



## BWX Technologies, Inc.

Babcock & Wilcox, a McDermott company

Naval Nuclear Fuel Division

P.O. Box 785  
Lynchburg, VA 24505-0785  
(804) 522-6000

November 21, 1997  
97-121

U. S. Nuclear Regulatory Commission  
ATTN: Document Control Desk  
Washington, DC 20555-0001

Reference: NRC Bulletin 97-02, September 23, 1997, Puncture Testing of Shipping Packages Under 10 CFR Part 71.

Gentlemen:

By letter dated October 16, 1997, BWX Technologies, Inc., Naval Nuclear Fuel Division (NNFD) replied to the referenced Bulletin, indicating NNFD would implement the action requested in the Bulletin and specified the timing for providing the required reports. Subsequent to receiving the Bulletin, NNFD received notice that the timing requirements specified in the reference were modified to compensate for an administrative delay in delivering the Bulletin. NNFD intends to implement the requested action in the Bulletin but we will implement the actions in accordance with the revised NRC schedule, rather than that specified in our October 16, 1997, letter.

NNFD possesses four shipping containers that are authorized for use pursuant to NRC issued Certificates of Compliance. These container are identified as, Model 5X22, C of C USA/9250/B(U)F; Model UNC 2600, C of C USA/5086/B(U)F; Model NNFD-10, C of C USA/6357/AF; and Model 814A, C of C C USA/5149/B(U)F. Container SARP's and associated documentation have been reviewed and the results of these reviews are provided in the enclosed report.

If there are questions please contact us.

Sincerely,

Arne F. Olsen  
Licensing Officer

NF14/1

Enclosure (1)

cc: NRC Resident Inspector

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PDR ADOCK 07105086  
C PDR



## **ENCLOSURE**

### **REPORT OF PUNCTURE TEST ASSESSMENT**

#### **MODEL 5X22 - C of C USA/9250/B(U)F**

Assessment - The puncture test for this container was a physical test. Based on photographic evidence and the test description and data provided in the SARP, we conclude that the test met all requirements of 10 CFR 71.73(c)(3).

Special Precautions or Operational Controls - Based upon the assessment of the puncture test for this container, no special precautions or operational controls are needed. The Model 5X22 container may continue to be used as specified in the Certificate of Compliance.

#### **MODEL UNC-2600 - C of C USA/5086/B(U)F:**

Assessment - A finite Element Analysis was performed for this container that modeled the 30 Foot drop test followed by the puncture test. The results indicate the container will pass the puncture test if it were physically performed in accordance with 10 CFR 71.73(c)(3).

Special Precautions or Operational Controls - Based upon the results of the Finite Element Analysis, no special precautions or operational controls are needed. The Model UNC-2600 container may continue to be used as specified in the Certificate of Compliance.

#### **MODEL NNFD-10 - C of C USA/6357/AF:**

Assessment - The Puncture Test required by 10 CFR 71.73(c)(3) for the Model NNFD-10 shipping container was performed on a container of similar design. The container that was tested was Model DHTF (C of C USA/9203/AF). The Model DHTF container Certificate of Compliance is held by Framatome/ Cogema Fuels. Framatome/Cogema Fuels performed an assessment of the puncture test performed on their container and determined based on information contained in the SARP, photographs of the test, and through discussions with personnel involved in the test that the puncture test performed on the Model DHTF was performed in compliance with 10 CFR 71.73(c)(3). BWXT assessment is that Model NNFD-10 container is in compliance with the puncture test requirements.

Special Precautions or Operational Controls - No special precautions or operational controls are necessary. Model NNFD-10 container may continue to be used as specified in the Certificate of Compliance.

MODEL-814A:

Assessment - This container was designed for a naval application . It was first used under a DOT Special Permit. After three renewals it was issued a NRC Certificate of Compliance. The Certificate of Compliance has been maintained in effect by BWXT at the request of Pittsburgh Naval Reactors (PNR). It was last used in the late 1970's and will not be again used until the year 2000 or later. BWXT and PNR are the only users of this container.

Special Precautions or Operational Controls - These containers will not be used until resolution of question of the puncture is resolved. BWXT and PNR are aware of this situation.