

SNL

ENTERED



National Nuclear Security Administration
Sandia Site Office
P.O. Box 5400
Albuquerque, New Mexico 87185-5400



FEB 12 2010

CERTIFIED MAIL – RETURN RECEIPT REQUESTED



James Bearzi, Chief
Hazardous Waste Bureau
New Mexico Environment Department
2905 Rodeo Park Road East, Bldg. 1
Santa Fe, NM 87505

Subject: Department of Energy (DOE)/Sandia National Laboratories/New Mexico
(SNL/NM) Responses for Notice of Disapproval for Long Term Environmental
Stewardship (LTES) Site 1 – Cable Debris Site

Dear Mr. Bearzi:

The Investigation Report and Proposal for Corrective Action Complete for LTES Site 1- Cable Debris Site at SNL/NM was submitted to the New Mexico Environment Department (NMED) for review and approval in March 2009. NMED reviewed this document and issued a Notice of Disapproval (NOD) in a letter to DOE and Sandia dated September 21, 2009. The letter is entitled, "Notice of Disapproval: Investigation Report and Proposal For Corrective Action Complete For Long Term Environmental Stewardship (LTES) Site 1 - Cable Debris Site At Sandia National Laboratories New Mexico, March 2009, Sandia National Laboratories, EPA ID# NM5890110518 HWB-SNL-08-014". On behalf of DOE, and Sandia, DOE is submitting responses to comments received in the September NOD.

In addition, upon review of the data validation reporting process, an analytical unit reporting discrepancy was discovered which caused us to over-estimate the initial confirmation sampling results for Cadmium and Thallium. Further clarification and investigation report page changes are provided with the NOD response to comments.

Should you have any questions, please feel free to contact me at (505) 845-6036, or John Gould of my staff at (505) 845-6089.

Sincerely,

Patty Wagner
Patty Wagner
Manager

Enclosure



James Bearzi

-2-

FEB 12 2010

cc w/enclosure:

W. Moats, NMED HWB (Via Certified Mail)
L. King, EPA, Region 6 (Via Certified Mail)
B. Salem, NMED HWB
T. Skibitski, NMED-OB
B. Birch, NMED-OB
Records Center, SNL/NM, Org.6765, MS 1089

cc w/o enclosure:

A. Blumberg, SNL/NM, Org. 11100, MS 0141
M. Hazen, SNL/NM, Org. 4000, MS 0143
S. Gutierrez, SNL/NM, Org. 4100, MS. 0725
R. Brandhuber, SNL/NM, Org. 4130, MS 0729
D. Miller, SNL/NM, Org 6765, MS 0718
T. Copper, SNL/NM, Org 4133, MS 0729
J. Cochran, SNL/NM, Org. 6765, MS 0719
M. Nagy, SNL/NM, Org. 4131, MS 0730
S. Salinas, SNL/NM, Org. 4131, MS 0730
Records Center, SNL/NM, Org.6765, MS 1089
J. Estrada, NNSA/SSO, MS 0184
J. Gould, NNSA/SSO, MS 0184

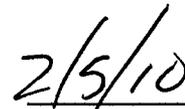
DOE/Sandia Responses for Notice of Disapproval for Long-term Environmental Stewardship (LTES) Site 1 – Cable Debris Site

CERTIFICATION STATEMENT

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 ensure 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 or imprisonment for knowing violations.



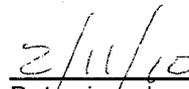
Michael W. Hazen, Vice President
Sandia Corporation
Albuquerque, New Mexico
Co-Operator



Date signed



Patty Wagner, Manager
U.S. Department of Energy
National Nuclear Security Administration
Sandia Site Office (SSO)
Owner and Co-Operator



Date signed

Sandia National Laboratories

Albuquerque, New Mexico

February 5, 2010

DOE/Sandia Responses to NMED “Notice of Disapproval: Investigation Report and Proposal for Corrective Action Complete for Long Term Environmental Stewardship (LTES) Site 1-Cable Debris Site at Sandia National Laboratories/New Mexico, March 2009, EPA ID# NM 5890110518 HWB-SNL-08-014”

INTRODUCTION

This document responds to comments received in a letter from the New Mexico Environment Department (NMED) to the U.S. Department of Energy (DOE) and Sandia Corporation (Sandia) dated September 21, 2009 regarding the Investigation Report and Proposal for Corrective Action Complete for Long Term Environmental Stewardship (LTES) Site 1-Cable Debris Site at Sandia National Laboratories/New Mexico (SNL/NM). The letter is entitled “Notice of Disapproval: Investigation Report and Proposal for Corrective Action Complete for Long Term Environmental Stewardship (LTES) Site 1-Cable Debris Site at Sandia National Laboratories/New Mexico, March 2009, EPA ID# NM 5890110518 HWB-SNL-08-014.” The NMED has identified several deficiencies that required additional information or resolution.

This document lists each NMED comment, and the DOE/Sandia response to that comment. The NMED comment is listed in boldface, followed by the DOE/Sandia response, written in normal font under “Response.”

Comment 1: The minimum detection limit (MDL) for twenty-one of twenty-eight soil samples analyzed cadmium and the MDL for twenty of twenty-five soil samples analyzed for thallium were above their corresponding approved background level. In the case of cadmium, the MDL was above the applicable soil screening level for a residential scenario. The Permittees must resample the soil to achieve lower MDL for both cadmium and thallium.

Response 1: Soil samples were collected at the site on November 10, 2009, as shown on Figure 1 (Attachment 1). Soil samples were collected from the same locations as the previous sampling event for those locations that had elevated cadmium or thallium method detection limit (MDLs). The soil samples were analyzed for cadmium and thallium using Environmental Protection Agency (EPA) Method 6010/6020. The results of the re-sampling are summarized in Table 1 (Attachment 2), and the corresponding analysis request/chain of custody (AR/COC) and data validation (DV) report are presented in Attachment 3.

As summarized in Table 1, all except one of the cadmium detections were below the NMED-approved background value, and all of the thallium detections were below the corresponding thallium background value. The maximum cadmium detection was 2.13 J milligrams per kilogram (mg/kg) which is only slightly greater than the NMED-approved background value and is significantly below the cadmium NMED residential soil screening level of 79.9 mg/kg. In addition, ten of the thallium samples were qualified as non-detects due to low concentration thallium detections in the continuing calibration blank. These non-detects were below the NMED-approved background value for thallium.

Upon review of the validation reporting process, an analytical units reporting discrepancy was discovered. Analytical Quality Associates (AQA) Incorporated reports their data validation analytical corrections for metals in micrograms per kilogram ($\mu\text{g}/\text{kg}$). Within the Investigation Report and Proposal for Corrective Action Complete for Long Term Environmental Stewardship (LTES) Site 1 -Cable Debris Site (SNL/NM, March 2009) the data validation analytical corrections for metals were reported in mg/kg but not converted from $\mu\text{g}/\text{kg}$ as reported by AQA. The detection limits (DL) for cadmium and thallium were effected by the data validation due to the use of incorrect units and not accounting for the normalized soil preparation factor. The cadmium and thallium DLs, as reported in Table 3.3.2-1 of the investigation report, were incorrectly reported in mg/kg. The cadmium and thallium DLs were revised in Table 3.3.2-1 (Attachment 4). As result of this correction all of the thallium soil samples were below the corresponding approved background level, and all of the cadmium DLs were significantly below the residential NMED soil screening level for cadmium. Also presented in Attachment 4 are the Investigation Report the impacted page changes and the revised DV report based on the cadmium and thallium corrections discussed above.

Therefore, based upon field investigation results, initial confirmatory soil sample analytical data, the human health and ecological risk assessment analyses, and the cadmium and thallium confirmatory soil re-sampling analytical data, a determination of correction action complete (CAC) without controls is recommended for LTES Site 1 for the following reasons:

- The surface debris has been removed and the soil has been sampled for all potential constituents of concern (COCs).
- No COCs are present in the soil at levels considered hazardous to human health for either an industrial or residential land-use scenario.
- None of the COCs warrant ecological concern because the ecological risks were acceptable per NMED guidance.

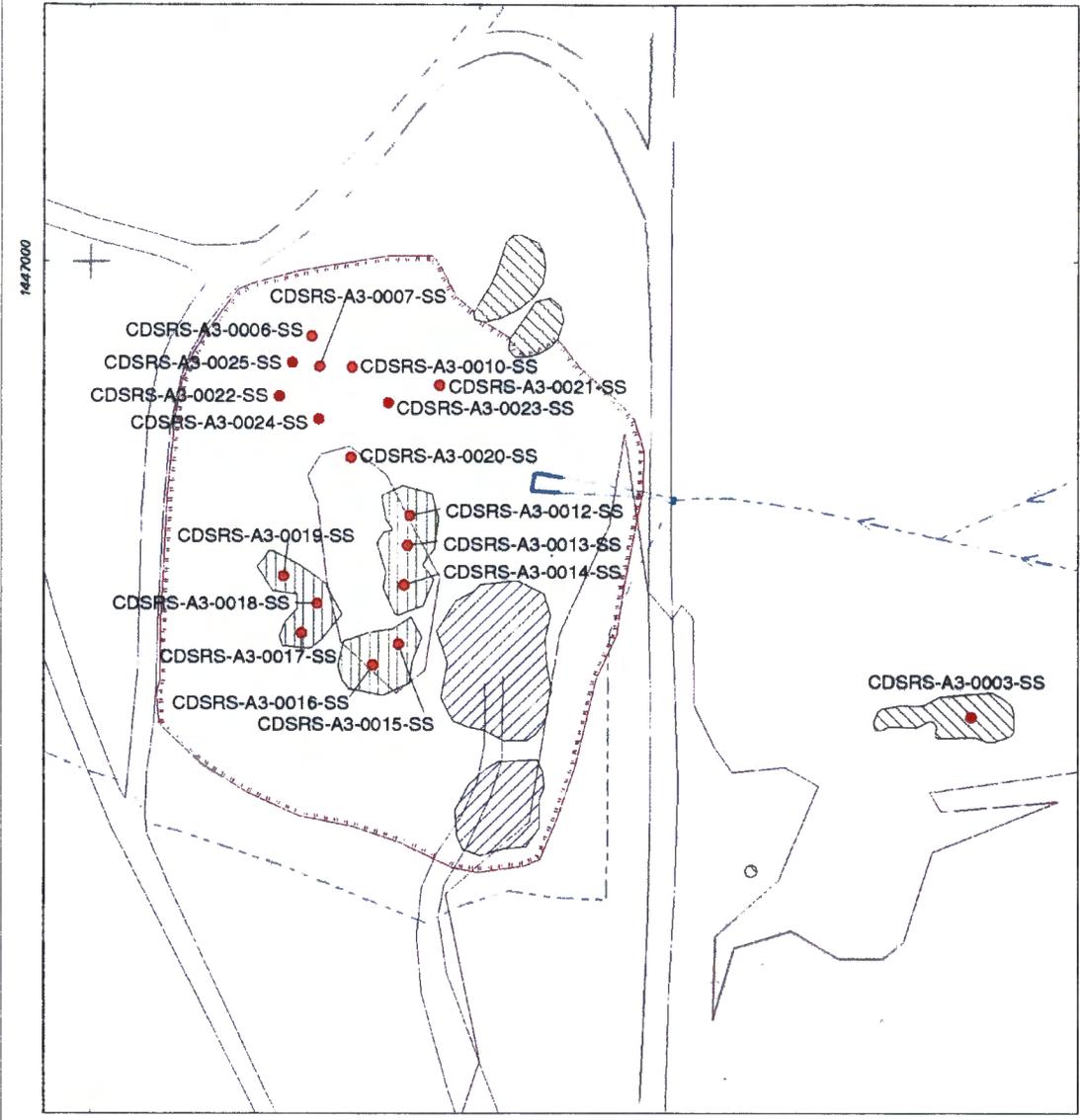
Comment 2: All four soil samples analyzed for cesium-137 resulted in activity levels exceeding background. Additional soil sampling to determine the extent of the cesium-137 contamination is needed.

Response 2: DOE and Sandia consider additional cesium-137 characterization to not be necessary, as explained below.

The comparison background value for cesium-137 within the risk assessment was for subsurface soils. Some surface soil removal occurred at the location of the concrete debris removal and the depth of soil removed is unknown. Therefore, erring on the side of conservatism, the cesium-137 subsurface background value was used for comparison. Only one of the four cesium-137 samples was from the area of concrete removal. The remaining three cesium-137 samples were surface samples from other locations. The cesium-137 background value for surface soils is 0.664 picocuries per gram (pCi/g) and all of the cesium-137 results were below this surface background activity. In addition, cesium-137 background values at SNL/NM ranges from 0.079 pCi/g to 0.908 pCi/g and the on-site cesium-137 results are well within the range of background at SNL/NM. In addition, all of the onsite debris was swiped for radiological contamination prior to removal from the site and the results did not reveal any evidence of radiological contamination and there is no on-site source for cesium-137 contamination. Therefore, additional characterization for cesium-137 should not be necessary.

On November 23, 2009, the NMED agreed that the additional soil sampling for cesium-137 is not needed and therefore, is no longer required (Attachment 5).

Attachment 1
Cable Debris Site Cadmium and Thallium Sample Location Figure



414000

Legend

- TAL Metals and HE Sampling Location
- Unpaved Road
- - - 10-ft. Contour
- - - Surface Drainage
- - - Edge of Depression
- - - Outfall (buried portion dashed)
- ▨ Historical Gravel / Fill Mix Debris Pile
- ▨ Historical Metal Mix Debris Pile
- ▨ Historical Concrete Rubble Debris Pile

Figure 1
TA-III Cable Debris Area
Cadmium and Thallium
Re-Sampling Locations



Sandia National Laboratories, New Mexico
Environmental Geographic Information System

Attachment 2
Cadmium and Thallium Analytical Results

Table 1
Summary of LTES Site 1
NOD Soil Sampling, Cadmium and Thallium Analytical Results

Sample Attributes			Metals (mg/kg) ^a	
Record Number ^b	ER Sample ID	Sample Depth(ft)	Cadmium	Thallium
612440	CDSRS-A3-0003-SS	0-0.5	0.296	ND (0.33)
611998	CDSRS-A3-0006-SS	0-0.5	0.309	ND (0.34)
611998	CDSRS-A3-006D-SS	0-0.5	0.294	ND (0.33)
611998	CDSRS-A3-0007-SS	0-0.5	0.547 J	ND (0.34)
611998	CDSRS-A3-0010-SS	0-0.5	0.299	ND (0.34)
611998	CDSRS-A3-0012-SS	0-0.5	0.741 J	ND (0.34)
611998	CDSRS-A3-0012D-SS	0-0.5	0.661 J	ND (0.33)
611998	CDSRS-A3-0013-SS	0-0.5	2.13 J	ND (0.33)
611998	CDSRS-A3-0014-SS	0-0.5	0.56 J	ND (0.34)
611998	CDSRS-A3-0015-SS	0-0.5	0.317	ND (0.34)
611998	CDSRS-A3-0016-SS	0-0.5	0.594	0.257
611998	CDSRS-A3-0017-SS	0-0.5	0.472	0.252
611998	CDSRS-A3-0018-SS	0-0.5	0.843	0.33
611998	CDSRS-A3-0018D-SS	0-0.5	0.818	0.305
611998	CDSRS-A3-0019-SS	0-0.5	0.375	0.2
611998	CDSRS-A3-0020-SS	0-0.5	0.427	0.167 J
611998	CDSRS-A3-0021-SS	0-0.5	0.288	0.13 J
611998	CDSRS-A3-0022-SS	0-0.5	0.677	0.22
611998	CDSRS-A3-0023-SS	0-0.5	0.233	0.108 J
611998	CDSRS-A3-0024-SS	0-0.5	0.874	0.329
611998	CDSRS-A3-0025-SS	0-0.5	0.765	0.286
Background concentration – Southwest Area Supergroup ^c			<1	<1.1
New Mexico Environment Department Residential Soil Screening Level (mg/kg)			79.9	5.16
Quality Assurance/Quality Control Samples (all in mg/L)				
611998	CDSRS-A3-EB1	NA	ND (<0.11)	ND (2.1)

Note: Values in **bold** exceed background soil concentrations.

^aEPA November 1986.

^bAnalysis request/chain-of-custody record.

^cDinwiddie September 1997.

A3 = Technical Area III

CDSRS = Cable Debris Site Re-Sample

D = Duplicate

EB = Equipment Blank

EPA = U.S. Environmental Protection Agency.

ft = Foot (feet).

ID = Identification.

J = Analytical result was qualified as an estimated value.

MDL = Method detection limit.

mg/kg = Milligram(s) per kilogram.

mg/L = Milligram(s) per liter.

NA = Not applicable.

ND () = Not detected above the MDL, shown in parentheses.

SS = Surface soil sample.

Attachment 3
ARCOG and DV Report

Batch No.

SMO Use

ARCOC

612440

Dept. No./Mail Stop: 4131 MS 1042	Date Samples Shipped:	Project/Task No.: 96750/01.03.04	<input type="checkbox"/>
Project/Task Manager S. Salinas	Carrier/Waybill No.	SMO Authorization:	Send Preliminary/Copy Report to:
Project Name: TS - Cable Debris Site	Lab Contact: E. Kent	Contract # 691436	<input type="checkbox"/> Validation Required
Record Center Code:	Lab Destination: GEL	Send Report to SMO:	<input type="checkbox"/> Released by COC No.:
Service Order No.: CF 093-10	SMO Contact/Phone: W. Palencia		

Location	Tech Area	Bill to: Sandia National Laboratories (Accounts Payable); P.O. Box 5800, MS-0154; Albuquerque, NM 87185-0154
Building	Room	

Sample No.-Fraction	Sample Location Detail	Beginning Depth (ft)	Non GW & WW Spatial Coordinates		Date/Time(hr) Collected	Sample Matrix	Container		Preservative	Collect Method	Sample Type	F (filtered) NF (non)	Parameter & Method Requested	Lab Sample Id
			Easting (X)	Northing (Y)			Type	Vol						
087784-001	CDSRS-A3-0003-SS	N/A	N/A	N/A	11/10/2009 10:00	S	G	500ml	N	C	SA	N/A	Cadmium and Thallium	
087785-001	CDSRS-A3-0006-SS	N/A	N/A	N/A	11/10/2009 9:56	S	G	500ml	N	C	SA	N/A	Cadmium and Thallium	
087786-001	CDSRS-A3-006D-SS	N/A	N/A	N/A	11/10/2009 9:56	S	G	500ml	N	C	SA	N/A	Cadmium and Thallium	
087787-001	CDSRS-A3-0007-SS	N/A	N/A	N/A	11/10/2009 9:54	S	G	500ml	N	C	SA	N/A	Cadmium and Thallium	
087788-001	CDSRS-A3-0010-SS	N/A	N/A	N/A	11/10/2009 9:52	S	G	500ml	N	C	SA	N/A	Cadmium and Thallium	
087789-001	CDSRS-A3-0012-SS	N/A	N/A	N/A	11/10/2009 9:33	S	G	500ml	N	C	SA	N/A	Cadmium and Thallium	
087790-001	CDSRS-A3-0012D-SS	N/A	N/A	N/A	11/10/2009 9:33	S	G	500ml	N	C	DU	N/A	Cadmium and Thallium	
087791-001	CDSRS-A3-0013-SS	N/A	N/A	N/A	11/10/2009 9:36	S	G	500ml	N	C	SA	N/A	Cadmium and Thallium	
087792-001	CDSRS-A3-0014-SS	N/A	N/A	N/A	11/10/2009 9:39	S	G	500ml	N	C	SA	N/A	Cadmium and Thallium	
087793-001	CDSRS-A3-0015-SS	N/A	N/A	N/A	11/10/2009 9:49	S	G	500ml	N	C	SA	N/A	Cadmium and Thallium	

RMMA	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Ref. No.	Sample Tracking	SMO Use	Special Instructions/QC Requirements:	Abnormal Conditions on Receipt
Sample Disposal	<input type="checkbox"/> Return to Client	<input checked="" type="checkbox"/> Disposal by lab	Date Entered:	Date Entered:	EDD	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	
Turnaround Time	<input type="checkbox"/> 7 Day *	<input type="checkbox"/> 15 Day *	<input checked="" type="checkbox"/> Day	Entered by:	Level D Package	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	

Return Samples By:	<input type="checkbox"/> Negotiated TAT	QC inits.	*Send/e-mail report to:
Sample Team Members	Name	Signature	TAL EPA Method 6010/6020
	Gilbert Quintana		
	Danielle Nieto		
			*Please list as separate report.

1. Relinquished by	Org.	Date	Time	3. Relinquished by	Org.	Date	Time
1. Received by	Org.	Date	Time	3. Received by	Org.	Date	Time
2. Relinquished by	Org.	Date	Time	4. Relinquished by	Org.	Date	Time
2. Received by	Org.	Date	Time	4. Received by	Org.	Date	Time

*Prior confirmation with SMO required for 7 and 15 day TAT

**CONTRACT LABORATORY
Analysis Request And Chain Of Custody (Continuation)**

AR/COC- **612440**

Project Name: # REF1		Project/Task Manger: S. Salinas				Project/Task No.: # REF1								
Location		Reference LOV (available at SMO)												Lab use
Tech Area														
Building														
Room														
Sample No- Fraction	Sample Location detail	Beginning Depth (ft)	Non GW Spatial Coordinates		Date/Time (hr) Collected	Sample Matrix	Container		Preser- vative	Collection Method	Sample Type	F(Filtered) NF (Non)	Parameter & Method Requested	Lab Samp ID
			Easting	Northing			Type	Volume						
087794-001	CDSRS-A3-0016-SS	N/A	N/A	N/A	1V 10/2009 9:46	S	G	500ml	N	C	SA	N/A	Cadmium and Thallium	
087795-001	CDSRS-A3-0017-SS	N/A	N/A	N/A	1V 10/2009 9:44	S	G	500ml	N	C	SA	N/A	Cadmium and Thallium	
087796-001	CDSRS-A3-0018-SS	N/A	N/A	N/A	1V 10/2009 9:41	S	G	500ml	N	C	SA	N/A	Cadmium and Thallium	
087797-001	CDSRS-A3-0018D-SS	N/A	N/A	N/A	1V 10/2009 9:41	S	G	500ml	N	C	DU	N/A	Cadmium and Thallium	
087798-001	CDSRS-A3-0019-SS	N/A	N/A	N/A	1V 10/2009 9:23	S	G	500ml	N	C	SA	N/A	Cadmium and Thallium	
087799-001	CDSRS-A3-0020-SS	N/A	N/A	N/A	1V 10/2009 9:26	S	G	500ml	N	C	SA	N/A	Cadmium and Thallium	
087800-001	CDSRS-A3-0021-SS	N/A	N/A	N/A	1V 10/2009 9:29	S	G	500ml	N	C	SA	N/A	Cadmium and Thallium	
087801-001	CDSRS-A3-0022-SS	N/A	N/A	N/A	1V 10/2009 9:21	S	G	500ml	N	C	SA	N/A	Cadmium and Thallium	
087802-001	CDSRS-A3-0023-SS	N/A	N/A	N/A	1V 10/2009 9:12	S	G	500ml	N	C	SA	N/A	Cadmium and Thallium	
087803-001	CDSRS-A3-0024-SS	N/A	N/A	N/A	1V 10/2009 9:15	S	G	500ml	N	C	SA	N/A	Cadmium and Thallium	
087804-001	CDSRS-A3-0025-SS	N/A	N/A	N/A	1V 10/2009 9:16	S	G	500ml	N	C	SA	N/A	Cadmium and Thallium	
087805-001	CDSRS-A3-EB1	N/A	N/A	N/A	1V 10/2009 9:05	W	P	500ml	HNO3	G	EB	N/A	Cadmium and Thallium	
Abnormal Conditions on Receipt												LAB USE		
Recipient Initials _____														



616 Maxine NE
Albuquerque, NM 87123
505-299-5201
www.aqainc.net

Memorandum - Revised

DATE: February 1, 2010 (revision)
TO: File
FROM: Marcia Hilchey (revision)
SUBJECT: Inorganic Data Review and Validation - SNL
Site: TS Cable Debris Site
AR/COC: 612440
SDG: 240902, 240903, and 240905
Laboratory: GEL
Project/Task No: 96750.01.03.04

See the attached Data Validation Worksheets for supporting documentation on the data review and validation. This validation was performed according to SNL/NM ER Project AOP 00-03 Rev 2.

Summary

The samples were prepared and analyzed with accepted procedures using method EPA 6020 (ICP-MS). Problems were identified with the data package that result in the qualification of data.

ICP-MS Analysis (Batch 923531):

Blanks: Tl was detected in the continuing calibration blank (CCB) at a concentration > the method detection limit (MDL) but < the practical quantitation limit (PQL). All associated sample results were detects <5X the CCB concentration and will be qualified "U,B3" at 5X the normalized CCB value.

ICS A: For samples 240902-004, -006, -007, -008, and -009, the sample Ca concentrations were > the ICS A Ca concentration and the ICS A result for Cd was > the MDL. All associated Cd results were detects <50X the ICS A result and will be qualified "J+,CK2."

ICP-MS Analysis (Batch 923539):

Blanks: Tl was detected in the CCB at a concentration > the MDL but < the PQL. The associated result of sample 240905-001 was a detect <5X the CCB concentration and will be qualified "U,B3" at 5X the value of the CCB (mg/l).

Data are acceptable. QC measures appear to be adequate. The following sections discuss the data review and validation.

Holding Times/Preservation

ICP-MS Analyses (All Batches): All samples were analyzed within the prescribed holding times and properly preserved.

ICP-MS Instrument Tune

ICP-MS Analyses (All Batches): All instrument tune requirements were met.

Calibration

ICP-MS Analyses (All Batches): All initial and continuing calibration QC acceptance criteria were met.

Reporting Limit Verification

ICP-MS Analyses (All Batches): All CRI recoveries met QC acceptance criteria.

Blanks

ICP-MS Analysis (Batch 923531): No target analytes were detected in the blanks, except as noted above in the summary section.

ICP-MS Analysis (Batch 923534): No target analytes were detected in the blanks.

ICP-MS Analysis (Batch 923539): No target analytes were detected in the blanks, except as noted above in the summary section. It should be noted that the TI detect result of the equipment blank (EB) (sample 240905-001) was qualified "U" (ND) due to CCB contamination and, therefore, cannot affect other field samples.

ICP-MS Internal Standards

ICP-MS Analyses (All Batches): All ICP-MS internal standards intensities met QC acceptance criteria.

Matrix Spike (MS)

ICP-MS Analysis (Batch 923539): No MS analysis was performed because the batch sample was the EB. No sample data will be qualified as a result.

ICP-MS Analyses (Other Batches): All MS QC acceptance criteria were met.

Laboratory Replicate

ICP-MS Analysis (Batch 923539): No laboratory replicate analysis was performed. The LCSD was used as a measure of laboratory precision. No sample data will be qualified as a result.

ICP-MS Analyses (Other Batches): All laboratory replicate QC acceptance criteria were met.

Laboratory Control Sample/Laboratory Control Sample Duplicate (LCS/LCSD)

ICP-MS Analysis (Batch 923539): All LCS/LCSD QC acceptance criteria were met.

ICP-MS Analyses (Other Batches): All LCS QC acceptance criteria were met.

Detection Limits/Dilutions

ICP-MS Analyses (All Batches): All detection limits were properly reported. All samples were diluted 2X due to the nature of the matrix. All associated batch QC samples were diluted at dilution factors that resulted in relative dilution factors to the samples that were $\leq 5X$. No sample data will be qualified as a result. No other samples required dilution.

ICP Interference Check Sample (ICS A and AB)

ICP-MS Analysis (Batch 923531): All ICS A and AB QC acceptance criteria were met, except as noted above in the summary section.

ICP-MS Analyses (Other Batches): Results of the ICS A and AB analyses were not evaluated because the concentrations of Al, Ca, Fe, and Mg in the samples were $<$ those in the ICS solutions. No sample data will be qualified as a result.

ICP Serial Dilution

ICP-MS Analyses (All Batches): The serial dilution analysis met all QC acceptance criteria.

Other QC

ICP-MS Analyses (All Batches): No field blanks (FBs) were submitted on the AR/COCs. All relative percent differences (RPDs) of the field duplicates (samples 240902-003 and -007 and 240903-004) were $< 35\%$. No criteria for the evaluation of FDs is currently in place.

No other specific issues that affect data quality were identified.

Attachment 4
Revised Investigation Report and Proposal for Corrective Action
Complete for Long Term Environmental Stewardship (LTES) Site 1 –
Cable Debris Site (SNL/NM, March 2009)
(page changes only)

Revised Table 3.3.2-1
Summary of LTES Site 1
Confirmatory Soil Sampling, Metals Analytical Results

Sample Attributes			Metals (EPA Method SW846 3005/SW846 3050) (mg/kg) ^a										
Record Number ^b	ER Sample ID	Sample Depth(ft)	Aluminum	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Copper	Iron	Lead
612009	CDS-A1-0001-SS	0-0.5	8160 B J	0.907 J (0.967)	1.49	64.2	0.385	0.207	6.8 J	2.81	5.46	6710	9.27 J
612009	CDS-A1-0002-SS	0-0.5	8160 B J	1.21	1.57	62.8	0.366	0.212	7.08 J	2.79	6.25	6660	8.22 J
611998	CDS-A1-0003-S	0-0.5	13400 J	ND (22) J	2.41	94	0.546	ND (120)	10.9	4.12	8.17	11100	7.62
612009	CDS-A1-0004-SS	0-0.5	9170 B J	1.48	2.35	93.2	0.424	0.269	7.75 J	3.33	6.25	7560	12.4 J
612009	CDS-A1-0005-SS	0-0.5	7940 B J	1.35	1.65	71.5	0.376	0.26	7.24 J	2.94	5.97	6960	13.7 J
611998	CDS-A1-0006-SS	0-0.5	13000 J	1.42J	3.87	140	0.519	ND (120)	12.2	4.61	21.6	11800	149
611998	CDS-A1-006D-SS	0-0.5	13300 J	ND (1.18) J	4.41	151	0.558	ND (120)	13.4	4.59	15.8	12600	2000
611998	CDS-A1-0007-SS	0-0.5	15400 J	1.54	3.59	151	0.598	ND (120)	13.6	5.42	15.8	12500	545
612009	CDS-A1-0008-SS	0-0.5	12600 B J	1.59	2.92	129	0.538	0.471	10.2 J	4.27	9.57	9430	98.4 J
612009	CDS-A1-0009-SS	0-0.5	11900 B J	3.1	2.45	105	0.491	0.555	10.8 J	3.9	10.3	8900	94 J
611998	CDS-A1-0010-SS	0-0.5	12200 J	1.15	2.94	124	0.509	ND (120)	10.2	3.79	7.85	10600	50.1
612009	CDS-A1-0011-SS	0-0.5	8080 B J	0.892 J (0.962)	2.43	126	0.365	0.235	7.57 J	4.02	5.91	7500	8.77 J
611998	CDS-A1-0012-SS	0-0.5	19500 J	0.592 J (0.975)	4.13	187	0.709	ND (120)	16.2	5.86	13.5	15100	90
611998	CDS-A1-0012D-SS	0-0.5	19400 J	0.599 J (0.975)	4.15	189	0.736	ND (120)	17.6	6.06	261	26900	169
611998	CDS-A1-0013-SS	0-0.5	18100 J	0.578 J (0.978)	3.97	190	0.707	ND (120)	15.6	5.58	12.9	14700	169
611998	CDS-A1-0014-SS	0-0.5	15400 J	1.08	3.62	169	0.615	ND (120)	13.7	4.97	10.9	13000	154
611998	CDS-A1-0015-SS	0-0.5	21900 J	ND (0.306)	4.37	221	0.852	ND (120)	18.9	6.91	15.5	17100	117
611998	CDS-A1-0016-SS	0-0.5	23000 J	2.15	4.62	217	0.812	ND (120)	20	6.66	16.5	20400	166
611998	CDS-A1-0017-SS	0-0.5	25700	2.73 J (4.87)	5.35 J	239	1.13	ND (120)	20.8 J	8.59	24.3 J	21900	527 J
611998	CDS-A1-0018-SS	0-0.5	20400	ND (0.306)	4.8 J	194	0.958	ND (120)	16.3 J	6.79	18.5 J	18100	37.4 J
611998	CDS-A1-0018D-SS	0-0.5	25400	2.25 J (4.96)	6.06 J	245	1.12	ND (120)	22.6 J	8.91	27.5 J	22500	61.7 J
611998	CDS-A1-0019-SS	0-0.5	13900	0.404 J (0.986)	3.68 J	140	0.641	ND (120)	11.3 J	4.99	10 J	12200	15.3 J
611998	CDS-A1-0020-SS	0-0.5	14600	0.486 J (0.984)	3.51 J	156	0.724	ND (120)	12.6 J	5.21	21.3 J	12600	57 J
611998	CDS-A1-0021-SS	0-0.5	9880	0.568 J (0.988)	2.86 J	126	0.554	ND (120)	8.42 J	3.88	7.37 J	9340	9.32 J
611998	CDS-A1-0022-SS	0-0.5	16600	ND (0.307)	3.86 J	171	0.843	ND (120)	13.5 J	5.83	11.5 J	13500	53.5 J
611998	CDS-A1-0023-SS	0-0.5	13100	3.59	3.32 J	137	0.641	ND (120)	12 J	4.84	13.9 J	11600	120 J
611998	CDS-A1-0024-SS	0-0.5	12000	0.971 J (0.977)	2.79 J	130	0.672	ND (120)	13.9 J	4.3	10 J	10800	109 J
611998	CDS-A1-0025-SS	0-0.5	13500	1.79	3.08 J	140	0.668	ND (120)	10.7 J	4.67	11.2 J	11200	203 J
Background concentration – Southwest Area Supergroup ^d			69,957 ^e	3.9	4.4	130	0.65	<1	21.8	5.2	15.4	NA	21.4
Quality Assurance/Quality Control Samples (all in mg/L)													
611998	CDS-A1-EB1	NA	ND (0.005)	ND (0.0005)	ND (0.0015)	ND (0.0005)	ND (0.0001)	0.0239	0.00165 J (0.003)	ND (0.0001)	0.00117	0.08	ND (0.0005)
612009	CDS-A1-EB2	NA	0.0772	ND (0.0005)	ND (0.0015)	0.000917 J (0.002)	ND (0.0001)	0.0189	ND (0.0015)	ND (0.0001)	0.000401 J (0.001)	ND (0.078)	ND (0.0005)

Revised Table 3.3.2-1 (continued)
Summary of LTES Site 1
Confirmatory Soil Sampling, Metals Analytical Results

Sample Attributes			Metals (EPA Method SW846 3005/SW846 3050/SW846 7470/SW846 7471) (mg/kg) ^a							
Record Number ^b	ER Sample ID	Sample Depth(ft)	Manganese	Mercury	Nickel	Selenium	Silver	Thallium	Vanadium	Zinc
612009	CDS-A1-0001-SS	0-0.5	157	ND (0.025)	5.89	ND (0.498) J	ND (0.0984)	ND (0.22)	11.8 J	29.9
612009	CDS-A1-0002-SS	0-0.5	168	ND (0.025)	5.81	ND (0.486) J	ND (0.0982)	ND (0.22)	12.2 J	27.9
611998	CDS-A1-0003-S	0-0.5	160	0.0102 J	8.78	ND (0.499)	ND (0.0998)	ND (2.40, 24)	22.7	46.7
612009	CDS-A1-0004-SS	0-0.5	173	ND (0.025)	7.17	ND (0.486) J	ND (0.0994)	ND (0.22)	14.8 J	27.6
612009	CDS-A1-0005-SS	0-0.5	196	ND (0.025)	6.02	ND (0.491)	ND (0.0994)	ND (0.22)	11.8 J	27.4
611998	CDS-A1-0006-SS	0-0.5	312	0.0144	9.72	ND (0.492)	ND (0.0996)	ND (0.242, 4)	22.1	99.4
611998	CDS-A1-006D-SS	0-0.5	291	0.0145	9.94	ND (0.498)	ND (0.0994)	ND (0.242, 4)	21.8	103
611998	CDS-A1-0007-SS	0-0.5	286	0.0149	10.8	ND (0.497)	ND (0.0998)	ND (0.242, 4)	22.5	93.8
612009	CDS-A1-0008-SS	0-0.5	300	ND (0.025)	9.42	ND (0.492) J	ND (0.099)	ND (0.22)	17.4 J	93.9
612009	CDS-A1-0009-SS	0-0.5	238	ND (0.025)	8.38	ND (0.486) J	ND (0.0982)	ND (0.22)	16.1 J	108
611998	CDS-A1-0010-SS	0-0.5	212	0.0126	8.36	ND (0.487)	ND (0.099)	ND (0.242, 4)	22	55.1
612009	CDS-A1-0011-SS	0-0.5	149	ND (0.025)	8.02	ND (0.497) J	ND (0.096)	ND (0.22)	17.3 J	30.8
611998	CDS-A1-0012-SS	0-0.5	303	0.0243	13.2	ND (0.489)	ND (0.0975)	ND (0.242, 4)	27.5	816
611998	CDS-A1-0012D-SS	0-0.5	374	0.0247	14.2	ND (0.491)	ND (0.0975)	ND (0.242, 4)	28.4	250
611998	CDS-A1-0013-SS	0-0.5	315	0.0262	12.8	ND (0.486)	ND (0.0978)	ND (0.242, 4)	27	148
611998	CDS-A1-0014-SS	0-0.5	297	0.0177	10.9	ND (0.485)	ND (0.0977)	ND (0.242, 4)	24	126
611998	CDS-A1-0015-SS	0-0.5	397	0.0253	15.6	ND (0.484)	ND (0.0988)	ND (0.242, 4)	29.9	189
611998	CDS-A1-0016-SS	0-0.5	351	0.0311	16	ND (0.498)	ND (0.0982)	ND (0.242, 4)	30.5	645
611998	CDS-A1-0017-SS	0-0.5	460	0.0335	19.4	ND (0.484) J	ND (0.487)	ND (0.242, 4)	31.5	147
611998	CDS-A1-0018-SS	0-0.5	344	0.0256	15.6	ND (0.494) J	ND (0.493)	ND (0.242, 4)	26.9	112
611998	CDS-A1-0018D-SS	0-0.5	428	0.0325	20.3	ND (0.495) J	ND (0.496)	ND (0.242, 4)	33.2	150
611998	CDS-A1-0019-SS	0-0.5	257	0.013	10.8	ND (0.484) J	ND (0.0986)	ND (0.242, 4)	21.6	48.3
611998	CDS-A1-0020-SS	0-0.5	282	0.0203	11.3	ND (0.496) J	ND (0.0984)	ND (0.242, 4)	21.4	64.5
611998	CDS-A1-0021-SS	0-0.5	174	0.0086 J (0.0114)	7.81	ND (0.497) J	ND (0.0988)	ND (0.242, 4)	18.5	31.6
611998	CDS-A1-0022-SS	0-0.5	289	0.0189	12.7	ND (0.486) J	ND (0.099)	ND (0.242, 4)	24.4	62.8
611998	CDS-A1-0023-SS	0-0.5	270	0.0147	10.2	ND (0.494) J	ND (0.0984)	ND (0.242, 4)	20.4	97.9
611998	CDS-A1-0024-SS	0-0.5	278	0.0173	9.91	ND (0.484) J	ND (0.0977)	ND (0.242, 4)	17.8	69.4
611998	CDS-A1-0025-SS	0-0.5	268	0.0154	9.89	ND (0.486) J	ND (0.0996)	ND (0.242, 4)	20.3	92.7
Background concentration- Southwest Area Supergroup ^d			831 ^e	<0.25	11.5	<1	<1	<1.1	20.4	62
Quality Assurance/Quality Control Samples (all in mg/L)										
611998	CDS-A1-EB1	NA	ND (0.001)	ND (0.00003)	ND (0.0005)	ND (0.001)	ND (0.0002)	0.000475 J (0.001)	ND (0.003)	ND (0.014)
612009	CDS-A1-EB2	NA	0.00147 J (0.005)	ND (0.00003)[UJ]	ND (0.0005)	ND (0.001)	ND (0.0002)	0.000611 J (0.001)	ND (0.003)	ND (0.13)

Note: Values in **bold** exceed background soil concentrations.

^aEPA November 1986.

^bAnalysis request/chain-of-custody record.

^cSamples were used for waste characterization and disposal only

^dDinwiddie September 1997.

^eFrom USGS (1994) NURE Data Program.

J () = The reported value is greater than or equal to the MDL but is less than the practical quantitation limit, shown in parentheses.

J = Analytical result was qualified as an estimated value.

MDL = Method detection limit.

mg/kg = Milligram(s) per kilogram.

Mg/L = Milligram(s) per liter.

EPA = U.S. Environmental Protection Agency.
ft = Foot (feet).
ID = Identification.

NA = Not applicable.
ND () = Not detected above the MDL, shown in parentheses.
SS = Surface soil sample.

Revised Investigation Report Page Changes

3.3.2 Soil Sampling Results

Analytical results for the final confirmatory soil samples that represent post-VCA conditions (28 samples including 3 duplicates) are presented and discussed in this section.

TAL Metals

TAL metals results for the 28 confirmation soil samples collected from the LTES Site 1 are summarized in Table 3.3.2-1. Method detection limit (MDL) for the metals in soil analyses are presented in Table 3.3.2-2. The following detections above background were reported:

- Four samples contained elevated arsenic levels ranging from 4.62 to 6.06J milligram per kilogram (mg/kg), above the background concentration of 4.4 mg/kg.
- Seventeen samples contained elevated barium levels ranging from 137 to 245 mg/kg, above the background concentration of 130 mg/kg.
- Twelve samples contained elevated beryllium levels ranging from 0.688 to 1.13 mg/kg, compared to a background concentration of 0.65 mg/kg.
- One sample contained elevated chromium at 22.6J mg/kg, compared to a background concentration of 21.8 mg/kg.
- Eleven samples contained elevated cobalt levels ranging from 5.21 to 8.91 mg/kg, compared to a background concentration of 5.2 mg/kg.
- Nine samples contained elevated copper levels ranging from 15.5 to 261 mg/kg, compared to a background concentration of 15.4 mg/kg.
- Twenty samples contained elevated lead levels ranging from 37.4J to 2000 mg/kg, compared to a background concentration of 21.4 mg/kg.
- Nine samples contained elevated nickel levels ranging from 12.7 to 20.3 mg/kg, compared to a background concentration of 11.5 mg/kg.
- Seventeen samples contained elevated vanadium levels ranging from 21.8 to 33.2 mg/kg, compared to a background concentration of 20.4 mg/kg.
- Nineteen samples contained elevated zinc levels ranging from 62.8 to 816 mg/kg, compared to a background concentration of 62 mg/kg.

The MDLs for antimony, and cadmium, ~~and thallium~~ were above their respective background concentrations due to analytical sample dilution. There are no available background values for iron.

Revised Investigation Report Metals Data Validation

Analytical Quality Associates, Inc.

616 Maxine NE
Albuquerque, NM 87123
Phone: 505-299-5201
Fax: 505-299-6744
Email: minteer@aol.com

Memorandum - Revised

DATE: February 1, 2010 (revision)
TO: File
FROM: Marcia Hilchey (revision)
SUBJECT: Inorganic Data Review and Validation - SNL
Site: Cable Debris Site Sampling
AR/COC: 611998
SDG: 215227/215230/215231/215232
Laboratory: GEL
Project/Task No: 96750.01.03.06

See the attached Data Validation Worksheets for supporting documentation on the data review and validation. This validation was performed according to SNL/NM ER Project AOP 00-03 Rev 2.

Summary

The samples were prepared and analyzed with accepted procedures using methods EPA6010 (ICP), EPA6020 (ICP-MS) and EPA7470A/7471A (CVAA). Problems were identified with the data package that result in the qualification of data.

ICP Analysis:

Blanks: Sb of Batch 791944 was detected in the initial calibration blank (ICB), continuing calibration blank (CCB), and method blank (MB) at concentrations > the method detection limit (MDL) but < the practical quantitation limit (PQL). The associated result of sample 215230-001 was a detect <5X the highest calibration blank concentration and <5X the MB concentration and will be qualified "U,B,B3" at 5X the value of the normalized ICB value (highest blank value).

MS: The MS percent recovery (%R) for Sb of Batch 791944 was <75% but >30%. The associated result of sample 215230-002 was a detect and will be qualified "J,MS3"; the associated results of samples -001 and -003 were non-detects (NDs) and will be qualified "UJ,MS3." It should be noted that the result of sample -001 was qualified "U" (ND) due to blank contamination and will be further qualified "UJ" due to the low MS %R, as shown on the sample findings summary.

ICP-MS Analysis:

Blanks: Ca of Batch 791975 was detected in the MB at a concentration > the MDL but < the PQL. The associated result of sample 215232-001 was a detect <5X the MB concentration and will be qualified "0.10U,B" at 5X the value of the MB (mg/l).

Blanks: Zn of Batch 791975 was detected in the MB at a concentration > the MDL but < the PQL. The associated result of sample 215232-001 was a detect <5X the MB concentration and will be qualified "0.014U,B" at 5X the value of the MB (mg/l).

Blanks: Cd was detected in the equipment blank (EB) (sample 215232-001) at a concentration > the MDL but < the PQL. All associated sample results were detects <5X the EB concentration and will be qualified "U,B2" at 5X the normalized EB value.

Blanks: Tl was detected in the EB (sample 215232-001) at a concentration > the MDL but < the PQL. All associated sample results were detects <5X the EB concentration and will be qualified "U,B2" at 5X the normalized EB value.

Blanks: Na was detected in the EB (sample 215232-001) at a concentration > the MDL but < the PQL. The associated results of samples 215227-006, -007, -011, -012, -014, -015, -017, -019, -021, -022, -023, and 215230-001 were detects <5X the EB concentration and will be qualified "U,B2" at 5X the normalized EB value.

MS: The MS %R for Se of Batch 792306 was <75% but >30%. The associated result of sample 215230-002 was a detect and will be qualified "J-,MS3"; all other associated sample results were NDs and will be qualified "UJ,MS3."

MS: The MS %R for As of Batch 792306 was >125%. All associated sample results were detects and will be qualified "J+,MS2."

MS: The MS %R for Cr of Batch 792306 was >125%. All associated sample results were detects and will be qualified "J+,MS2."

MS: The MS %R for Cu of Batch 792306 was >125%. All associated sample results were detects and will be qualified "J+,MS2."

Serial Dilution: The serial dilution percent difference (%D) for Al of Batch 792301 was >10%. All associated sample results were detects and will be qualified "J,D1."

Serial Dilution: The serial dilution %D for Mg of Batch 792301 was >10%. All associated sample results were detects and will be qualified "J,D1."

Serial Dilution: The serial dilution %D for Pb of Batch 792306 was >10%. All associated sample results were detects and will be qualified "J,D1."

CVAA Analysis:

Blanks: Hg of Batch 791848 was detected in the ICB and CCB at negative concentrations with absolute values > the MDL but < the PQL. The associated result of sample 215230-002 was a ND and will be qualified "UJ,B4."

Data are acceptable. QC measures appear to be adequate. The following sections discuss the data review and validation.

Holding Times/Preservation

All Analyses: All samples were analyzed within the prescribed holding times and properly preserved.

ICP-MS INSTRUMENT TUNE

ICP-MS Analysis: The instrument tune data were not reported and could not be evaluated. No sample data should be qualified as a result.

Calibration

All Analyses: All initial and continuing calibration QC acceptance criteria were met, except for the following. Initial calibration y-intercept values and correlation coefficients (R^2) values for target analytes were not reported and could not be evaluated. No sample data should be qualified as a result.

Reporting Limit Verification

ICP-MS Analysis: All CRI recoveries met QC acceptance criteria, except the following. The CRI %R for Al of Batch 792301 was <30% and the %R for Mg of Batch 792301 was <70% but >30%. However, all associated sample results were detects >5X the PQL and will not be qualified.

All Other Analyses: All CRA/CRI recoveries met QC acceptance criteria.

Blanks

ICP Analysis: No target analytes were detected in the blanks, except the following. Sb of Batch 791944 was detected in the ICB, CCB, and MB at concentrations > the MDL but < the PQL. However, the associated result of sample 215230-002 was a detect >5X the highest calibration blank value and >5X the MB value and will not be qualified; the associated result of sample -003 was ND and will not be qualified.

ICP-MS Analysis: No target analytes were detected in the blanks, except as noted above in the summary section and the following. Fe, Al, Be, Co, Mg, Cr, Cu, Cd, Ca, Tl, Zn, Na, Sb, and As were detected in one or more of the blanks at concentrations > the MDL but < the PQL. However, all associated sample results, except the results qualified above in the summary section, were either NDs or detects >5X the highest calibration blank concentration and/or MB concentration and/or EB concentration and will not be qualified. It should be noted that the EB detect results for Ca and Zn were qualified "U" (ND) by MB contamination and, therefore, can not affect other field samples.

CVAA Analysis: No target analytes were detected in the blanks, except as noted above in the summary section and the following. Hg of Batch 791848 was detected in the ICB and CCB at negative concentrations with absolute values > the MDL but < the PQL. However, the associated results of samples 215230-001 and -003 were detects >5X the MDL and will not be qualified. Hg of Batch 791843 was detected in the CCB at a negative concentration with an absolute value > the MDL but < the PQL. However, all associated sample results were detects >5X the MDL and will not be qualified.

ICP-MS INTERNAL STANDARDS

ICP-MS Analysis: Internal standards data were not reported and could not be evaluated. No sample data should be qualified as a result.

Matrix Spike/Matrix Spike Duplicate (MS/MSD)

ICP Analysis: All MS (PS) QC acceptance criteria were met, except as noted above in the summary section.

The MSD analysis was assessed because the laboratory replicate analysis was used as a measure of precision. No sample data should be qualified as a result.

ICP-MS Analysis: All MS (PS) QC acceptance criteria were met, except as noted above in the summary section. The MSD analysis was not assessed because the laboratory replicate analysis was used as a measure of precision. No sample data should be qualified as a result.

CVAA Analysis: All MS (PS) QC acceptance criteria were met. The MSD analysis was not assessed because the laboratory replicate analysis was used as a measure of precision. No sample data should be qualified as a result.

Laboratory Replicate

ICP Analysis: All replicate QC acceptance criteria were met.

ICP-MS Analysis: All replicate QC acceptance criteria were met. It should be noted that the laboratory replicate relative percent difference (RPD) for Mg of Batch 792306 was >20% but <35%, which is the acceptable limit for samples of soil matrix. No sample data should be qualified as a result. No laboratory replicate analysis was performed for Batch 791975 but the LCSD analysis was used as a measure of precision. No sample data should be qualified as a result.

CVAA Analysis: All replicate QC acceptance criteria were met. No laboratory replicate analysis was performed for Batch 791857 but the LCSD analysis was used as a measure of precision. No sample data should be qualified as a result.

Laboratory Control Sample/Laboratory Control Sample Duplicate (LCS/LCSD)

ICP Analysis: All LCS QC acceptance criteria were met. No LCSD analyses were performed. The laboratory replicate analyses were used as measures of laboratory precision. No sample data will be qualified as a result.

ICP-MS/CVAA Analyses: All LCS/LCSD QC acceptance criteria were met.

Detection Limits/Dilutions

All Analyses: All detection limits were properly reported. All samples of Batches 792301, 792306, were diluted the standard 2X soils dilution for all ICP-MS analytes, except 10X dilutions for various analytes of the following samples that were performed to bring over-range target analyte concentrations into the linear calibration range of the instrument and due to high internal standard native concentration: samples 215227-001, -002, -003, -004, -005, -006, -008, -010, -011, -012, -018, -019, 020, -021, -022, and -023, and samples 215230-001, -002, and -003. Samples 215227-014, -015, -017 were diluted 20X for Ca and ample 215230-002 was diluted 100X for Cu and Fe due to over-range concentrations of the target analytes. Sample 215227-015 was diluted 5X for Ag to minimize matrix suppression. Samples 215227 -014 and -017 were diluted 5X for Sb and Ag due to the affects of high Ca concentrations. All associated batch QC samples were diluted at dilution factors that resulted in relative dilution factors to the samples that were $\leq 5X$. No sample data will be qualified as a result. No other samples required dilution.

ICP Interference Check Sample (ICS A and AB)

ICP-MS Analysis: The ICS A and ICS AB raw data were not reported and could not be evaluated. No sample data should be qualified as a result. It should be noted that all ICS AB recoveries still met QC acceptance criteria. No sample data should be qualified as a result.

ICP SERIAL DILUTION

ICP Analysis: The serial dilution analysis met all QC acceptance criteria.

ICP-MS Analysis: The serial dilution analysis met all QC acceptance criteria, except as noted above in the summary section.

Other QC

No field blanks (FBs) were submitted on the AR/COC. All RPDs of the field duplicates (FDs) (samples 215227-007 and -017) were <35%, except for the following analytes: Cu, Pb, Fe, and Zn. No QC acceptance criteria for the evaluation of FDs are currently in place.

No other specific issues were identified which affect data quality.

Attachment 5

**Denial: Request For Extension for Long-Term Environmental Stewardship (LTES)
Site 1 - Cable Debris Site, November 2, 2009 Sandia National Laboratories, EPA ID#
NM5890110518 HWB-SNL-08-014**



BILL RICHARDSON
Governor

DIANE DENISH
Lieutenant Governor

NEW MEXICO
ENVIRONMENT DEPARTMENT

Hazardous Waste Bureau

2905 Rodeo Park Drive East, Building 1
Santa Fe, New Mexico 87505-6303
Phone (505) 476-6000 Fax (505) 476-6030
www.nmenv.state.nm.us



RON CURRY
Secretary

JON GOLDSTEIN
Deputy Secretary

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

November 23, 2009

Kimberly A. Davis
Acting Manager
Sandia Site Office/NNSA
U.S. Department of Energy
P.O. Box 5400, MS 0184
Albuquerque, NM 87185-5400

Fran B. Nimick
Deputy Director
Nuclear Energy & Global Security Technologies
Sandia Corporation
P.O. Box 5800, MS 0701
Albuquerque, NM 87185

RE: DENIAL: REQUEST FOR EXTENSION FOR LONG-TERM ENVIRONMENTAL STEWARDSHIP (LTES) SITE 1 – CABLE DEBRIS SITE, NOVEMBER 2, 2009 SANDIA NATIONAL LABORATORIES, EPA ID# NM5890110518 HWB-SNL-08-014

Dear Ms. Davis and Mr. Nimick:

The New Mexico Environment Department (NMED) has reviewed the subject document dated November 2, 2009, in which the U. S. Department of Energy on behalf of itself and Sandia Corporation (collectively the "Permittees") requested an extension to complete the required sampling and analysis of soil for cadmium and thallium at the Cable Debris Site. The Permittees did not provide a reason for the extension request. NMED does not find good cause for the request and therefore denies it.

Additionally, the Permittees indicate in the letter that although the results of the four soil samples analyzed for Cesium-137 exceeded the background level for subsurface soil, the results should have been compared to the background level for surface soil. Upon reevaluation of the data, the activity levels of all four soil samples are indicative of background conditions. NMED agrees additional soil sampling for Cesium-137 is not needed and, therefore, is no longer required.

Ms. Davis and Mr. Nimick
November 23, 2009
Page 2

If you have any questions regarding this matter, please contact Mr. Brian L. Salem of my staff at (505) 222-9576.

Sincerely,



James P. Bearzi
Chief
Hazardous Waste Bureau

JPB:bls

cc: J. Kieling, NMED HWB
W. Moats, NMED HWB
B. Salem, NMED HWB
T. Skibitski, NMED DOE OB
D. Pellegrino, DOE NNSA/SSO, MS 0184
L. King, EPA Region 6 (6PD-N)
File: SNL 2009
SNL-08-014