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CENTER FOR NUCLEAR WASTE REGULATORY ANALYSES
QUALITY ASSURANCE
SURVEILLANCE REPORT

PROJECT NO: 20-1402-171 | **REPORT NO:** 2002-07 5/1/02 | **PAGE** 1 **OF** 1

SURVEILLANCE SCOPE: Development and control of software

REFERENCE DOCUMENTS: TOP-018, Development and Control of Scientific and Engineering Software
Corrective Action Request (CAR) 2001-04

STARTING DATE: March 11, 2002 **ENDING DATE:** April 29, 2002

QA REPRESENTATIVE: R. Folck

PERSONS CONDUCTING TEST/EXAM/ACTIVITY: R. Janetzke, B. Mabrito, S. Painter, M. Ehnstrom, B. Dasgupta, A. Lozano, D. Stead, D. Turner, D. Gute, G. Ofoegbu, G. Wittmeyer, S. Mohanty, M. Padilla, C. Walker

SATISFACTORY FINDINGS:

Reviewed documentation packages maintained in quality assurance records for software listed on the CNWRA Master Directory of Scientific & Engineering Software. In general, documentation packages were complete, properly indexed, and maintained in accordance with applicable TOP-018 requirements.

UNSATISFACTORY FINDINGS:

1. Software used for technical work and not under TOP-018 control - HyperMesh 4.0, 5.0.
2. QA Verification Reports classified required TOP-018 elements as "not applicable" without rationale or justification.
3. QA Verification Reports found incomplete.
4. Listing of files for a given release not included in QA file.
5. Software medium improperly labeled.
6. Unable to read QA record copy of software stored on 3-1/2' floppy disk - FITEQL 2.0.
7. Software Development Plans not signed or missing.

Identified discrepancies corrected during the course of the surveillance with exception of item 6. See recommendations 3 and 4. Corrective action to preclude recurrence tracked via previously issued CNWRA CAR 2001-04.

NONCONFORMANCE REPORT NO: None

ATTACHMENTS: None

RECOMMENDATIONS/ACTIONS:

1. Support references to web site addresses with an electronic or hard copy of the referenced material.
2. Update Software Development Plan when changes occur. The Software Development Plan should be a living document.
3. Revisit QA Verification Reports for category I and II software. This should be done when the validation plan for the code is approved and placed in the QA records.
4. Convert electronic files for category I or II software to compact disk (CD) or magnetic tape. Electronic files are currently stored on 3-1/2" floppy, zip disk, tape, and CD medium.
5. Issue Software Release Notice number only after QA Verification is complete.

APPROVED: _____
CENTER DIRECTOR OF QUALITY ASSURANCE

DATE: 4/30/2002

DISTRIBUTION:
ORIGINAL - CENTER QA DIRECTOR/ QA RECORDS
ORIGINATOR
PRICIPLAL [redacted].
ELEMENT MANAGERS
TECHNICAL DIRECTOR