

NOTE: ATTACHMENT AS STATED FILED IN WM s/f ON AUG 2, 1983 BY MEMO TO "THOSE ON ATTACHED LIST" FROM MATTHEW GORDON, WMHL

AUG 9 1983

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PROJECT WM-10

MEMORANDUM FOR: Matthew G. Gordon
 High-Level Waste Licensing
 Management Branch
 Division of Waste Management

FROM: Mark J. Logsdon
 High-Level Waste Technical
 Development Branch
 Division of Waste Management

SUBJECT: SITING SECTION/HYDROLOGY TEAM COMMENTS ON AUGUST 2,
 1983, DRAFT UMBRELLA SITE TECHNICAL POSITION ON
 PERFORMANCE ASSESSMENT OF BWIP

Attached is a marked-up copy of the P.A. Umbrella STP with the comments of T.R. Verma of WMHT. Marked-up comments by M.J. Logsdon of WMHT were transmitted to you on August 8, 1983. In addition to the detailed comments on the marked-up copies, the hydrogeology team of WMHT has several comments specifically related to groundwater that we wish to highlight:

1. The detailed discussions on pages 13-14 of uncertainties in data collection and analysis are at too specific a level of detail for a Performance Assessment Umbrella STP. Matters of such detail in data collection and analysis are or will be addressed in chapter 3 and supporting appendices of the DSCA, in the draft site technical position on hydrologic testing strategy, and future hydrology STP's. In particular, the discussion on page 14 concerning the analysis of a dual porosity system probably requires too much additional discussion to clarify its principal thrust to be justified in the Performance Assessment Umbrella STP. The hydrology team recommends that the discussion on pages 13-14 be reduced to statements of general approach. A possible version is indicated in the mark-up by Verma, based on comments by both Verma and Logsdon.

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NAME	: MLogsdon	: TVerma	: PJustus	: HJMiller	:	:	:
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2. The guidance on defining the disturbed zone on the basis of temperature, and the brief discussion in the second paragraph of page 7 about the possible effects of a 5°C temperature increase, are too detailed and probably too prescriptive. The hydrology team of WMHT recommends that the STP restrict itself to a general approach of requiring DOE to propose criteria and standards for demonstrating compliance without inadvertently prejudicing DOE's approach by stipulating temperature as the critical parameter.

3. The hydrology team of WMHT considers that the discussions on pages 17-20 concerning radionuclide transport do not adequately highlight the physical processes of transport, especially dispersivity, which is given only a very brief mention in the first paragraph on page 17. For more details on our concerns, please see the comment on page 18 of Logsdon's mark-up and Logsdon's "Trip Report For Short Course on Contaminant Hydrology, University of Waterloo, May 30-June 3, 1983" (Memorandum from Mark Logsdon to Philip S. Justus, dated June 16, 1983).

The hydrology team of the Siting Section of WMHT appreciates the opportunity to review this draft of the Umbrella STP. We are available for further discussion with you or with other members of WMHT if further discussions are needed.

ORIGINAL SIGNED BY

Mark J. Logsdon
 High-Level Waste Technical
 Development Branch
 Division of Waste Management

- Record Note:
1. WMHT hydrology comments initiated in response to memo from Gordon soliciting comments on draft umbrella STP for Performance Assessment.
 2. Marked-up comments on draft of August 2 transmitted by Logsdon 8/8/83.
 3. Draft of this memo prepared by Logsdon and given to T.R. Verma for comment. All comments resolved.

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