CENTER FOR NUCLEAR WASTE REGULATORY ANALYSES
QUALITY ASSURANCE
SURVEILLANCE REPORT

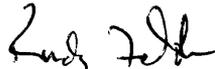| PROJECT NO: 20.06002.01.031	REPORT NO: 2005-10	PAGE __1__ OF __1__

SURVEILLANCE SCOPE: Development and control of scientific and engineering software

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

STARTING DATE: April 5, 2005   **ENDING DATE:** May 4, 2005

QA REPRESENTATIVE: R. Folck

PERSONS CONDUCTING TEST/EXAM/ACTIVITY: B. Dasgupta, N. Franklin, R. Janetzke, G. Adams, S. Painter, B. Winfrey, R. Fedores, D. Gute, S. Gonzalez, K. Smart, L. Howard, T. Maxwell, S. Mohanty, S. Hsiung, O. Pensado, A. Gosh, R. Benke

SATISFACTORY FINDINGS:
- Software development activities and documentation were found to be in accordance with applicable requirements of TOP-018 for the following software: MULTIFLO™, Version 2.0.1, 3DStress™, Version 3.1, and TPA, Version 5.0.1.
- Of the 65 versions of software being considered for use in licensing review activities 49 have been validated, 7 are scheduled for validation by the end of June 2005 and 9 versions are under consideration for possible use in licensing activities.
- Software developers and users expressed satisfaction of the streamlined software release process.

UNSATISFACTORY FINDINGS: DECOM PA, Version 1.0 was released to the NRC as a *beta* version November 22, 2004. A Software Requirements Description (SRD) for the software was approved November 3, 2004. Scientific Notebook 674-01E states that no Software Development Plan (SDP) will be developed because the development effort meets the requirements for a waiver of a SDP as described in TOP-018, R8, C2, paragraph 5.4.1. However, no waiver was documented. A waiver was subsequently received April 7, 2005. See recommendations below.

NONCONFORMANCE REPORT NO: N/A

ATTACHMENTS: None

RECOMMENDATIONS/ACTIONS:
- Issue a Software Change Report to document the development of DECOM PA, Version 1.0.
- Modify TOP-018, R9, C0, paragraph 5.7.2 to require a Software Release Notice (SRN) for beta versions of software.

APPROVED: _____
CENTER DIRECTOR OF QUALITY ASSURANCE

DATE: __5/6/2005__