RDR-1 LPDR-WM-10 G. WM-11 (2)

Wm-16/2

AUG 14 1987

426.1/D1021/87/08/04/RC

- 1 -

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

Dear Mr. Logsdon:

We have reviewed the Salt Technical Descriptive Summaries dated June 24, 1987, Communication Number 172. The purpose of this letter is to authorize you to commence work on Task Descriptive Summary #15, "Analysis of Uncertainty in Prediction of Travel Path and Travel Time, Phase I."

Daniel B. Stevens and Associates should conduct a review of the literature pertaining to stochastic approaches for characterizing the uncertainty in predictive groundwater analyses. This literature review will provide a summary report to include:

- a. A detailed review of uncertainties in groundwater travel time and path which are attributed to hydrogeologic parameters;
- b. Critical reviews of relevant scientific articles related to the analysis of uncertainties in prediction of groundwater travel time and path;
- c. A discussion of the significance of the findings to the NRC's waste management program;
- d. Clear explanations and illustrations of the stochastic concept and the methods of stochastic analyses; and
- e. A glossary of the terms relevant to stochastic analyses.

The literature review will be generic and apply at this time only to saturated sites. Special emphasis should be devoted to reconciliation of data collected on different scales in order to address the question of whether and under what circumstances single well (e.g., slug test) data may be used for groundwater travel time calculations. A related topic to be explored is the characterization of sites with data collected at scales smaller than the Representative Elementary Volume (REV), and whether these data are useful in conventional modeling approaches using differential equations. The estimated professional time required to complete this task is one man-month.

87232843 WM Project: WM-10, 11, 16 PDR yes (Return to WM, 623-SS)	WM Record File: D1021 LPDR yes	WM Record File DIOZI NWCI	WM Project 10, 11, 16 Docket No PDR
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426.1/D1021/87/08/04/RC

- 2 -

If you have any questions please contact Richard Codell, at (301)-427-4558.

The action taken by this letter is considered to be within the scope of the current contract NRC-02085-009. 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,

Jeffrey A. Pohle, Project Officer Technical Review Branch

Division of High-Level Waste Management Office of Nuclear Material Safety

and Safeguards

cc: Dan Stevens and Associates, Inc.

- 3 -

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LETTER TO:

Mark J. Logsdon, Project Manager

Nuclear Waste Consultants, Inc.

Suite 14

8341 S. Sange de Cristo Road

Littleton, CO 80127

FROM:

Jeffery A. Pohle

Technical Review Branch

Division of High-Level Waste Management, NMSS

SUBJECT:

Review of the Salt Technoial Descriptive Summaries

DATE:

August , 1987

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