



Department of Energy

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

16546

JUN 18 1993

93-DOE-06959

Mr. Martin Hestmark
U. S. Environmental Protection Agency, Region VIII
ATTN: Rocky Flats Project Manager, 8HWM-RI
999 18th Street, Suite 500, 8WM-C
Denver, Colorado 80202-2405

Mr. Gary Baughman
Hazardous Waste Facilities Unit Leader
Colorado Department of Health
4300 Cherry Creek Drive South
Denver, Colorado 80222-1530

Gentlemen:

Enclosed please find a copy of the Proposed Monitoring Well Locations Downgradient of Individual Hazardous Substance Site 115 (IHSS 115) for Operable Unit 5 (OU5) at the Rocky Flats Plant. This letter is presenting modification and clarification of the OU5 Phase I RCRA Facility Investigation/Remedial Investigation Work Plan (RFI/RI), Section 7.0, Field Sampling Plan (FSP) for the monitoring well locations identified by predecessor field activities required by the work plan.

This plan was originally to be submitted as part of Technical Memorandum 8 (TM8)-Monitoring Wells at IHSS 115. Due to time constraints, the Department of Energy (DOE) proposed in a letter to the Environmental Protection Agency (EPA) and Colorado Department of Health (CDH), dated May 28, 1993, that TM8 be withdrawn as a requirement of OU5. The TM would be replaced with this letter, in combination with the May 28, 1993, letter proposing a field sampling plan for investigation of soil gas anomalies with IHSS 115. These two letters address the entire scope of TM8 as defined by Section 7 of the work plan. This proposal was discussed with your staffs during a meeting held on May 14, 1993, regarding OU5 field activities.

If you have questions or comments, please contact Jen Pepe of my staff at 966-2184.

Sincerely,


James K. Hartman
Assistant Manager for Transition
and Environmental Restoration

Enclosure

JUN 18 1993

M. Hestmark and G. Baughman
93-DOE-06959

2

cc w/Enclosure:
A. Rampertaap, EM-453

cc w/o Enclosure:
J. Ciocco, EM-453.1
B. Lavelle, EPA
J. Schieffelin, CDH
R. Benedetti, EG&G
E. Mast, EG&G

PROPOSED MONITORING WELL LOCATIONS DOWNGRADIENT OF IHSS 115

The OU5 Phase I RFI/RI Work Plan (Table 7-1, Activity 13) shows four alluvial groundwater monitoring wells located downgradient of the Original Landfill with three of the wells installed between the Original Landfill and the South Interceptor Ditch (SID), and one well installed between the SID and Woman Creek (Figure 1). At the time the OU 5 Work Plan was being written, the original boundary of the Landfill had been characterized principally from reviews of historic aerial photographs and from the operational history of the site. The eastern and southern boundaries of this IHSS, as characterized by these reviews, have since been extended based on EPA and CDH investigations (TM 6). The southern boundary was extended because waste was identified in areas south of the SID. The eastern boundary was extended because a surface disturbance area east of the Landfill once served as a pipe and scrap metal storage yard and possibly a soil disposal area concurrent with, and following operations at, the Landfill. Radiological and geophysical (electromagnetic and magnetometer) surveys conducted as part of the Phase I RFI/RI investigation have yielded additional information that indicates the old Landfill boundary and disturbed area extend to the east, south, and west of these limits.

The intent of the OU5 Work Plan was to monitor the groundwater downgradient of the original Landfill. In order to keep the intent of the OU 5 Work Plan intact, the proposed locations of two of these four monitoring wells have been adjusted and two additional monitoring wells are proposed to be added to the groundwater monitoring program. Figure 1 identifies the original OU 5 Work Plan proposed locations as A, B, C, and D (Phase I RFI/RI Work Plan, Figure 7-1). The revised proposed well locations are identified as 1 through 6. The following provides a rationale for these revised locations on a well-by well basis.

Well 1 (formerly Well A)

Well location A has been moved approximately 200 feet to the south and renamed well location 1. This locates the well downgradient of any suspected waste. The preliminary CPT survey data (from site 06893) indicates a low area in the top of bedrock and the presence of groundwater in this area (Figure 3).

Well 2

This new well is proposed in order to locate a well at the southern edge of the fill material and downgradient of any suspected waste.

Well 3 (formerly Well B)

This proposed well location has been renamed well location 3; no other adjustment has been made. Groundwater was present in borehole #50993 but was not sampled at the time of drilling. This proposed well location is located in what appears to be a channel incised in bedrock (Figure 4).

Well 4 (formerly Well C)

This proposed well location has been renamed well location 4; no other adjustment has been made.

Well 5 (formerly Well D)

Well location D has been moved approximately 150 feet to the south and renamed well location 5. This places the well south of the SID and downgradient of the Landfill. This also places the well in an area that overlies a bedrock low (Figure 3), where groundwater is present in the alluvium as indicated by the CPT survey at location 05993, and in a probable channel incised in bedrock (Figure 4).

Well 6

This new location is proposed in order to have a well downgradient of the eastern end of the Landfill. The well is proposed to be located at CPT location 05593 because the CPT survey indicated an underlying bedrock low (Figures 3 and 4). A visual review of the ground surface in this area reveals two seeps to the north of the location that are probably evidence of groundwater.

Wells placed at locations 1, 2, and 4 would also provide an additional line of geologic control points from which to develop cross sections for future modeling. Locations 5 and 6 could be characterized with well points; however, monitoring wells would provide additional data with regard to lithology, ongoing water samples, aquifer testing capability, and more precise location of top of bedrock.