Sandia National Laboratories

Albuquerque, New Mexico 87185

July 14, 1988

Mr. Chad Glenn
Regulatory Branch
Division of Low-Level Waste Management
and Decommissioning
Office of Nuclear Material Safety and Safeguards
U.S. Nuclear Regulatory Commission
Mail Stop 5E4
Washington, DC 20555

Dear Mr. Glenn:

Enclosed is the June 1988 monthly report for FIN A1763. If you have any questions or comments, please feel free to contact me at (FTS) 844-8368.

Sincerely,

Robert M. Cranwell

Robert M. Cranwell
Safety and Reliability Analysis
Division 6415

RMC:6416:om

Enclosure

Copy to:
USNRC Office of Director, NMSS (Attn: PMDA)
USNRC Dr. M. R. Knapp, Director, DLLWMB
USNRC C.E. MacDonald, NMSS/TB
USNRC LLWM Docket Control Center
6410 N.R. Ortiz
6415 R.M. Cranwell
6416 L. R. Shipers

A1763
WM-3
NL031

Program: Evaluation, Validation, Verification, and Documentation of the IMPACTS-BRC Computer Code. FIN: A1763

Contractor: Sandia National Laboratories BUDGET PERIOD: 10/87 -9/88

NRC PROGRAM MANAGER: C. J. Glenn BUDGET AMOUNT: $150K

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

PRINCIPAL INVESTIGATOR: R. M. Cranwell FTS PHONE: 844-8368

PROJECT OBJECTIVES

To validate, verify, document and make code changes as necessary so as to provide the NRC with a documented and defensible version of IMPACTS-BRC for subsequent use in BRC petitions.

ACTIVITIES DURING JUNE 1988

The IMPACTS-BRC code supplied by the Argonne National Code Center was tried and made to run on 8088 and 8086 CPU PC's. The code supplied had been compiled to run without a math coprocessor. The supplied source code was modified slightly in order to compile in Microsoft FORTRAN 4.1, but only the non-math coprocessor version was executable due to a "bug" in Microsoft FORTRAN.

In performing the BRC-LLW documentation overview, it became evident that the PATHRAE AND PATH61 PC codes would be useful for the comparison aspects of the required IMPACTS-BRC review. These codes were ordered and acquired from V. Rogers and RSIC, respectively.

Meetings were held at Sandia National Laboratories, Albuquerque (SNLA) with Clarence Lee, Applied Physics, Incorporated (API), Jeff Philbin, Gene Emerson, and Robert Cranwell (SNLA) on June 3, 23 and 30. Clarence Lee is a contractor working on this project, Jeff Philbin is a Sandia staff member providing part-time assistance, and Gene Emerson is the former principal investigator. The purpose of these meetings was to provide input on the progress being made and to initiate a plan for completing

Task 1:	September 1, 198C
Task 2:	October 15, 988
Task 3:	January 15, 1989
Task 4:	March 15, 1989
Task 5:	April 1, 1989

We have kept the completion date of the project April 1, 1989 as was originally proposed in the 189. Every effort will be made to meet this deadline. We realize that this is an ambitious schedule but feel that with a concentrated effort and with the right key personnel we can accomplish the goals and produce an excellent product.

The selection of a new principal investigator is being finalized and should be completed by the end of July. You will be notified as soon as selection has been made.