

GEOSCIENCES AND ENGINEERING DIVISION QUALITY ASSURANCE SURVEILLANCE REPORT

REPORT No.:2005-12 Page _1_ of _1_/ **PROJECT** NO.:20.06002.01.321,-.323

SURVEILLANCE SCOPE: Mining, Geotechnical, & Process Engineering Activities

REFERENCE DOCUMENTS: QAP-002, Review of CNWRA Documents, Reports and Papers; QAP-004, Surveillance Control; QAP-007, Professional Personnel Qualification; and AP-001, Evaluation of Potential for Conflict of Interest.

START DATE: 05/23/05 END DATE 06/20/05 QA REPRESENTATIVE: Mark R. Ehnstrom

PERSONS CONDUCTING ACTIVITY: A. Chowdhury, S. Hsiung, D. Gute, B. Dasgupta, A. Ghosh, G. Adams, L. Ibarra, X. He, and S. Gonzalez

SATISFACTORY FINDINGS: A review of the Quality Requirements Application Matrixes (QRAMs) for the Mining, Geotechnical, & Facility Engineering (MGFE) area provided planning information to be used during the course of the surveillance. The QRAMs listed a total of 14 software items for possible use. The software are included on the CNWRA Controlled Software Directory. Of the 14 codes, 6 are validated and 2 are NRC endorsed, leaving 6 that have not been validated. The attachment identifies the codes listed on the QRAMs and their current validation status.

Fifteen Scientific Notebooks assigned to MGFE and other staff working on MGFE activities were reviewed for compliance to QAP-001, Scientific Notebook Control. Two of these notebooks were electronically maintained. The review found them to be complete, legible, and satisfying the requirements of the procedure. The attachment identifies the notebooks reviewed during the surveillance.

Most of the current MGFE activities consisted of safety reviews, licensing reviews, and licensing hearings. There was no current laboratory work.

The Predecisional Final Letter Report: Humboldt Bay Independent Spent Fuel Storage Installation Safety Evaluation Report was reviewed to determine compliance to QAP-002, Review of CNWRA Documents, Reports, and Papers. The review found one comment resolution sheet had not been signed by the reviewer showing formal acceptance of the response. On a second comment sheet, the responder was not identified. Although the individuals who performed these activities could be determined with great confidence, verbatim compliance to the review system had not been accomplished. Both resolution sheets were corrected during the surveillance.

Personnel files were reviewed for compliance to QAP-007, Professional Personnel Qualification and AP-001, Evaluation of Potential for Conflict of Interest. (See unsatisfactory findings).

UNSATISFACTORY FINDINGS: Procedure QAP-002, Document Review, is not identified in all cases on Form QAP 11-1 for individuals performing document reviews. Reviews performed on remaining center staff identified an additional seven personnel where this requirement had not been satisfied. Nonconformance Report 2005-27 was issued address this issue.

NCR NO.: 2005-27 CAR NO.: N/A

ATTACHMENTS: Yes

RECOMMENDATIONS/ACTIONS: A more detailed evaluation should be performed during the annual reviews of staff members qualification files to assure that appropriate procedures have been identified in relationship to existing work activities and job description.

APPROVED DISTRIBUTION: ORIGINAL—QA RECORDS

ASSISTANT DIRECTOR: S. Mohanty MANAGER: A. Chowdhury DATE:

PRINCIPAL INVESTIGATOR: N/A

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Attachment to Surveillance Report 2005-SR-012

Software identified on Quality Requirements Application Matrix for possible use and their validation status:

ABAQUS V6.4	Validated (On ASL)	UDEC V3.1	Not validated
LS-DYNA 960 V 5.7	Validated	SAP2000 V8.3.1	Not validated
ProShake V1.1	Validated	SAPHIRE V6.8	Not validated
RSAC V6.2	Validated	PCSA Tool V3.0	Validated
MELCOR V1.8.5	Validated	DTHERM V1.2	Validated
HyperMesh V7	Validated	SCALE V4.4A (Not listed, V5 was used during reviews and is NRC Endorsed)	

During the surveillance the following scientific notebooks were reviewed and were found to be in compliance with QAP-001, Scientific Notebook Control:

391, 404, 407, 409, 410, 417, 433, 544, 593, 614, 635E, 656, 665E, 692, and 703

Professional Personnel Qualification files reviewed during the surveillance:

R. Reed, A. Garabedian, R. Chen, A. Chowdhury, G. Adams, L. Ibarra, G. Ofoegbu*, S. Hsiung*, B. Dasgupta, A. Ghosh*, and D. Gute,

NRC Endorsed

MCNP 4C2

Increased review based on preliminary results found that QAP-002 was not identified on the Form QAP-11-1 for these personnel:

N. Franklin, B. Hill, D. Hooper, M. Necsoiu, D. Sims, A. Sun, D. Waiting.

^{*} QAP-002 not identified on Form QAP-11 (NCR 2005-27)