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CENTER FOR NUCLEAR WASTE REGULATORY ANALYSES QUALITY ASSURANCE SURVEILLANCE REPORT

PROJECT NO: 20-1402-171

REPORT NO: 2002-25

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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: September 4, 2002

ENDING DATE: September 24, 2002

QA REPRESENTATIVE: R. Folck *R. Folck*

PERSONS CONDUCTING TEST/EXAM/ACTIVITY: V. Jain, R. Janetzke, B. Mabrito, M. Padilla, N. Franklin,
Y. Pan, B. Hill, N. Sridhar, G. Wittmyer

SATISFACTORY FINDINGS:

- Performed QA verification activities for the following scientific and engineering software to place them under TOP-018 control: OLI Stream Analyzer, V1.1; 3Dstress, V2.0; PVHA_YM, V2.0; ThermoCalc, VN; and DICTRA, V21.
- Reviewed and provided comments on software validation plans/reports for the following scientific and engineering software: Arcview-V3.1, 3.2, 3.2.a; Multiflo V1.5.1; SterioNet V3.0; and Tectran V1.0.
- Verified implementation Software Development Plan requirements for TPA, V5.0 development, as follows: Use of specified hardware and software, Implementation of selected lifecycle model, Use of SCRs, Traceability of code changes, and Implementation of coding conventions and configuration management procedures.

UNSATISFACTORY FINDINGS: None

NONCONFORMANCE REPORT NO: None

ATTACHMENTS: None

RECOMMENDATIONS/ACTIONS:

TPA uses auxiliary codes such as Asplume, GENII, LHS, and Neftran. These codes are modified to work "within" TPA. It is recommended that a strategy be developed to either (i) validate these modified codes independently or (ii) validate these codes as part of the TPA system.

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

DATE: 10/16/2002

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