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



APR 19 2008

CERTIFIED MAIL – RETURN RECEIPT REQUESTED



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

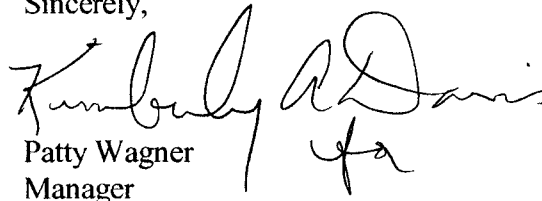
Dear Mr. Bearzi:

On behalf of the Department of Energy (DOE) and Sandia Corporation (Sandia), DOE is submitting a Voluntary Corrective Action (VCA) Plan for the Cable Debris Site at Sandia National Laboratories/New Mexico (SNL/NM). A notification of the discovery of this suspected SWMU was transmitted to you on March 21, 2008. Requirements for a VCA Plan are contained in Section VI.H of the Compliance Order on Consent for SNL/NM.

The Compliance Order on Consent for SNL/NM specifies in Section VI.H that this submittal be provided to the New Mexico Environment Department (NMED) a minimum of 15 days prior to the commencement of any voluntary field activity. Due to funding availability, we hope to begin field work on July 10, 2008. As a result, we would very much appreciate NMED comments on the VCA Plan as soon as possible.

If you have any questions regarding this notification, please contact me at (505) 845-6036, or Dan Pellegrino of my staff at (505) 845-5398.

Sincerely,


Patty Wagner
Manager

Enclosure

cc w/enclosure:
W. Moats, NMED (Via Certified Mail)
L. King, EPA, Region 6 (Via Certified Mail)
T. Skibitski, NMED-OB



MAR 19 2008

James Bearzi

(2)

cc w/o enclosure

B. Birch, NMED-OB

A. Blumberg, SNL/NM, Org. 11100, MS-0141

D. Miller, SNL/NM, Org. 6765, MS-0718

P. Freshour, SNL/NM, Org. 6765, MS-1089

B. Langkopf, SNL/NM, Org. 6765, MS-1089

M. Skelly, Org. 6765, MS-1089

S. Griffith, Org. 6765, MS-1089

T. Jackson, Org. 4133, MS-1089

M. Davis, Org. 6765, MS-1089

SNL ES&H Records Center, Org. 6765, MS-1089

T. Longo, HQ/GTN, NA-56

MAR 19 2008

**Voluntary Corrective Action Plan for the Cable Debris Site at Sandia National
Laboratories/New Mexico**

CERTIFICATION STATEMENT

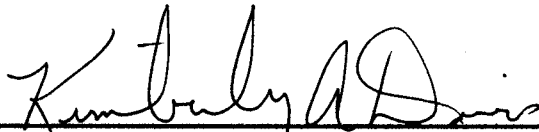
I certify under penalty of law that this document and all attachments were prepared under my direction or supervision according to a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, 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

14 May 2008

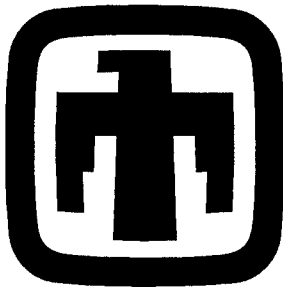
Date signed



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

5/16/08

Date signed



Sandia National Laboratories/New Mexico

VOLUNTARY CORRECTIVE ACTION PLAN FOR LTES SITE 1—CABLE DEBRIS May 2008



United States Department of Energy
Sandia Site Office

Sandia is a multiprogram laboratory operated by Sandia Corporation, a wholly-owned subsidiary of Lockheed Martin Corporation, for the United States Department of Energy's National Nuclear Security Administration under contract DE-AC04-94AL85000.

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LIST OF ATTACHMENTS

Attachment A – Cable Debris Site Photographs (6 ea.)

ACRONYMS AND ABBREVIATIONS

AR/COC	analysis request/chain of custody
bgs	below ground surface
COPC	constituent of potential concern
COOC	Compliance Order on Consent
DOE	Department of Energy
DQO	data quality objective
EPA	U.S. Environmental Protection Agency
EPC	exposure point concentration
HASP	Health and Safety Plan
HE	high explosive
HQ	hazard quotient
ILCR	incremental lifetime cancer risk
KAFB	Kirtland Air Force Base
kg	kilogram
mg	milligram(s)
NMED	New Mexico Environment Department
PPE	personal protective equipment
RFI	RCRA Facility Investigation
SMO	Sample Management Office
SNL/NM	Sandia National Laboratories/New Mexico
SSL	soil screening level
SWPPP	Storm Water Pollution Prevention Plan
TA	Technical Area
TAL	target analyte list
TEDE	total effective dose equivalent
THQ	target hazard quotient
TR	target risk
UCL	upper confidence limit
VCA	Voluntary Corrective Action

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1.0 INTRODUCTION

This document describes the Voluntary Corrective Action (VCA) to be conducted at the Technical Area (TA) III Cable Debris Site. The VCA addresses the removal of surface debris from the site, including the surge basin and surrounding area, confirmatory soil sampling, and other activities as necessary.

1.1 Objectives and Scope

The objectives of this VCA are to reduce any potential impacts to human health and the environment through remediation of the site. The debris will be processed to a manageable size, segregated, and the disposition will either be through recycling or waste disposal paths. After confirmatory sampling, the site will be re-vegetated. This action is intended to be the final remedy for the Cable Debris Site.

The United States Department of Energy (DOE) and Sandia Corporation (Sandia) considered several factors in determining the need for a VCA at this location.

- The presence of surface debris, including metal cables with other metal debris and concrete rubble and rebar.
- The potential remedy is obvious and can be readily applied.
- Complete assessment and final remediation of the site requires removing the surface debris.
- The remedy is intended as a final resolution and will eliminate source material (metal and concrete) and prevent any potential release or migration of contaminants from the site.
- Environmental, safety, and health risk reductions will be achieved.

1.2 Approach and Implementation

The nature and extent of contamination associated with the Cable Debris Site has not been determined. However, through visual inspection the potential contamination within the area appears to be limited to surface debris, and cleanup of the site will generate solid waste. This VCA will primarily involve the following activities:

- 1) processing the debris to a manageable size,

- 2) segregating and staging material based on the recycling or disposal pathway,
- 3) placing material into roll-offs or other appropriate containers for recycling or disposal,
- 4) final disposition of debris through Sandia National Laboratories/New Mexico (SNL/NM) recycling processes or the Solid Waste Transfer Facility, and
- 4) confirmatory soil sampling. After confirmation data has been reviewed and it is determined that appropriate risk levels have been met, the areas will be re-vegetated as feasible.

1.3 Background Issues

1.3.1 Regulatory Issues

This VCA will be conducted under Section VI.H.3 and 4 of the Compliance Order on Consent (COOC) between the DOE, Sandia, and the New Mexico Environment Department (NMED) (NMED, 2004). This VCA will not pose an unacceptable risk to human health and the environment, and has been designed to achieve source reduction. The proposed cleanup is consistent with overall corrective action objectives and requirements, and is based on the VCA process established in the COOC. Site-specific objectives were developed for this VCA (see Section 4.0) and are consistent with the final site remedy. Final confirmatory sampling and geophysical surveys will be used to verify the objectives have been met. As required by Section VI.H of the COOC, this VCA Plan will be submitted to the New Mexico Environmental Department (NMED) at least 15 days prior to the start of field work. The Investigation Report will be submitted to the NMED within 90 days of completion of the VCA field work. The Investigation Report will present the results of this VCA.

1.3.2 Cleanup Goals

Target risk and hazard levels for human health are risk management-based criteria for carcinogenic and non-carcinogenic responses, respectively, to determine:

- (1) whether site-related contamination poses an unacceptable risk to human health and require corrective action(s), or
- (2) whether implemented corrective action(s) sufficiently protect human health (NMED 2006).

The current and future land use at the site is industrial. However, based upon the objective of achieving unrestricted land use and site closure without controls for the Cable Debris Site,

residential screening levels will be used as a corrective action objective for this VCA. For nonradionuclide chemical of potential concern (COPC), soil screening levels (SSLs) from NMED guidance (NMED 2006) will be used to estimate the potential hazard or risk at this site. The NMED SSLs are based on a target hazard quotient (HQ) of 1.0 and a target risk of 1×10^{-5} (NMED 2006). For those COPCs for which no NMED SSL is available, EPA Region 6 screening levels (EPA 2007) will be used. The EPA screening levels for carcinogens, which are based on a target risk of 1×10^{-6} , will be multiplied by 10 to adjust to the NMED target risk of 1×10^{-5} . Cumulative human health risk will be calculated based on the methodology summarized Section 4.5. In addition, an ecological screening risk assessment will be completed and the results summarized in the investigation report.

Based on the limited data collected to date at the Cable Debris Site, radionuclides are not expected to be a COPC at this site. However, if necessary, the coded equation provided in RESRAD computer code will be used to estimate total effective dose equivalent (TEDE) and cancer risk for the individual exposure pathways and receptors, and the TEDE will be compared directly to the exposure guidelines of 15 mrem/year for residential land use.

1.3.3 Data Quality Objectives Process

The two primary data quality objectives for this VCA are:

- 1) confirm that bulk debris has been removed from the site, and
- 2) verify that debris areas meet the screening risk assessment cleanup goals.

SNL/NM's DQO process for this VCA follows these general steps:

- Compile and evaluate site background information
- Develop a conceptual site model based upon field investigation and laboratory data
- Establish DQOs, including:
 - Corrective action objectives and cleanup goals
 - Confirmatory methods to ensure corrective action objectives have been achieved

2.0 DESCRIPTION OF LTES SITE 1—CABLE DEBRIS

This chapter presents the site description, operational history, waste characteristics, and geology/hydrogeology of the Cable Debris Site. This information has been combined with site investigation data to develop the revised conceptual site model discussed in Chapter 3.0.

2.1 Site Description

The Cable Debris Site is located within the boundaries of Kirtland Air Force Base (KAFB) (Figure 2-1) in TA-III of SNL/NM on KAFB land permitted to the DOE. The current and future land use at the site is industrial. The Cable Debris Site consists of surface debris piles within a surge basin. A surge basin is part of a drainage system in the local vicinity that provides additional storage and retention of water during heavy rainfall or flood events. The surge basin is a circular depression approximately 1.3 acres in size (Figure 2-2).

Three of the debris piles are primarily comprised of metal cables with other metal debris, including rebar, steel pipe, tubes, weldments, welded steel fixtures, spent rocket motors and powder actuated cable cutter(s). The remaining two piles in the surge basin are comprised primarily of concrete rubble and rebar; one of these piles is located on the edge of the basin. In addition, there are five smaller debris piles directly east of the surge basin which are primarily comprised of small cobbles, fill dirt and some minor solid waste that includes paper, plastic, and small metal debris. Based upon visual inspection, there is no indication that these piles contain anything other than minor solid waste — no soil staining or other signs of contamination were observed. Photographs of debris piles are provided in Attachment A.

The area surrounding the surge basin is generally flat with a gentle slope to the southwest. No major arroyo channels occur in the area. Precipitation is low in the region (approximately 8 inches per year) and surface runoff is minimal. Vegetation primarily consists of desert grasses, cacti, and tumbleweeds.

2.2 Operational History

The operational history at the Cable Debris Site is unknown. However, based on the available information, this location has never been an active site and the contamination is limited to the surface debris (i.e., solid waste) that was probably transported to the area from various test areas. However, prior to 1995, no information is available and the precise origin of the debris is unknown.