

0432 RF 93

DUE  
DATE

**COLORADO DEPARTMENT OF HEALTH**  
Dedicated to protecting and improving the health and  
environment of the people of Colorado

Jan 27 3 25 PM '93



Roy Romer  
Governor  
Patricia A. Nolan, MD,  
Executive Director

**ACTION**

300 Cherry Creek Dr. S. Laboratory Building  
Denver, Colorado 80222-1530 4210 E. 11th Avenue  
Phone (303) 692-2000 Denver, Colorado 80220-3716  
(303) 691-4700

EG&G  
ROCKY FLATS PLANT  
CORRESPONDENCE CONTROL

DIST.	LTR	ENC
BENEDETTI, R.L.	X	
BENJAMIN, A.		
BERMAN, H.S.		
CARNIVAL, G.J.		
CORDOVA, R.C.		
CROUCHER, D.W.		
DAVIS, J.G.		
FERRERA, D.W.		
HANNI, B.J.		
HEALY, T.J.		
HEDAHL, T.G.	X	
HILBIG, J.G.		
IDEKER, E.H.		
KIRBY, W.A.		
KUESTER, A.W.		
LEE, E.M.		
MANN, H.P.		
MARX, G.E.		
McKENNA, F.G.		
MORGAN, R.V.		
PIZZUTO, V.M.		
POTTER, G.L.		
RILEY, J.H.		
SANDLIN, N.B.		
SATTERWHITE, D.G.		
SCHUBERT, A.L.		
SETLOCK, G.H.		
SHEPLER, R. L.		
SULLIVAN, M.T.		
SWANSON, E.R.		
WILKINSON, R.B.		
WILSON, J.M.		
ZANE, J.O.		

January 20, 1993

Mr. Martin Hestmark  
U.S. Environmental Protection Agency  
Region VIII  
999 18th Street, Suite 500, 8WM-C  
Denver, Colorado 80202-2405

**RE: Technical Memorandum (TM) 5: Revised Soil Gas Sampling Program  
for the Original Landfill, OU 5, January, 1993**

Dear Mr. Hestmark,

The Colorado Department of Health, Hazardous Materials and Waste Management Division (the Division), has reviewed the above referenced document prepared by DOE and prime operating contractor, EG&G. We recommend that this TM be given conditional approval subject to the comments included below.

The Division's comments to TM 5 are as follows:

1) The Division is uncomfortable with the single line of soil gas survey points on 20-foot spacing along the downgradient edge of the Landfill. One of the primary purposes and goals of the soil gas survey was to try to establish, in a non-invasive manner, whether or not there are contaminants leaking out of the downgradient edge of the Landfill in the subsurface and potentially impacting areas proximal to Woman Creek. To get a quality characterization of the downgradient edge, the Workplan specified that the soil gas survey would take samples on a 25-foot grid between the last 100-foot soil gas sample within the IHSS boundary and the first 100-foot sample outside the boundary. The idea was to create a band of closely spaced coverage - not a line. Therefore, the Division proposes the following compromise. Replace the one line of 20-foot spacing with four lines of 40-foot spacing on a triangular grid. This preserves the 10-foot radius of influence when considering flowpaths occurring at a right-angle to the survey, covers a 60-foot wide band, and only adds the equivalent of one additional 20-foot spaced line.

2) The Division urges that the analytical results from the primary and secondary samples that are planned be reviewed, mapped and

most EX

Grndt mX

Taylor R X  
adm Rec

CORRES CONTROL	x	x
TRAFFIC		

Reviewed for Addressee  
Corres. Control RFP

1-27-93 *Ci*  
DATE BY

Ref Ltr. #

interpreted in as rapid a manner as possible so that any tertiary samples that are necessary can be taken in a timeframe that minimizes potential survey variations. These variations could include weather, temperature, sampling crew, sampling device, etc.

3) Text in Section 3.5 indicates that several intervals will be sampled at the first several sample points to determine the optimum depth for sampling at the subsequent sample locations. The Workplan specifically stated that the samples will be taken from a depth of 5 feet. Therefore, the Division would not support soil gas samples taken from a depth of less than 5 feet unless 1) subsurface conditions prevent sample port placement to that depth after several tries in the sample point vicinity, or 2) depth to bedrock or water is less than 5 feet.

4) The Division is concerned about the definition of an anomaly as presented in Section 3.3, particularly since we note that very few, if any, soil gas samples are being taken from "undisturbed" areas or areas outside what could conceivably be affected by waste within the Landfill. We urge DOE to either re-define an anomaly or add sample locations in an unaffected or "background" areas.

5) During review of Workplans that have been prepared since the OU 5 Workplan, the Division has been made aware that the confirmation soil cores may not accomplish their intended purpose and should be replaced by boreholes that characterize the entire alluvial interval. The Division would like to discuss this issue with DOE, EG&G, and sub-contractor representatives before implementation of this TM.

If you have any questions regarding these matters, please call Joe Schieffelin of my staff at 692-3356.

Sincerely,



Gary W. Baughman, Chief  
Facilities Section  
Hazardous Waste Control Program

cc: Richard Schassburger, DOE  
Jen Pepe, DOE  
Mike Arndt, EG&G  
Ed Mast, EG&G  
Jackie Berardini, CDH-OE