown	The East Manzano Alliance
Jerome W. Byrd	Sii
Roger Clark	Brown & Root Environmental
Chris DeWitt	377 ABW/EMR
John Eichenberger	Daniel B. Stephens & Associates
Peter A. Guerra	Intera Inc
Mary Lou Leonard	Albuquerque Environmental Health Dept.
Victor Tesillo	NM Laborers Training Trust Fund
Mark Gardiner	International Technology Corp.
John Gould	Department of Energy, Kirtland Area Office
Michelle Hedrick	Air Force Phillips Laboratory
Mark Holmes	377 ABW/EMR
Julie Jacobs	NM Environment Dept., Groundwater Bureau (DSMOA)
Larry Janis	U.S. Army Corps of Engineers (Omaha District)
Dyan Jojola	United We Stand America/Isleta Resident
Will Keener	Sandia National Laboratories
Maj David Martin	377 ABW/EM-2
Capt Mike Martin	377AMDS/SGPB
David L. Mayerson	Derby Environmental Services
William S. McDonald	NM Environment Dept., DOE Oversight Bureau
William P. Moats	NM Environment Dept., DOE Oversight Bureau
Nancy Morlock	EPA Region 6 (Dallas TX)
Kari Paseur	377 ABW/PA
Stephen Pullen	NM Environment Dept., Hazardous & Radioactive Materials Bureau
Mike Selke	Geoscience Consultants, Ltd.
Jay Sorenson	Sierra Club (New Mexico)
Mark Thacker	Brown & Root Environmental
Floyd Thompson	Sandia Ranger District (U.S. Forest Service)
Scott Waters	(self)
Steve Weber	Foster Wheeler Environmental



Fact Sheet

United States Air Force

Environmental Management, 377th Air Base Wing, Kirtland AFB, New Mexico 87117-5659

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KIRTLAND SITES INSTALLATION RESTORATION PROGRAM

<u>IRP*</u> <u>NUMBER</u>	<u>SWMU**</u> <u>NUMBER</u>	<u>APPENDIX</u>	<u>DESCRIPTION</u>	<u>RELATIVE RISK</u>
LF-01	6-1	I	Landfill 1	High
LF-02	6-2	I	Landfill 2	High
RW-04	6A-2	IV	Radioactive Holding Tank 4	High
RW-05	6A-2	IV	Radioactive Holding Tank 5	High
RW-06	6-30	IV	Radioactive Burial Site 11	Medium
LF-07	6-3	I	Landfill 3	High
LF-08	6-4	I	Landfill 4, 5, 6	High
LF-09	6-10	III	Abandoned Landfill	Low
RW-10	N/A	N/A	Radiation Training Sites 1 - 8	High
FT-13	6-16	I	Kirtland Fire Training Area	High
FT-14	6-32	I	Manzano Fire Training Area	High
LF-15	6-8	I	Landfill B	Medium
WP-16	6-24	I	MWSA Sewage Treatment Facility	High
RW-17	6A-2	IV	Radioactive Holding Tank 6	High
LF-18	6-7	II	Landfill A	Medium
RW-19	N/A	IV	Radioactive Holding Tank 8	High
LF-20	6-29	I	Manzano Landfill	High
RW-23	6A-2	IV	Radioactive Holding Tank 9	High
WP-26	N/A	N/A	Golf Course Main Pond & Two Sewage Lagoons	High
OT-28	6-31	I	McCormick Ranch/Range	High
OT-29	6-19	II	EOD Range	Medium
LF-44	6-11	II	Fill Area SE of Sewage Lagoons	Medium
LF-45	6-15	II	Explosive Test Site Unnamed Dump	Medium
OT-46	6-22	I	Lake Christian	High
WP-47	8-6	II	Silver Recovery Unit	Low
ST-51	6-14	III	Sewage Effluent Line	Medium
LF-56	LF-56	II	Landfill D	Medium
WP-58	WP-58	II	East Laundry, Bldg 20451	Medium

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ST 59	ST-59	II	ART Drum, Bldg 768	Medium
ST-60	ST-60	II	ART Pit, Bldg 765	Medium
SS-61	8-49	III	Fuel Shop Waste Battery Storage Area, Bldg 20677	Low
SS-62	9-20	III	Inactive Waste Accumulation Area, Bldg 909	Low
SS-63	10-2	III	Jet Engine Test Cell, Bldg 702	Low
ST-64	ST-64	II	USACE Vehicle Maintenance Yard, Bldg 20212, Demolished	Medium
SS-65	SS-65	III	Horizontal Polarized Dipole (HPD) Drum Rack	Low***
ST-66	ST-66	II	Trestle Facility (Vehicle Pit and Aircraft Pit)	Medium***
DP-67	N/A	N/A	Three Mine Shafts	Low
RW-68	RW-68	IV	Radium Dump/Slag Piles & Cratering Area	High
SS-69	SS-69	IV	Drum Storage Area (Within INWS TS-6)	High
ST-70	ST-70	II	KAFB Oil/Water Separators	High
ST-71	8-13	II	Oil/Water Separator, Bldgs 1001/1002	Medium
ST-72	ST-72	II	Oil/Water Separator, Bldg 30146	Medium
ST-73	ST-73	II	CERF Drain, Bldg 57001	Medium
OT-74	OT-74	III	Former Pistol Range	Not Ranked
RW-75	N/A	IV	South Tijeras Trench	Not Ranked

Total: 45 IRP Sites

* IRP -- Installation Restoration Program (Part of Defense Environmental Restoration Program)

** SWMU -- Solid Waste Management Unit (Regulated under Resource Conservation and Recovery Act)

*** Tentative Ranking, Pending Stakeholder Approval (Sites SS-65 and ST-66)

(Current as of February 15, 1996)

