



CENTER FOR NUCLEAR WASTE REGULATORY ANALYSES QUALITY ASSURANCE SURVEILLANCE REPORT

PROJECT NO: 20-1402-159

REPORT NO: 2001-04 ⁵ *BS*

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6/6/2001

SURVEILLANCE SCOPE: Development and control of software

REFERENCE DOCUMENTS: TOP-018, Development and Control of Scientific and Engineering Software

STARTING DATE: May 3, 2001

ENDING DATE: June 4, 2001

QA REPRESENTATIVE: R. Folck/B. Mabrito

[Signatures]

PERSONS CONDUCTING TEST/EXAM/ACTIVITY: R. Janetzke, B. Mabrito, S. Painter, M. Ehnstrom

SATISFACTORY FINDINGS:

Reviewed design verification reports and QA record packages for the following software releases:

- Crystal Ball 2000, Version 5.1
- TPA Version 4.1.j
- ABAQUS, Version 6.1
- Earth Vision 5.1

Documentation reviewed was generally clear, concise, identifiable and retrievable.

UNSATISFACTORY FINDINGS:

1. The following minor discrepancies were corrected during the course of the surveillance.
 - Crystal Ball 2000 - Design verification report noted that software validation was not applicable without explanation.
 - TPA - Installation testing not performed for the PC platform.
 - ABAQUS - Recording medium not labeled properly.
 - Earth Vision - Recording medium not labeled properly.
2. Of the 90 codes listed on the CNWRA Master List of Scientific & Engineering Software, only two are identified as being validated. It should be noted that this problem has been a point of discussion by senior management over the last six months and there has been formal and informal discussion concerning the validation of specific codes (i.e. TPA and MULTIFLO). CAR 2001-03 is being issued primarily to document the need for a plan for the validation of CNWRA scientific and engineering software.

NONCONFORMANCE REPORT NO: CAR 2001-03

ATTACHMENTS: None

RECOMMENDATIONS/ACTIONS: None

APPROVED: *[Signature]*
CENTER DIRECTOR OF QUALITY ASSURANCE

DATE: 6/6/2001

DISTRIBUTION:

ORIGINAL - CENTER QA DIRECTOR / QA Records
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