

Sandia National Laboratories

Albuquerque, New Mexico 87185

October 15, 1990

Mr. David H. Tiktinsky
Office of Nuclear Material Safety
and Safeguards
Division of High-Level Waste Management
U.S. Nuclear Regulatory Commission
Mail Stop 6A-4
Washington, DC 20555

Dear Mr. Tiktinsky:

Enclosed is the September 1990 monthly report for FIN A1165. If you have any questions or comments, please feel free to contact me at (FTS) 844-5303 or L. L. Price at (FTS) 844-6206.

Sincerely,



Evaristo J. Bonano, Supervisor
Waste Management Systems
Division 6416

EJB:6416

Enclosure

Copy to:

E. Davis
Office of the Director, NMSS
Attn: Program Support
Robert Browning, Director
Division of High-Level Waste Management
Seth Coplan
Division of High-Level Waste Management
Pauline Brooks
Division of High-Level Waste Management
John Randall
Division of Engineering

9010220159 901015
PDR WMRES EXISANL
A-1165 PDR

A1165-11
WM-11
NH4/1

Tiktinsky

-2-

October 15, 1990

3223 P. A. Davis
6410 D. A. Dahlgren
6416 E. J. Bonano
6416 L. L. Price
6416 K. K. Wahi
6416 D. A. Zimmerman
6416 1183.000 File

SUMMARY SHEET

September 1990 Monthly Report for FIN A1165

<u>Task</u>	<u>Activity</u>	<u>Costs</u>
I	Licensing Methodology Assistance	\$ 0K
II	Uncertainty Identification and Analysis	\$ 0K
III	Probability Techniques	\$ 0K
IV	Maintenance and Management of PA Codes	\$ 0K
V	Technical Assistance for SCP Review	\$ 0K
VI	Short Term Technical Assistance	\$ 0K

PROGRAM: Licensing-Methodology Assistance

FIN A1165
Task I

CONTRACTOR: Sandia National
Laboratories

BUDGET PERIOD: 10/89 -
9/90

NMSS PROGRAM MANAGER: P. Brooks

BUDGET AMOUNT: \$1K

CONTRACT PROGRAM MANAGER: E. J. Bonano

FTS PHONE: 844-5303

PRINCIPAL INVESTIGATOR: L. L. Price

FTS PHONE: 844-6206

PROJECT OBJECTIVE

To assist in the overall development and integration of the
licensing assessment methodology.

ACTIVITIES DURING SEPTEMBER 1990

Task I has been completed.

PROGRAM: Identification and Analysis of
Uncertainties

FIN A1165
Task II

CONTRACTOR: Sandia National
Laboratories

BUDGET PERIOD: 10/89 -
9/90

NMSS PROGRAM MANAGER: P. Brooks

BUDGET AMOUNT: \$37K

CONTRACT PROGRAM MANAGER: E. J. Bonano

FTS PHONE: 844-5303

PRINCIPAL INVESTIGATOR: L. L. Price

FTS PHONE: 844-6206

PROJECT OBJECTIVE

To identify, analyze, and recommend generic methodologies for treating uncertainties associated with performance assessments of HLW repositories.

ACTIVITIES DURING SEPTEMBER 1990

Subtask 2.1

I. Recommended techniques for assessing compliance with the EPA's HLW repository containment requirement (40 CFR 191.13)

Completed.

Subtask 2.2/2.6c

I. Identification, evaluation, quantification, and reduction of uncertainty in HLW repository performance assessments.

A draft of this report was sent to the NRC on April 2, 1990. Internal SNL reviews have been completed. NRC comments were received on September 13, 1990 and are currently being addressed.

Subtask 2.3

I. Elicitation and use of expert judgement in dealing with uncertainty in HLW repository performance assessments.

Completed.

Subtask 2.4

I. Methods for analyzing uncertainty in HLW repository performance assessment models.

A draft of this report was sent to the NRC on February 7, 1990.

Internal SNL reviews have been completed. NRC comments were received on September 10, 1990.

Subtask 2.5

Completed

Subtask 2.6

I. Recommended methodologies for the analysis of data and parameter uncertainty in HLW repository performance assessment.

Completed

IV. Uncertainty and sensitivity analysis in ground-water flow modeling.

A draft of this report was sent to the NRC on February 27, 1990, and we received NRC comments on May 23, 1990. Internal reviews of the report have been completed. Both the NRC comments and the comments resulting from internal review are being addressed.

PROGRAM: Probability Techniques

FIN A1165
Task III

CONTRACTOR: Sandia National
Laboratories

BUDGET PERIOD: 10/89 -
9/90

NMSS PROGRAM MANAGER: P. Brooks

BUDGET AMOUNT: \$16K

CONTRACT PROGRAM MANAGER: E. J. Bonano

FTS PHONE: 844-5303

PRINCIPAL INVESTIGATOR: L. L. Price

FTS PHONE: 844-6206

PROJECT OBJECTIVE

To identify techniques for assigning probabilities to geologic processes and events.

ACTIVITIES DURING SEPTEMBER 1990

Subtask 3.2

I. Recommended techniques for estimating probabilities of events and processes affecting the performance of geologic repositories: assessing compliance with the EPA's containment requirements (40 CFR 191.13).

A draft of this report was sent to the NRC on February 21, 1990. Internal reviews of the report have been completed. NRC comments were received on September 11, 1990.

PROGRAM: Short-Term Technical Assistance

FIN A1165
Task VI

BUDGET AMOUNT: \$3K

PROGRAM OBJECTIVE

To provide, on short notice, general technical assistance on HLW matters related to Tasks 1 through 5 that would not be provided in the normal course of the work in these tasks.

ACTIVITIES DURING SEPTEMBER 1990

No activity this month