Sandia National Laboratories

Albuquerque, New Mexico 87185

WM-RES

WM DOCKET CONTROL CENTER

August 14, 1985

Neil M. Coleman Hydrology Section

Geotechnical Branch

7915 Eastern Avenue

Silver Spring, MD 20910

Division of Waste Management

U.S. Nuclear Regulatory Commission

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WM-Record-File WM Project 10,11,16 Docket No. _ SNE PDR_ LPDR **B** Distribution: can Coleman. STILL (Return to WM, 623-SS)

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Dear Mr. Coleman:

Enclosed is the monthly report on FIN A-1158, Repository Site Description and Technology Transfer for July 1985.

Please feel free to contact me if you have any questions or comments.

Sincerely, Chu fa navar R.m. Cranwell

8508300334 85081

WMRES

PDR

-1158

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 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 R. M. Cranwell 6431 6431 R. L. Hunter

PDR

PROGRAM:	Repository Si Short-term Te	te Def chnica	initions; l Assista	nce	FIN# Tasi	: A-1158 ks I, III
CONTRACTOR:	Sandia Natior Laboratories	nal		BUDGET	PERIOD	: 10/84 - 9/85
NMSS PROGRAM	MANAGER:	N. M.	Coleman	BUDGE	t amoui	NT: \$90K
CONTRACT PRO	GRAM MANAGER:	R. M.	Cranwell	FTS P	HONE :	844-8368
PRINCIPAL IN	VESTIGATORS:	R. L. M. D.	Hunter Siegel		PHONE : PHONE :	846-6337 846-5448

PROJECT OBJECTIVE

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To develop reference repositories in media other than bedded salt (i.e., basalt, domed salt, welded tuff, and granite).

ACTIVITIES DURING JULY 1985

The final draft of the RSD for unsaturated tuff is in Sandia management review.

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PROGRAM:	Technology Tr	ansfer		FIN#:	A-1158 Task II
CONTRACTOR:	Sandia Nation Laboratories	al	B	UDGET PERIOD:	10/84 - 9/85
NMSS PROGRAM	MANAGER :	N. M.	Coleman	BUDGET AMOU	NT: \$239K
CONTRACT PRO	GRAM MANAGER:	R. M.	Cranwell	FTS PHONE:	844-8368
PRINCIPAL IN	VESTIGATORS:		Hunter Siegel	FTS PHONE: FTS PHONE:	846-6337 846-5448

PROJECT OBJECTIVE

To insure through technical support, problem definition, and documentation the timely, thorough, and efficient transfer of the information, analysis techniques, and analysis tools developed for the U.S. Nuclear Regulatory Commission (NRC) by the methodology program.

ACTIVITIES DURING JULY 1985

TOUGH

Work on the sample problems is progressing. Dr. Pruess completed the heat pipe problem, obtaining excellent agreement with a known semi-analytical solution. This problem brought to light an interesting issue in the weighting of binary diffusion parameters near phase boundaries, handling of which required some subtle modifications in the TOUGH code. Dr. Pruess concentrated on the user's guide during July. He completed a first rough draft, containing most of the material to be included in the final document, with the exception of the sample problems. We expect to receive a copy of the draft as soon as it is typed.

SWIFT II STC

Final problems with the SWIFT II Self-Teaching Curriculum were resolved during a visit with Dave Ward of Geotrans. Final drafting of the figures is complete. Minor typographical corrections to the text and microfiche copies of data input for the problems must be prepared. Sandia technical and management review are expected to take at least eight weeks. A-1158, Tasks I and III 0976.020 July 1985

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

		Current <u>Month</u>	Year-to-Date
I.	Direct Manpower (man-months of charged effort)	0.0	0.5
II.	Direct Loaded Labor Costs Materials and Services	0.0	5.0 1.0
	ADP Support (computer) Subcontracts*	0.0	0.0
	Travel	0.0	194.0
	Other	0.0	<u>1.0</u>
	TOTAL COSTS	1.0	201.0

Other = rounding approximation by computer

III. Funding Status

Prior FY	FY85 Projected	FY85 Funds	FY85 Funding
Carryover	Funding Level	Received to Date	Balance Needed
None	90K	90K	None

*We are expecting reimbursements as indicated in earlier monthly reports.

A-1158, Task II 0976.010 July 1985

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

		Current <u>Month</u>	Year-to-Date
I.	Direct Manpower (man-months of charged effort)	0.2	1.8
II.	Direct Loaded Labor Costs Materials and Services ADP Support (computer) Subcontracts* Travel Other	1.0 0.0 0.0 5.0 0.0 <u>0.0</u>	14.0 0.0 52.0 0.0 <u>0.0</u>
	TOTAL COSTS	6.0	66.0

Other = rounding approximation by computer

III. Funding Status

Prior FY	FY85 Projected	FY85 Funds	FY85 Funding
Carryover	Funding Level	Received to Date	Balance Needed
172K	239K	67K	None

*Subcontractor charges are from LBL (Karsten Pruess).

A-1158

TOTAL FOR 0976.010 and 0976.020

July 1985

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

		Current <u>Month</u>	Year-to-Date
I.	Direct Manpower (man-months of charged effort)	0.2	2.3
II.	Direct Loaded Labor Costs Materials and Services ADP Support (computer) Subcontracts Travel Other	1.0 1.0 0.0 5.0 0.0 0.0	19.0 1.0 0.0 246.0 0.0 1.0
	TOTAL COSTS	7.0	267.0

Other = rounding approximation by computer

III. Funding Status

Prior FY	FY85 Projected	FY85 Funds	FY85 Funding
Carryover	Funding Level	Received to Date	Balance Needed
172K	329K	157K	