

**Sandia National Laboratories**

Albuquerque, New Mexico 87185

October 15, 1986

Neil M. Coleman  
Hydrology Section  
Geotechnical Branch  
Division of Waste Management  
U.S. Nuclear Regulatory Commission  
7915 Eastern Avenue  
Silver Spring, MD 20910

Dear Mr. Coleman:

Enclosed is the monthly report on FIN A-1158, Repository Site Definition and Technology Transfer for September 1986. Please feel free to contact me at FTS 844-8368 or Charlene Harlan at FTS 844-8164 if you have any questions or comments.

Sincerely,

*Robert M. Cranwell*

Robert M. Cranwell, Supervisor  
Waste Management Systems  
Division 6431

RMC:6431

Enclosure

Copy to:  
Office of the Director, NMSS  
Attn: Program Support  
Robert Browning, Director  
Division of Waste Management  
Philip Justus  
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 C. P. Harlan  
6431 G. F. Wilkinson

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PDR WMRES EXISANL  
A-1158 PDR

PROGRAM: Task I, Repository Site Definitions

FIN#: A-1158

CONTRACTOR: Sandia National Laboratories

BUDGET PERIOD: 10/85 -  
9/86

NMSS PROGRAM MANAGER: N. M. Coleman

BUDGET AMOUNT: - 0 -

CONTRACT PROGRAM MANAGER: R. M. Cranwell

FTS PHONE: 844-8368

PRINCIPAL INVESTIGATOR: C. P. Harlan

FTS PHONE: 844-8164

PROJECT OBJECTIVE

To develop RSDs for candidate host media and provide data for use in developing and testing performance assessment methodologies for the various media.

ACTIVITIES DURING SEPTEMBER 1986

No activity.

PROGRAM: Task II, Technology Transfer

FIN#: A-1158

CONTRACTOR: Sandia National Laboratories

BUDGET PERIOD: 10/85 -  
9/86

NMSS PROGRAM MANAGER: N. M. Coleman

BUDGET AMOUNT: \$115K

CONTRACT PROGRAM MANAGER: R. M. Cranwell

FTS PHONE: 844-8368

PRINCIPAL INVESTIGATOR: C. P. Harlan

FTS PHONE: 844-8164

PROJECT OBJECTIVE

To provide technical support for the transfer of the capability to use the information, analytical techniques, and tools developed for the NRC under the Performance Assessment Methodology program (FIN A-1266).

ACTIVITIES DURING SEPTEMBER 1986

SWIFT II Self-Teaching Curriculum (STC)

Corrections to the camera ready copy of the report are being prepared. When complete, it will be transmitted to NRC for reprint of the document.

TOUGH User's Guide

Comments to the report are being finalized. Minor modifications to the sample problems may occur as a result of the review.



PROGRAM: Task IV, Code Validation and Verification

FIN#: A-1158  
Task IV

CONTRACTOR: Sandia National Laboratories

BUDGET PERIOD: 10/85 -  
9/86

NMSS PROGRAM MANAGER: N. M. Coleman

BUDGET AMOUNT: \$87K

CONTRACT PROGRAM MANAGER: R. M. Cranwell

FTS PHONE: 844-8368

PRINCIPAL INVESTIGATOR: C. P. Harlan

FTS PHONE: 844-8164

PROJECT OBJECTIVE

To assemble the various tests that have been performed to help validate and verify various portions of relevant codes and recommend any additional feasible tests.

ACTIVITIES DURING SEPTEMBER 1986

SWIFT II Verification/Validation

During September, work continued on the letter report for SWIFT II verification/validation problems. During October, a rough draft of the report should be completed summarizing existing verification and validation problems, along with recommendations of additional areas to be developed.



A-1158

Total for 0976.010, 0976.020, 0976.030, 0976.040 and 0976.050  
September 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)	3.6 ---	26.8 ---
II. Direct Loaded Labor Costs	18	207
Materials and Services	0	0
ADP Support (computer)	2	16
Subcontracts	-109	-38
Travel	3	4
Other (computer roundoff)	-1	3
	-----	-----
TOTAL COSTS	-87	192
	(in addition to 192K costed for FY86, outstanding invoices total 90-95K)	

III. Funding Status

Prior FY Carryover -----	FY 86 Projected Funding Level -----	FY 86 Funds Received to Date -----	FY 86 Funding Balance Needed -----
\$150K	\$486K **	\$336K **	- 0 -

\*\* \$70K of these funds were transferred to A-1755 by NRC Form 173  
dated April 4, 1986.

A-1158, Task I  
 0976.010  
 September 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)	0.0 ---	0.0 ---
II. Direct Loaded Labor Costs	0	0
Materials and Services	0	0
ADP Support (computer)	0	0
Subcontracts	0	0
Travel	0	0
Other (computer roundoff)	0	0
	-----	-----
TOTAL COSTS	0	0

III. Funding Status

Prior FY Carryover -----	FY 86 Projected Funding Level -----	FY 86 Funds Received to Date -----	FY 86 Funding Balance Needed -----
None	None	None	None



A-1158, Task II  
 0976.020  
 September 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)	0.6 ---	11.6 ---
II. Direct Loaded Labor Costs	3	93
Materials and Services	0	0
ADP Support (computer)	0	0
Subcontracts	-47	-14
Travel	3	3
Other (computer roundoff)	0	1
	-----	-----
TOTAL COSTS	-41	83

III. Funding Status

Prior FY Carryover -----	FY 86 Projected Funding Level -----	FY 86 Funds Received to Date -----	FY 86 Funding Balance Needed -----
	\$115K		-0-

A-1158, Task III  
 0976.030  
 September 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)	2.7 ---	12.2 ---
II. Direct Loaded Labor Costs	14	93
Materials and Services	0	0
ADP Support (computer)	2	16
Subcontracts	-31	-19
Travel	0	0
Other (computer roundoff)	-1	2
	-----	-----
TOTAL COSTS	-16	92

III. Funding Status

Prior FY Carryover -----	FY 86 Projected Funding Level -----	FY 86 Funds Received to Date -----	FY 86 Funding Balance Needed -----
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\$175K

-0-

A-1158, Task IV  
 0976.040  
 September 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 ---	2.4 ---
II. Direct Loaded Labor Costs	1	16
Materials and Services	0	0
ADP Support (computer)	0	0
Subcontracts	-31	-6
Travel	0	1
Other (computer roundoff)	0	1
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TOTAL COSTS	-30	12

III. Funding Status

Prior FY Carryover -----	FY 86 Projected Funding Level -----	FY 86 Funds Received to Date -----	FY 86 Funding Balance Needed -----
	\$87K		-0-

A-1158, Task V  
 0976.050  
 September 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)	0.0 ---	0.6 ---
II. Direct Loaded Labor Costs	0	5
Materials and Services	0	0
ADP Support (computer)	0	0
Subcontracts	0	0
Travel	0	0
Other (computer roundoff)	0	0
	-----	-----
TOTAL COSTS	0	5

III. Funding Status

Prior FY Carryover -----	FY 86 Projected Funding Level -----	FY 86 Funds Received to Date -----	FY 86 Funding Balance Needed -----
	\$39K		-0-