December 18, 2009

MEMORANDUM TO: Eric Benner, Acting Deputy Director
Division of Spent Fuel Storage and Transportation
Office of Nuclear Material Safety
and Safeguards

FROM: Chris Staab, Project Manager **/RA/**
Licensing Branch
Division of Spent Fuel Storage and Transportation
Office of Nuclear Material Safety
and Safeguards

SUBJECT: SUMMARY OF DECEMBER 17, 2009, MEETING WITH TRANSNUCLEAR AND AREVA REGARDING A PROPOSED AMENDMENT TO MODEL NO. ANF-250 TRANSPORTATION PACKAGE CERTIFICATE OF COMPLIANCE

Background. On December 17, staff met with Transnuclear (TN) and AREVA to discuss a proposed amendment to a Certificate of Compliance for a transportation package used to transport uranium oxide pellets and powder. No regulatory decisions were requested or made at the meeting. The list of meeting attendees is Enclosure 1. The agenda is Enclosure 2. Presentation handouts are Enclosure 3.

Discussion. The discussion addressed the items identified in the agenda and is summarized below:

- Future Plans. TN will provide an amendment which includes additional drop testing results, which reflect the most damaging configuration of the package and corresponding criticality analyses.

- Scope of Amendment.

    - Drop Testing. The applicant will submit drop testing results from drop tests performed on two specimens. One specimen was dropped from 30 feet followed by two puncture tests. Another specimen was dropped twice from 30 feet.

    - Criticality Analyses. The applicant states the criticality analyses will be updated to reflect current codes, clarifications will be provided in the Safety Analysis Report, and criticality analyses will be provided which distinguish scrap from pellets.

- Schedule for Amendment. TN will submit the proposed amendment by December 24, 2009. TN desires to receive an amended Certificate of Compliance by May 1, 2010, in order to support planned shipments of nuclear material.

- Staff Comments.
    - Staff encouraged the applicant for future applications, to drop test one specimen using the regulatory sequence for drop testing, which is one thirty foot drop test followed by one puncture test, not multiple puncture tests using the same specimen or multiple thirty foot drop tests using the same specimen.
    - Staff encouraged the applicant to use NUREG/CR-6818 when satisfying the ambient temperature aspects of the drop testing requirement. Staff also encouraged the applicant to look at the public docket 71-9250 for Babcock and Wilcox's 5 X 22 package. The docket contains methodology for satisfying the ambient temperature requirement for shallow angle drop testing.
    - Staff encouraged the applicant to provide in the application the bounding of deformations caused by shallow angle drop tests by previous drop tests.
    - Staff encouraged the applicant to submit an electronic version of the complete Safety Analysis Report and a markup of the Certificate of Compliance to support the review.

TAC No. L24399

Enclosures:
1. Attendees
2. Agenda
3. Handouts

- Staff Comments.
    - Staff encouraged the applicant for future applications, to drop test one specimen using the regulatory sequence for drop testing, which is one thirty foot drop test followed by one puncture test, not multiple puncture tests using the same specimen or multiple thirty foot drop tests using the same specimen.
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TAC No. L24399

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2. Agenda
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Distribution: NRC Attendees BWhite WWheatley
Filename: G:/SFST/Staab/ANF_250/ANF Meeting Summary 12_17_09.doc
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|---|---|---|---|---|---|---|
| NAME | CStaab | | MDeBose (via email) | | EBenner | |
| DATE | 12/18/2009 | | 12/18/2009 | | 12/18/2009 | |

C=Without attachment/enclosure E=With attachment/enclosure N=No copy **OFFICIAL RECORD COPY**

MEETING ATTENDEES
Meeting Between the Nuclear Regulatory Commission,
Transnuclear, and AREVA
December 18, 2009

| | |
|---|---|
| David Tang | NRC/SFST |
| Mike Call | NRC/SFST |
| Michele Sampson | NRC/SFST |
| Chris Staab | NRC/SFST |
| Jayant Bondre | TN |
| Don Shaw | TN |
| Prakash Narayanan | TN |
| James Davis | AREVA |

Enclosure 1

# Agenda
## Meeting with Transnuclear and AREVA
## December 17, 2009

1. Future Plans

2. Scope of Amendment

   - Inclusion of shallow angle drop test results on drum-type containers for ANF-250 package in the Safety Analysis Report

   - Revision to criticality analysis

3. Schedule for Amendment

Enclosure 2