

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



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22 May 1997

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 (AFB)
Environmental Working Group (EWG)

1. PLACE: Wyndham Albuquerque Hotel, 2910 Yale SE, Albuquerque
2. TIME/DATE: 1830, 22 May 1997
3. CHAIRPERSON: Nancy Morlock, EPA Region 6
4. ATTENDANCE: See Attachment 1
5. INTRODUCTION: Ms. Morlock called the meeting to order and asked attendees to introduce themselves. Since the EWG will probably soon be combined with the DOE-Sandia National Laboratories (SNL) Citizen Action Group (CAB), Ms. Morlock announced that she expected this to be the last EWG as an independent entity. Capt Martin asked about the CAB and its organization. Chris DeWitt stated that the CAB was a very well-organized group that meets monthly with good attendance from various agencies and private citizens. Mr. DeWitt and the EWG are proposing to sponsor the CAB in three months and to begin the CAB an hour earlier to accommodate EWG business. In addition, the minutes from the previous meeting were approved without comment and the agenda reviewed.
6. PROPOSED REVISION OF THE EWG CHARTER: Mr. DeWitt distributed the new EWG charter (Attachment 2). He would like as many citizen organizations as possible to sign off on the charter, despite the upcoming merger with the CAB. He will attempt to have CAB members sign the charter as well. A member of the CAB, Mr. Yugal Behl, invited any interested parties to begin attending the CAB. The CAB generally meets the third Wednesday of every month, but Mr. DeWitt will find out the date, time, and location of the next meeting for EWG members. Mr. DeWitt pointed out the advantages to a combined CAB-EWG, as the public relations and transcription costs can be pooled and divided equally.

KAFB1865



7. STATUS OF CLEANUP ACTIVITIES AND FUNDING:

a. Mr. DeWitt reported on the status of various Air Force (AF) cleanup projects. The Phase 2 Resource Conservation and Recovery Act (RCRA) Facility Investigations (RFI) at all appendix sites are basically completed. Some additional characterization will be required at certain sites, but 377 ABW/EM is currently submitting Phase II RFI reports to regulators. Corrective Measures Studies (CMS) and risk assessments are to be completed following RFI report review and approval by state regulators. Many solid waste management units (SWMU) sites are expected to be recommended for No Further Action (NFA) status.

b. Mr. DeWitt distributed a summary of the FY98 budget for Kirtland AFB, including 26 projects and areas of concern (excluding management projects) (Attachment 3). The Environmental Restoration Account (ERA) budget for Kirtland AFB is estimated at \$4.8 million with 33 projects, including management projects. The compliance-related projects total approximately \$2 million. 377 ABW/EM is hoping to receive funding for 28 of the 33 projects and invites any interested parties to review the budget and provide comments before the budget is finalized this summer. The first draft of the FY99 budget will be available in August and at the next EWG meeting in order to give stakeholders even more time to provide input for next year.

8. NEWLY IDENTIFIED SITES

a. Kirtland AFB is generally in a stable funding mode, including funding for newly identified sites. Although AF budgets have been decreasing over the past several years, Kirtland AFB has not completed the majority of its environmental programs and thus is expected to continue receiving funding for the next several years. Consistent relative risk evaluations (RRE), with good citizen participation, will provide Kirtland AFB with the documentation necessary to continue to receive funding for environmental projects.

b. Mr. DeWitt distributed a list of Newly Identified Sites for the first quarter of 1997 which included eight new potential sites at Kirtland AFB (Attachment 4). The base is required to notify regulators of any potential new sites and designate the sites as SWMUs or conduct SWMU assessments. A SWMU assessment report must be turned in to regulators 90 days following site identification. Then a RFI is completed to investigate the potential contamination and need for cleanup. Mr. Behl asked if Kirtland AFB always has funding available for investigation of newly identified sites. Mr. DeWitt stated that the base generally puts funding aside each year for the investigation of these sites, but in the cases where funding is not available Kirtland AFB submits a request to regulators (EPA, NMED) for an extension in the site assessment process. Mr. Behl then asked why Kirtland AFB was not surveyed all at once so that these newly identified sites do not keep appearing. The Kirtland AFB region, answered Mr. DeWitt, has been surveyed by air photography and through the interview process. However, it is simply not possible to identify all the sites at one time since new information becomes available at different times, and different areas of the base are developed under varying circumstances.

c. Mr. DeWitt quickly reviewed the eight newly identified sites at Kirtland AFB and how each was identified. The first site, the ALECS facility, for example, was previously cleaned up and turned over to the U.S. Army for an Electromagnetic Pulse (EMP) Test Facility. But since it will again be under Air Force control for use by Phillips Laboratory, the site will be re-investigated for any remaining contamination. The site of most interest at the current time is the seventh newly identified site, the Manzano Burial Sites. This site was identified following a letter to the Air Force from a former Kirtland AFB military employee relating his health problems and potential exposure events. Supposedly three train tank cars with radiation labels came into Kirtland AFB and remained for a month. The waste, a pasty sludge later found to contain tetrachloride-saturated radioactive Chemwipes[®], was removed and buried at an as-yet unidentified perimeter location at the former Manzano Base. 377 ABW/EM has initiated the interview and investigation process and proposes to designate the site as an ERA-funded potential SWMU, and plans to begin a geophysical survey and RFI of the site as soon as possible. Mr. Behl asked if the base was pursuing the site for legal reasons stemming from the letter. Mr. DeWitt stated that the base would look for the contamination; the site could be a potential mixed waste problem.

9. INTERIM CORRECTIVE MEASURES: Mr. Jeff Johnston presented a summary report of the interim corrective measure (ICM), or voluntary measure, completed by Brown and Root Environmental Corp at SWMU RW-68, or the Radium Dump/Slag Pile and Cratering Area site. This site is one of eight ICMs being completed by Brown and Root and is located at the southern end of the base. This site was previously a cratering area where vintage WWII aircraft were tested and then destroyed. The site was characterized by more than 150 tons of metal ash and slag and is located in the flood plain of a large area arroyo. Contaminants of concern at the site included radium-226, cesium, cadmium, lead, and selenium. Hazardous and mixed waste-contamination was found at nearly all of the 19 areas of this site. Following sampling and analysis, Brown and Root segregated and conducted a cleanup of five waste streams at the site, which included: 120 cubic yards of mixed waste-contaminated ash and soil; 188 cubic yards of radioactive waste-contaminated soils; five cubic yards of RCRA-characteristic waste; one cubic yard of radioactive waste-contaminated debris; and 45 tons of nonhazardous debris. Mr. Behl asked how they knew that the nonhazardous debris was clean and why it was disposed of if it was nonhazardous. Mr. Johnston replied that each individual piece of the nonhazardous debris was surveyed for radioactive contamination and disposed of in order to leave the site available for future use. The waste was segregated in order to save on disposal costs, since mixed waste-contaminated ash and debris is more expensive to dispose of than waste with soil-like qualities. The mixed waste was stabilized with a combination of calcium phosphate and magnesium oxide following a treatability study to determine the most cost-effective manner of stabilization. Capt Martin asked how the waste was mixed for the chemical stabilization, and Mr. Johnston replied that a large mixer was utilized, with the waste and chemicals being added by the use of large hoppers. Mr. Behl asked how the equipment was cleaned following stabilization, and Mr. Johnston answered that sand was run through the equipment before it was certified as clean for reuse. A RFI is planned, with boreholes installed beneath former waste piles, to confirm survey data which shows that the site has been rid of contamination.

10. FINAL TIJERAS TRENCH REPORT (RW-75): Ms. Devon Jercinovic of International Technology Corporation provided an overview of the completed site investigation at the South Tijeras Trench, RW-75. Because of hearsay information provided to Kirtland AFB, as well as the presence of an old radioactive sign posted at the site, the South Tijeras Trench was listed as a potential site and investigated for buried radioactive sources. Mr. Behl asked how the boundaries of the site were determined. Ms. Jercinovic responded that the determination of the boundaries was difficult because the exact location of this potential site was unknown. Only the sign and the locations designated by interviews were available. SNL has also been notified of this potential site on their property, Site 23, and it was undetermined at the onset of this investigation if these two sites were actually the same site. IT completed surface radiological and geophysical surveys, and then performed test pit excavations and soil sampling in the 10 areas of geophysical anomalies. The site boundaries were expanded in September of 1996 following the identification of a linear anomaly below the surface, which could suggest an area of contamination. Each anomaly at the site was determined to be lithologic and the site investigation report was submitted to the NMED and EPA in January of this year. Mr. Behl asked why the site was investigated since no contamination was found. Ms. Jercinovic and Mr. DeWitt both responded that the combination of interviews where witnesses stated seeing things buried at the site, along with the presence of the radioactive sign, provided Kirtland AFB with sufficient suspicion that the site required investigation. The current suspicion of contamination at the Manzano Burial Sites has arisen from similar interviews of people working at Kirtland more than 35 years ago, and since the level of risk is significant if the site should be contaminated, it is necessary to investigate.

10. HIGHLIGHTS OF DoD/NMED PARTNERING MEETING: The Partnering Meeting was held to attempt to find ways to reduce review delays for site investigation reports. The Background Study completed at SNL and Kirtland AFB is completed and nearing final approval by regulators. The DOE and DoD are also close to an agreement on the facility-wide future land use issues. In addition, a groundwater abatement plan has been completed for the potential perched aquifer TCE-problem which crosses SNL and Kirtland property. The DoD and DOE will be splitting the cost and labor of installing monitoring wells. Kirtland AFB is also meeting with SNL regarding their shared efforts at technology development in order to share knowledge and equipment and not spend additional funds and require additional review by regulators for similar problems. Finally, the NMED is currently working with SNL and the Los Alamos National Laboratory to produce a Document of Understanding with the DOE to standardize the RCRA Corrective Action process in New Mexico. The DoD is working on a similar document, attempting to make the documents as similar as possible so that the regulators will be reviewing like documents, and thus speeding up the review process. Hopefully all state facilities will eventually utilize the same process. Mr. Jerry Bober, NMED, added that the DoD branch of the NMED employs five people who are responsible for 18 facilities, and the work load is significant.

11. RELATIVE RISK EVALUATIONS (RREs): Mr. DeWitt said all of Kirtland's IRP sites will be re-evaluated in September to see if the rankings determined last year are still current and valid. The RREs categorize the Kirtland sites as high, medium, or low relative risk and help to concentrate funding to the worst sites first. The next round of RREs are expected to be much less

subjective because of the data being generated during the investigation process, with all of the site information expected to be finalized in July and presented at the August EWG meeting. Citizens are encouraged to be involved in the evaluation process. Kirtland AFB will offer another RRE training session in September in order to ensure public involvement in the evaluations. Mr. DeWitt pointed out that the DOE and DoD need to identify similarities in the RRE process and the DOE site prioritization process in order to mesh the systems and facilitate citizen involvement. The RRE process is not a formal risk assessment but prioritizes funding and provides funding for sites which are not regulatory-driven. Mr. Behl asked the level of relative risk assigned to the South Tijeras Trench at the time of its identification. Mr. DeWitt responded that it did not have one as newly identified sites do not undergo the RRE process until after initial investigations.

11. JOINT CAB/EWG Progress: As previously discussed, the first joint CAB-EWG meeting will hopefully be held in August. Mr. DeWitt will continue to work on combining these groups and will let EWG members know of progress.

12. AGENDA ITEMS/HOST/DATE OF NEXT MEETING:

a. The next EWG meeting is tentatively scheduled for Wednesday, August 20, 1997, before the CAB, at an as yet undetermined location and time. 377 ABW/EWR will solicit volunteers to host the meeting. Anyone interested in receiving additional information about the EWG or the Partnering Meeting should contact Chris DeWitt at Kirtland AFB at (505) 846-0053.

b. Suggested items for discussion at the August meeting included the problems associated with legislation requiring the NMED to develop a fee schedule for funding its own staff. This measure is putting pressure on the NMED to develop a mechanism to obtain grants and fees and also results in causing rifts between different agencies. All of this is further pressuring the NMED's workload, which was estimated at more than three times its current capacity, and delays the review and permitting process for environmental projects. Mr. Bober further stated that citizens of New Mexico need to be aware of the problems the NMED and DoD face, as well as acknowledge that the DoD is much better at trying to solve its environmental problems than the commercial sector, where many environmental issues are ignored.

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

Attachments:

1. Attendance List
2. Charter of the Bernalillo County/Kirtland Environmental Working Group
3. Kirtland AFB FY98 Budget Summary
4. Kirtland AFB Newly Identified Sites, 1st Quarter 1997

ATTENDANCE LIST

BERNALILLO COUNTY/KIRTLAND AIR FORCE BASE
ENVIRONMENTAL WORKING GROUP MEETING,
LOMA LINDA COMMUNITY CENTER, ALBUQUERQUE, NEW MEXICO
22 May 1997

<u>NAME</u>	<u>ORGANIZATION</u>
Yugal Behl	Siekes
Jerry Bober	New Mexico Environment Department (NMED)
Harry Davidson	377 ABW/EMR
Chris DeWitt	377 ABW/EMR
Devon Jercinovic	International Technology Corp.
Jeff Johnston	Brown and Root Environmental
Mary Lou Leonard	Albuquerque Environmental Health Dept.
Mike Martin	377 AMDS/SGPB
María Montalvo	International Technology Corp.
Nancy Morlock	Environmental Protection Agency Region 6
Dave Pugh	Air Force
Chris Roberts	<i>Albuquerque Journal</i>
John Rogers	NMED/GWQB
Steve Rowe	U.S. Army Corps of Engineers
Sina Sevedian	Foster Wheeler Environmental Corp.
Eric Tow	Foster Wheeler Environmental Corp.
Steve Weber	Foster Wheeler Environmental Corp.

CHARTER OF THE BERNALILLO COUNTY/KIRTLAND ENVIRONMENTAL WORKING GROUP

I. NAME

This organization shall be known as the Bernalillo County/Kirtland Restoration Advisory Board, hereafter referred to as the RAB.

II. PURPOSE

The purpose of the RAB is to facilitate communication and coordination, and provide for review and comment among the United States Air Force (AF), the United States Environmental Protection Agency (EPA), the New Mexico Environment Department (NMED), designated city, county, and federal congressional representatives, and the community concerning environmental issues affecting the Bernalillo County area.

A primary purpose of the RAB shall be to address soil and or groundwater contamination on Kirtland Air Force Base (KAFB) and adjacent communities and any of its possible sources. The scope of the RAB will not be limited to any particular media or statute.

As applied to KAFB, the RAB will serve as part of the community relations plan for both the AF's Installation Restoration Program (IRP) and the Hazardous and Solid Waste Amendments (HSWA) portion of the Part B permit, ID No. NMD9570024423, under the Resource Conservation and Recovery Act (RCRA). The IRP is part of the Defense Environmental Restoration Program (DERP) and is the Department of Defense's response to the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) for conducting a comprehensive identification of hazardous waste disposal sites, assessing the nature and magnitude of contamination, and taking corrective actions to protect the public health and

environment consistent with applicable laws. The RAB also serves as the Restoration Advisory Board as defined in the Final Report of the Federal Facilities Environmental Restoration Dialogue Committee, the Keystone Report. As such, the Group assists in relative risk evaluations and program identification and prioritization.

It is recognized that within New Mexico, the NMED has authority from the EPA for the HSWA permits under RCRA and to conduct the present, ongoing compliance portion of RCRA. The EPA will provide review comments and recommendations to NMED on corrective action documents produced by KAFB.

By agreement to the charter of the RAB, representatives do not waive rights to pursue individual or governmental actions under city, county, state, or federal law.

III. COMPOSITION

Participation is open to any interested party. Regular membership should include a representative from KAFB, the EPA, and NMED, as well as designated representatives from the city, county, and federal congressional offices, and interested community organizations. Technical representatives should also be present if necessary to provide in-depth support on technical discussions. Each regular member or any interested party shall specify an official point of contact for their organization and an address and phone number to which all mailings and inquiries should be directed.

IV. MEETINGS

Meetings will be held on a quarterly basis in the Albuquerque vicinity, and it will be the responsibility of KAFB to publicize each meeting to the general public. Members should ensure an authorized substitute will attend if they cannot. Minutes of the RAB meetings shall be recorded, reproduced, mailed to members, and included in the public record of applicable actions, all of which shall be the responsibility of KAFB.

The primary function of the RAB's meetings is to convey to the appropriate decision-making bodies the comments of a cross-section of the parties involved in environmental issues, to include relative risk evaluations, background determinations, and future land use. Comments should include technical as well as policy recommendations. Subcommittees shall be created as needed on an *ad hoc* basis to address specific technical and or policy issues and report their comments back to the RAB. In regards to KAFB, they will be presented to the Environmental Protection Committee (EPC), the local decision-making body, and higher up in the chain of command for those decisions that require approval of higher headquarters. A representative from the KAFB EPC will be a regular attendee at the RAB's meetings. The other representatives from regulatory agencies will present the minutes to their respective authorities.

All members recognize that environmental issues involve a complex set of statutory and regulatory schemes enacted by Congress and state and local governments, in addition to AF instructions, guidance, and policies at many decision-making levels. Since there is no one path to pursue resolution of all environmental actions, each attendee, in the spirit of cooperation, should endeavor to help other attendees understand the appropriate mechanisms for resolution of each environmental issue.

V. CHAIR RESPONSIBILITIES

The RAB will have a rotating chair, which at a minimum will include KAFB, NMED, EPA, and the member citizen organizations. Citizen organizations and any other regular member may elect to chair a meeting at their option. The chair for the next meeting will be determined at each meeting.

KAFB is responsible for compiling and distributing the agenda, notifying each attendee of the time and place, and distributing information to members in sufficient time to permit technical review and preparation of comments prior to the next meeting. Written comments on any agenda item should also be distributed to members for review prior to the meeting. A key to the success

of the RAB's purpose is to provide timely information so discussion may proceed at an efficient pace to allow coverage of all agenda items in any given meeting. All written materials, including consolidation of raw data, test results, key environmental documents, and other pertinent information, if available and releasable, will be sent by the responsible agencies to all regular members or placed in the information repository within one week of their availability.

Agenda items for the next meeting will be proposed at the end of each meeting. Additional agenda items and supporting material should arrive at the KAFB recorder's office no later than one month prior to the next meeting. Items submitted later will be added at the discretion of the chair, the determination being based on sufficient time to allow for review of submitted material and timely comments prior to the quarterly meeting. Comments on agenda items should be sent to each member at least two weeks in advance of the meeting. Each member who submits an agenda item is responsible for sending copies of material to all other members. Each member who wishes to submit comments is responsible for sending copies to all other members. A final draft of the agenda will be sent to each member no later than one week prior to the quarterly meeting. Emergency agenda items may be proposed for discussion after approval of previous meeting minutes.

The basic agenda format will be as follows:

1. Approval of the previous meeting minutes;
2. Old Business: Discussion, comments, additional information or changes, and further recommendations on any previous agenda items;
3. New Business:
 - a. Proposed additional agenda items;
 - b. Subcommittee reports, discussion, recommendations;
 - c. Timeline, work plan, resource needs, problems, discussion;
 - d. Key events prior to next quarterly meeting, creation of any new *ad hoc* subcommittee if necessary, distribution of new material;
 - e. Summary of comments and or consensus for minutes;

f. Proposed agenda items for next meeting.

All comments, both oral and written, will be considered and reflected in the meeting minutes, which will be prepared by the KAFB recorder and distributed to each member. If at all possible, a consensus should be reached concerning each agenda item. If not possible, then each point of view should be reflected in the minutes so any reviewing body has the benefit of all expressed opinions. The KAFB recorder will distribute the draft of the minutes at least three weeks prior to the next quarterly meeting.

VI. TERMINATION/MODIFICATION

The RAB shall continue in the above capacity as long as it serves its stated purpose. It shall be disbanded or modified upon a consensus of a quorum of the regular members. Any regular member who wishes to opt out of the RAB may do so upon written notice provided to the chair of the next regularly scheduled meeting.

FY98 BUDGET SUMMARY (Management Projects Not Included)

Projects are listed by priority.

Definitions:

AOC - Area of Concern
CMD - Corrective Measures Design
CMI - Corrective Measures Implementation
CMS - Corrective Measures Study
DRO - Diesel Range Organics
GRO - Gasoline Range Organics
ICM - Interim Corrective Measure
NFA - No Further Action
SAR - SWMU Assessment Report
SI - Site Investigation
SVOCs - Semi-Volatile Organic Compounds
SWMU - Solid Waste Management Unit
VOCs - Volatile Organic Compounds

1. CMI at Landfill 2 (LF-02)

KAFB is proposing a CMI at Tijeras Arroyo in order to protect Landfill 2 from the erosional effects of water flow through the channel. Tijeras Arroyo drains approximately 132 sq. miles of mountain area and during rain events, large volumes of water flow through the arroyo causing damage to channel banks particularly at turns and twists in the flow pathway. Water flow during the past two years has caused substantial damage to the channel bank at Landfill 2. The proposed project will install toe protection to five ft below the arroyo bed, and the arroyo banks will be stabilized with gabion baskets or concrete revetment. The proposed project will integrate with existing gabion baskets currently in place. Only partial funding of this project will be required in FY98.

2. Long-Term Groundwater Monitoring Plan (LTM)

The purpose of this project is to continue a groundwater monitoring program to determine if there have been any releases of hazardous substances from 9 RCRA SWMUs to groundwater in the uppermost aquifer underlying the facility and to establish a baseline to support future corrective measure determinations at these sites. Monitoring will continue at 28 wells at LFs-01, 02, and 08, FT-13, WP-26, OT-28, OT-46 and Tijeras Arroyo on a semi-annual basis. Five new wells at LF-08 and WP-26, to be completed in the regional aquifer and the perched zone if it exists in those areas, will be monitored on a quarterly basis. Groundwater samples for these sites will continue to be analyzed for Table 1 Parameters as required by 40 CFR 264.94, and Contaminant Indicator Parameters,

Groundwater Quality Parameters, volatile organic compounds, nitrates, and contaminants of concern identified during the Stage 2A RFI. Four newly installed wells at LF-20, RW-06 and RW-68 will also be included in the LTM. The 4 new wells that will be sampled on an annual basis will be analyzed for a full suite of parameters: VOCs, SVOCs, metals, herbicides, pesticides, inorganics and radiological. All data will be loaded into IRPIMS format. An annual monitoring report documenting sampling and analysis activities will be prepared.

3. SAR for MWSA Burial Sites (RW-84)

The purpose of this project is to conduct a SAR consisting of a geophysical survey to identify burial sites containing carbon tetrachloride saturated radioactive wipes, photographic equipment, and personal protection equipment believed to have been put into trenches/pits and covered with soil at newly identified AOC OT-86, MWSA Burial Sites, located in the northwest portion of the former MWSA. The assessment will determine if the site should be designated a SWMU requiring additional corrective action.

4. SAR for Bldg 907 Detention Pond and Yard (SS-81)

The purpose of this project is to conduct a SAR to determine if contamination is present at newly identified AOC SS-81, which consists of a former detention pond and adjacent yard associated with Bldg 907. The assessment will determine if the site should be designated a SWMU requiring additional corrective action.

5. SAR for Former Small Arms Range near E-W Runway (OT-86)

The purpose of this project is to conduct a SAR to determine if lead contamination is present at newly identified AOC OT-86, Former Small Arms Range, located east of the end of the Albuquerque International Airport's east-west runway. The assessment will determine if the site should be designated a SWMU requiring additional corrective action.

6. SI at MWSA Maintenance Building (RW-85)

The purpose of this project is to conduct a SI to determine if tritium contamination is present at Building 37122 and along the inflow line to the underground emergency holding tank RW-17 (removed in 1996). The contaminant of concern is tritium. The investigation will determine if additional corrective action will be required at this site.

7. RFI at Radiation Training Sites 1-8 (RW-10)

The purpose of this project is to conduct characterization to complete the assessment of nature and extent of contaminants present at RW-10, which consists of eight Defense Special Weapons School (DSWS) training sites (TS-1 thru TS-8). The additional investigation will complete the preliminary investigative work undertaken in 1995, 1996 and 1997. Results of the investigation will provide information for risk assessments, presumptive remedies, closures, and or corrective measures studies. In addition, the proposed work will characterize an apparent buried bunker at TS-8.

8. RFI at Blast Overpressure (BOP) Site Cesspools (ST-328)

The purpose of this project is to conduct a Phase 2 RFI at the BOP Site Cesspools, which were associated with an abandoned and removed apartment building. The investigation will determine the horizontal and vertical extent of metals contamination (lead and zinc) identified during the initial RFI. The results will provide information for risk assessment, closure, presumptive remedies, and/or corrective measure studies.

9. Post Closure Care at Sewage Lagoons and Golf Course Main Pond (WP-26)

The purpose of this project is to continue post-closure care activities. This project involves installation of four monitor wells at the Sewage Lagoons to replace the wells that are no longer feasible to sample due to dropping groundwater levels and slow recharge rates. Two of the wells will be completed in the regional aquifer to continue monitoring the domestic water supply. The other two will be completed in a perched zone if it exists in this area. The new wells and three wells at the Golf Course Main Pond will be sampled quarterly for one year as part of the Long-Term Groundwater Monitoring Plan. Samples will be analyzed for chromium, nitrate/nitrite and volatile organic compounds. Three of the four original monitor wells at the Sewage Lagoons that are no longer sampled will be abandoned, the fourth will remain open for use as a water table gauging point.

10. CMS at KAFB Oil/Water Separators (ST-70)

The purpose of this project is to complete a CMS and CMD at the Kirtland Oil/Water Separators (OWSs) to address the contamination identified in the Appendix II, Phase 2 RFI. This project involves completion of a risk assessment-focused CMS leading to a presumptive remedy for bioremediation. Oil water separators at Building locations 333, 377, 381, 471, 481/482, 2637, 20205, 20375 and 20422 will be included in the CMS. Passive and active bioventing will be evaluated at three locations with deep contamination: Buildings 377, 471 and 481/482. CMS pilot studies will be conducted;

the studies will require a lengthy study period to gather adequate data to evaluate a passive bioventing application. The CMS will also address the remaining building locations, with limited soil contamination, concerning exposure issues which may arise from the risk assessment and determine if further action will be required. Natural attenuation will be evaluated at these locations if further action is required. Bioventing is anticipated only at the locations with deep soil contamination. A CMS report will be produced. It is anticipated that the CMS will lead to a remedy that will reduce the potential for exposure through bioremediation processes. A CMD will also be initiated and completed for the type of bioventing system selected. A CMD report will be produced.

11. CMS at Landfill 1 (LF-01)

The purpose of this project is to conduct a CMS to develop the data necessary to prepare a remedial design for closure of Landfill 1. The project will consist of reviewing corrective measure alternatives, conducting field surveys, assessing elevation changes, and gathering meteorological data for the site. The data will be utilized to model potential groundwater impacts and erosional effects of water flow over the site during rain events in order to recommend and design an appropriate cover system to achieve site closure.

12. CMS at Radium dump/Slag Piles and Cratering Area (RW-68)

The purpose of this project is to install one up gradient and one down gradient monitoring wells at this former radium slag pile area to assess groundwater impacts from aircraft dismantling and incineration activities. The data results will be used to verify radium detected in surrounding wells is background in order to support a CMS risk assessment and NFA recommendation. If groundwater impacts are determined to exist from site activities, the data will provide information for presumptive remedies and or remedial design efforts. Groundwater is estimated to be at a depth of ± 100 feet at this site. If it is determined that this site has not impacted the groundwater, a no further action document will be prepared for site closure.

13. CMS at Manzano Fire Training Area (FT-14)

The purpose of this project is to install a groundwater monitoring well at this former fire training area to assess groundwater impacts from the fire training activities. The results will provide the data necessary to support a CMS risk assessment and NFA recommendation. If the results indicate groundwater impacts from FT-14 activities, the data will be used to evaluate for presumptive remedies and or remedial design efforts. Depth to groundwater is unknown but could be as shallow as 80 ft or as deep as 350 ft

depending on which side of an area fault this site is situated. If it is determined that this site has not impacted the groundwater, a no further action document will be prepared for site closure.

14. CMS at Landfills 4, 5, and 6 (LF-08)

The purpose of this project is to conduct a CMS to address remediation of the contamination identified at this site as part of the Appendix 1 Phase 2 RFI. The project involves completion of a risk assessment-focused CMS leading to a presumptive remedy for upgrading the existing landfill-type surface cover to address the existing contamination and meet federal and state landfill closure requirements. The CMS will evaluate erosion control options and generate design-basis descriptions, drawings, and calculations for a selected cover system. A monitor well will be installed in the regional aquifer to confirm that the first underlying aquifer is being monitored to permit completion of the CMS. A CMS report will be produced. The CMS is anticipated to lead to a remedy that will reduce the potential for exposure through erosion control. A CMS was recommended in the Phase 2 RFI.

15. CMS at Radioactive Burial Site 11 (RW-06)

The purpose of this project is to complete a CMS to address remediation of contamination identified in the Stage 2D-1, Phase 2 RFI: This project involves completion of a risk assessment-focused CMS leading to a presumptive remedy for a landfill cover system. The CMS will evaluate erosion control options for a selected cover system. A monitor well will be installed to determine if the groundwater has been impacted. Analyses will include a full suite of parameters, concentrating on specific radiological determinations, as no prior groundwater monitoring has occurred. A CMS report will be produced. The CMS is anticipated to lead to a remedy that will reduce the potential for exposure.

16. CMS at Manzano Landfill (LF-20)

The purpose of this project is to conduct a CMS to address remediation of the contamination identified at this site as part of the Appendix 1 Phase 2 RFI. This project involves completion of a risk assessment-focused CMS to evaluate options to mitigate erosion concerns and address exposure issues which may arise from the risk assessment and determine if further action will be required. Two monitor wells will be installed to assess whether groundwater has been impacted to permit completion of the CMS. Analyses will include a full suite of parameters as no prior groundwater monitoring has occurred. A CMS report will be produced. The proposed project is anticipated to lead to a remedy that will either reduce the potential for exposure through erosion control or result in a finding of NFA. A CMS was recommended in the Phase 2 RFI.

17. CMS at Lake Christian (OT-46)

The purpose of this project is to conduct a CMS to address remediation of the contamination identified at this site as part of the Appendix 1 Phase 2 RFI. This project involves completion of a risk assessment-focused CMS leading to closure of the man-made Lake Christian by drainage and refilling with soil. The CMS will evaluate options concerning exposure issues which may arise from the risk assessment. A CMS report will be produced. The CMS is anticipated to lead to a remedy that will reduce the potential for impacts to the groundwater or result in a finding of NFA. A CMS was recommended in the Phase 2 RFI.

18. CMS at East Laundry (WP-58)

The purpose of this project is to conduct a CMS to address contamination identified in the Appendix V, Phase 2 RFI to be completed in FY97: This project involves completion of a risk assessment-focused CMS to evaluate bioremediation options as a presumptive remedy to mitigate exposure issues which may arise from the risk assessment and determine if further action will be required. The options to be evaluated include natural attenuation and bioventing. A CMS report will be produced. The CMS is anticipated to lead to a remedy that will reduce the potential for exposure or result in a finding of NFA.

19. CMS at IRP Sites

The purpose of this project is to conduct a focused CMS to include a risk assessment, modeling, and baseline soil sampling to evaluate and support intrinsic bioremediation/natural attenuation or bioventing, and producing the CMS report. The CMS will focus on intrinsic bioremediation/natural attenuation at SS-62, Building 909 Inactive Waste Accumulation Area; ST-71, Building 1000/1001 Oil/Water Separator; and ST-72, Manzano Security Garage Oil/Water Separator, as well as bioventing for ST-71 for areas of deep DRO/GRO and SVOC soil contamination that are inaccessible to excavation. A CMS report will be produced. The CMS is anticipated to lead to a remedy that will reduce the potential for exposure and result in site closure. A CMS was recommended for these sites in the Phase 2 RFI.

20. CMS at Potential NFA IRP Sites

The purpose of this project is to conduct a CMS consisting of a risk assessment to support a recommendation for NFA at LF-7, LF-09, FT-13, LF-15, WP-16, LF-18, OT-28, OT-29, LF-44, and LF-45. If sufficient data is available to recommend the sites for no further action, NFA documents will be prepared and submitted.

The Following Projects Were Not Previously Identified For FY98. They Are Being Submitted For Consideration if Excess FY98 Funds are Identified.

21. ICM at Radiation Training Sites 1-8 (RW-10)

The purpose of this project is to develop an ICM plan and implement remedial action to construct an erosion wall for the protection of TS-6 from the effects of water flow in the Coyote Arroyo. The site is located about 10 ft from the Coyote. If contaminants were to migrate to Coyote Arroyo from TS-6, they would commingle with the Tijeras Arroyo and ultimately be discharged into the Rio Grande. The project consists of developing an ICM plan to build an approximate 500 ft protective erosion wall where the Coyote Arroyo adjoins Training Site 6 of RW-10. The work will involve re-building the bank and installing a filter fabric and concrete revetment type stabilization system.

22. ICM at MWSA Burial Sites (RW-84)

The purpose of this project is to develop and implement an ICM for the excavation and proper disposal of radioactive wastes potentially buried in trenches at MWSA. The project consists of developing an ICM plan to include a focused CMS and risk assessment to excavate, segregate, characterize, containerize, store, transport, and dispose of possible mixed wastes buried in the 1950s. A SAR containing the results of a geophysical survey is to be submitted to NMED by 30 April 1998. This project is identified for potential funding only. The SAR results will determine if this project will be required.

23. CMD at Landfill 2 (LF-02)

The proposed CMD at LF-02 consists of designing a cover system that is protective of Landfill 2 from the erosion and leaching effects of water flow during rain and flood events. Because Landfill 2 lies in the Tijeras Arroyo floodplain, the cover design will take into consideration the potential for erosion control and leaching during high water flow and flood conditions during major rain events. The cover system will be integrated with the ICM project to fortify the Tijeras Arroyo banks at LF-02. Once in place, the cover may prove sufficient to recommend no further action at the site. However, if the regulators require additional remedial action, the proposed design will be an integral element of the final design for closure. This project is identified for potential funding only. The 100-year flood study is currently underway to determine if this project will be required.

NEWLY IDENTIFIED SITES

1st Quarter 1997

1. ALECS Facility:

a. Phillips Laboratory is currently in the process of transferring an Electromagnetic Pulse (EMP) Test Facility from the U. S. Army, who previously controlled the facility under a permit from the Air Force. This EMP facility, known as the ALECS Facility, is located near Bldg 622. The Air Force and Phillips Laboratory utilized the facility prior to permitting it to the Army. Prior to signing the permit, the Army and Phillips Laboratory were required to address environmental concerns found during the standard environmental assessment conducted prior to real property transfers. This included removal of stained soil noted around the pump shed, reclaiming shed, pulsar building, and enclosure and replacement with clean soil. Laboratory tests indicated the soil removed ranged to 640 mg/Kg TPH. There are no records of the volume of soil removed/replaced. The Phillips Laboratory directorate is interested in re-obtaining the ALECS facility for R&D.

b. To determine the nature and extent of any remaining contaminated soil, Kirtland AFB proposes this site be added as SWMU SS-82, ALECS Facility (SS-82), to the HSWA Module IV of our RCRA Part B Permit. We will submit the Sampling and Analysis Plan (SAP) by 31 December 1997, and the RFI Report by 31 December 1998. This will be an Environmental Compliance Program (ECP)-funded SWMU.

2. Skeet Range and Landfill Road:

a. On 15 May 1996, Kirtland AFB Environmental Management (EM) staff was notified that the Sandia Skeet Range was being cleaned and graded by the base Civil Engineers (CE) Group. During this operation, CE removed soil containing clay pigeons and lead shot, and placed it as bedding along 2.5 miles of road (within the floodplain of the Tijeras Arroyo) leading from Pennsylvania Avenue to the base construction and demolition landfill. Subsequent sample analyses of the transported material indicated lead concentrations up to 375 mg/Kg. In response to the incident report, NMED inspected the area on 3 June 1996 and noted that lead shot also was being released from the skeet range through a drainage ditch/arroyo which bisects the site. The NMED issued Kirtland AFB a Compliance Order on 28 February 1997.

b. Kirtland AFB proposes this site be added as SWMU SS-83, Skeet Range and Landfill Road (SS-83), to the HSWA Module IV of our RCRA Part B Permit. We will submit the SAP by 31 December 1997, and the RFI Report by 31 December 1998. This will be an ECP-funded SWMU.

3. Bldg 907 Detention Pond and Yard:

a. In March 1997, Phillips Laboratory submitted a plan to excavate for underground utilities near its facilities at Bldg 907. As the excavation was close to SWMU 9-20, EM staff conducted a site visit on 15 April 1997 to survey the site. An area which appears to have been a detention

pond (approximately 50 ft x 100 ft) was noted, as well as an area where above-ground storage tanks were utilized. A drain line from a janitorial/industrial sink located in Bldg 907 emptied into to the pond. During subsequent interviews, previous tenants indicated the pond contained water and was even stocked with fish (as part of a picnic/recreation area). They stated the fish were killed as a result of overuse of copper sulfate for algae control. The area north of the pond contained storage tanks used to store hydraulic fluid. Aerial photos from 1970 show the pond, but it is not present in photos from the late 1980s.

b. Kirtland AFB proposes to designate this site as Environmental Restoration Account (ERA)-funded AOC SS-81, Bldg. 907 Detention Pond and Yard. We will submit an enhanced SWMU assessment report (SAR) by 30 April 1998.

4. Former Small Arms Range

a. During recent reviews of historical aerial photographs, EM staff noted an area that appeared to be an abandoned small arms range. A subsequent records search and interviews indicated that a small arms range was located approximately 1,700 ft east of the existing east-west runway at the Albuquerque International Airport. There were at least four berms located at increasing distances from the south-facing firing line out to approximately 1,000 ft. The range was used in the 1960s and 1970s. Analysis of the photographs indicates the range was demolished and the berms removed prior to 1983. There are no records to indicate the level of use or if lead was reclaimed prior the closing of the range.

b. Kirtland AFB proposes to designate this site as ERA-funded AOC OT-86, Former Small Arms Range. We will submit an enhanced SAR by 30 April 1998.

5. MWSA Maintenance Building:

a. We submitted the Appendix IV Stage 2D-2 RFI Report for AOC 6-A2 on 28 June 1996. This AOC consists of six underground emergency holding tanks located in the former Manzano Weapons Storage Area (MWSA). One tank, RW-17, contained water with tritium concentrations of 5,500 pCi/L, ± 600 pCi/L. No tritium was detected in any soil samples; however, the inflow line to the tank and the maintenance building that drained into it were not investigated during the RFI.

b. Kirtland AFB proposes to designate this site as ERA-funded AOC RW-85, MWSA Maintenance Building, a potential low-level radioactive, non-RCRA site. We will submit a site characterization report by 30 December 1998.

6. Addition to SWMU 10-21:

a. During a recent meeting with the company contracted to remove the oil/water separator at the Trestle Facility (SWMU ST-66), a previously unknown septic tank was noted on the facility's as-built drawings. The septic tank was utilized by personnel operating from instrument trailers located on a concrete pad at the facility.

b. Kirtland AFB has designated this septic tank as ECP site ST-346 and proposes to include it with the other septic tanks in SWMU No. 10-21. We will submit a SAP for this site, as an addendum to the existing Appendix III Wasteline RFI Work Plan, by 30 December 1997 and a RFI Report by 30 December 1998.

7. Manzano Burial Sites:

a. Sandia National Laboratories forwarded a letter, dated February 1996, to EM from a retired Air Force officer who worked at "Sandia Base" in 1950 and 1951. A portion of the letter discusses an incident involving the removal and burial of carbon tetrachloride-saturated radioactive Chemwipes® at the MWSA (then called "Manzano Base"), which had been transported to the former base depot via rail cars. The EM staff interviewed the letter's author and the former depot commander, who validated the incident and indicated additional burial sites may be located in the same area. These burial sites, reportedly in the northwest portion of the MWSA, appear to be separate from AOC 6-A1 (RW-21) (in the northeast portion of the MWSA).

b. Kirtland AFB proposes to designate the burial sites as ERA-funded AOC RW-84, Manzano Burial Sites, and will submit an enhanced SAR by 30 April 1998.

8. Active Pistol Range:

a. Kirtland AFB maintains an active pistol range located adjacent to Southgate Ave., 1,500 feet south of the east-west runway at the Albuquerque International Airport. This range has been in operation since the 1950s. Although current design and operations prevent off-site lead releases, there are no records from previous years regarding use or reclamation activities.

b. Kirtland AFB proposes to expand SWMU OT-74, Former Pistol Range, to include the area outside the active pistol range. This area will be investigated as part of the OT-74 RFI and included in the RFI report we will submit by 30 December 1998. This area will also be included in the revised OT-74 SAP we will submit in June 1997. The SWMU will be redesignated as Former Pistol Range and Area Outside Existing Range.