



DEPARTMENT OF THE AIR FORCE
HEADQUARTERS 377TH AIR BASE WING (AFMC)

 ENTERED

JAN 31 2014

Colonel Tom D. Miller
377 ABW/CC
2000 Wyoming Blvd SE
Kirtland AFB, NM 87117-5000

RECEIVED

Mr. John Kieling, Manager
RCRA Permits Management Program
Hazardous Waste Bureau (HWB)
New Mexico Environment Department (NMED)
2905 Rodeo Park Road
Santa Fe, New Mexico 87505

FEB 7 2014

NMED
Hazardous Waste Bureau

Dear Mr. Kieling

Kirtland Air Force Base (AFB) is pleased to submit the quarterly Resource Conservation and Recovery Act Corrective Action Report for the period 1 October – 31 December 2013, as required by the conditions set forth in the permit issued to Kirtland AFB (EPA ID NM9570024423) in July 2010 to operate a hazardous waste treatment facility as outlined in Sections 6.1.6 and 6.2.4.1.

Please contact Mr. Cole Crosgrove at (505) 853-3098 or at cole.crosgrove@kirtland.af.mil if you have any questions.

Sincerely

TOM D. MILLER, Colonel, USAF
Commander

KAFB4120



Attachment:

RCRA CA Quarterly Report 01 October – 31 December 2013

cc:

377 MSG/CEI

NMED-HWB (Mr. Moats)

NMED-HWB (Mr. McDonald with attachments)

EPA Region 6 (Ms. King)

NMED-GWQB (Mr. Faris)

NMED-PSTB (Mr. Reuter)

AFCEE/CMSE (Mr. Oyelowo)

USACE Omaha (Mr. Zink)

CB&I (Mr. Cooper)

CH2M HILL (Ms. Minchak)

TLI Solutions (Mr. Swanson)

Public Info Repository (Central New Mexico)

Community College Montoya Campus

File

**ENVIRONMENTAL RESTORATION PROGRAM
KIRTLAND AIR FORCE BASE, NEW MEXICO**

***RESOURCE CONSERVATION AND RECOVERY ACT*
CORRECTIVE ACTION QUARTERLY REPORT
1 October through 31 December 2013**

EPA ID NM9570024423

January 2014

THIS PAGE INTENTIONALLY LEFT BLANK

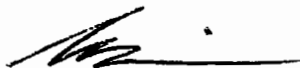
**40 CFR 270.11
DOCUMENT CERTIFICATION
JANUARY 2014**

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



TOM D. MILLER, Colonel, USAF
Commander, 377th Air Base Wing

This document has been approved for public release in accordance with Department of Defense Directives and Air Force Instructions.



KIRTLAND AIR FORCE BASE
377th Air Base Wing Public Affairs

THIS PAGE INTENTIONALLY LEFT BLANK

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 was issued to Kirtland Air Force Base (AFB) to operate a hazardous waste treatment facility (EPA ID NM9570024423, July 2010).
- B. This Quarterly Report is consistent with the terms and conditions of the permit found under Sections 6.1.6 and 6.2.4.1. Item 2 in section 6.2.4.1, the requirement for lab data summary inclusion in quarterly reports, is met via site report submittals to avoid undue mass submittals and duplication efforts.

II. DESCRIPTION OF WORK COMPLETED

The following tables list the Solid Waste Management Units (SWMUs) and Areas Of Concern (AOCs) requiring corrective action as listed in Table I-3 of the RCRA permit, the SWMUs and AOCs for which corrective action is complete without controls as shown in Table K-1 of the RCRA permit, and sites not regulated under RCRA. Corrective action is conducted under the Kirtland AFB Environmental Restoration Program (ERP) and the Environmental Compliance Program (ECP). Each Kirtland AFB ERP or ECP site listed below includes the SWMU number, the Kirtland AFB identification number, and the site name.

SWMUs and AOCs Requiring Corrective Action

SWMU	KAFB No.	Site Name
6-1	LF-001	Landfill No. 1
6-2	LF-002	Landfill No. 2
6-4	LF-008	Landfill 4, 5, & 6
6-24	WP-016	Manzano Sewage Treatment Facility
6-30	RW-006	Radioactive Burial 11
10-2-A	ST-325	Corrosion Control Shop, Storm Drain, Bldg 482
10-2-B	ST-220	Paint Shop, Bldg 1001, Storm Drain
10-2-C	ST-220	Plating & Anodizing, Bldg 1001, Storm Drain
10-2-D	ST-329	Propulsion Branch Floor Drains, Bldg 336
10-2-F	ST-325	H-3/H-53, Phase Dock, Bldg 1000 Floor Drains
10-2-G	ST-331	C-130 Maintenance Shop Bldg 1009, Storm Sewer
10-2-H	ST-285	West Storm Sewer System
10-2-I	ST-286	East Storm Sewer System
10-7-V	ST-267	Oil/Water Separator, Bldg 57007
10-21-B	ST-288	Bldg 614 Septic System
	ST-289	Bldgs 617/620 Septic System
	ST-291	Bldg 617 Septic System
10-21-C	ST-294	Bldg 633 Septic System
	ST-298	Bldgs 730 & 734 Septic System
	ST-299	Bldg 751 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

SWMU	KAFB No.	Site Name
10-21-S	ST-314	Bldgs 48056 & 48059 Septic System
10-21-T	ST-316	Bldgs 57003/57012 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-Z	ST-330	Bldg 1032 Septic System
10-21-AA	ST-333	Bldg 66001 Septic System, SOR
	ST-343	Bldgs 66000/66008 Septic System, SOR
	ST-344	Bldg 66042 Septic System, SOR
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-258)
ST-70-I	ST-070	Bldg 20422 Oil/Water Separator (Former ST-260)
ST-73	ST-073	CERF Drain
DP-88	DP-088	Trestle Site Disposal Area
WP-26	WP-026	Sewage Lagoons & Golf Course Pond
SS-102	SS-102	ARES Test Facility
RW-68	RW-068	Radium Dump/Slag Pile & Cratering Area (<i>Reopened</i>)
DP-67	DP-67	Three Mine Shafts (<i>Reopened</i>)
6-19	OT-029	EOD Range (<i>to be closed with the Open Burn/Open Detonation Unit</i>)
ST-106	ST-106	Spill At Bulk Fuels Facility
SS-111	SS-111	Bulk Fuels Facility Phase-Separated Hydrocarbon (PSH)
MBG	ST-105	Manzano Base Groundwater, TCE-Contaminated Groundwater
TAG	ST-105	Tijeras Arroyo Groundwater, TCE-Contaminated Groundwater
WYO-4	ST-105	Monitoring Well WYO-4 Area, TCE Contaminated Groundwater
McCormick Ranch ^a	ST-105	Nitrate-Contaminated Groundwater

^a The Nitrate-Contaminated Groundwater portion at ST-105 is regulated by the New Mexico Environment Department Ground Water Quality Bureau (NMED-GWQB). The TCE-contaminated groundwater at ST-105 is regulated by the NMED-Hazardous Waste Bureau (NMED-HWB).

**SWMUs and AOCs for which Corrective Action is Complete
without Controls (Granted No Further Action Status)**

SWMU	KAFB No.	Site Name
Class 3 Permit Modification Dated 28 August 2003		
6-7	LF-018	Landfill A
6-10	LF-009	Abandoned Landfill
6-15	LF-045	Unnamed Dump
6-16	FT-013	Kirtland Fire Training Area
8-53	ST-335	Paint Shop Floor Drain Bldg 20681
8-58	ST-321	Battery Storage Area, Bldg 57007
10-3	ST-249	Waste Oil Storage Tank Bldg 20205
ST-66	ST-066	Trestle Facility Oil/Water Separator and Pit
RW-68	RW-068	Radium Dump/Slag Pile & Cratering Area
SS-76	SS-076	Fuel Tank Burn Area
SS-83	SS-083	Skeet Range & Landfill Road
ST-326	ST-326	Waste Oil Storage Tank Bldg 20375
ST-328	ST-328	BOP Site Cesspools

SWMU	KAFB No.	Site Name
Class 3 Permit Modification Dated 3 August 2005		
06-A1	RW-021	Radioactive Burial Site 7
08-49	SS-061	Bldg 20677 Fuel Shop Battery Storage Area (ST-275)
DP-067	DP-067	Three Mine Shafts
LF-056	LF-056	Landfill D
OT-086	OT-086	Former Small Arms Firing Range Disposal Pit Building 29015
RW-085	RW-085	Manzano Maintenance Building
SS-065	SS-065	Horizontal Dipole Drum Rack
SS-082	SS-082	ALECS Facility
SS-103	SS-103	Jet Engine Test Fuel Line
ST-059	ST-059	ART Drum
ST-060	ST-060	Armament Research Test (ART) Facility Drain Pit
Class 3 Permit Modification Dated 21 September 2005		
06-08	LF-015	Landfill B
06-29	LF-020	Manzano Landfill ("Manzano Dump")
06-A2-A	RW-004	Radioactive Holding Tank RB-4
06-A2-B	RW-005	Radioactive Holding Tank RB-5
06-A2-C	RW-017	Radioactive Holding Tank RB-6
06-A2-D	RW-019	Radioactive Holding Tank RB-8
06-A2-E	RW-023	Radioactive Holding Tank RB-9
08-13	ST-071	Bldg 1000/1001 Oil/Water Separator (Formerly ST-221)
09-14	ST-270	Buried Caustic Drain Line Bldg 617
09-15	ST-271	Neutralization Pit Bldg 617
09-16	ST-272	Evaporation/Infiltration Pond Bldg 617
10-21-OO	ST-355	Riding Stables Residence
10-21-S	ST-353	Building 48057 Septic Tank
10-21-S	ST-354	Sheep Grooming Septic Tank
OT-010	OT-010	Radiation Training Sites 5-8 (TS5, TS6, TS7)
RW-075	RW-075	South Tijeras Radiation Trench
SS-069	SS-069	Drum Storage Area
ST-100	ST-100	Coyote Springs Cess Pool
ST-341	ST-341	Condensate Tank Bldg 1033
WP-058	WP-058	East Laundry Bldg 20451
Class 3 Permit Modification Dated 29 November 2005		
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 Building 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

SWMU	KAFB No.	Site Name
	ST-235	Oil/Water Separator Bldg 1051
	ST-236	Oil/Water Separator Bldg 1051
	ST-237	Area Drain Bldg 1051
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	Oil/Water Separator Bldg 20422
10-7-T	ST-263	Oil/Water Separator Bldg 23226
10-7-U	ST-264	Oil/Water Separator Bldg 30142
Class 3 Permit Modification Dated 27 February 2006		
6-14	ST-051	Sewage Effluent Line
8-5	ST-201	Oil/Water Separator, Bldg 255
8-6	WP-047	Silver Recovery Unit
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
8-31	ST-252	Oil/Water Separator, Bldg 20348
	ST-253	Oil/Water Separator, Bldg 20348
8-41	ST-274	Waste Battery Storage Area, Bldg 20423
8-47	ST-261	Oil/Water Separator, Bldg 20423
8-55	ST-262	Oil/Water Separator, CE Bldg 20698
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-283	Sanitary Sewer System F
10-1-G	ST-284	Sanitary Sewer System G
10-1-H	ST-327	Manzano Sanitary Sewer System
Class 3 Permit Modification Dated 2 June 2006		
AOC DP-101	DP-101	Old EOD Disposal Pits
6-31	OT-028	McCormick Range Ranch
OT-074	OT-074	Pistol Range Sites
OT-091	OT-091	South Coyote Firing Range
AOC RW-084	RW-084	Manzano Burial Site
SD-090	SD-090	JATO Rocket Motor Disposal Site
9-20	SS-062	Bldg 909 Inactive Waste Accumulation Area (SS-62) (Former ST-277)
AOC SS-081	SS-081	Detention Pond and Yard Bldg 907
ST-72	ST-072	MWSA Security Garage Oil/Water Separator Bldg 30146
AOC DP-099	DP-099	Disposal Pit Bldg 29015
FT-15	FT-015	NMERI Fire Suppression Test Area
SS-079	SS-079	Bldg 381 Spill Site
SS-078A	SS-078A	Water Tower Soils - 21650
AOC SS-089	SS-089	Transportation Yard
ST-080	ST-080	Manzano Auto Hobby Shop Bldg 30124
10-21-B	ST-273	Bldg 618 Septic System, Chemical Laser
9-4	ST-276	Waste Accumulation Area Bldg 617
ST-347	ST-347	Building 29015 Cess Pool

SWMU	KAFB No.	Site Name
10-21-B	ST-351	Building 635 Septic Tank
10-21-B	ST-352	Building 613/614 Septic Tank
WP-087	WP-087	Grab Site Waste Pile
WP-339	WP-339	Contractor Yard West of Building 20423
LF-268	LF-268	Active Landfill
Class 3 Permit Modification Dated 17 July 2007		
6-11	LF-044	Fill Area SE of Sewage Lagoons
SS-77	SS-077	Abandoned Railroad Spur
6-22	OT-046	Lake Christian
6-32	FT-014	Manzano Fire Training Area
8-35	ST-214	Waste Oil Storage Tank, Bldg 471
10-2-E	SS-063	Jet Engine Test Cell (Former ST-336)
10-21-B	ST-348	Building 610 Septic Tank
	ST-349	Building 626 Septic Tank
ST-64	ST-064	COE Vehicle Maintenance Yard (Former ST-337)
SS-078-B	SS-078-B	Water Tower 21871
SS-078-C	SS-078-C	Water Tower 2474
SS-078-D	SS-078-D	ITRI WTs
LF-107	LF-107	VA Hospital Demolition Debris Landfill
ST-108	ST-108	Abandoned JP-4 Fuel Line
Class 3 Permit Modification Dated 4 April 2008		
10-21-A	ST-287	Building 525 Septic System
10-21-B	ST-290	Building 619 Septic System
10-21-B	ST-292	Building 622 Septic System
10-21-C	ST-295	Building 638 Septic System
10-21-D	ST-296	Building 702 Septic System
10-21-D	ST-297	Building 707 Septic System
10-21-E	ST-300	Building 20199 Septic System
10-21-F	ST-301	Building 20560 Septic System
10-21-G	ST-302	Building 20599 Septic System
10-21-H	ST-303	Building 20749 Septic System
10-21-I	ST-304	Building 20797 Septic System
10-21-J	ST-305	Building 28054 Septic System
10-21-J	ST-306	Building 28050 Septic System
10-21-K	ST-307	Building 30101 Septic System
10-21-L	ST-308	Building 37511 Septic System
10-21-K	ST-315	Building 30102 Septic System
10-21-T	ST-317	Building 57011 Septic System
10-21-W	ST-320	Building 20149 Septic System
10-21-X	ST-323	Building 29042 Septic System
10-21-Y	ST-324	Building 29051 Septic System
10-21-AA	ST-342	SOR Building 66029 Septic System
10-21-AA	ST-345	SOR Building 66006 Septic System
10-21-BB	ST-346	Trestle Site Septic System
6-3	LF-007	Landfill 3
ST-356	ST-356	Skeet Range Septic Tank (Domestic Sewage)
10-21-X	ST-350	600 Area Field Office Septic Tank (Domestic Sewage)

Non-RCRA Units
(Included in Quarterly Report but not subject to
Hazardous Waste Management Regulations)

SWMU	KAFB No.	Site Name
N/A	UST 58	UST Site 58
ST-105	ST-105	Trichloroethene (TCE) and Nitrate Contaminated Groundwater ^a
EOD Hill	EOD Hill	Perchlorate Contaminated Groundwater

^a The Nitrate-Contaminated Groundwater portion at ST-105 is regulated by the New Mexico Environment Department Ground Water Quality Bureau (NMED-GWQB). The TCE-contaminated groundwater at ST-105 is regulated by the NMED-Hazardous Waste Bureau (NMED-HWB).

III. SUMMARY OF ACTIVITIES AND FINDINGS

A. SWMU Assessments and New SWMUs and AOCs:

1. **SWMU Assessments:** No planned activities.
2. **New AOCs:** No planned activities.

B. RCRA Facility Investigation (RFI):

1. **Sampling and Analysis Plans (SAPs):** No planned activities.
2. **Field Work:** No planned activities.
3. **Reports:**

- New AOCs: Draft RFIs for Building 57001, Zia Park Area, Asphalt Dump Area, and Transient Alert Pad (New AOCs) were delivered to Kirtland AFB.

C. Risk Assessment:

1. **Ecological Risk:** No planned activities.
2. **Human Health Risk:** No planned activities.

D. Corrective Measures Study (CMS):

1. **Work Plans:** No planned activities.
2. **Study and Field Work:** No planned activities.
3. **Reports:** No planned activities.

E. Accelerated and Interim Corrective Measures (ACMs/ICMs):

1. Work Plans:

- The UFP QAPP for sites SWMU 6-1, Landfill 1 (LF-001); SWMU 6-2, Landfill 2 (LF-002); SWMU 6-4, Landfills 4, 5, and 6 (LF-008); WP026; ST105; ST070 and PL567 was delivered on 3 December 2013.

2. Field Work:

- SWMU ST-70-E, Oil/Water Separator (OWS) (ST-070): The soil vapor extraction (SVE) system was shut down for the winter on 5 December 2013. Approximately 40 gallons of condensate was collected from the system and was drummed on site.

3. Reports:

- SWMU ST-70-E, Oil/Water Separator (OWS) (ST-070): Data for the July 2013 to December 2013 ICM Report was collected.

F. Corrective Measure Designs/Implementations (CMDs/CMI):

1. Designs:

- The UFP QAPP for sites SWMU 6-1, Landfill 1 (LF-001); SWMU 6-2, Landfill 2 (LF-002); SWMU 6-4, Landfills 4, 5, and 6 (LF-008); WP026; ST105; ST070 and PL567 was delivered on 3 December 2013.

2. Implementation: No planned activities.

3. Remedial Action Operation:

- **SWMU 6-1, Landfill 1 (LF-001):** Quality Assurance Project Plan (QAPP) for SWMUs 6-1 (LF-001), 6-2 (LF-002) and 6-4 (LF-008) was submitted to NMED in December 2013. After regulatory approval, this plan will replace the groundwater monitoring components of the November 2006 Long-Term Monitoring and Maintenance Plan for SWMUs 6-1, SWMU 6-2, and 6-4, under which groundwater monitoring has been performed to date.
- Monthly landfill inspections of the condition of the landfill evapotranspiration (ET) cover were performed during the reporting period.
- Quarterly groundwater well gauging took place in November.
- ET cover system data collection was performed twice a month.
- **SWMU 6-2, Landfill 2 (LF-002):** Quality Assurance Project Plan (QAPP) for SWMUs 6-1 (LF-001), 6-2 (LF-002) and 6-4 (LF-008) was submitted to NMED during in December 2013. After regulatory approval, this plan will replace the groundwater monitoring

components of the November 2006 Long-Term Monitoring and Maintenance Plan for SWMUs 6-1, SWMU 6-2, and 6-4, under which groundwater monitoring has been performed to date.

- Monthly landfill inspections of the condition of the landfill ET cover were performed during the reporting period.
- Quarterly groundwater well gauging took place in November.
- ET cover system data collection was performed twice a month.
- **SWMU 6-4, Landfills 4, 5, and 6 (LF-008):** Quality Assurance Project Plan (QAPP) for SWMUs 6-1 (LF-001), 6-2 (LF-002) and 6-4 (LF-008) was submitted to NMED in December 2013. After regulatory approval, this plan will replace the groundwater monitoring components of the November 2006 Long-Term Monitoring and Maintenance Plan for SWMUs 6-1, SWMU 6-2, and 6-4, under which groundwater monitoring has been performed to date.
- Monthly landfill inspections of the condition of the landfill ET cover were performed during the reporting period.
- Quarterly groundwater well gauging took place in November.
- ET cover system data collection was performed twice a month.

4. Reports:

- Monthly landfill inspection reports were completed.

G. Other Investigations and Activities:

- 1. Groundwater Monitoring (Long-Term Monitoring [LTM]):** No planned activities.
- 2. Base-Wide Background and Hydrogeology:** No planned activities.
- 3. Trichloroethene (TCE) Characterization and Abatement (ST-105):**
 - Kirtland AFB continues to serve as a member of the Tijeras Arroyo Groundwater Group to characterize the hydrogeology and the extent of TCE in the perched and regional aquifers in this area.
- 4. Nitrate Contamination (ST-105):**
 - Production of nitrate-contaminated groundwater from production well KAFB-7 continued during the reporting period. The water is piped to the Tijeras Arroyo Golf Course for beneficial use as an irrigation source. There were no sampling or monitoring activities during the June through September 2013 time frame.
- 5. No Further Action (NFA):**
 - Statement of basis documents were prepared for 21 NFA sites (23 SWMUs). The public comment period occurred from September 1

through November 30, 2012. The public meeting for the sites was held during the Kirtland AFB semi-annual public meeting on October 23, 2012. Kirtland AFB did not receive any comments during the public comment period. Comments received by NMED have not been provided to Kirtland AFB. Current project work is 90 percent complete.

6. **Base-Wide Plans:** No planned activities.
7. **Bulk Fuels Facility Spill SWMUs ST-106 and SS-111:**
 - Quarterly groundwater monitoring sampling was conducted at 109 of the 117 existing and newly installed groundwater monitoring wells during the period of October through December 2013.
 - Quarterly soil vapor sampling was conducted at the 51 existing and newly installed soil vapor monitoring (SVM) wells and the 13 SVE wells during the period of October through December 2013.
 - Delivered the Quarterly Pre-Remedy Monitoring and Site Investigation Report: July – September 2013 to the NMED for review and approval on 31 December 2013.
 - Continued operation of the newly constructed SVE treatment system.
 - Completed stack testing at SVE treatment system in November 2013
 - Presented at the November 2013 CAB public meeting to provide update on project status.
 - Completed aquifer testing at KAFB-106157 in November 2013 as outlined in the Groundwater Extraction Well KAFB-106157 Aquifer Testing Work Plan.
 - Completed soil vapor extraction pilot testing in November 2013 as outlined in the Soil Vapor Extraction System Expansion Work Plan Part 1: Candidate Well Identification and Pilot Testing
 - Current project work is 60 percent complete.
8. **UST Site 58:**
 - Quarterly groundwater well gauging took place in November.
9. **RW-006:**
 - Final Status Survey Report was submitted to the USAF Radioisotope Committee, which was approved and delivered to the Nuclear Regulatory Commission (NRC). Comments to FSSR have been addressed, and once final approval is obtained from the NRC, NMED will be provided with the final document.
 - Current project work is 98 percent complete.

H. Public Meeting:

- Kirtland AFB public meetings are held on a semi-annual basis. A public meeting was held on 23 April 2013.
- Civilian Advisory Board (CAB) meeting was held on 19 November 2013.

I. Military Munitions Response Program (MMRP):

PROVIDED FOR INFORMATIONAL PURPOSES ONLY

- Completed field work for cleanup of Skeet Range Sites TS775 and TS776. Proposed plan went out for public review, no comments were received. Briefed proposed plan to public April 2013 at semi-annual public meeting.

IV. SUMMARY OF PROBLEMS

A. SWMU Assessments and New SWMUs and AOCs: No problems were encountered.

B. RCRA Facility Investigation: No problems were encountered.

C. Risk Assessment: No problems were encountered.

D. Corrective Measures Study: No problems were encountered.

E. Accelerated and Interim Corrective Measures: No problems were encountered.

F. Corrective Measure Designs/Implementations

1. Designs:

- SWMU WP-26, Sewage Lagoons and Golf Course Main Pond: The CMD is on hold until the CMS is reviewed and approved. The CMS was submitted for review in September 2010.

2. Remedial Action Operation:

- SWMU 6-1, Landfill 1 (LF-001); SWMU 6-2, Landfill 2 (LF-002); SWMU 6-4, Landfills 4, 5, and 6 (LF-008); WP026; ST105: On 11 December 2013 a field technician was injured during sampling of KAFB-0609 at the Golf Course pond (part of site WP026). Injuries included loss of index and middle finger on the left hand, tendon damage on left thumb, as well as an injury to the left wrist. The field technician was taken via emergency vehicle to the local trauma center and the Kirtland field teams were put on safety stand down. A company-wide safety stand down remains in place for sampling of deep groundwater monitoring wells while the safety investigation continues. The safety stand down impacts the schedule for completing groundwater sampling at the ST105, WP026, and the landfill sites.

3. Reports: No problems were encountered.

G. Other Investigations and Activities:

1. **Groundwater Monitoring:** A bridge contract has been awarded. A kickoff meeting has been held to discuss future field activities. Field activities expected to begin October 2013.
2. **Base-Wide Background and Hydrogeology:** No problems were encountered.
3. **TCE Characterization and Abatement:** No problems were encountered.
4. **Nitrate Contamination:** No problems were encountered.
5. **No Further Action:** No problems were encountered.
6. **Base-Wide Plans:** No problems were encountered.
7. **Fuel Spill at Bulk Fuels Facility:** Previous issues with the SVE system were resolved. Troubleshooting restored the destruction rate in August 2013. No additional problems were encountered.
8. **UST Site 58:** A bridge contract has been awarded. A kickoff meeting has been held to discuss future field activities. Field activities expected to begin October 2013.

H. Public Meeting: No problems were encountered.

I. MMRP: No problems were encountered.

V. PROJECTED WORK FOR THE NEXT REPORTING QUARTER

A. SWMU Assessments and New SWMUs and AOCs:

1. **SWMU Assessments:** No planned activities.
2. **New AOCs:** No planned activities.

B. RCRA Facility Investigation:

1. **Sampling and Analysis Plans (SAP):** No planned activities.
2. **Field Work:** No planned activities.
3. **Reports:** No planned activities.

C. Risk Assessment:

1. **Ecological Risk:** No planned activities.
2. **Human Health Risk:** No planned activities.

D. Corrective Measures Study:

1. **Work Plans:** No planned activities.
2. **Field Work and Study:** No planned activities.

3. **Reports:** No planned activity.

E. Accelerated and Interim Corrective Measures (ACMs/ICMs):

1. **Work Plans:** No planned activities.

2. **Field Work:**

- SWMU ST-70-E (ST-070, Former ST-219): Ongoing system maintenance and site field sampling activities will continue during the quarter. System waste will be disposed of. The SVE system at this suite was shut down on 5 December 2013 and will resume operations in March of 2014.

3. **Reports:**

- Annual O&M report for Landfills 1, 2 and 8 will be submitted to NMED October 2014.

F. Corrective Measures:

1. **Designs:** No planned activities.

2. **Implementation:** No planned activities.

3. **Remedial Action Operation:**

- SWMU 6-1, Landfill 1 (LF-001): Biweekly collection of lysimeter data will be conducted. Monthly inspections of the condition of the landfill ET cover will continue. Quarterly well gauging will be performed in February 2014.
- SWMU 6-2, Landfill 2 (LF-002): Biweekly collection of lysimeter data will be conducted. Monthly inspections of the condition of the landfill ET cover will continue. Quarterly well gauging will be performed in February 2014.
- SWMU 6-4, Landfills 4, 5, and 6 (LF-008): Biweekly collection of lysimeter data will be conducted. Monthly inspections of the condition of the landfill ET cover will continue. Quarterly well gauging will be performed in February 2014.

4. **Reports:** No planned activities.

G. Other Investigations and Activities:

1. **Groundwater Monitoring (Long Term Monitoring [LTM] and Maintenance and Monitoring [M&M]):** No planned activities.

2. **Base-Wide Background and Hydrogeology:** No planned activities.

3. **TCE Characterization and Abatement (ST-105):** No planned activities.

4. **Nitrate Contamination (ST-105):**
 - Nitrate-contaminated groundwater will continue to be extracted from well KAFB-7 to provide mass removal and hydraulic containment of the nitrate plume. The nitrate-contaminated groundwater will continue to be conveyed to the Tijeras Arroyo Golf Course Main Pond for irrigation use.
5. **No Further Action:**
 - Respond to public comments, as needed. Submit final statement of basis document to NMED.
6. **Base-Wide Plans:** No planned activities.
7. **Bulk Fuels Facility Spill SWMUs ST-106 and SS-111:**
 - Pre-remedy quarterly monitoring will be initiated in January 2014 for the First Quarter 2014 quarterly sampling event. This will include groundwater sampling of the existing and additional newly installed monitoring wells, sampling of the Kirtland AFB production wells KAFB-3, KAFB 15, and KAFB-16, and VA-2. Also included will be vapor sampling at all existing Bulk Fuels Facility soil vapor monitoring and extraction wells, SVE system monitoring, and water and LNAPL measurements.
 - The Bulk Fuels Facility Quarter 2 Pre-Remedy Monitoring and Site Investigation Report for October – December 2013 will be submitted to NMED in March 2014.
 - Present at the January 2014 CAB public meeting to provide project status.
 - Deliver Draft Groundwater RFI to the NMED by 31 March 2014.
8. **UST Site 58:**
 - Quarterly well gauging will be performed in February 2014.
9. **RW-006:**
 - Final Status Survey report was submitted to the USAF Radioisotope Committee, which was approved and delivered to the Nuclear Regulatory Commission (NRC). Once final approval is obtained from the NRC, NMED will be provided with the final document.

H. Public Meeting:

- Kirtland AFB public meetings are held on a semi-annual basis. A public meeting is not scheduled for the next quarter.
- CAB is held quarterly. One is scheduled for 28 January 2014.

I. MMRP

PROVIDED FOR INFORMATIONAL PURPOSES ONLY

- The draft final Proposed Plan for Skeet Range sites TS775 and TS776 will go out for 30 day public review.