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

FEB 25 2014

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Mr. Tom Blaine, Manager
Environmental Health Division Director
Environmental Health Division
New Mexico Environment Department (NMED)
1190 St. Francis Drive
Santa Fe, New Mexico 87502

FEB 27 2014

**NMED
Hazardous Waste Bureau**

Dear Mr. Blaine

Attached please find the Soil Vapor Extraction (SVE) Pilot Test Report that was recently completed. This report details the pilot testing of candidate wells that were performed to collect required data in order to design the expansion of the SVE system at Solid Waste Management Units ST-106 and SS-111.

Please contact Mr. L. Wayne Bitner at 505.853.3484 or at ludie.bitner@us.af.mil or Ms. Victoria R. Branson at 505.846.6362 or at victoria.branson@us.af.mil, if you have any questions.

Sincerely

TOM D. MILLER, Colonel USAF
Commander

cc:
NMED-HWB (Kielsing, Cobrain, Moats, McDonald, Brandwein)
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KAFB4126



**KIRTLAND AIR FORCE BASE
ALBUQUERQUE, NEW MEXICO**

**Soil-Vapor Extraction System Pilot Test Report
Bulk Fuels Facility Spill
Solid Waste Management Units ST-106 and SS-111**

February 2014



**377 MSG/CEANR
2050 Wyoming Blvd. SE
Kirtland AFB, New Mexico 87117-5270**

**KIRTLAND AIR FORCE BASE
ALBUQUERQUE, NEW MEXICO**

SOIL-VAPOR EXTRACTION SYSTEM PILOT TEST REPORT

**BULK FUELS FACILITY SPILL
SOLID WASTE MANAGEMENT UNITS ST-106 AND SS-111
KIRTLAND AIR FORCE BASE, NEW MEXICO**

February 2014

Prepared for

U.S. Army Corps of Engineers
Albuquerque District
Albuquerque, New Mexico 87109

USACE Contract No. W912DY-10-D-0014
Delivery Order 0002

Prepared by

CB&I Federal Services LLC
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Greenwood Village, Colorado 80111

NOTICE

This report was prepared for the U.S. Army Corps of Engineers by CB&I Federal Services LLC for the purpose of aiding in the implementation of a final remedial action plan under the U.S. Air Force Environmental Restoration Program. As the report relates to actual or possible releases of potentially hazardous substances, its release prior to a final decision on remedial action may be in the public's interest. The limited objectives of this report and the ongoing nature of the Environmental Restoration Program, along with the evolving knowledge of site conditions and chemical effects on the environment and health, must be considered when evaluating this report, since subsequent facts may become known which may make this report premature or inaccurate.

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6. AUTHOR R. Hobbs, S. Shealy				
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13. ABSTRACT (Maximum 200 words) CB&I Federal Services LLC prepared this report, which details pilot testing of candidate wells to collect the required data in order to design the expansion of the soil-vapor extraction (SVE) system at Solid Waste Management Units ST-106 and SS-111, Bulk Fuels Facility Spill site, Kirtland Air Force Base, New Mexico. Pilot testing took place between October 3, 2013 and November 8, 2013. Two groups of wells were evaluated during pilot testing. Thirteen wells outside of the zone of influence of the existing SVE wells were evaluated to determine if they are suitable for expansion of the SVE zone of influence. The second set of wells tested included the two existing SVE wells (KAFB-106160 and KAFB-106161) and three Pneulog [®] wells within the zone of influence of the existing SVE system. Pilot test data from these five wells will be evaluated to optimize the removal of benzene and ethylene dibromide (EDB) in soil-vapor within the zone of influence of the existing SVE system. The SVE pilot test generated much of the data that is needed to complete the design of an expanded Bulk Fuels Facility SVE system. These data include the concentrations of hydrocarbons, oxygen, carbon dioxide, and EDB that can be expected from the various SVE wells. These concentrations, in conjunction with the amount of soil vapor produced by the wells as a function of wellhead vacuum, are necessary inputs to design an expanded SVE system.				
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**40 CFR 270.11
DOCUMENT CERTIFICATION
FEBRUARY 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 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 fines and imprisonment for knowing violations.



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

This document has been approved for public release.



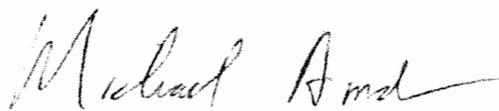
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377th Air Base Wing Public Affairs

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PREFACE

This Soil-Vapor Extraction System Pilot Test Report has been prepared by CB&I Federal Services LLC (CB&I) for the U.S. Army Corps of Engineers (USACE), under Contract W912DY-10-D-0014, Delivery Order 0002. It pertains to the Kirtland Air Force Base Bulk Fuels Facility Spill, Solid Waste Management Units ST-106 and SS-111, located in Albuquerque, New Mexico. This report was prepared in accordance with all applicable federal, state, and local laws and regulations, including the New Mexico Hazardous Waste Act, New Mexico Statutes Annotated 1978, New Mexico Hazardous Waste Management Regulations, Resource Conservation and Recovery Act, and regulatory correspondence between the New Mexico Environment Department Hazardous Waste Bureau and the U.S. Air Force, dated April 2, June 4, August 6, and December 10, 2010.

This work will be performed under the authority of USACE Contract No. W912DY-10-D-0014, Delivery Order 0002. Mr. John McBee is the USACE Albuquerque District Project Manager; Mr. Wayne Bitner, Jr. is the Kirtland Air Force Base Restoration Section Chief; and Mr. Michael Amdurer is the CB&I Project Manager. This report was prepared by Stuart Shealy and Rachel Hobbs.



Michael Amdurer PG, PhD
CB&I Federal Services LLC
Project Manager