

STATE OF COLORADO

Bill Owens, Governor
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Dedicated to protecting and improving the health and environment of the people of Colorado

HAZARDOUS MATERIALS AND WASTE MANAGEMENT DIVISION
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**Colorado Department
of Public Health
and Environment**

December 1, 2000

Mr. Donald Metzler
Technical Manager
UMTRA Groundwater Project
U.S. Department of Energy
2597 B $\frac{3}{4}$ Road
Grand Junction, CO 81503

RE: CDPHE Comments on the Final Site Observational Work Plan (SOWP) for the Gunnison Site

Dear Don:

The Colorado Department of Public Health and Environment has completed its review of the above referenced document; attached to this letter are our specific comments. I have also sent you via electronic mail, the MS Word2000 file to assist you in responding to the comments.

In our specific comments you will note several requests regarding the groundwater modeling results. We would like to review this additional model output prior to concurring in the selection of the groundwater compliance strategy for the site.

I thank you for the opportunity to provide our input to this effort. Please call me at (303) 692-3394 if you have any questions.

Sincerely,

Wendy Naugle, P.E.
UMTRA Groundwater Project Hydrologist

cc: ✓ Philip Ting, NRC
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Colorado Department of Public Health and Environment
Comments on the Gunnison, Colorado
Site Observational Work Plan
Dated September 2000

1. Page 3-2. The paragraph describing current water use and monitoring in the buffer zone area is misleading. The Buffer Zone monitoring was a major concession to DOE in exchange for not hooking up all the residences in the Dos Rios subdivision to the new water system. By lowering the number of hook-ups (one of the most expensive pieces of the water system), DOE was able to stay under the 5.8 million dollar spending limit. In exchange for these hook-ups, DOE was required to provide monitoring of a small number of the remaining wells to insure that changes in water quality would not affect well users on the west side of the river. DOE recently requested that the Buffer Zone monitoring program be discontinued as a result of low concentrations detected over the years. The Colorado Department of Public Health and Environment responded with a request for DOE to verify which residences in the Buffer Zone had subsequently tapped into the Dos Rios Water system and to base the decision on a scientific analysis of plume behavior, rather than simply rely upon the results of monitoring in the buffer zone wells alone. On page 7-6 of the SOWP it is stated that "all businesses and residences within a suggested IC boundary are connected with the Dos Rios water system." This statement is erroneous, as the Colorado Department of Public Health and Environment has confirmed that there are still 14 residences within the suggested IC boundary that are not connected to the system. While we will entertain a proposal to reduce the amount of buffer zone monitoring, DOE's proposal is not acceptable, as it does not consider plume dynamics, nor does it accurately consider potential future exposures. Of particular concern is Buffer Zone well 469; while this well has not yet been impacted by the plume, it is located just west of well 160, which has shown an increasing uranium concentration trend over the past 14 years.
2. Page 4-9. The caption for these pictures has an erroneous date. The date should be November 1992. The test pits were excavated prior to remediation for the determination of the Cobbles-to-fines correction factors.
3. Page 4-21. The results of the column leaching tests are similar to those reported by DOE in 1993. In the 1993 report, differences in uranium leaching were attributed to differences in the pH of the soils. Are pH data available for the 1999 experiments to see if these results may also be pH dependent?
4. Page 5-13. On Table 5-1, the sample 779 has the note "f". Should this be an "e" instead?
5. Page 5-15. The document uses 0.025 mg/l uranium "above background" as the cut-off for distinguishing contaminated versus uncontaminated groundwater. This is confusing. The cut-off should be set at background, which is somewhere around 0.009 mg/l. Thus, any concentrations exceeding "background" would indicate the plume. The selection of the cut off value needs to be explained in the text.