



UNITED STATES DEPARTMENT OF COMMERCE  
National Institute of Standards and Technology  
Gaithersburg, Maryland 20899-0001

August 7, 1996

Dr. William D. Travers  
Director, Spent Fuel Project Office  
U.S. Nuclear Regulatory Commission  
Washington, DC 20555

Dear Dr. Travers:

Subject: Docket No. 71-9246, Certificate of Compliance No. 9246.

NIST respectfully requests renewal of the Certificate of Compliance for its Model ST fuel transfer cask, Package Identification No. (USA/9246/AF). All analyses previously submitted remain the same and are still valid. The performance of the cask since its initial use has been flawless.

NIST also requests a change in the description of the cask. The proposed change shown as item 3 in revised Drawing No. D-04-04 sheets 1 and 2 Revision 3, copy of which is enclosed, affects only the internal device that positions the element. It does not affect any portion of the containment system of the cask or the cask performance. The proposed design device is typical of what will be used to position the element and will allow for easier loading and unloading of the element.

Sincerely,

Lyman E. Pevey  
Chief, Occupational Health  
and Safety Division

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PDR ADOCK 07109246  
C PDR

160033

NIST

NT01/1

**FIGURE WITHHELD UNDER 10 CFR 2.390**

**FIGURE WITHHELD UNDER 10 CFR 2.390**

NATIONAL INSTITUTE OF STANDARDS & TECHNOLOGY BETHESDA, MARYLAND 20815	
SHIPPING CONTAINER MODEL ST SERIES	
FOR NBSR FUEL ELEMENT	
DESIGNED BY JACK STURROCK DATE 8-24-80	DESIGNED BY JACK STURROCK DATE 8-24-80
DESIGNED BY MADHESH SUTNAR DATE 2-7-92	DESIGNED BY JOHN NICKLAS DATE 2-7-92
ALL DIMENSIONS IN FEET AND INCHES	SCALE: NO NOT SCALE
NO. 826 REV. 000	NO. 826 REV. 000
	D-04-048



May 22, 1996

MEMORANDUM FOR Jim Tracy  
Program Manager for Radioactive Material packages  
245/C101

FROM Mahesh Suthar/Paul Liposky  
Reactor Engineering  
235/A151 x6266

*mm* / *PL*

SUBJECT Proposed design changes to the Shipping Container for  
NBSR fuel elements.

In order to improve handling, assembly and disassembly of the above subject shipping container, the following minor modifications to the wooden supports within the container are proposed (Refer to drawing no. D-04-048, rev. 3):

- (i) Decrease diametrical dimensions by 1/8" of item no. 3, 4, and 5 (Top, Bottom, and Nozzle Supports).
- (ii) Replace 2" long wood screws on item no. 3 (Top Support) with 1/4"-20 bolts and tee nuts.
- (iii) Drill a 1/4" diameter thru hole in the center of item no. 3 (Top Support) and install a 1/4" diameter tee nut at the bottom of the lower piece as shown. This will facilitate to remove the Top Support from the fuel element by inserting a 1/4" diameter threaded rod, threading it into the tee nut and pulling the whole assembly out.

These modifications will provide for easier insertion and removal of the fuel element from the container and will eliminate past difficulties experienced in some removals. At the same time, it will provide a positive and reliable hold on the element within the container. Accordingly, it is our conclusion that the proposed modifications do not change any of the safety considerations of the shipping container.

Please review the proposed modifications. We will proceed upon receipt of your approval.

**FIGURE WITHHELD UNDER 10 CFR 2.390**

INTERNAL BUREAU OF ENERGETICS & TECHNOLOGY GASTROCHEMICAL RESEARCH DIVISION	
SHIPPING CONTAINER MODEL BY NUMBER	
PESA FUEL ELEMENT	
DATE: JAN 1968 BY: [illegible]	DATE: JAN 1968 BY: [illegible]
DATE: JAN 1968 BY: [illegible]	DATE: JAN 1968 BY: [illegible]
ALL INFORMATION IN THIS REPORT IS UNCLASSIFIED	SCALE: IS NOT SCALE
NO. 000	0-04-048

**FIGURE WITHHELD UNDER 10 CFR 2.390**

FURNISH, DATE OF TENDERS & RECEIVED CONTAINERS, FURNISH 2000	
SHIPPING CONTAINER MODEL, ST SYMBOL	
NEER FUEL ELEMENT	
DATE OF TENDERS 0-24-00	DATE OF RECEIVED 0-24-00
DATE OF TENDERS 0-24-00	DATE OF RECEIVED 0-24-00
ALL INFORMATION IN THIS FORM IS UNCLASSIFIED	DATE OF DECLASSIFICATION 0-04-04
FORM NO. 0-04-04	FORM NO. 0-04-04



**FIGURE WITHHELD UNDER 10 CFR 2.390**

NATIONAL BUREAU OF STANDARDS & TECHNOLOGY BETHESDA, MARYLAND 20815	
SHIPPING CONTAINER MODEL ST SERVICE	
NBSR FUEL ELEMENT	
DATE: 6-24-66	DATE: 6-24-66
BY: J. W. GIBSON	BY: J. W. GIBSON
ALL DIMENSIONS IN MM UNLESS NOTED	SCALE: 100 NET SCALE
FIG. NO.	0-04-048