



000025791
UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION VIII

999 18th STREET - SUITE 500
DENVER, COLORADO 80202-2466

NOV -2 1992

Ref: 8HWM--FF

Mr. Gary Baughman
Hazardous Waste Facilities Unit Leader
Colorado Department of Health
4210 East 11th Avenue
Denver, Colorado 80220-3716

NOV 14 1992

RE: Review of OU12 Final RFI/RI Work Plan

Dear Mr. Baughman:

Enclosed is the Environmental Protection Agency's technical review of the Final RFI/RI Work Plan for Operable Unit 12, Rocky Flats Plant. Although most of our comments provided for the draft version of this plan were adequately addressed, there are still some issues to be resolved and several SOPs that must be developed. In light of this, EPA is recommending that the work plan be approved on the condition that satisfactory response to our remaining comments are provided, including timely submittal of the necessary SOPs.

If you or members of your staff have any questions regarding EPA's comments, please contact Gary Kleeman at 294-1071.

Sincerely,

A handwritten signature in cursive script that reads "W. G. Hestmark (for)".

Martin Hestmark, Manager
Rocky Flats Project

Enclosure

cc: w/enc.
Harlen Ainscough, CDH
Frazer Lockhart, DOE
Terry Smith, PRC

**TECHNICAL REVIEW COMMENTS
FINAL RFI/RI WORK PLAN
OPERABLE UNIT 12**

GENERAL COMMENTS

1. Several standard operating procedures (SOPs), which are at the center of the planned sampling efforts at OU12, have still not been submitted by EG&G to CDH and EPA for approval. These include the amended soil sampling SOP, SOPs for operation of the HPGe in the field and the laboratory, and SOPs for soil and ground water field screening analyses. These SOPs must be submitted in a timely manner so they may be reviewed by CDH and EPA before field work begins at OU12.

SPECIFIC COMMENTS

Section 2.4.2.1, Page 40, paragraph 2. This paragraph discusses beryllium concentrations in soils and refers to Figure 2-37. The units of concentration for beryllium on Figure 2-37 are keyed as micrograms per kilogram (ug/kg) whereas the units are expressed as mg/kg on page 40 and Table 2.4. This discrepancy was not corrected on Figure 2-37 as stated in the response to comments document.

Section 4.1.4, Page 8, paragraph 2. The draft work plan and subsequent comment response document mention the fact that surface water analysis data will be obtained from sitewide surface water monitoring programs. This version of the work plan does not even address this issue with such a statement. No mention of surface water sampling is made in Section 6.3, as indicated in this paragraph. Section 5.3.2 (Subtask 2 of the field investigation) states that "...surface water samples will be determined from the results of Subtask 1". Therefore a definite plan to address surface water in OU 12 does not seem to be developed at this time. The proposition of an industrial area surface water plan has been put forth in meetings, and as a general concept is acceptable to EPA. However, since no such plan has yet been presented, it is necessary that surface water sampling for OU 12 be addressed in a

technical memorandum prior to Subtask 2 of the field investigation.

Section 6.2.1, Pages 5 and 6. What is the advantage in using the NaI probe for spatial resolution of detected radioactivity? This probe does not appear to have the resolution capabilities of the HPGe. The field of view for the HPGe can be reduced by deploying it closer to the ground and/or shielding. In addition, no documentation or information is provided concerning the NaI probe's sensitivity, field of view, operation, limitations, etc. Although efforts designed to provide better spatial resolution of radiation anomalies are encouraged, further explanation and documentation are needed for this aspect of the radiation survey.

Section 6.2.1, Page 7, Paragraph 2. Although some of the information provided in Appendix G is useful and informative, it does not contain a specific SOP for the HPGe as is claimed in the work plan. The two documents that comprise this appendix, dated 1985 and 1991 respectively, also do not completely specify detection limits for all radionuclides of concern or the different sensitivities of tripod vs. truck mounted detectors. Tabulation of both instruments' sensitivities is needed for all radionuclides of interest is needed, in addition to specific SOPs.

Section 6.2.1, Page 8, Paragraph 3. The discussion here states that no vertical profile samples for radionuclide contamination will be conducted in paved areas. A subset of the paved area sampling locations should include vertical profile sampling done in the same manner as in unpaved areas **for the purpose of delineating the extent and distribution of radionuclide contamination with respect to depth.** This is justified by the fact that depth of contamination for paved and unpaved areas cannot be directly correlated due to differences in exposure and disturbance through the years.

Section 6.6, Pages 52-52. EPA's comment #S47 regarding the Data Management and Reporting section of the draft work plan was not completely addressed by the forms that have been inserted as Appendix I. These forms do show the requested field data parameters for input to RFEDS and the initial step to be taken in tracking samples by RFEDS, but they do

not demonstrate that sample tracking beyond shipping date to the lab will be routinely accomplished. Sample tracking from the date of collection through the final transmittal of analytical results to the subcontractor is an important task that should be planned in advance and routinely monitored and reported. One of the lessons learned from the OU 1 RI process and subsequent laboratory audit was that such sample and data tracking reports are important in giving early warning to project managers when delays are occurring that will impact the project. In addition it was determined that the format of analytical data presented to the subcontractor was initially a problem in that all necessary data was not being made available from RFEDS. Therefore, the data format should be reviewed in advance to be sure that these problems will not occur. Finally, transmittal of analytical data from RFEDS to subcontractors has only occurred after specific requests for such data. This seems to be a rather cumbersome process and it is recommended that all pertinent analytical data be automatically transmitted to the subcontractors on a routine basis.

DOE/EG&G may already be addressing these issues, but if not, it is strongly recommended that these aspects of data management and reporting be thoroughly planned prior to commencing field work.