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NUCLEAR WASTE CONSULTANTS INC.

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Docket No. \_\_\_\_\_

Distribution: Pohle  
Jean Tule  
(Return to WM, 623-SS)

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January 14, 1987

009/PM/MONTHLY.015  
RS-NMS-85-009  
Communication No. 128

Mr. Jeff Pohle, Project Officer  
Geotechnical Branch  
Division of Waste Management  
U.S. Nuclear Regulatory Commission  
MS 623 - SS  
Washington, DC 20555

Re: Contract RS-NMS-85-009  
Monthly Progress Report - December, 1986

Dear Mr. Pohle:

Please find attached our monthly progress report for Project Number RS-NMS-85-009, "Technical Assistance in Hydrogeology - Project B - Analysis" for December, 1986. During December, Terra Therma, Inc. and Nuclear Waste Consultants participated in a BWIP Hydrology Data Review meeting in Richland, Washington; site reviews of research installations at Creston, Washington, and Kellog, Idaho, preceded the Richland meeting. Nuclear Waste Consultants transmitted a trip report on the meetings as NWC Communication No. 121. As instructed by the NRC Project Officer, staff of NWC continued to work with staff of Williams and Associates on the proposed topical reports concerning uncertainty that grew out of the November meetings with the NRC Staff, though at a reduced level of effort pending new direction from the NRC Project Officer. NWC personnel plus Terra Therma Inc. staff worked on NWC's reanalysis of BWIP GWTT calculations. Water, Waste and Land and Terra Therma completed work on their Subtask N.5 update reports, which were transmitted to the NRC Staff as NWC Communications Nos. 122 and 126, respectively. Daniel B. Stephens and Associates completed their Conceptual Model update report (Subtask 3.4; NWC Communication No. 117). NWC and its subcontractors began preparation for the proposed project management meetings in Silver Spring in late January to discuss project planning for the remainder of FY 87 and for FY88.

NWC performed managerial and technical reviews of all the products that were sent to you under this contract. In addition to the planning for the January meeting, key project management activities included ongoing interactions with NWC's subcontractors on implementation of the NWC project-specific QA plan. The NWC Project Manager and the NWC QA Director reviewed a variety of subcontractor QA plans and proposals and continued to work with subcontractor management on application of the project-specific QA plan to

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specific subtask assignments. NWC has planned an internal, preliminary QA audit of subcontractors for the time period between January 15 and February 15, 1987.

In addition, NWC prepared and transmitted nine project management communications to the NRC, including monthly report, voucher, incidental letters and transmittals of microfiche copies of contractor documents.

This monthly report includes a financial and administrative summary (Attachment A) and a technical status and general project summary (Attachment B). Only Attachment B and this cover letter are to be made available to the Public Document Rooms, per the agreements of the contract. The voucher for work completed in December, 1986 has been sent under separate cover to the Office of Resource Management (Communication No. 127).

If you have any questions about the monthly report or about the December voucher, please contact me immediately.

Respectfully submitted,  
NUCLEAR WASTE CONSULTANTS, INC.



Mark J. Logsdon, Project Manager

Att: Monthly Report - December, 1986  
Attachment A: Financial and Administrative Report  
Attachment B: Technical Status and Project Summary

cc: NRC - Director, NMSS (Attn: PSB)  
DWM (Attn: Division Director) - 2  
Mary Little, Div. of Contracts  
WMGT (Attn: Branch Chief)  
L. Davis, WWL  
M. Galloway, TTI  
J. Minier, DBS

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ATTACHMENT B

MONTHLY REPORT - December, 1986

## ATTACHMENT B - TECHNICAL STATUS AND PROJECT SUMMARY

B1.0. NARRATIVE DESCRIPTION OF WORK COMPLETED IN THE REPORTING PERIOD

Work completed under the contract during December included:

1. Management. Management of subtasks associated with the project. Preparation of the project voucher and the monthly progress report for November, 1986. Technical and managerial reviews of subcontractor products and on-going QA interactions with Water, Waste and Land, Terra Therma, Inc., and Daniel B. Stephens and Associates. Planning and control of the NWC re-analysis of the BWIP GWTT calculations. Preparation for FY87-FY88 program planning meeting.
2. Subtask N.1. Collection and review of documents. Water, Waste and Land (WWL), Terra Therma (TTI) and Daniel B. Stephens and Associates (DBS) have completed Subtasks 1.1, 2.1 and 3.1 with the submission of the letter reports on NNWSI, BWIP and Salt (Palo Duro Basin) Site Familiarization, respectively. The subtask is 100% complete. Each of the three site teams has continued to review critical materials identified by the NRC site leads, as directed by the NRC Project Officer; reading and review of these materials will be allocated against Subtasks N.2 - N.5, as appropriate, in the future.

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3. Subtask N.2. Development and management of data inventories, including the development of a bibliographic data base and the development of a quantitative data base for hydrogeologic data. NWC and its subcontractors are implementing the data bases. The WWL, TTI and DBS reports on the data inventory and management systems (Subtasks 1.2, 2.2 and 3.2) were submitted as NWC Communications 34, 30, and 53, respectively. WWL, TTI, and DBS have submitted semi-annual updates for Subtasks 1.2, 2.2, and 3.2 (NWC Communications No. 82, 93 and 106). The bibliographic data bases, which were documented for all three sites in the respective Site Familiarization Reports, are kept updated by the task teams. The subtask is 90% complete at the end of December, 1986; updates of the data management reports will be produced per the terms of the current contract.
4. Subtask N.3. TTI and NWC participated in the December BWIP Data Review and submitted a trip report on the meeting as NWC Communication No. 121. NWC and TTI continued their reanalysis of the BWIP GWTT calculations, as discussed in the November BWIP planning meeting. The subtask is 75% complete at the end of December, 1986.
5. Subtask N.4. The WWL letter report for Subtask 1.4 was transmitted as Communication No. 45. The TTI report on BWIP was transmitted as Communication No. 52. The DBS report on Salt was submitted as Communication No. 63. The WWL Subtask 1.4 update was transmitted to

NRC as NWC Communication No. 105. TTI's Subtask 2.4 update report was submitted as NWC Communication No. 108. DBS's update report was submitted as NWC Communication No. 117. The subtask is 90% complete at the end of December, 1986. Updates of the conceptual model reports will be produced per the terms of the current contract.

6. Subtask N.5. WWL has completed the first three mini-reports under Subtask 1.5, submitted as NWC Communication No. 66; TTI has completed five mini-reports under Subtask 2.5, submitted as NWC Communication No. 78; DBS has completed a series of five mini-assessments under Subtask 3.5, submitted as NWC Communication No. 88. All of the original mini-reports have gone through QA Peer Review by members of the NWC Technical Pool; updates of the modeling reports will be produced per the terms of the current contract and will include the results of the peer reviews. WWL and TTI have submitted update reports including new mini-reports (NWC Communications Nos. 122 and 126, respectively). The subtask is 80% complete at the end of December, 1986.
7. Task 5. NWC continued to work with staff of Williams and Associates on the topical reports dealing with specific aspects of evaluating uncertainty in GWTT, however, the level of effort has been significantly reduced pending new direction from the NRC Project Officer. NWC anticipates that there will be substantial work under

Task 5 in the next 6 months. The subtask is approximately 11% complete at the end of December, 1986, based on funding available.

**B2.0 PROBLEMS ENCOUNTERED IN THE REPORTING PERIOD**

No technical problems have arisen during December, 1986. However, NWC and its subcontractors cannot proceed with the Task 5 Topical Reports on uncertainty in groundwater travel time until we receive new direction from the Project Officer. This matter was discussed in NWC Communication No. 125, dated December, 1986. Based on a telephone conversation between Mark Logsdon (NWC) and Mr. J. Pohle (NWC), NWC understands that this matter will be discussed at the January project management meeting in Silver Spring.

**B3.0 ANTICIPATED PROJECT ACTIVITIES DURING JANUARY, 1987**

The Site Familiarization Subtasks are complete. Additional documents will be read by key team members, and document-control data bases will be updated as parts of other subtasks which have continuing activities.

The site teams are continuing to update their data management systems. Data inventory and management will continue throughout the life of the contract, with regular reports of updates, per the terms of the contract.

No site visits or NRC/DOE workshops are currently scheduled. All site teams continue to review the literature to determine whether there are additional documents that need formal review. NWC will submit its reanalysis of the BWIP GWT calculations during January. Mr. F. Ross, the NRC Salt Lead, has sent

materials on the WIPP Site to the Daniel B. Stephens and Associates team, in preparation for review of the applicability of this material to reviews of the Palo Duro Basin site. NWC and DBS anticipate receiving written direction as to the scope and detail of review that is required before investing significant effort in reviewing this material.

The information in the N.4 Conceptual Model reports will be updated and the updates documented to the Staff on the schedule provided in the current contract.

All three site teams are proceeding with their analytical and numerical evaluations under Subtasks N.5. Updates of the reports and additional mini-reports will be prepared and submitted on the schedule provided in the current contract. NWC and its subcontractors anticipate that this work will contribute to preparation for the meetings with NRC Site Leads that the NRC Project Officer had tentatively scheduled for the first quarter of FY 87 and to the NRC's preparation for review of the Site Characterization Plans. NWC will continue to minimize resource commitments to SWIFT II until we receive written direction from the NRC Project Officer as to how the Staff anticipates using our modelers.

NWC anticipates continuing the planning process for its Task 5 Topical Reports related to uncertainty in GWTT, as discussed in the November meeting in Rockville and in recent communications between the NWC Project Manager and the NRC Project Officer.

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NWC is continuing to implement the project-specific QA program, through meetings and telephone conferences with each of the subcontractors by the Project Manager and the Project QA Director and through NWC review of the QA documents stipulated in the QA Plan. All documents submitted to NRC during December have received technical and managerial reviews that meet the requirements of the NWC project-specific QA plan.

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**B4.0 RECOMMENDATIONS FOR FUTURE WORK**

The anticipated initiation of the Task 5 Topical Reports, plus the ongoing analytical and numerical evaluations of Subtasks N.5 and the January project planning meeting in Silver Spring will, we consider, keep us fully occupied during the upcoming month.

**B5.0 DESCRIPTION OF ADVANCES OR DELAYS IN THE SCHEDULE**

Relative to an initiation of the project schedule based on the contract kickoff meeting of October 25, 1985, there has been no significant change in the anticipated schedule for the project activities or deliverables.