

WM DOCKET CONTROL
CENTER

Sandia National Laboratories

Albuquerque, New Mexico 87185

September 15, 1986

86 SEP 19 P3:01

Ms. Sandra Wastler
Repository Projects Branch
Division of Waste Management
U.S. Nuclear Regulatory Commission
7915 Eastern Avenue
Silver Spring, MD 20910

Dear Ms. Wastler:

Enclosed is the summary of activities during August 1986 for the following tasks (A-1165): (I) Assisting in the Development of the Licensing Assessment Methodology (II) Monitor and Review Aspects of DOE programs; (III) Identifying Techniques for Probability Assignments; and (IV) Short Term Technical Assistance.

Sincerely,

Robert M. Cranwell

Robert M. Cranwell, Supervisor
Waste Management Systems
Division 6431

RMC:6431:jm

Enclosure

Copy to:
Office of the Director, NMSS
Attn: Program Support
Robert Browning, Director
Division of Waste Management
Seth Coplan
Division of Waste Management
Hubert Miller
Division of Waste Management
Malcolm R. Knapp
Division of Waste Management
Enrico Conti, Branch Chief
Health Siting & Waste Management Division
John Randall
Division of Radiation Programs and
Earth Sciences
6400 R. C. Cochrell
6430 N. R. Ortiz
6431 R. M. Cranwell
6431 R. L. Hunter

WM-RES
WM Record File
A1165
SNW

WM Project 10, 11, 16
Docket No. _____

PDR ✓

LPDR ✓ (B, N, S)

Distribution:

SWastler
SCoplan

(Return to WM, 623-SS)

Joan - ticket
NSH

8610020344 860915
PDR WMRES EXISANL
A-1165 PDR

SAC

2796

Iman, R. L., W. J. Conover, and J. E. Campbell, 1980, Risk Methodology for Geologic Disposal of Radioactive Waste: Small Sample Sensitivity Analysis Techniques for Computer Models, with an Application to Risk Assessment, NUREG/CR-1397, SAND80-0020, SNLA, 120 p.

Ortiz, N. R., and R. M. Cranwell, 1982, Risk Assessment Methodology for High Level Waste: Assessing Compliance with the EPA Draft Standard Including Uncertainties, SAND82-0596, SNLA, 14 p.

These five reports, combined with the 25 previously completed, make up about three-quarters of the total NRC LAM documentation; however, several DOE reports may also have to be examined.

PROGRAM: Monitor/Review Aspects of DOE
& other National and Inter-
national Waste Management
Programs

FIN#: A-1165
Task II

CONTRACTOR: Sandia National Laboratories BUDGET PERIOD: 10/85-
9/86

NMSS PROGRAM MANAGER: S. Wastler BUDGET AMOUNT: \$80K

CONTRACT PROGRAM MANAGER: R. M. Cranwell FTS PHONE: 844-8368

PRINCIPAL INVESTIGATORS: R. L. Hunter FTS PHONE: 846-6337

PROJECT OBJECTIVES

To monitor and review the performance-assessment aspects of DOE
and other national and international waste management programs.

ACTIVITIES DURING AUGUST 1986

No activity.

PROGRAM: Probability Techniques

**FIN#: A-1165
Task III**

**CONTRACTOR: Sandia National Laboratories BUDGET PERIOD: 10/85-
9/86**

NMSS PROGRAM MANAGER: S. Wastler BUDGET AMOUNT: \$163K

CONTRACT PROGRAM MANAGER: R. M. Cranwell FTS PHONE: 844-8368

PRINCIPAL INVESTIGATORS: R. L. Hunter FTS PHONE: 846-6337

PROJECT OBJECTIVES

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

ACTIVITIES DURING AUGUST 1986

Preliminary review of draft chapters from Cornell and Wahi is nearly complete. They should be ready for submission to NRC in mid-October. Holland's chapter will be substantially expanded and consequently will not be complete for a few months.

The review comments received from NRC on the completed chapters are being examined and written responses are being prepared. Final corrections are being made, preparatory to submitting these chapters for Sandia technical and management review.

PROGRAM: Short-Term Technical Assistance FIN#: A-1165
Task IV
CONTRACTOR: Sandia National Laboratories BUDGET PERIOD: 10/85-
9/86
NMSS PROGRAM MANAGER: S. Wastler BUDGET AMOUNT: \$50K
CONTRACT PROGRAM MANAGER: R. M. Cranwell FTS PHONE: 844-8368
PRINCIPAL INVESTIGATORS: R. L. Hunter FTS PHONE: 846-6337

PROJECT OBJECTIVES

To provide general technical assistance on waste-management matters on the request of the NMSS PM.

ACTIVITIES DURING AUGUST 1986

Final revisions to the report "Assessing Compliance with the EPA High-Level Waste Standard: An Overview," SAND86-0121, NUREG/CR-4510, are in management review. A detailed discussion of reduced probability spaces and the normalization process is forthcoming in a letter report from Sandia.

A-1165, Task I
 1183.010
 August 1986

THIS IS AN ESTIMATE ONLY AND MAY NOT MATCH THE INVOICES SENT TO
 NRC BY SANDIA'S ACCOUNTING DEPARTMENT.

	Current Month	Year-to-Date
I. Direct Manpower (man-months of charged effort)	0.3	4.0
II. Direct Loaded Labor Costs	2.0	45.0
Materials and Services	0.0	0.0
ADP Support (computer)	0.0	0.0
Subcontracts	4.0	50.0
Travel	0.0	2.0
Other	0.0	1.0
TOTAL COSTS	6.0	98.0

Other = rounding approximation
 by computer

III. Funding Status

Prior FY Carryover	FY86 Projected Funding Level	FY86 Funds Received to Date	FY86 Funding Balance Needed
50K	200K	150K	None

A-1165, Task II
 1183.020
 August 1986

THIS IS AN ESTIMATE ONLY AND MAY NOT MATCH THE INVOICES SENT TO
 NRC BY SANDIA'S ACCOUNTING DEPARTMENT.

	Current Month	Year-to-Date
I. Direct Manpower (man-months of charged effort)	0.2	0.7
II. Direct Loaded Labor Costs	1.0	7.0
Materials and Services	0.0	0.0
ADP Support (computer)	0.0	0.0
Subcontracts	0.0	21.0
Travel	1.0	1.0
Other	0.0	0.0
TOTAL COSTS	* 2.0	29.0

Other = rounding approximation
 by computer

III. Funding Status

Prior FY Carryover	FY86 Projected Funding Level	FY86 Funds Received to Date	FY86 Funding Balance Needed
-0-	80K	80K	None

* These costs are for work performed in previous months.

A-1165, Task III
 1183.030
 August 1986

THIS IS AN ESTIMATE ONLY AND MAY NOT MATCH THE INVOICES SENT TO
 NRC BY SANDIA'S ACCOUNTING DEPARTMENT.

	Current Month	Year-to-Date
I. Direct Manpower (man-months of charged effort)	0.5	5.4
II. Direct Loaded Labor Costs	4.0	58.0
Materials and Services	0.0	0.0
ADP Support (computer)	0.0	0.0
Subcontracts*	3.0	92.0
Travel	0.0	1.0
Other	0.0	1.0
TOTAL COSTS	7.0	152.0

Other = rounding approximation
 by computer

III. Funding Status

Prior FY Carryover	FY86 Projected Funding Level	FY86 Funds Received to Date	FY86 Funding Balance Needed
143K	163K	20	None

*Charges were received for Gutjahr and Wahi.

A-1165, Task IV
 1183.040
 August 1986

THIS IS AN ESTIMATE ONLY AND MAY NOT MATCH THE INVOICES SENT TO
 NRC BY SANDIA'S ACCOUNTING DEPARTMENT.

	Current Month	Year-to-Date
I. Direct Manpower (man-months of charged effort)	0.1	3.1
II. Direct Loaded Labor Costs	1.0	36.0
Materials and Services	0.0	1.0
ADP Support (computer)	0.0	0.0
Subcontracts	0.0	1.0
Travel	0.0	3.0
Other	0.0	1.0
TOTAL COSTS	1.0	42.0

Other = rounding approximation
 by computer

III. Funding Status

Prior FY Carryover	FY86 Projected Funding Level	FY86 Funds Received to Date	FY86 Funding Balance Needed
-0-	50K	50K	None

A-1165

TOTAL FOR 1183.010, 1183.020, 1183.030, 1183.040

August 1986

THIS IS AN ESTIMATE ONLY AND MAY NOT MATCH THE INVOICES SENT TO
NRC BY SANDIA'S ACCOUNTING DEPARTMENT.

	Current Month	Year-to-Date
I. Direct Manpower (man-months of charged effort)	1.1	13.2
II. Direct Loaded Labor Costs	8.0	146.0
Materials and Services	0.0	1.0
ADP Support (computer)	0.0	0.0
Subcontracts	7.0	164.0
Travel	1.0	7.0
Other	0.0	3.0
TOTAL COSTS	16.0	321.0

Other = rounding approximation
by computer

III. Funding Status

Prior FY Carryover	FY86 Projected Funding Level	FY86 Funds Received to Date	FY86 Funding Balance Needed
193K	493K	300K	None