



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

PROJECT NO.:20.06002.01.321-.323	REPORT No.:2005-11	Page <u>1</u> of <u>1</u>
SURVEILLANCE SCOPE: Corrosion Science and Process Engineering		
REFERENCE DOCUMENTS: QAP-001, Scientific Notebook Control, QAP-002, Review of CNWRA Documents, Reports and Papers; QAP-004, Surveillance Control; QAP-007, Professional Personnel Qualification; QAP-017, Drawing Control; QAP-019, Control of Measuring and Test Equipment; and AP-001, Evaluation of Potential for Conflict of Interest.		
START DATE: 04/28/05	END DATE 05/5/05	QA REPRESENTATIVE: Mark R. Ehnstrom
PERSONS CONDUCTING ACTIVITY: V. Jain, D. Dunn, Y. Pan, L. Yang, X He, B. Derby		
<p>SATISFACTORY FINDINGS: Quality Requirements Application Matrixes for the Corrosion Science and Process Engineering activities were reviewed at the start of the surveillance. Due to travel commitments by the manager, first discussions were held with D. Dunn. Interviews with project personnel consisted of discussions about current activities, experiments being performed, use of subcontractors and consultants, and software being used.</p> <p>Corrosion tests are being performed in the laboratories in Building 57. Scientific Notebooks used to document these activities and other activities performed by staff personnel were reviewed. The notebooks, 533,659, 675, 686, and 697 were reviewed for compliance to QAP-001, Scientific Notebook Control, and were determined to be acceptable.</p> <p>During the review of these notebooks three pieces of critical measuring and test equipment were identified. A search in the Electronic Library Facility (ELF) found that the calibration documentation for two of these items was located in QA records. The calibration documentation for the third piece of equipment was obtained from the calibration laboratory and placed into the QA records.</p> <p>Compliance to QAP-002, Review of CNWRA Documents, Reports, and Papers, was determined by a sample review of recently issued reports. The following reports were reviewed and found to be compliant to procedural requirements:</p> <ul style="list-style-type: none"> • Chapter 1: Use of Alloy 22 as a Long-Term Radioactive Waste Containment Material • Passive and Localized Corrosion of Alloy 22- Modeling and Experiments • Modeling Phase Transformations of Ni-Cr-Mo Alloys <p>Consultant files for Stuart Birnbaum, Geri Becker, and T. Calvin Tszeng were reviewed for compliance to QAP-007, Professional Personnel Qualification and AP-001, Evaluation of Potential for Conflict of Interest. The review found the files were complete and acceptable.</p> <p>Software used by the group includes THERMOCALC, DICTA, and ESP Stream Analyzer. These programs are contained on the CNWRA Controlled Software Directory.</p>		

7 file 5/23/05

<p>UNSATISFACTORY FINDINGS: During the 2005 annual audit of the CNWRA, several laboratory activities were identified unsatisfactory. Among the areas were measuring and test equipment owned by other divisions but being used for CNWRA work activities and traceability of materials. These unsatisfactory areas will be addressed by Corrective Action Requests resulting from the audit.</p>	
NCR NO.: N/A	CAR NO.: N/A
ATTACHMENTS: None	
RECOMMENDATIONS/ACTIONS:	
<p>APPROVED: <u><i>[Signature]</i></u> DATE: <u>5/23/05</u></p>	<p>DISTRIBUTION: ORIGINAL—QA RECORDS DIRECTOR, QA Assistant DIRECTOR: S. Mohanty MANAGER: V. Jain PRINCIPAL INVESTIGATOR: D. Dunn</p>