



# CENTER FOR NUCLEAR WASTE REGULATORY ANALYSES QUALITY ASSURANCE SURVEILLANCE REPORT

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PROJECT NO.: 20-5702-7xx

REPORT NO.: 95-14

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**SURVEILLANCE SCOPE:** General Review of Performance Assessment (PA) Operations Plan Tasks for Compliance with QA Program Requirements

**REFERENCE DOCUMENTS:** HLW Operations Plans FY96; Quality Assurance Requirements Matrices; Program Manager's Periodic Report (PMPR), Period 02, FY96.

**STARTING DATE:** 12/19/95

**ENDING DATE:** 12/21/95

**QA REPRESENTATIVE:** R. D. Brient

**PERSONS CONDUCTING TEST/EXAM/ACTIVITY:** R. Baca, R. Manteufel, M. Jarzempa, W. Murphy

**SATISFACTORY FINDINGS:** The most recent PMPR was consulted to identify current activities within PA. Discussions were held with the Principal Investigators to review activities, identify personnel involved, and to re-establish the QA requirements applicable to the specific activities. Results are as follows:

**5702-711—Implementation of EPA Standards:** This is joint work with NRC, no numerical analysis, and no milestones. Scientific Notebooks are not applicable to this activity.

**5702-712—Develop Technical Positions:** A low level of activity is ongoing in resolving comments to finalize the TP on elicitation. No Scientific Notebooks are currently involved.

**5702-721—LARP Development:** No current activity.

**5702-723—Iterative Performance Assessment:** Current activity covers several analyses that were performed by PA and other element staff. A Scientific Notebook for the ground heave numerical analysis (G. Ofoegbu) was reviewed. The notebook is being compiled, and is not currently in Scientific Notebook format (an NCR has been issued previously to address this issue). However, the analysis was thoroughly and clearly documented. The pages will be bound, and entries and corrections will be initialed and dated. Heat flow calculations in Scientific Notebook #107 were reviewed for the thermal source-term analysis. Entries appeared to be complete and met applicable requirements. The work on developing the 2D carbon balance model is primarily documented in the report (IM 5702-723-545). Part of the basis for the model is previously published CTOUGH code calculations, along with newer transport calculations. The technical review for this paper was verified, as described below.

**5702-724—TPA Code Software Development:** No current activity. All software QA for PA will fall under this subtask. At this time, IPA software listed under the previous revision of TOP-018 has not been transitioned with additional tests and documentation to comply with the current revision of TOP-018.

**5702-441—Prelicensing Reviews and Interactions:** No current activity. The staff is waiting to receive DOE's next TSPA.

Personnel qualification and indoctrination records were verified for the following personnel contributing to PA activities:  
R. Baca, R. Manteufel, M. Jarzempa, R. Janetzke, B. Henderson, G. Ofoegbu

Review documentation was verified for the following PA reports identified in the latest PMPR:  
Paper on Carbon System Model (IM 5702-723-545)

Preliminary Analysis of Important Site-Specific Dose Assessment Parameters and Exposure Pathways Applicable to A Groundwater Release Scenario at Yucca Mountain (symposium paper)

**UNSATISFACTORY FINDINGS:** None  
**NONCONFORMANCE REPORT NO.:** N/A

**ATTACHMENTS:** None

**RECOMMENDATIONS/ACTIONS:** Discussions were held during the surveillance to bring TSPA software into compliance with TOP-018, Revision 4 as soon as possible.

**APPROVED:**

CNWRA DIRECTOR OF QUALITY ASSURANCE

**DATE:**

1/12/96

**DISTRIBUTION:**

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