UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

January 31, 1995

Dr. Robert G. Baca, Manager
Performance Assessment Program Element
Center for Nuclear Waste Regulatory Analyses
Southwest Research Institute
6220 Culebra Road
San Antonio, Texas 78228-0510

SUBJECT: TECHNICAL DIRECTION FOR SUBTASK 2.3 OF THE PERFORMANCE ASSESSMENT ELEMENT

Dear Dr. Baca:

This letter provides technical direction for Intermediate Milestone (IM) 5702-723-456, "Letter Report on Status of Iterative Performance Assessment (IPA) Activities." The letter report needs to include not only an update of the activities but provide a perspective on the inter-relationship of all the IPA activities, the integrating role of performance assessment (PA), and the regulatory context of the activities. This report is an important document for demonstrating the usefulness and context of PA within the HLW program and will be used as one input to an annual commission update on PA activities. As such, it will need to contain, at a minimum, the following information:

1) the regulatory focus of the IPA activities;

The IPA activities need to be described relative to their regulatory context and as applicable to the Key Technical Uncertainties (KTUs). The emphasis should be to briefly describe the overall context and goals for the IPA activity (e.g., independent capability to determine compliance with release limits) and the specific context and goals for the individual activities (e.g., infiltration has been shown to influence significantly the release calculations in current performance assessments, therefore, detailed analysis of infiltration are examining current concepts and modeling assumptions related to infiltration; and the relationship of the near-field analyses to understanding issues on the "hot" repository concept). It is anticipated that the regulatory focus can be described in 4-8 pages of text.

030004

4261
WM-11
NH16

2) the inter-relationship of the individual activities and the HLW program; and

The many individual activities of IPA need to be described relative to each other and, where appropriate, relative to other aspects of the HLW program. It is important to describe how the many activities contribute to meeting the goal(s) of the IPA program as identified in topic 1 above. A key aspect of the IPA activities are its interactions with many parts of the HLW program. It is critical to identify and describe the integration with other elements of the program (e.g., use of geologic stratigraphic maps from geology element), and the relationships and/or dependencies within the individual IPA activities (e.g., the infiltration analyses will provide a more defensible range for infiltration for IPA calculations and boundary conditions for regional models, C14 analysis provides additional information with respect to the chemical environment useful to the source term calculation). It is anticipated that the inter-relationship of the individual activities can be described in 4-8 pages of text.

3) technical summary of contributions/findings from IPA activities.

IPA activities have contributed to the HLW program in a number of technical areas (insights on conceptual models, parameter sensitivities, contribution to total system performance, etc.). For key technical areas, this summary should provide the reader with: the important findings made during the conduct of IPA; DOE approach(es), where appropriate, and rationale for similarities and differences in NRC approach; identification of follow-on activities or the need for follow-on activities; and as appropriate, identification of findings anticipated from on-going and planned activities. The goal of this summary is to give the reader an understanding of where and how IPA has made technical contributions, how this relates to the DOE's approach(es), and what are the anticipated findings for future and on-going activities. It is anticipated that this summary will require anywhere from 4 to 10 pages of text and 1 to 5 figures and/or tables.

Briefly, the letter report should answer the following four questions: why we are doing the work, how does it help the Overall Review Strategy (ORS), what we have learned to date, and what additional work is needed.

The Center is requested to provide the letter report on April 17, 1995. This effort is considered to be within the scope of Subtask 2.3. Let me know if this work will have a significant impact on the cost or schedule associated with this subtask.

If you have any questions regarding the contents of this letter, please contact Tim McCartin at (301) 415-6681.

Sincerely,

/S/

Timothy McCartin, Manager
Performance Assessment Program Element
Division of Waste Management
Office of Nuclear Material Safety
and Safeguards

cc: S. L. Fortuna, PMDA
B. D. Meehan, CAB

Mark Small Boxes in Concurrence Block to Define Distribution Copy Preference.

In small Box on "OFC:" line enter: C = Cover E = Cover & Enclosure N = No Copy

OFC	PAHB	C	PAHB	E	PAHB			
NAME	TMcCartin	TJM	RWescott	RJW	NEisenberg	NJE		
DATE	1/31/95		1/31/95		1/31/95			

S:\DIRECT.TJM OFFICIAL RECORD COPY
In small Box on "DATE:" line enter: M = E-Mail Distribution Copy H = Hard Copy

DISTRIBUTION:
DWM r/f
[Central File]
NMSS r/f
JAustin
CNWRA
BStiltenpole
PAHB r/f
[LSS]
[PUBLIC]