

8/19/87

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PDR-1
LPDR- Wm-10 (2)
Wm-11 (2)
Wm-16 (2)

426.1/D1021/NC/87/08/17/

- 1 -

Mark J. Logsdon, Project Manager
Nuclear Waste Consultants Inc.
Suite 14
8341 S. Sangre de Cristo Rd.
Littleton, CO 80127

WM-RES
WM Record File
D1021
NWCT

WM Project 10, 11, 16
Docket No. _____

PDR
*LPDR (B, N, S)

Distribution: _____

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Dear Mr. Logsdon:

We have reviewed the BWIP Technical Description Summaries dated June 24, 1987, Communication No. 171, and have made the following observations:

1. It is not clear that the stated objective of report #24 can be achieved using only "relatively simple analytical solutions" and work on this report is not yet authorized. A 3-dimensional code may be needed for part of this work. At present a preliminary 3-D model of steady-state hydraulic heads at the Hanford Site has been developed by Paul Davis of Sandia National Labs. This model was prepared using the Posson version of the USGS 3-D groundwater code. Both the code and the data set for the model are being maintained on the INEL computer system. You are authorized to become familiar with the INEL operating system, the USGS code, and the corresponding model of the Hanford site.

2. Technical Reports numbered 31, 32, 33, and 34 relate to post-emplacment hydrogeologic issues. Work on these reports is not authorized to begin. At present these are considered to be of a lower priority than those reports that relate to hydrogeologic testing and pre-emplacment issues.

3. You are authorized to initiate a literature review of piezometer integrity testing methodologies in support of technical report no. 22. Other work on this report will not be authorized until the literature review is submitted and more detailed results of piezometer integrity testing at BWIP become available.

4. The objectives for report no. 29 are unclear, but in general the results of this study should be of considerable interest. Please contact Jim Warner of the Geology Section at 427-4603 to discuss the objectives and approach. Jim is acquainted with many details regarding the stratigraphy and borehole logging at the Hanford Site and is especially interested in helping to relate that information directly to the hydrogeology investigations. Please submit a revised technical descriptive summary for this report after consultation with Warner.

5. The technical approach and objective for report no. 23 appear reasonable and the proposed literature review is authorized. I wish to call your attention to a recent reference that is relevant and should be examined in the course of this review. A copy of Neuman (1987) is enclosed.

Attached are some hydrogeology documents regarding the Hanford Site that are provided for addition to your technical library. Detailed reviews of these documents are not requested at this time. The enclosures include:

8710230059 870817
PDR WMRES EECNWCI
D-1021 PDR

87251077/5
WM Project: WM-10, 11, 16
PDR yes
(Return to WM, 623-SS)

WM Record File: D1021
LPDR yes

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Brown, W. R., 1985. Integrity Testing Plans for Selected Hanford Site Monitoring Wells, SD-BWI-TP-039, Rockwell Hanford Operations, Richland, Washington.

Brown, W. R., (?). [Draft] Results of Integrity Testing [in] Selected Boreholes in the Immediate Reference Repository Area, SD-BWI-TD-025, Rockwell Hanford Operations, Richland, Washington.

Coleman, N. M. NRC Staff Document Review (dated June 30, 1987) of Internal Rockwell Letter (No. 71000-87-LC-069) re: Piezometer Integrity, NRC Division of Waste Management File 101.0, Washington, DC.

Connell, L. Internal Rockwell Letter (dated February 26, 1987) to G. W. Jackson re: Interim Problem Reports on integrity testing in cluster wells and status of packers in Westbay device at RRL-14, No. 71000-87-LC-069.

Neuman, S. P., 1987. Stochastic Continuum Representation of Fractured Rock Permeability as an Alternative to the REV and Fracture Network Concepts, 28th US Symposium on Rock Mechanics, Tucson, Arizona.

Spane, F. A. Jr., 1986. Preliminary Evaluation of Piezometer Responses at DC-19, DC-20, and DC-22 During Construction of DC-23W, SD-BWI-TI-313, Rockwell Hanford Operations, Richland, Washington.

Spane, F. A. Jr. Internal Rockwell Letter (dated June 9, 1986) to S. M. Baker re: Preliminary Results and Hydrologic Test Summary for DC-23GR, No. 75220-86-114.

The action taken by this letter is considered to be within the scope of the current contract NRC-02-85-009. No changes to costs or delivery of contracted products are authorized. Please notify me immediately if you believe this letter would result in a change to costs or delivery of contracted products.

Sincerely,

ORIGINAL SIGNED BY

Jeffrey A. Pohle, Project Officer
Technical Review Branch
Division of High-Level Waste Management
Office of Nuclear Material Safety
and Safeguards

cc: Mike Galloway, Terra Therma

AUG 19 1987

426.1/D1021/NC/87/08/17/

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OFFICIAL CONCURRENCE AND DISTRIBUTION RECORD

LETTER TO: Mark J. Logsdon, Project Manager
 Nuclear Waste Consultants, Inc.
 Suite 14
 8341 S. Sangre de Cristo Rd.
 Littleton, CO 80127

FROM: Jeffrey A. Pohle, Project Officer
 Technical Review Branch
 Division of High-Level Waste Management
 Office of Nuclear Material Safety
 and Safeguards

SUBJECT: TECHNICAL DESCRIPTION SUMMARIES AND TRANSMITTAL
 OF DOCUMENTS

DATE:

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CONCURRENCES

| ORGANIZATION/CONCUREE | INITIALS | DATE CONCURRED |
|-----------------------|---------------|----------------|
| HLTR/ NColeman | <u>JMS</u> | 87/08/19 |
| HLTR/ JPohle | <u>JAP</u> | 87/08/19 |
| HLTR/ DChery | <u>DChery</u> | 87/08/19 |

original sent out by LDW 87/08/19

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