



DEPARTMENT OF THE AIR FORCE
377th Civil Engineer Squadron (AFMC)



CERTIFIED MAIL 7099 3220 0002 5455 6014
RETURN RECEIPT REQUESTED

27 Apr 2001

MEMORANDUM FOR MR. JOHN KIELING, MANAGER
RCRA PERMITS MANAGEMENT PROGRAM
HAZARDOUS WASTE BUREAU
NEW MEXICO ENVIRONMENT DEPARTMENT
PO BOX 26110
SANTA FE NM 87502

FROM: 377 CES/CEVR
2050 Wyoming Blvd SE, Ste 126
Kirtland AFB NM 87117-5270

SUBJECT: RCRA CA Quarterly Report

1. We are submitting the quarterly RCRA Corrective Action report for the period January 1, 2001 through March 31, 2001, as required by the conditions set forth in our RCRA Part B Permit, Module IV, Section E.
2. Please contact me at (505) 846-9122 if you have any questions.


CHRISTOPHER B. DEWITT, GS-13
Chief,
Installation Restoration Program Branch

Attachment:
Quarterly Report

cc:
See Distribution List



DISTRIBUTION LIST

377 CES/CE

NMED-HWB (Mr. Moats)

NMED-GWQB (Ms. Jacobs)

EPA Region 6 (Ms. Tellez)

HQ AFMC/CEVR (Ms. Linthicum)

HQ AFMC/CEVC (Mr. Fort)

MWE (Mr. Johnston)

IT Corp. (Ms. Jercinovic)

FWE (Mr. Johnson)

CH2 (Ms. Halloran)

AFCEE/ERDM (Mr. Arnold)

USACE Omaha (Mr. Rowe)

Quarterly Report

**Kirtland AFB, New Mexico
January 1, 2001 through March 31, 2000**

I. INTRODUCTION

A. Pursuant to the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act (RCRA), as amended by RCRA Statute (42 U.S.C. 6701, et seq.), as amended by the Hazardous and Solid Waste Amendments of 1984 (HSWA), a permit has been issued to Kirtland AFB to operate a hazardous waste disposal facility (ID No. NMD9570024423, October 10, 1990).

B. This Quarterly Report is consistent with the terms and conditions of the permit found under HSWA Module IV, Section E.

II. DESCRIPTION OF WORK COMPLETED

A. The following is a list of solid waste management units (SWMUs) listed as Corrective Action Units (CAU) in Module IV, areas of concern (AOCs), and sites not regulated under RCRA. Corrective action at these sites is conducted under the Installation Restoration Program (IRP) and the Environmental Compliance Program (ECP). Each site includes the CAU number, the Kirtland AFB identification number, and the site name.

CORRECTIVE ACTION UNITS ON ANNUAL UNIT AUDIT

Corrective Action Unit No.	KAFB No.	DESCRIPTION
6-1	LF-001	Landfill No. 1
6-2	LF-002	Landfill No. 2
6-3	LF-007	Landfill No. 3
6-4	LF-008	Landfill 4,5, & 6
	LF-268	Active Landfill
6-7	LF-018	Landfill A
6-8	LF-015	Landfill B
6-10	LF-009	Abandoned Landfill
6-11	LF-044	Fill Area SE of Sewage Lagoons
6-14	ST-051	Sewage Effluent Line
6-15	LF-045	Unnamed Dump
6-16	FT-013	Kirtland Fire Training Area
6-19	OT-029	EOD Range
6-22	OT-046	Lake Christian
6-24	WP-016	Manzano Sewage Treatment Facility
6-29	LF-020	Manzano Landfill
6-30	RW-006	Radioactive Burial 11
6-31	OT-028	McCormick Ranch Range
6-32	FT-014	Manzano Fire Training Area
6-A1	RW-021	Radioactive Burial 7
6-A2-A	RW-004	Radioactive Holding Tank 4
-B	RW-005	Radioactive Holding Tank 5
-C	RW-017	Radioactive Holding Tank 6
-D	RW-019	Radioactive Holding Tank 8
-E	RW-023	Radioactive Holding Tank 9
8-5	ST-201	Oil/Water Separator, Bldg 255
8-6	WP-047	Silver Recovery Unit
8-13	ST-071	Bldg 1000/1001 Oil/Water Separator (Former ST-221)
8-26	ST-242	Oil/Water Separator, Bldg 1063
	ST-243	Oil/Water Separator, Bldg 1063
8-28	ST-250	Oil/Water Separator, Bldg 20338
8-29	ST-251	Oil/Water Separator, Bldg 20344

Corrective Action Unit No.	KAFB No.	DESCRIPTION
8-31	ST-252	Oil /Water Separator, Bldg 20348
	ST-253	Oil/Water Separator, Bldg 20348
8-35	ST-214	Waste Oil Storage Tank, Bldg 471
8-41	ST-274	Waste Battery Storage Area, Bldg 20423
8-47	ST-261	Oil/Water Separator, Bldg 20423
8-49	SS-061	Fuel Shop Wst Batt Strg, Bldg 20677 (Former ST-265)
8-53	ST-335	Pnt Shop Flr Drn to Rock Bed, Bldg 20681
8-55	ST-262	Oil/Water Separator, CE Bldg 20698
8-58	ST-321	Battery Storage Area, Bldg 57007
9-4	ST-276	Waste Accumulation Area, Bldg 617
9-14	ST-270	Buried Caustic Drain Line, Bldg 617
9-15	ST-271	Neutralization Pit, Bldg 617
9-16	ST-272	Evaporation/Infiltration Pond, Bldg 617
9-20	SS-062	Bldg 909 Waste Accumulation Area (Former ST-277)
10-1-A	ST-278	Sanitary Sewer System A
10-1-B	ST-279	Sanitary Sewer System B
10-1-C	ST-280	Sanitary Sewer System C
10-1-D	ST-281	Sanitary Sewer System D
10-1-E	ST-282	Sanitary Sewer System E
10-1-F	ST-284	Sanitary Sewer System G
10-1-G	ST-327	Manzano Sanitary Sewer System
10-2-A	ST-325	Corrosion Cntrl Shop, Strm Drn, Bldg 482
10-2-B	ST-220	Paint Shop, Bldg 1001, Storm Drain
10-2-C	ST-220	Pltng & Anodizing, Bldg 1001, Storm Drain
10-2-D	ST-329	Propulsion Branch Floor Drains, Bldg 336
10-2-E	SS-063	Jet Engine Test Cell (Former ST-336)
10-2-F	ST-325	H-3/H-53, Phase Dock, Bldg 1000 Flr Drns
10-2-G	ST-331	C-130 Mntnc Shop, Bldg 1009, Strm Swr
10-2-H	ST-285	West Storm Sewer System
10-2-I	ST-286	East Storm Sewer System
10-3	ST-249	Waste Oil Storage Tank, Bldg 20205
10-7-A	ST-204	Sediment Trap, Bldg 333
	ST-205	Oil/Water Separator, Bldg 333
10-7-B	ST-206	Oil/Water Separator, Bldg 336
	ST-207	Oil/Water Separator, Bldg 336
	ST-208	Oil/Water Separator, Bldg 336
	ST-209	Catch Basin, Bldg 336
10-7-C	ST-212	Oil/Water Separator, Bldg 381
	ST-213	Area Drain, Bldg 381
10-7-D	ST-217	Oil/Water Separator, Bldg 481
10-7-E	ST-218	Oil/Water Separator, Bldg 482
10-7-F	ST-222	Oil/Water Separator, Bldg 1031
	ST-223	Sewage Ejector Unit, Bldg 1031
	ST-224	Area Drain, Bldg 1031
	ST-225	Holding Tank, Bldg 1031
10-7-G	ST-226	Oil/Water Separator, Bldg 1037
	ST-227	Holding Tank, Bldg 1037
10-7-H	ST-228	Area Drain, Bldg 1040
10-7-I	ST-229	Sewage Ejector Unit, Bldg 1043
10-7-J	ST-230	Oil/Water Separator, Bldg 1046
	ST-231	Holding Tank, Bldg 1046
	ST-232	Sewage Ejector Unit, Bldg 1046
	ST-233	Area Drain, Bldg 1046
10-7-K	ST-234	Oil/Water Separator, Bldg 1051
	ST-235	Oil/Water Separator, Bldg 1051
	ST-236	Oil/Water Separator, Bldg 1051
	ST-237	Area Drain, Bldg 1051

Corrective Action Unit No.	KAFB No.	DESCRIPTION
10-7-L	ST-238	Oil/Water Separator, Bldg 1056
	ST-239	Oil/Water Separator, Bldg 1056
10-7-M	ST-240	Holding Tank, Bldg 1058
10-7-N	ST-241	Oil/Water Separator, Bldg 1061
10-7-O	ST-244	Oil/Water Separator, Bldg 1064
	ST-245	Holding Tank, Bldg 1064
10-7-P	ST-246	Oil/Water Separator, Bldg 1070
10-7-Q	ST-254	Oil/Water Separator, Bldg 20365
10-7-R	ST-255	Oil/Water Separator, Bldg 20375
	ST-256	Oil/Water Separator, Bldg 20375
	ST-257	Oil/Water Separator, Bldg 20375
10-7-S	ST-259	Area Drain, Bldg 20422
10-7-T	ST-263	Oil/Water Separator, Bldg 23226
10-7-U	ST-264	Oil/Water Separator, Bldg 30142
10-7-V	ST-267	Oil/Water Separator, Bldg 57007
10-21-A	ST-287	Bldg 525 Septic System
10-21-B	ST-273	Bldg 618 Septic System, Chem Laser
	ST-288	Bldg 614 Septic System, Chem Laser
	ST-289	Bldgs 617/620 Septic System, Chem Laser
	ST-290	Bldg 619 Septic System, Chem Laser
	ST-291	Bldg 617 Septic System, Chem Laser
	ST-292	Bldg 622 Septic System, Chem Laser
	ST-348	Building 610 Septic Tank
	ST-349	Building 626 Septic Tank
	ST-351	Building 635 Septic Tank
	ST-352	Building 613/614 Septic Tank
10-21-C	ST-294	Bldg 633 Septic System, FAA Facility
	ST-295	Bldg 638 Septic System, FAA Facility
10-21-D	ST-296	Bldg 702 Septic System, Rnge & Ammo
	ST-297	Bldg 707 Septic System, Rnge & Ammo
	ST-298	Bldgs 730/734 Septic System, Rnge & Ammo
	ST-299	Bldg 751 Septic System, Rnge & Ammo
10-21-E	ST-300	Bldg 20199 Septic System
10-21-F	ST-301	Bldg 20560 Septic System
10-21-G	ST-302	Bldg 20599 Septic System
10-21-H	ST-303	Bldg 20749 Septic System
10-21-I	ST-304	Bldg 20797 Septic System
10-21-J	ST-305	Bldg 28054 Septic System
	ST-306	Bldg 28054 Septic System
10-21-K	ST-307	Bldg 30101 Septic System, Manzano Gate
	ST-315	Bldg 30102 Septic System, Manzano Gate
10-21-L	ST-308	Bldg 37511 Septic System
10-21-M	ST-309	Bldg 37504 Septic System
10-21-N	ST-310	Bldgs 37507/37508/37513 Septic System
	ST-322	Bldgs 37507/37508/37513 Septic System
10-21-O	ST-311	Plant 1 and Bldg 37501 Septic System
10-21-P	ST-312	Plant 2 and Bldg 37503 Septic System
10-21-Q	ST-313	Bldgs 37529/37530 Septic System
10-21-R	ST-293	Bldg 37570 Septic System
10-21-S	ST-314	Bldgs 48056/48059 Septic System
	ST-353	Building 48057 Septic Tank
	ST-354	Sheep Grooming Septic Tank
	ST-355	Building 48062 Septic Tank
10-21-T	ST-316	Bldgs 57003/57012 Septic System, CERF
	ST-317	Bldg 57011 Septic System, CERF
	ST-340	Bldgs 57001 and 57002 Septic System, CERF
10-21-U	ST-318	Bldg 37200 Septic System
10-21-V	ST-319	Bldg 37541 Septic System
10-21-W	ST-320	Bldg 20149 Septic System
10-21-X	ST-323	Bldg 29042 Septic System
10-21-Y	ST-324	Bldg 29051 Septic System

Corrective Action Unit No.	KAFB No.	DESCRIPTION
10-21-Z	ST-330	Bldg 1032 Septic System
10-21-AA	ST-333	Bldg 66001 Septic System, SOR
	ST-342	Bldg 66029 Septic System, SOR
	ST-343	Bldgs 66000/66008 Septic System, SOR
	ST-344	Bldg 66042 Septic System, SOR
	ST-345	Bldg 66006 Septic System, SOR
10-21-BB	ST-346	Trestle Site Septic Tank
WP-26	WP-026	Sewage Lagoons & Golf Course Pond
LF-56	LF-056	Landfill D
WP-58	WP-058	Bldg 20451, East Laundry
ST-59	ST-059	ART Drum
ST-60	ST-060	ART Pit
ST-64	ST-064	COE Vehicle Maintenance Yard (Former ST-337)
SS-65	SS-065	Horizontal Dipole Drum Rack (Former ST-338)
ST-66	ST-066	Trestle Facility OWS and Pit
DP-67	DP-067	Three Mine Shafts
RW-68	RW-068	Radium Dump/Slag Pile & Cratering Area
SS-69	SS-069	Drum Storage Area
ST-70-A	ST-070	Bldg 333/334 OWS & Sediment Trap (Former ST-202 & ST-203)
ST-70-B	ST-070	Bldg 377 OWS, Tank, & Drying Rack (Former ST-210)
ST-70-C	ST-070	Bldg 381, Oil/Water Separator (Former ST-211)
ST-70-D	ST-070	Bldg 471, 2 Oil/Water Separators (Former ST-215 & ST-216)
ST-70-E	ST-070	Bldgs 481/482 Oil/Water Separator (Former ST-219)
ST-70-F	ST-070	Bldg 2637 Oil/Water Separator (Former ST-247)
ST-70-G	ST-070	Bldg 20205 Oil/Water Separator (Former ST-248)
ST-70-H	ST-070	Bldg 20375 Oil/Water Separator (Former ST-256)
ST-70-I	ST-070	Bldg 20422 Oil/Water Separator (Former ST-260)
ST-72	ST-072	Bldg 30146, MWSA Security Garage OWS (Former ST-265)
ST 73	ST-073	CERF Drain
OT-74	OT-074	Pistol Range Sites
SS-76	SS-076	Fuel Tank Burn Area
SS-77	SS-077	Abandoned Railroad Spur
SS-78	SS-078	Water Tower Soils
SS-79	SS-079	Bldg 381 Spill Site
ST-80	ST-080	Bldg 30124, Auto Hobby Shop
SS-81	SS-081	Bldg 907 Detention Pond and Yard
SS-82	SS-082	ALECS Facility
SS-83	SS-083	Skeet Range and Landfill Road
RW-84	RW-084	Manzano Burial Sites
OT-86	OT-086	Former Small Arms Range
WP-87	WP-087	GRABS Site Waste Pile
DP-88	DP-088	Trestle Site Disposal Area
SS-89	SS-089	Transportation Yard
SD-90	SD-090	JATO Rocket Motor Disposal Site
OT-91	OT-091	South Coyote Firing Site
DP-99	DP-099	Bldg 29015 Disposal Pit
ST-100	ST-100	Coyote Springs Cesspool
DP-101	DP-101	Old EOD Disposal Pits
SS-102	SS-102	ARES Test Facility

Corrective Action Unit No.	KAFB No.	DESCRIPTION
SS-103	SS-103	Jet Engine Test Cell Spill Site
LF-107	LF-107	VA Hospital Demolition Debris Landfill
ST-326	ST-326	Waste Oil Storage Tank, Bldg 20375
ST-328	ST-328	Blast Overpressure Sites Cesspools
WP-339	WP-339	Contractor Yard West of Bldg 20423
ST-341	ST-341	Evap Pond/Condensate Tank, Bldg 1033
ST-347	ST-347	Building 29015 Cesspool

NEW UNITS NOT ASSIGNED A CAU NUMBER

Corrective Action Unit No.	KAFB No.	DESCRIPTION
N/A	ST-109	Acetone Spill Site
N/A	ST-350	Field Office Septic Tank
N/A	ST-356	Skeet Range Septic Tank

UNITS WITH FINAL NFA APPROVAL

Corrective Action Unit No.	KAFB No.	DESCRIPTION
---------------------------------------	---------------------	--------------------

Non-RCRA UNITS (Included in Quarterly Report but Not HMB Oversight)

Corrective Action Unit No.	KAFB No.	DESCRIPTION
N/A	OT-010	Radiation Training Sites 5-8
N/A	RW-075	South Tijeras Rad Trench
N/A	RW-085	Manzano Maintenance Bldg
N/A	XU-092	Proximity Fuse Range
N/A	XU-093	Tijeras Mortar Range
N/A	XU-094	Coyote M-20 Range
N/A	XU-095	Tijeras Small Arms Ranges
N/A	XU-096	Frustration Mortar Range
N/A	XU-097	Field Firing Range
N/A	XU-098	McCormick Ranch Range (UXO)
N/A	XU-104	Military Munitions Rule Sites
N/A	ST-105	TCE and Nitrate Contaminated Grndwtr
N/A	ST-106	Spill At Bulk Fuels Facility
N/A	ST-108	Abandoned Fuel Lines

III. SUMMARY OF ACTIVITIES AND FINDINGS

A. SWMU Assessments and New CAUs and AOCs:

1. SWMU Assessments:

- CAU ST-100, Coyote Springs Cesspool (ST-100): We completed and submitted the SWMU Assessment Report.
- DP-101, Old EOD Disposal Pit (DP-101): We completed and submitted the SWMU Assessment Report.
- CAU SS-103, Jet Engine Test Cell Spill Site (SS-103): Developing the draft SAP for installation and sampling of soil borings.
- CAU LF-107, VA Hospital Demolition Debris Landfill (LF-107): Developing the SAP for the installation and sampling of soil borings.

2. New AOCs:

- AOC ST-109, Acetone Spill Site: Kirtland AFB EM personnel identified this site during the field investigation of the fuel spill at the Bulk Fuels Facility. During the investigation, elevated levels of acetone were detected in soil to a depth of 270 feet. The site is located in the northwest portion of Kirtland AFB between the Bulk Fuels Facility and the Defense Reutilization and Marketing Office Facility. The volatile organic compounds (VOCs) acetone and three related ketones, methyl ethyl ketone (MEK), methyl butyl ketone (MBK), and methyl isobutyl ketone (MIBK), have been discovered in soil borings installed as part of the fuel release investigation conducted from Jul 00 to the present. The borings are located in areas around the fuel offloading rack and the associated pump house. The subsurface stratigraphy is characterized by three major clay layers (13-30 feet thick each) at depths of 15, 140 and 270 feet below grade surface. Poor to well-graded sands and silty sands separate the clay units. Acetone has been detected more frequently, more extensively, and at greater concentrations than the other ketones. Acetone has been detected in 19 of the 29 soil borings. The detections of acetone have occurred at depths ranging from 12 – 270 fbs, and concentrations have ranged from 0.053 to 380 mg/kg, which are below the EPA Region 6 Human Health Risk Based Screening level of 1500 mg/kg. In general, the acetone concentrations increase with depth, corresponding to the sand units between the clay layers. The highest concentrations were detected on top of the deepest clay layer at a depth of 270 fbs. Acetone has not been detected below this clay layer. A monitor well was installed as part of the fuels release investigation. The well is located adjacent to and down gradient of the area of greatest fuel contamination and completed in the regional aquifer. KAFB and the NMED Groundwater Quality Bureau collected groundwater samples from the monitor well in Nov 00. No VOCs were detected in either groundwater samples. The source of the ketones has not been identified and the extent of the contamination has not been determined. The source of the acetone is

presumed to be from leakage or spillage from railroad tank cars previously located at the site. Records indicate that bulk acetone was delivered via railroad tank cars to the site through the 1980s.

B. RCRA Facility Investigation (RFI):

1. Sampling and Analysis Plans (SAPs):

- CAU 9-4, Building 617, Waste Accumulation Area (ST-276): We completed the draft SAP for additional soil sampling at the site.
- CAU ST-80, Building 30124, Manzano Auto Hobby Shop (ST-80): We completed the draft SAP for a geophysical survey and confirmation soil sampling at the site.
- CAU RW-84, Manzano Burial Sites (RW-84): We continued developing the SAP for an additional geophysical survey and reviewed the results of the recent aerial radiation survey conducted by Battelle for Sandia National Laboratories. We identified potential anomalies for further investigation.
- CAU OT-91, South Coyote Firing Site (OT-91): We began developing the SAP for additional sampling requested by NMED/HWB.

2. Field Work: No Activity

3. Reports: No Activity

C. Risk Assessment:

1. Ecological Risk:

- CAU 10-2, Storm Sewer Systems (10-2A – 10-2H): We submitted the final ecological risk assessment.
- CAU 10-21, Septic Systems (10-21A - 10-21BB): We submitted the final ecological risk assessment.
- CAU SS-77, Abandoned Railroad Spur (SS-77): We submitted the final ecological risk assessment.
- CAU SS-78, Water Tower Soils (SS-78): We submitted the final ecological risk assessment.
- CAU SS-81, Bldg 907, Detention Pond and Yard (SS-81): We submitted the final ecological risk assessment.
- CAU OT-86, Former Small Arms Ranges (OT-86): We submitted the final ecological risk assessment.
- CAU DP-88, Trestle Site Disposal Area (DP-88): We submitted the final ecological risk assessment.

2. Human Health Risk:

- CAU 8-35, Waste Oil Storage Tank, Building 471 (ST-214): We submitted the final human health risk assessment.
- CAU 10-2, Storm Sewer Systems (10-2A – 10-2H): We submitted the final human health risk assessment.
- CAU 10-21, Septic Systems (10-21A - 10-21BB): We submitted the final human health risk assessment.
- CAU SS-77, Abandoned Railroad Spur (SS-77): We submitted the final human health risk assessment.
- CAU SS-78, Water Tower Soils (SS-78): We submitted the final human health risk assessment.
- CAU SS-81, Bldg 907, Detention Pond and Yard (SS-81): We submitted the final human health risk assessment.
- CAU SS-82, ALECS Facility (SS-82): We submitted the final human health risk assessment.
- CAU OT-86, Former Small Arms Ranges (OT-86): We submitted the final human health risk assessment.
- CAU DP-88, Trestle Site Disposal Area (DP-88): We submitted the final human health risk assessment.

D. Corrective Measures Study (CMS):

1. Work Plans:

- CAU SS-81, Building 907 Detention Yard and Pond (SS-81): We continued preparing the CMS work plan.

2. Study and Field Work:

- CAU ST-70-E KAFB Oil/Water Separators (ST-70): We continued the pilot-scale bioventing test at the Bldg 481/482 OWS site.

3. Reports:

- CAU 9-20, Building 909, Waste Accumulation Area (SS-62): We continued preparing the draft CMS report.
- CAU ST-72, Building 30146, MWSA Security Garage OWS (ST-72): We continued preparing the draft CMS report.
- CAU ST-341, Condensate Holding Tank and Evaporation Pond (ST-341): We continued preparation of the CMS report.

E. Voluntary and Interim Corrective Measures (ICMs):

1. Work Plans: No Activity

2. Field Work:

- CAU ST-341, Condensate Holding Tank and Evaporation Pond (ST-341): We completed chemical oxidation treatment of soil hydrocarbon-contamination at the condensate tank area. Confirmation soil samples were collected from the condensate tank area to evaluate the performance of the chemical oxidation treatment.

3. Reports:

- CAU 6-2, Landfill No. 2 (LF-02): We are reviewing the draft completion report for the Tijeras Arroyo Stabilization ICM.
- CAU 6-22, Lake Christian (OT-46): Comments have been provided to be incorporated into the final ICM report. The report summarizes the site-specific investigation, sampling and analysis, and associated ICM field activities.
- CAU SS-78, Water Towers Soils (SS-78): We continued preparing the draft ICM report.
- CAU SS-79, Building 381 Spill Site (SS-79): We continued preparing the draft ICM report
- CAU RW-84, Manzano Burial Sites (RW-84): Reporting activities for the draft ICM report are on hold pending receipt of the Sandia National Laboratories' aerial survey, which will be included in the report and was performed during the summer of 2000.
- CAU WP-87, GRABS Site Waste Pile (WP-87): We continued preparing the draft ICM report.

F. Corrective Measures (CMDs/CMIs):

1. Designs:

- CAU 6-2, Landfill No. 2 (LF-02): Work is continuing on development of the preliminary design.
- CAU 6-4, Landfill No. 4,5,6 (LF-08): Comments to the prefinal design were received from NMED, Kirtland AFB, and USACE and incorporated into the final design and work plan. These documents were issued in March.

2. Field Activities:

- CAU 6-1, Landfill No. 1 (LF-01): We commenced construction of the evapo-transpiration cover by crushing clean salvage concrete that will be used as subgrade material.
- CAU 6-4, Landfill No. 4,5,6 (LF-08): We commenced construction of the evapo-transpiration cover. Initial activities included site mobilization and preparation.

3. Reports:

- CAU 6-7, Landfill A (LF-18): We completed the final report for the CMI.
- CAU 6-15, Unnamed Dump (LF-45): We completed the final report for the CMI

G. Other Investigations and Activities:

1. Groundwater Monitoring (LTM):

a). CAUs included in the LTM program are CAUs 6-1, 6-2, 6-4, 6-16, 6-22, 6-29, 6-30, 6-31, WP-339, and WP-26 Golf Course Main Pond and Sewage Lagoons. The results of the June 2000 quarterly sampling event were submitted on October 9, 2000. The September semiannual detection-monitoring event was initiated on September 7 and completed on October 10, 2000. The event included water level measurements and sample collection for all LTM wells. The results were submitted in December and also included in the FY00 LTM Annual Report. The December 2000 quarterly sampling event was performed December 12 and 13, 2000. The event included water level measurements at all LTM wells and two new wells, KAFB-7201 and KAFB-7202. Sampling and analysis was performed on three wells for the December event: KAFB-0315, KAFB-7201, and KAFB-7202. The February 2001 LTM event was performed on February 20, and included well gauging all wells at LF-268, and LF-20, and sampling well KAFB-0315. The March 2001 semiannual detection-monitoring event was initiated on March 12 and completed in mid April. All LTM wells were gauged and sampled. Data management and reporting activities for the LTM are ongoing.

b). CAU 6-4, Landfill No. 4,5,6 (LF-08): Installation of the groundwater monitoring well KAFB-0315 was initiated on August 28. The well was developed on September 28. A well installation report was submitted on October 20, 2000. The report will be revised to include the Sewage Lagoon well installation, KAFB-0507.

c). CAU WP-26, Sewage Lagoons and Golf Course Main Pond (WP-26): Sewage Lagoons and Golf Course Main Pond (WP-26): Installation of groundwater monitoring well KAFB-0507 was completed in February 2000. The well was sampled during the March semiannual detection-monitoring event. A well installation summary report will be generated to include both KAFB-0507 and KAFB-0315.

2. Base-Wide Background and Hydrogeology: No activity.

3. TCE Characterization and Abatement (ST-105): We continued to analyze samples from the LTM program for TCE.

4. Nitrate Contamination (ST-105): We began subcontracting and other planning activities to prepare for the groundwater investigation and installation of the first groundwater monitoring well. We issued replacement pages in response to the comments from the NMED Groundwater Bureau on the Stage 1 Abatement Plan for Nitrate-Impacted groundwater at Kirtland AFB.

5. Management Action Plan (MAP) Update: No Activity.

6. No Further Action (NFA):

- CAU 6-32, Manzano Fire Training Area (FT-14): During preparation of the No Further Action report, we determined that some additional sampling will be required prior to making a determination regarding NFA at the site. We prepared a draft SAP for the sampling activities and began revisions to the draft SAP to prepare the final SAP.
- CAU 8-35, Waste Oil Storage Tank, Building 471 (ST-214): We submitted the final No Further Action Proposal
- CAU 10-2, Storm Sewer Systems: We submitted the final No Further Action Proposal
- CAU 10-21 Septic Systems: We submitted the final No Further Action Proposal
- CAU SS-77, Abandoned Railroad Spur (SS-77): We submitted the final No Further Action Proposal
- CAU SS-82, ALECS Facility (SS-82): We submitted the final No Further Action Proposal

7. Base-Wide Plan: No Activity

8. HSWA Survey: No Activity

9. Post Closure Care at CAU WP-26, Sewage Lagoons and Golf Course Main Pond: We continued post closure reporting.

10. Radiation Training Sites 5-8 (OT-10): We continued preparing the remedial action work plan.

11. Spill at Bulk Fuels Facility (ST-106): We continued the deep soil boring investigation program at the site. We met with NMED personnel to discuss progress and proposed schedule. We continued to detect concentrations of Total Petroleum Hydrocarbons (TPH), VOCs, and acetone at concentrations greater than applicable regulatory standards.

H. Budget and Program: No Activity

I. Restoration Advisory Board (RAB): We held the RAB meeting on January 18, 2001. Kirtland AFB provided a briefing on the FY01 program. Montgomery Watson provided a presentation on the status of the decommissioning plan for OT-10 Radiation Training Sites and the nitrate abatement activities at Kirtland AFB. CH2MHill provided a presentation on the status of the investigation of the fuel spill at the Bulk Fuels Facility (ST-106) and Foster Wheeler Environmental presented the status of the CMDs at LF-01, LF-02 and LF-08. This was the first joint KAFB/DOE quarterly meeting and had a higher number of attendees than any previous RAB meetings.

J. Perchlorate Survey: Sampling and analysis for perchlorate was performed at Lake Christian and McCormick Ranch in conjunction with the March 2001 LTM semiannual detection-monitoring event. Reporting is ongoing.

K. Military Munitions Rule: We are incorporating all internal comments for the Management Action Plan for the Military Munitions Rule.

L. Range Inventory: No Activity

IV. SUMMARY OF PROBLEMS

A. SWMU Assessments and New CAUs and AOCs: No problems encountered.

B. RCRA Facility Investigation: No problems encountered.

C. Risk Assessment: No problems encountered.

D. Corrective Measures Study:

- CAU 6-32, Manzano Fire Training Area (FT-14): The data from the CMS indicate that there were still elevated levels of TPH in the surface soils after the ICM was completed. We prepared a draft SAP to collect 5 additional soil samples to determine if the TPH levels are still present in the surface soils.

E. Voluntary and Interim Corrective Measures: No problems encountered.

F. Corrective Measures: No problems encountered.

G. Other Investigations and Activities:

1. Groundwater Monitoring: No problems encountered.

2. Base-Wide Background and Hydrogeology: No problems encountered.

3. TCE Characterization and Abatement: No problems encountered.

4. Nitrate Contamination: No problems encountered.

5. Management Action Plan Update: No problems encountered.

6. No Further Action: No problems encountered.

7. Base-Wide Plan: No problems encountered.

8. HSWA Survey: No problems encountered.

9. Post Closure Care at CAU WP-26, Sewage Lagoons and Golf Course Main Pond: No problems encountered.

10. Radiation Training Sites 5–8 (OT-10): Sampling and analysis activity at the sites will be expanded to address issues identified by AFIERA and AFMOA.

11. Fuel Spill At Bulk Fuels Facility (ST-106): No problems encountered.

H. Budget & Program: No problems encountered.

I. Restoration Advisory Board: No problems encountered.

J. Perchlorate Survey: No problems encountered.

K. Military Munitions Rule: No problems encountered.

L. Range Inventory: No problems encountered.

V. PROJECTED WORK FOR THE NEXT REPORTING QUARTER

A. SWMU Assessments:

- CAU SS-103, Jet Engine Test Cell Spill Site (SS-103): We will complete and submit the SAP and field work for installation and sampling of soil borings and begin preparing the SAR.
- CAU LF-107, VA Hospital Demolition Debris Landfill (LF-107): We will complete and submit the SAP, initiate and complete fieldwork for the installation and sampling of soil borings, and begin preparing the SAR.

B. RCRA Facility Investigation:

1. Sampling and Analysis Plans:

- CAU 9-4, Waste Accumulation Area, Building 617 (ST-276): We will submit the final SAP for additional sampling activities at the site.
- CAU ST-80, Auto Hobby Shop Building 30124 (ST-80): We will submit the final SAP for additional sampling activities at the site.
- CAU RW-84, Manzano Burial Sites (RW-84): The SAP for an additional geophysical survey at the CAU will be submitted.
- CAU OT-91, South Coyote Firing Range (OT-91): We will submit the final SAP for additional sampling requested by NMED/HWB.
- CAU DP-99, Building 29015 Disposal Pit (DP-99): We will begin preparation of plans for nature and extent investigation.
- CAU SS-102, ARES Test Facility (SS-102): We will begin preparation of plans for installation and sampling of a downgradient groundwater monitoring well.

- ST-108, Abandoned Fuel Lines (ST-108): We will begin preparation of plans for nature and extent investigation.
- CAU WP-339, Contractor Yard West of Bldg 20423 (WP-339): We will prepare and submit the SAP for the installation of 2 regional and 1 perched aquifer wells.

2. Field Work:

- CAU 9-4, Waste Accumulation Area, Building 617 (ST-276): Additional sampling will be conducted to define the areal extent of SVOC-contamination at the site.
- CAU ST-80, Bldg 30124 Auto Hobby Shop (ST-80): Additional sampling will be conducted to define the areal extent of SVOC- and metals-contamination at the site.
- CAU RW-84, Manzano Burial Sites (RW-84): We will complete an initial site walk-through for the additional geophysical survey and confirmation soil borings. We will identify the appropriate aerial geophysical technique for the survey and begin procurement of the subcontractor.
- CAU OT-91, South Coyote Firing Range (OT-91): We will collect additional samples requested by NMED/HWB.

3. Reports:

- CAU WP-339 South, Contractor Yard West of Bldg 20423 (WP-339 South): We will submit the draft RFI Report for the soil sampling activities.
- CAU OT-91, South Coyote Firing Range (OT-91): We will begin preparation of the draft report.

C. Risk Assessment:

1. Ecological Risk:

a). We will initiate Ecological Risk Assessments/Screenings at the following CAUs: No activity planned.

b). We will complete Ecological Risk Assessments at the following CAUs:

- CAU WP-87, GRABS Site Waste Pile (WP-87)
- CAU ST-341, Evaporation Pond/Condensate Tank, Building 1033 (ST-341)

2. Human Health Risk

a). We will initiate Human Health Risk Assessments/Screenings at the following CAUs: No activity planned.

b). We will complete Human Health Risk Assessments at the following CAUs:

- CAU SS-79, Building 381 Spill Site (SS-79)
- CAU WP-87, GRABS Site Waste Pile (WP-87)
- CAU ST-341, Evaporation Pond/Condensate Tank, Building 1033 (ST-341)

D. Corrective Measures Study

1. Work Plans:

- CAU 6-32, Manzano Fire Training Area (FT-14): We will collect five additional surface samples for TPH analysis.
- CAU SS-81, Building 907 Detention Pond and Yard (SS-81): We will submit final SAP for the collection of representative soil for the chemical oxidation bench test.
- CAU ST-341, Condensate Holding Tank and Evaporation Pond (ST-341): We will complete and submit the CMS report.

2. Field Work and Study:

- CAU ST-70-E, Kirtland Oil/Water Separators (ST-70): We will continue the pilot-scale bioventing test at Buildings 481/482.
- CAU SS-81, Building 907 Detention Basin and Yard (SS-81): We will perform sampling for bench studies of PAH chemical oxidation.

3. Reports:

- CAU 9-20, Bldg 909 Waste Accumulation Area (SS-62): We will complete and submit the CMS report.
- CAU SS-81, Building 907 Detention Pond and Yard (SS-81): We will begin summarization of bench study results in a CMS report.
- CAU ST-341, Condensate Holding Tank and Evaporation Pond (ST-341): We will submit the CMS report.

E. Voluntary and Interim Corrective Measures:

1. Work Plans: No activity planned.

- CAU SS-81, Building 907 Detention Basin and Yard (SS-81): We will begin preparation of plans for implementation of PAH chemical oxidation.
- CAU OT-91, South Coyote Firing Range (OT-91): We will begin preparation of plans for site cleanup.
- CAU OT-74, Pistol Range Sites (OT-74): We will begin preparation of plans for site cleanup.

2. Field Work: No activity planned.

3. Reports:

- CAU 6-2, Landfill No. 2 (LF-02): We will submit the final completion report for the Tijeras Arroyo Stabilization ICM.
- CAU 9-20, Bldg 909 Waste Accumulation Area (SS-62): We will submit the final ICM report as an appendix to the CMS report.
- CAU ST-72, Building 30146, MSWA Security Garage OWS (ST-72): We will submit the final ICM report as an appendix to the CMS report.
- CAU SS-78, Water Towers Soils (SS-78): We will submit the draft ICM report.
- CAU SS-79, Spill Site Building 381 (SS-79): We will submit the draft ICM report.
- CAU WP-87, GRABS Site Waste Pile (WP-87): We will submit the draft ICM report.

F. Corrective Measures

1. Designs:

- CAU 6-2, Landfill No. 2 (LF-02): We will submit the prefinal design and draft construction work plan.

2. Implementation:

- CAU 6-4, Landfill No. 4,5,6 (LF-08): We will continue construction of the evapo-transpiration cover.

3. Request for Supplemental Information (RSI) from NMED for Additional Characterization at eight landfills: During the next reporting period the draft work plan for the additional characterization will be developed. The sites are listed below:

- CAU 6-1, Landfill 1 (LF-01)
- CAU 6-2, Landfill 2 (LF-02)
- CAU 6-3, Landfill 3 (LF-07)
- CAU 6-4, Landfills 4, 5, & 6 (LF-08)
- CAU 6-8, Landfill B (LF-15)
- CAU 6-29, Landfill 20 (LF-20)
- CAU 6-11, Landfill 44 (LF-44)
- CAU LF-56, Landfill 56 (LF-56)

The RSI was submitted to Kirtland AFB in response to state agency review of the Phase II RCRA Facility Investigation. Planned field activities at these landfills include active soil gas sampling for methane, passive soil gas sampling for volatile organic compounds (VOCs), subsurface soil sampling, and test pit excavation. For the most part, the RSI is based on the evaluation of existing geophysical surveys and sampling results for the landfills, and new information available that indicates additional investigation is

necessary in order to proceed with finalizing corrective measures studies, designs, and/or corrective measure implementation at these sites.

G. Other Investigations and Activities:

1. Groundwater Monitoring: The June LTM sampling event will include well gauging all wells at CAU 6-4 (LF-268) and sampling of well KAFB-0315.

2. Base-Wide Background and Hydrogeology: No activity planned.

3. TCE Characterization and Abatement: No activity planned.

4. Nitrate Contamination: We will continue field activities to further characterize the nitrate contamination.

5. Management Action Plan Update: No activity planned.

6. No Further Action:

- CAU 6-32, Manzano Fire Training Area (FT-14): We will complete and submit the CMS report.
- CAU 9-15, Building 617, Neutralization Pit (ST-271): We will submit the final NFA proposal.
- CAU 9-16, Building 617, Evaporation Pond (ST-272): We will submit the final NFA proposal.
- CAU 10-2 (all), Storm Sewer Systems: We will submit the NFA report.
- CAU 10-21 (all), Septic Tanks: We will submit the NFA report.
- CAU ST-73, CERF Drains (ST-73): We will complete and submit the NFA report.
- CAU SS-83, Skeet Range and Landfill Road (SS-83): We will submit the final NFA proposal.
- CAU OT-86, Former Small Arms Ranges (OT-86): We will submit the final NFA proposal.
- CAU ST-328, Blast Overpressure Site Cesspools (ST-328): We will complete and submit the NFA report.

7. Base-Wide Plan: No activity planned.

8. HSWA Survey: No activity planned.

9. Post Closure Care at Site WP-26, Sewage Lagoons and Golf Course Main Pond: No activity planned.

10. Radiation Training Sites 5-8 (OT-10): We will complete the initial gamma radiation survey and soil sampling at the sites.

11. Fuel Spill at Bulk Fuels Facility (ST-106): We will complete the subsurface soils investigation to determine the horizontal and vertical extent of the TPH concentrations that exceed the 100 ppm action level. We will complete the soil borings as vadose zone monitoring wells. We will submit the Stage 1 Abatement Plan to NMED.

H. Program and Budget: We will begin preparing the FY02 budget and program documents.

I. Restoration Advisory Board: We will hold our next meeting on April 19, 2001 in conjunction with the DOE's Quarterly Meeting. We will provide a briefing of the FY02 budget and use the meeting as the public forum for presenting the proposed modifications to the Sub Part X permitted Explosive Ordnance Disposal Range. We will also provide a presentation about the ICM at CAU 6-22, Lake Christian (OT-46).

J. Perchlorate Survey: No activity planned.

K. Military Munitions Rule: We will submit the final Management Action Plan for the Military Munitions Rule.

I. Range Inventory:

- Site XU-93, Tijeras Mortar Range: We will have a geophysical expert perform a field inspection of the suspected site. We will prepare a work plan for investigation of the area to establish if the area was ever used as a mortar range.


CHRISTOPHER B. DEWITT, GS-13
Chief,
Installation Restoration Program Branch