

CORRES. CONTROL
OUTGOING LTR NO.

DOE ORDER #

01 RF 01851 August 10, 2001



DIST.	LTR	ENC
BRAILS FORD, M.D		
FERRERA, D.W.	X	
FERRI, M.S.		
FULTON, J.C.		
GIACOMINI, J.		
HALL, L.		
MARTINEZ, L.A.		
PARKER, A.M.		
POWERS, K.		
SCOTT, G.K.		
SHELTON, D.C.	X	
SPEARS, M.S.		
TRICE, K.D.		
TUOR, N.R.	X	
VOORHEIS, G.M.		
BUTLER, J.L.	X	X
PRIMROSE, A	X	X
ANDERSON, J	X	X
NEVEAU, R	X	X
BLAKE, C	X	X
STRAND, D	X	X
LINDSAY, T	X	X
CORSI, J	X	X
COR CONTROL	X	X
ADMN. RECORD	X	X
WASTE REC. CTR.		
TRAFFIC		
PATS/130		
RISSE/ER LIBRARY	X	
CLASSIFICATION		
UCNI		
UNCLASSIFIED		
CONFIDENTIAL		
SECRET		

Ms Norma Castaneda
Environmental, Safety and Health Program Assessment
DOE, RFFO

On August 8, 2001, eight copies of the Final Data Summary Report for the Characterization of UBCs 123 & 886 were delivered to your office. At your request, changes were made to the reports after they were delivered. Enclosed are 8 copies of the revised page 29, and the requested Executive Summary.

Please forward these changes to CDPHE, Savannah River Operations, and Sandia National Laboratories.

CDPHE/HMWMD-FF-B2
4300 Cherry Creek Drive South
Denver, CO 80246-1530
(1 copy)
Attention: Carl Spreng

Savannah River Operations
P.O. Box A
Aiken, South Carolina 29803
(2 copies)
Attention: Scott McMullin
Carl Lanigan

Sandia National Labs
P.O. Box 5800
Albuquerque, NM 87185-0706
(1 copy)
Attention: Cecelia Williams

If you have any questions regarding this transmittal, please contact Tom Lindsay at 303-966-5708 or David Strand at 303-966-6422.

J. Lane Butler
Manager, Environmental Restoration Programs

AUTHORIZED CLASSIFIER SIGNATURE
Exemption - CEX-072-99

JLB: dd
Orig. and 1 cc - Norma Castaneda

Date
IN REPLY TO RFP CC NO:

Enclosures:
As Stated

ACTION ITEM STATUS
 PARTIAL/OPEN
 CLOSED

cc:
Tom Anderson
Andy Johnson
Dawn Kaback
Mark Ruthven
Concurrent Technologies Corp.
MSE-TA
Concurrent Technologies Corp.
DOE

LTR APPROVALS:

ORIG & TYPIST INITIALS

DOCUMENT CLASSIFICATION
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Kaiser Hill Company, L.L.C.
Rocky Flats Environmental Technology Site, 10808 Hwy. 93 Unit B, Golden CO 80403-8200 • 303-966-7000

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EXECUTIVE SUMMARY

The Department of Energy (DOE) Subsurface Contaminant Focus Area (SCFA) provided funding to characterize potential under building contamination at Building 886 and the Building 123 slab at Rocky Flats Environmental Technology Site. The technology deployed was horizontal directional drilling combined with environmental measurement while drilling (EMWD) developed by Sandia National Laboratory. Geoprobe data were also collected to evaluate the feasibility and cost effectiveness of this methodology compared to conventional characterization. The characterization information will be used to make remedial action decisions and waste disposal decisions.

The preliminary results indicate that the two methods are comparable. As expected, the horizontal drilling method was slower and encountered more subsurface obstacles but collected samples specifically within the target area under the process waste lines. The results indicate that this technique is effective, particularly where waste minimization and spread of contamination are major issues.

At Building 886, one horizontal borehole, and 15 conventional sample locations were completed. Data indicate that no radiological or chemical contamination exist above RFCA action levels at the sample locations.

At Building 123, four horizontal boreholes and 29 geoprobe holes were completed. There were three isolated sample locations where arsenic and lead exceed RFCA action levels. No other potential contaminants exceeded action levels.

7.0 SUMMARY

The DOE Subsurface Contaminant Focus Area provided funding for the Site to conduct this project. This characterization effort was performed to make remedial and waste disposition decisions for the subsurface soils at UBCs 123 and 886. The characterization included all potential contaminants, both radiological and chemical, based on previous sampling in the industrial area and process knowledge of the buildings. The data presented in this report have been verified and validated for the purpose of corroborating decisions to acceptable levels of confidence as stated in the project's original data quality objectives.

UBC 123

With the exception of arsenic and lead at three isolated sample locations, the results of the data indicate that no radiological or chemical contamination exists in excess of RFCA Tier I or Tier II Action Levels at the sample locations collected in UBC 123. Removal and disposal of the former Building 123 foundation and slab is currently scheduled for fiscal year (FY) 2002.

UBC 886

Results indicate that no radiological or chemical contamination exists in excess of RFCA Tier I or Tier II Action Levels at the sample locations collected in UBC 886. D&D of Building 886 is currently scheduled for FY 2002.

This project was completed in a safe and efficient manner with no lost work time. Additionally, the project was successful in accomplishing its objective of making qualitative data comparisons between the vertical and horizontal sampling methods.