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CORRES CONTROL  
INCOMING LTR NO

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Department of Energy

ROCKY FLATS OFFICE  
P O BOX 928  
GOLDEN COLORADO 80402-0928

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EG&G  
ROCKY FLATS PLANT  
CORRESPONDENCE CONTROL



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ACTION

DIST.	LTR	ENC
BENJAMIN, A.		
BRETZKE, J.C.		
BURLINGAME, A.H.		
COPP, B.D.		
CROUCHER, D.W.		
DAVIS, J.G.		
EVERED, J.E.	X	
FERRERA, D.W.		
FERRIS, L.R.		
FRANKO, F.J.		
FRANCIS, G.E.		
GOODWIN, R.		
HANN, B.J.		
HEALY, T.J.		
DEKER, E.H.		
JENS, J.P.		
KERSH, J.M.	X	
KIRBY, W.A.		
KREG, D.		
LEE, E.M.		
MAJESTIC, J.R.		
MARX, G.E.		
MATHEWS, T.A.		
McCLUSKY, J.K.		
MEURENS, B.E.		
MORGAN, R.V.		
PIZZUTO, V.M.		
POTTER, G.L.		
SAFFELL, B.F.		
SANDLIN, N.B.		
SWANSON, E.R.		
WEBB, J.S.		
WILKINSON, R.B.		
WILSON, J.M.		
YOUNG, E.R.		
ZANE, J.O.		
Arndt	M	X
Greengard	T	X

Mr Gary Baughman, Unit Leader  
Hazardous Waste Facilities  
Colorado Department of Health  
4210 East 11<sup>th</sup> Avenue  
Denver, Colorado 80220

Mr. Martin Hestmark, Project Manager  
U.S. Environmental Protection Agency, Region VIII  
ATTN: Rocky Flats Project Manager, 8HWM-RI  
999 18<sup>th</sup> Street, Suite 500, 8 WM-C  
Denver, Colorado 80220-2405

Gentlemen.

As per discussions of May 17 and May 22, 1991 pertaining to downhole sampling procedures, please find enclosed a revised page 5-3 of the Phase III RFI/RI Work Plan for OU1. Please insert the new revised page and destroy the old page.

If you have any questions, please feel free to contact Thomas T. Olsen of my staff at 966-2762.

Sincerely,

*David P. Simonson*  
David P Simonson  
Assistant Manager  
for Environmental Management

Enclosure

cc w/o Enclosure:  
B Barry, CDH  
M Arndt, EG&G/RF  
T Greengard, EG&G/RF

CORRES CONTROL	X	X
TRAFFIC		

Reviewed for Addressee  
Corres Control RFP

6-26-91 *Ca*

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ADMIN RECORD

in soils directly beneath the sites. In addition, ground-water monitoring wells will be installed adjacent to some of the boreholes to characterize ground-water quality directly beneath the sites. This section discusses those wells and boreholes which will be drilled for source characterization. Wells to be drilled outside of IHSSs for characterizing the extent of contamination are discussed in Section 5.3.1. All proposed Phase III RFI/RI wells and boreholes are shown on Plate 1. Drilling, sampling, and well installation will follow the Rocky Flats Plant ER Program SOP (EG&G, 1990g).

Boreholes to be drilled into IHSSs will extend from the ground surface to 6 feet below the base of alluvial material if no sandstone is encountered. Continuous core will be collected for geologic descriptions for the entire borehole depth. From this core, discrete samples will be submitted for laboratory volatile organic analyses (VOA) beginning two feet from the ground surface, continuing every 4 feet to the water table. A VOA sample will also be collected from the bottom of the first drive sample below the water table. In addition, a discrete VOA sample will be submitted to the laboratory if staining, discoloration, odor or other anomaly is observed during drilling. A final VOA sample will be collected for chemical analysis from the base of the first drive within bedrock immediately below the alluvial material. Core from saturated surficial materials will not be submitted to the laboratory, as the presence of water in this zone will affect interpretation of chemical results. If drilling is to continue below the standard 6 feet into bedrock (i.e., if a sandstone is encountered) surface casing will be grouted into the borehole through surficial materials. In addition to the VOA samples, linear samples from the core will be submitted to the laboratory for analysis of the remaining chemical parameters from every consecutive 6 foot interval to the base of weathering. Details of this sampling are found in SOP GT2, Sampling Procedure 5.3. To further characterize weathered bedrock immediately beneath the sites, fracture patterns (both degree of fracturing and vertical extent) will be noted on the borehole logs and in situ packer tests will be performed in the bedrock where drilling conditions allow.

Alluvial ground-water monitoring wells will be installed adjacent to some boreholes to characterize ground-water quality directly beneath IHSSs. In addition, bedrock wells will be installed adjacent to boreholes where weathered sandstone is encountered to evaluate the potential downward migration of contaminants. Wells will be drilled, sampled, and completed in accordance with the Rocky Flats Plant ER Program SOP (EG&G, 1990g). Source characterization borehole and monitor well locations are discussed in the following sections.

## **5.2.1 Sample Locations**

### **5.2.1.1 Oil Sludge Pit Site (IHSS Ref. No. 102)**

The location of IHSS 102 has been revised from that shown in the Phase II RI report (Rockwell International, 1988a) based on further review of historical aerial photographs. Specifically, the Oil Sludge Pit Site appears on a 1955 aerial photo. Also evident on the 1955 photos is seepage from the pit as shown on Plate 1. The pit was covered after its use (Rockwell International, 1987c), and it is no longer visible on 1959 aerial photographs. Additional soil and ground-water sampling are needed within, surrounding, and downgradient