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DEPARTMENT OF THE AIR FORCE
27TH SPECIAL OPERATIONS CIVIL ENGINEER SQUADRON (AFSOC)
CANNON AIR FORCE BASE NEW MEXICO

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FEB 22 2016
NMED
Hazardous Waste
Bureau

Sheen Thomas Kottkamp M.S.
Environmental Program Manager/Scientist
27 SOCES/CEIER
402 S. Chindit Blvd.
Cannon AFB NM 88103-5003

Mr. Gabriel Acevedo
Environmental Scientist & Specialist-Operational
New Mexico Environment Department
Hazardous Waste Bureau
2905 Rodeo Park Drive East, Bldg. 1
Santa Fe NM 87501

Dear Mr. Acevedo

Cannon Air Force Base is pleased to provide for your record the *"Preliminary Sampling Plan, SWMU 34"*. Based upon historical remediation of an adjacent Environmental Restoration Site; SWMU 31, soils associated with SWMU 34 may have been impacted. Preliminary sampling and subsequent analytical results will allow Cannon Air Force Base to confirm or refute the presence of lead contaminated soils at SWMU 34 and determine the appropriate course of action for the site.

Cannon AFB appreciates the valued working relationship established with you and your department. If you have further comments or questions pertaining to the referenced documents, please contact Sheen T. Kottkamp, sheen.kottkamp.ctr@us.af.mil (575) 904-6743 or Brandy Chavez, brandy.chavez.1@us.af.mil, (575) 904-6747.

Sincerely

Sheen Thomas Kottkamp

Attachments:
Preliminary Sampling Plan SWMU 34/SD015, Cannon AFB.

RE: Preliminary Sampling at SD015 (Solid Waste Management Unit [SWMU] 34)
Cannon Air Force Base (AFB), New Mexico

The purpose of this memo is to provide the scope of the preliminary sampling proposed to be completed at SD015 prior to the submission of the Accelerated Corrective Measure Work Plan (ACMWP) for SD015.

Site Description

SD015, also referred to as the Aerospace Ground Equipment (AGE) Drainage Ditch, originates on the flightline side of the AGE Building No. 186, runs parallel to Buildings Nos. 191 and 193 in a northeast direction, and terminates at a culvert inlet near Argentia Avenue. Stormwater runoff from the AGE Drainage Ditch flows under Argentia Avenue via this culvert to a second drainage ditch that then routes the water to the northeast Storm Water Drainage Area (SWMU 95).

SD015 is the former location of railroad tracks that were removed in the 1960s. The drainage ditch was formed when the soils settled following the removal of the railroad tracks. The drainage ditch is approximately 1,200 feet long, 12 feet wide and 1 foot deep. Vegetation is currently present throughout the majority of the drainage ditch (grass). However, the southwestern end of SD015 has been regraded and is currently located under asphalt paving. This area is the general location of one of two boring (S34-SS01) with reported elevated lead concentrations.

Contamination Identified and Proposed Sampling

Previous investigations at SD015 indicated the presence of lead contamination in subsurface soils (upper 1 foot) above New Mexico Environment Department (NMED) residential soil screening levels (SSLs). Lead was reported above residential SSLs in soil boring 2 from 0 – 1 foot below ground surface (bgs) and soil boring C34-SS01 from 0.5 – 1 foot bgs. Surface soil is defined as 0 to 0.5 feet bgs. The current Performance Based Remediation contract requires an ACMWP to be completed to address the lead contaminated soils at SD015. However, the extent of lead contamination is not delineated by the current analytical data. Furthermore, changes to the soils in the area surrounding (and possibly including) boring C34-SS01 may have occurred during the remedial activities at the adjoining site, MY031 (SWMU 31). Based on the work completed to excavate soils at MY031 and repave the adjoining parking area, the potential exists for the lead contaminated soils at SD015 to have been impacted. This may have resulted in a change in conditions that is not reflected by the current analytical data.

The scope of work proposed includes resampling the soils at historic soil boring 2 and C34-SS01 for lead. Based on the historic sampling completed in the area surrounding soil boring 2, no further delineation samples are required. Based on the absence of soil sampling in the area surrounding, further sampling is required to delineate the extent of lead identified in the surface soils at C34-SS01. Additional delineation samples will be collected from four borings located approximately five feet to the north, south, east, and west of C34-SS01 to delineate the extent of lead contamination in the near surface soils at C34-SS01.

The analytical results will be utilized to confirm or refute the indicated presence of lead contaminated soils at SD015 in excess of the current NMED residential SSLs. If the analytical results confirm the

presence of lead, they will be utilized to design the excavation and be presented to NMED in the ACMWP. If the analytical results refute the presence of lead, the results will be presented to NMED in a status report. The status report will outline the site description, historical uses, historical investigations, and recommend a change in status to Corrective Action Complete (CAC) without Controls.

The delineation/confirmation sampling is requested to be completed prior to the completion of the ACMWP in order to facilitate a greater understanding of the extent of lead contamination at SD015. This will allow for a more accurate ACMWP, and will help determine what additional safety measures (i.e. traffic control and possible temporary lane closures) may be required to remediate the lead contamination at SD015. Preliminary consideration had been given to excavating the area and screening the soils using an x-ray fluorescence (XRF) followed by submission of confirmation soil samples for laboratory samples. These activities were recently completed at site FT006 in accordance with the NMED approved work plan for that site. However, the presence of the paving over the site area introduces significant complications to any excavation effort. Another primary consideration is the need to provide an accurate scope of work for bids from subcontractors to complete the excavation work if required. Completion of the sampling would allow the current conditions to be characterized and allow for clarity regarding the actions necessary to achieve the goal of achieving CAC without controls at SD015.

Attachments

Tables
Summary of Soil Samples Proposed for Chemical Analysis at SD015

Figures
Field Investigation Results at SWMU 34 (figure from previous report)
Proposed Soil Sampling Locations at SD015

SUMMARY OF SOIL SAMPLES PROPOSED FOR CHEMICAL ANALYSIS AT SD015
CANNON AIR FORCE BASE, NEW MEXICO

Soil Boring Location	Soil Sample Number	Sample Depth Interval (feet bgs)	Sample Coordinates (Northing, Easting)[1]		Analytical Parameters			Technical Rationale
					Lead[2]	Field Duplicate Samples [3]	MS/MSD Samples [4]	
SBC34a	CA015-SBC34a-01	0.5-1.0	TBD	TBD	X			Confirm or refute the presence of lead in the soil identified by a historical surface soil sample from C34-SS01.
	CA015-SBC34a-03	2.0-3.0	TBD	TBD	X			
	CA015-SBC34a-05	4.0-5.0	TBD	TBD	X			
SB01	CA015-SB01-01	0.5-1.0	TBD	TBD	X			Delineate the extent of lead contamination identified by a historical surface soil sample from C34-SS01.
	CA015-SB01-03	2.0-3.0	TBD	TBD	X			
	CA015-SB01-05	4.0-5.0	TBD	TBD	X	X		
SB02	CA015-SB02-01	0.5-1.0	TBD	TBD	X			
	CA015-SB02-03	2.0-3.0	TBD	TBD	X			
	CA015-SB02-05	4.0-5.0	TBD	TBD	X		X	
SB03	CA015-SB03-01	0.5-1.0	TBD	TBD	X			
	CA015-SB03-03	2.0-3.0	TBD	TBD	X			
	CA015-SB03-05	4.0-5.0	TBD	TBD	X			
SB04	CA015-SB04-01	0.5-1.0	TBD	TBD	X			
	CA015-SB04-03	2.0-3.0	TBD	TBD	X			
	CA015-SB04-05	4.0-5.0	TBD	TBD	X	X		
2a	CA015-SB2a-01	0.5-1.0	TBD	TBD	X			Confirm or refute the presence of lead in the soil by a historic surface soil sample from boring 2.
	CA015-SB2a-03	2.0-3.0	TBD	TBD	X			
	CA015-SB2a-05	4.0-5.0	TBD	TBD	X			
				Totals	**18**	**2**	**1**	

Notes:

[1]Horizontal coordinates will be included in New Mexico East State Plane, North American Datum of 1983.

[2]Lead analysis via USEPA Method 6020A

[3]Field duplicate samples collected at a rate of 10% (1 per 10 samples collected) for laboratory analysis.

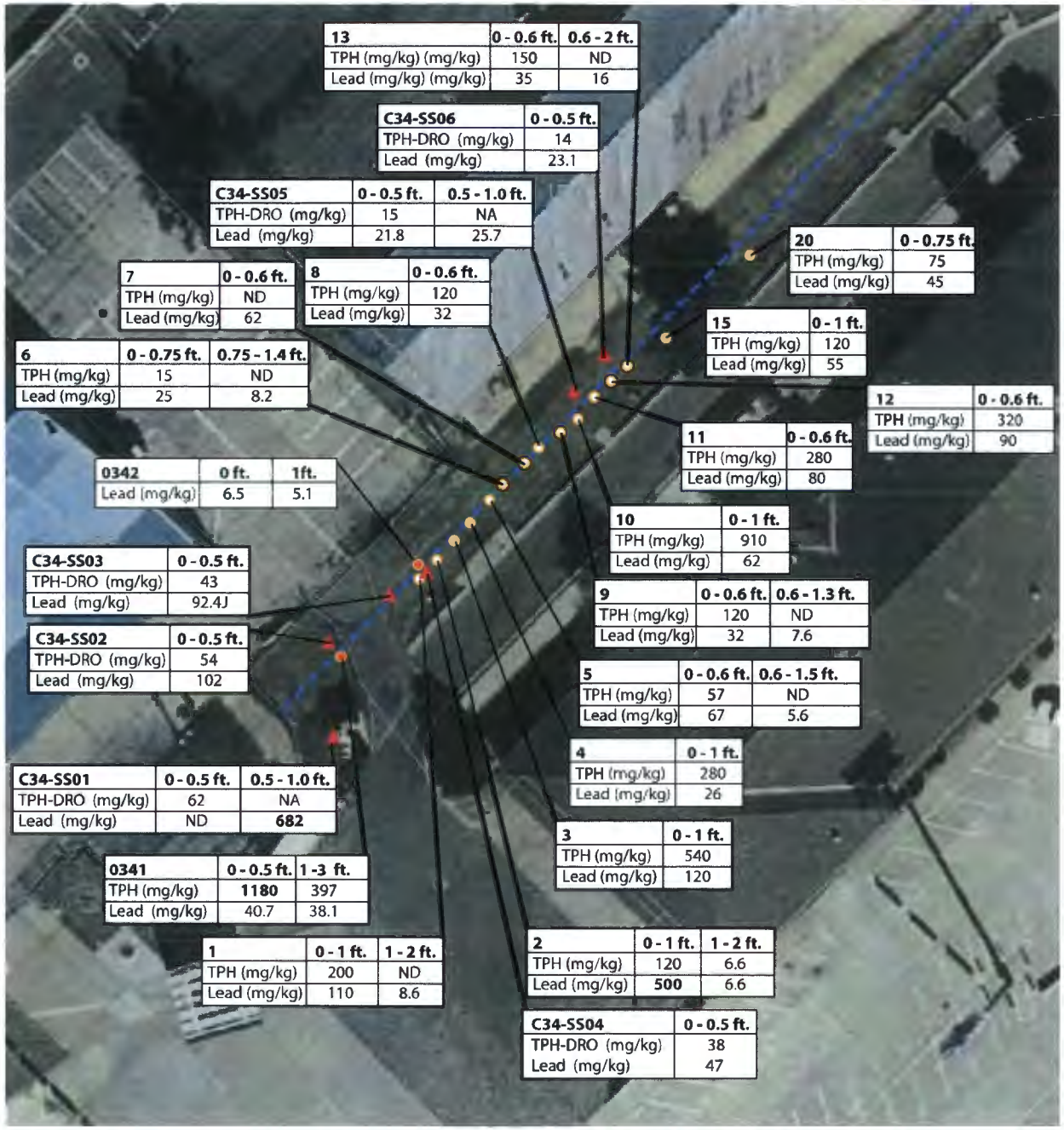
[4]MS/MSD samples collected at a rate of 5% (1 per 20 samples collected) for laboratory analysis.

bgs = below ground surface

MS/MSD = matrix spike/matrix spike duplicate

USEPA = United States Environmental Protection Agency

X = sample to be collected



LEGEND

- Soil Boring Locations (Radian, 1987)
- Soil Boring Location (Woodward-Clyde, 1991)
- Soil Locations (URS, 2009)
- Ditch

NOTE: **Bold** Indicates an Exceedance

DRO	=	Diesel Range Organics
ft.	=	Feet
J	=	Estimated
(mg/kg)	=	milligram per kilogram
NA	=	Not Applicable
ND	=	Nondetect
RCRA	=	Resource Conservation and Recovery Act
SWMU	=	Solid Waste Management Unit
TPH	=	Total Petroleum Hydrocarbons

SITE LOCATION

Revision Date: 03/15/12

N

0 50 100
Feet

0 25
Meters

CANNON AIR FORCE BASE, NEW MEXICO

CORRECTIVE ACTION COMPLETE PROPOSAL
EIGHT SOLID WASTE MANAGEMENT UNITS

FIGURE I-8

FIELD INVESTIGATION RESULTS AT SWMU 34 (AGE DRAINAGE DITCH)

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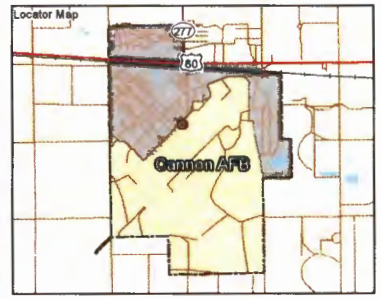

Legend

- Planned Soil Sample Location
- Previous Soil Sample Location
- Utility Clearance Area
- Site Boundary
- Base Boundary

Map projection: NAD83 State Plane Feet New Mexico East (FIPS 3001)

N 20 10 0 20 Feet

Planned Soil Sampling Locations at SD015
Cannon Air Force Base,
New Mexico

Drawn By:	Date	Project No:	Figure 1
DPG	1/21/2016	23446539	
Checked By:	Revision:		
MS	0		

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