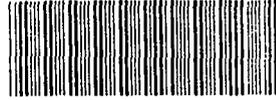


STATE OF COLORADO

COLORADO DEPARTMENT OF HEALTH

Dedicated to protecting and improving the health and environment of the people of Colorado

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Roy Romer
Governor

Patricia A. Nolan, MD, MPH
Executive Director

April 6, 1994

Ms. Jessie M. Roberson
U.S. Department of Energy
Rocky Flats Office, Building 116
P.O. Box 928
Golden, Colorado 80402-0928

40118

RE: Draft Industrial Area IM/IRA/DD

Dear Ms. Roberson,

The Colorado Department of Health, Hazardous Materials and Waste Management Division (the Division), has reviewed the above referenced document and is providing the following comments. The Division has also solicited and incorporated comments from the Water Quality Control Division (WQCD), the Air Pollution Control Division (APCD), and the Disease Control & Environmental Epidemiology Division (DCEED).

The Division looks forward to working with you to implement the recommendations of this IM/IRA.

If you have any questions regarding these matters, please call Dave Norbury of my staff at 692-3415.

Sincerely,

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

cc: Martin Hestmark, EPA
Bill Fraser, EPA
Jen Pepe, DOE
Mark Buddy, EG&G
Laura Perrault, AGO
Steve Tarlton, RFPU



ADMINISTRATIVE

A-0009-000154

General Comments

1) The Division supports the majority of the conclusions and recommendations found in the report. The interest now shifts to the implementation of this IM/IRA's recommendations. Installation of additional monitoring equipment where pathways do not have adequate coverage is a common theme; the Division strongly endorses doing so in a timely manner, such that baseline conditions prior to the onset of D&D activities may be established. We would like to see a strong DOE commitment to the realization of the IM/IRA's suggestions.

The IM/IRA/DD is currently worded in such a way that recommendations "should" be fulfilled. A Decision Document needs to contain specific, measurable action items with accompanying implementation schedules.

2) Because the majority of contaminants this plan is to monitor for occur at "environmental levels", the Division insists that ongoing analytical methods evaluation takes place to ensure that the money and time spent in doing this monitoring is at a level that will have the ability to make meaningful ARARs comparisons.

Specific Comments

1) Section 4.4.2, page 4-26: Highly fractured areas of claystone could allow vertical migration of DNAPLs and should not be completely ruled out as a potential migration pathway. Bedrock well P210189 (just south of pond 207C) is screened from 19 to 37 feet, traverses several sandstone lithologies, bottoms out in claystone, and shows CCl₄ and TCE concentrations approaching 1% of their solubility limits. Page 4-29 (EG&G 1993a) contends that plumes exist in both surficial deposits and in bedrock, and that concentrations are often higher in bedrock groundwater.

2) Section 4.8.2: The recommendation for new monitoring wells raises the same concerns of specific comment #1 above. The text recommends paired bedrock and alluvial wells in areas where analysis of footing drain waters are elevated or where UBC has been documented. However, the details on the 11 new wells do not consistently follow this advice:

The proposed wells around 371/374 are acceptable as alluvial, provided existing bedrock well 2186 is incorporated.

Well D is proposed as alluvial. Footing drain waters from 559/561 are known to have (and supported by the data presented in Table 7-2) relatively high VOC concentrations. Building 559 is also a UBC.

The wells in the 700 complex (E, F, and H) should all be paired. Footing drain contamination and UBC occurs at all 700-area buildings.

The same argument applies to proposed well J. Buildings 883, 865, and 886 all have UBC and elevated footing drain contaminant levels.

On the other hand, proposed paired well K, east of 444, is in an area where the footing drain waters are relatively clean (compared to limited data in Table 7-2), and Building 444 is not listed as a UBC.

We understand that this IM/IRA is not scoped to characterize the nature and extent of contamination. However, the data suggests that focusing groundwater efforts almost exclusively on alluvial waters may miss an important transport pathway.

Colorado Department of Health
Comments on the Draft Industrial Area IM/IRA/DD

- 3) Section 4.8.5, page 4-60: Geoprobe/hydropunch screening of borehole locations would need to take place during conditions favorable to high water levels.
- 4) Plates 4-1 and 4-2: On the west side of the maps, the 6025' water table contour intersects the 6020' elevation contour. Do the seeps shown here really have a 5' pressure head?
- 5) Section 6.2.8, page 6-26: An MOU is being worked out which will provide meteorological data collected at all CDH APCD monitoring sites. The use of CDH met data may pre-empt the need for RFP to construct additional met stations.
- 6) Section 6.5, page 6-34: CDH samplers X-4 and X-5 will be added this year. The locations were selected by plant emissions modeling. 23 VOCs will be run on a GC/MS. The VOC list and further information is available if needed.
- 7) Section 6.7.2, page 6-52: The Division agrees to some decrease in, but not a halt to, beryllium monitoring. As stated in section 6.2.2.1, CDH's APCD is involved with discussions about the appropriate frequency.
- 8) Section 6.7.4, page 6-53: If additional locations are required for establishment of a metals baseline, agency approval should be obtained. Existing RFP/CDH stations are preferred. For ambient VOCs, the proposed RAAMP collocations are questioned. S-04 appears to be in a topographic low area in North Walnut Creek; S-03 or S-05 may be better. Likewise, S-11 seems better positioned than S-100. In either case, equipment and location selection is very important and should be fully discussed.
- 9) Section 7.1, page 7-2, last paragraph: See general comment #2.
- 10) Table 7-6, page 7-38: Specific waste acceptance criteria need to be established for the active treatment facilities. It is not enough to know that OU1 can handle "organics" at a given capacity; what is needed is a clear dispositional strategy of what to do with water containing 1500 ug/L of carbon tetrachloride. Some quantification is attempted for the STP but is insufficient. This information will be necessary regardless of the scope of the pending NPDES permit.
- 11) Section 7.7.3, page 7-70: Ruling out the use of OU1 or OU2 treatment facilities for incidental waters is premature. Efforts are underway to authorize discontinuing the treatment of several influents to these systems, potentially opening up significant capacity. The combined treatment trains can handle most constituents.
- 12) Section 8.2.1, page 8-8: Release mechanisms for primary sources should consider beryllium- as well as radioactively-contaminated equipment.
- 13) Section 9.1.8, page 9-10: The "administrative link" which is to tie D&D activities to IM/IRA verification monitoring must be a strong one. Tiering the verification monitoring off D&D monitoring will work only if the "IM/IRA Management Team" knows of D&D activities in time to design and install verification monitors and establish the pre-D&D baseline. This type of interdepartmental communication has been historically weak. It is possible that D&D may not reside within ER by the time it is implemented.
- 14) Section 11.4, page 11-7: New surface water sampling stations at each subbasin ARE to be installed (not "whenever possible") and will be installed ASAP (not "during D&D activities"). This mirrors general comment #1 and applies to all recommendations.