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D1021  
NWCI

WM Project 10, 11, 12  
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APR 29 1986  
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426-1/D1021/JAP/86/04/28

Distribution:

(Return to WM, 623-SS)

Mr. Mark J. Logsdon, Project Manager  
Nuclear Waste Consultants, Inc.  
8341 South Sangre de Cristo Road  
Suite 6  
Littleton, CO 80127

Dear Mr. Logsdon:

I have received your Monthly Progress Report for March dated April 10, 1986. This report describes the status of Nuclear Waste Consultants' Technical Assistance under Contract No. NRC-02-85-009. Progress made to date under this contract is satisfactory.

The Technology Transfer Seminar for SWIFT II has been cancelled. Knowing that you had already made advance reservations, I hope we haven't greatly inconvenienced you. We will be investigating alternatives for the Technology Transfer.

Progress is being made in establishing computer accounts at INEL for your use. Attached is a memorandum from RM/DSS on use of NRC Accessible Timesharing Facilities by contractors. Please read this memorandum and attachments thoroughly and disseminate the information accordingly. Note that the section of software development, submittal, distribution and documentation requirements for NRC contractors is being amended to your contract. Given that we are not heavily involved in software development, I see no significant impact.

As a result of our meeting last week the decision was made to proceed with development of the data needs assessments using cumulative release of radionuclides to the accessible environment as the performance measure. In the meantime, I will be evaluating the appropriateness of using velocity (groundwater travel time) as an alternate performance measure. This may well depend on whether predictions of radionuclide concentration versus time are required as a result of other environmental and safety considerations defined in the final EPA rule (such as groundwater protection).

I have taken a brief look at your outline for a QA plan. Dick Codell reviewed the outline and noted that he saw no reference to specific procedures for software and no reference to standards of QA. Evidently there is a considerable body of literature on QA standards. Probably some "homework" in the area of standards will be necessary. I will follow up on this with Jim Kennedy (WMP) and see if we can get some advice from his QA staff.

I have the following comments relative to ongoing work.

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Task 1- NNWSI

Subtask 1.1

Complete

Subtask 1.2

We received your Task Report on the NNWSI Data Inventory and Management. Based on my review of recent DOE project summaries it appears that automated water-level data-acquisition systems (saturated zone) have been installed at nine sites near Yucca Mountain (last summer). The systems generate output in the form of voltage from downhole pressure transducers. The voltage record is transferred in the field from memory chips to cassette tapes, then by computer terminal to a prime computer in Denver. Apparently, some software is being developed (or has been by now) to enable plotting graphs of the data and to reduce the voltage data to water-level changes, depths, and altitudes. I asked Paul Presholt to inquire about such data and see if we can obtain the information in a timely way. I suggest that either you or Lyle Davis give Paul a call (598-6125) to follow-up on this. I really think it advisable for all contractors to establish a working relationship with the site representatives.

I do not know if any similar data-acquisition systems are in place relative to unsaturated zone holes (UZ) or neutron holes in the washes. In any event, I bringing this up for consideration in integrating such data into the inventory system upon receipt.

Subtask 1.3

I received your reviews of the following:

- 1) USGS WRI 84-4345, "Conceptual Hydrologic Model of Flow in the Unsaturated Zone, Yucca Mountain, Nevada," by Montazer and Wilson, 1984.
- 2) SAND 84-7202, "Hydrologic Mechanisms Governing Fluid Flow in Partially Saturated, Fractured, Porous Tuff at Yucca Mountain" by Wang and Narasimhan, 1985.

Under separate cover I am forwarding a copy of SAND 84-1492, "Preliminary Bounds on the Expected Postclosure Performance of the Yucca Mountain

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Repository Site, Southern Nevada by Sinnock, 1984. This was requested by Mr. Brown. Mr. Davis already has a copy.

Subtask 1.4

No comments.

Subtask 1.5

No comments.

Task 2- BWIP

Subtask 2.1

Complete.

Subtask 2.2

We received your Task report on the BWIP Data Inventory and Management. I understand Mr. Weber has been in touch with Terra Therma on this to discuss his comments.

Subtask 2.3.

We received your review of RHO-BW-CR-150P, "PORFLO - A Continuum Model for Fluid Flow, Heat Transfer, and Mass Transport in Porous Media."

Subtask 2.4

No comments.

Subtask 2.5

No comments.

Task 3- SRPO

Subtask 3.1

We have received your SRPO Site Familiarization Report as required by Subtask 3.1. This report included a list of SRPO related documents which

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you have in your possession. All requirements of Subtask 3.1 have been completed successfully.

Subtask 3.2

No comments.

Subtask 3.3

No comments.

Subtask 3.4

No comments.

Subtask 3.5

No comments.

Task 4

Not initiated.

Task 5

No comments.

The action taken by this letter is considered to be within the scope of the current contract NRC-02-85-009. No changes to cost or delivery of contracted

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services and products are authorized. Please notify me immediately if you believe that this letter would result in changes to cost or delivery of contracted products.

Sincerely,

Jeffrey A. Pohle, Project Officer  
Hydrology Section  
Geotechnical Branch  
Division of Waste Management  
Office of Nuclear Material Safety  
and Safeguards

Enclosure:  
As Stated

- cc: Mary Little, ACB
- Atef Elzeftawy, WMGT
- Richard Codell, WMGT
- Neil Coleman, WMGT
- Fred Ross, WMGT
- Michael Weber, WMGT

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