

## CENTER FOR NUCLEAR WASTE REGULATORY ANALYSES QUALITY ASSURANCE SURVEILLANCE REPORT

PROJECT NO: 20-5708-860 REPORT NO: 96-07 PAGE 1 OF 1

SURVEILLANCE SCOPE: Unsaturated and Saturated Flow Under Isothermal Conditions KTI Activities

REFERENCE DOCUMENTS: HLW Operations Plans, Quality Requirements Application Matrices

STARTING DATE: May 28, 1996

ENDING DATE: May 29, 1996

QA REPRESENTATIVE: R.D. Brient

PERSONS CONDUCTING TEST/EXAM/ACTIVITY: E. Pearcy, R. Bagtzoglou, G. Wittmeyer, and S. Stothoff

## **SATISFACTORY FINDINGS:**

Task 1 — Technical Assistance: Model development activities have been conducted for a watershed model and a hydrostratigraphic model. Field activities were conducted in late May, 1996, to provide data for model development. These notebooks are being reviewed and annotated, so were not yet available for surveillance. Scientific Notebook #166 was reviewed. The notebook currently has entries for software control installation tests for PORFLOW 2.50 and MODFLOW 1.31. Scientific Notebook #163 (electronic) had been printed and processed into QA records in April 1996. This was reviewed as well.

- Task 2 Code Development—SUFLAT: The plan was to baseline version 1.0 of SUFLAT and perhaps start on version 1.1. No work has been done to baseline v. 1.0, but it should be easily accomplished. The anticipated dates for software control milestones should be revised to 6/96 for design verification and installation test, and configuration control in 7/96. The reports covering development of SUFLAT 1.0 will be reviewed to determine if they are suitable for a User's Manual, especially considering that v. 1.1 may soon be developed.
- Task 3 Applied Technical Investigations: Work has been done in modeling perched water using BIGFLOW v. 1.1, which was verified as the currently controlled version. Scientific Notebook #171, which documents this work, was reviewed.
- Task 4 Code Development—BREATH: No activity. The development of BREATH v. 1.2 is a potential Operations Plan activity, and, thus far, has not been initiated. The software control milestone dates remain to be determined.

The Scientific Notebooks reviewed were all acceptable, and the few minor errors corrected.

Personnel qualifications and QA indoctrination documents were verified for E. Pearcy, G. Wittmeyer, R. Bagtzoglou, S. Stothoff, and T. Tolley.

UNSATISFACTORY FINDINGS: None

NONCONFORMANCE REPORT NO: None

ATTACHMENTS: None

**RECOMMENDATIONS/ACTIONS: None** 

APPROVED:

CNWRA DIRECTOR OF QUALITY ASSURANCE

DATE:

5/29/96

DISTRIBUTION:

**CNWRA QA DIRECTOR** 

**ORIGINATOR** 

TASK LEADERS: G. Wittmeyer, R. Bagtzoglou,

S. Stothoff

**ELEMENT MANAGER: E. Pearcy** 

B. Sagar, H. Garcia