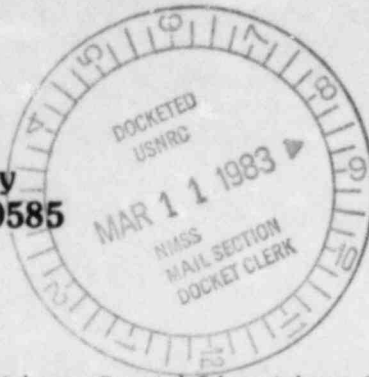
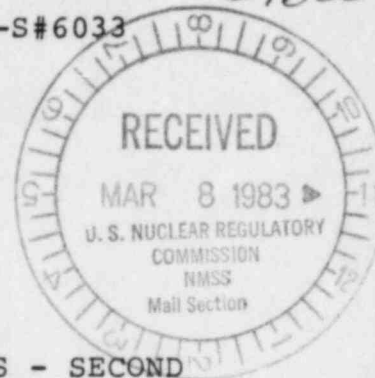




Department of Energy  
Washington, D.C. 20585



NR:RM:PJWindley-S#6033  
March 1, 1983



C. E. MacDonald  
Chief, Transportation Certification Branch  
Nuclear Regulatory Commission  
Washington, D.C. 20555

WAPD-40 SHIPPING CONTAINER FOR IRRADIATED TEST SPECIMENS - SECOND  
REVISION TO THE SAFETY ANALYSIS REPORT AND CERTIFICATE OF  
COMPLIANCE; FORWARDING OF, FOR INFORMATION

Naval Reactors submits for Nuclear Regulatory Commission (NRC) information and comment, the second revision to the Safety Analysis Report for Packaging (SARP) and Certificate of Compliance for the WAPD-40 shipping cask, USA/5874/BF. The SARP has been revised to resolve NRC comments that were forwarded to Naval Reactors by NRC memorandum FCTC:RHO 71-5874 dated July 30, 1982.

A copy of revision 2 to the WAPD-40 SARP and the DOE Certificate of Compliance are attached as enclosures (1) and (2) respectively and are forwarded for NRC information and review as appropriate. The resolution of NRC comments is shown in Enclosure (3).

Naval Reactors considers that shipments of radioactive materials using the WAPD-40 shipping container comply with Code of Federal Regulations Requirements (10CFR71) and a revised DOE Certificate of Compliance was issued on March 1, 1983.

W. P. Engel, Director  
Division of Reactor Safety  
and Computation

Enclosures: (1) Revision 2 to the WAPD-40 Safety Analysis Report  
for Packaging  
(2) Certificate of Compliance USA/5874/BLF (DOE-NR)  
(3) Resolution of NRC Comments

CC:

**C. E. MacDonald (NRC) 2 copies with enclosures**

Dr. D. M. Ross, Operational and Environmental Safety, DOE  
(w/o enclosures)

Manager, PNRO (w/o enclosures)

Manager, Shipping Container Analysis, Bettis (w/o enclosures)

8303180462 830301  
PDR ADOCK 07105874  
C PDR

22022

KEYWORDS: WAPD-40 Cask + Safety Analysis  
Report for Packaging



WAPD-REO(C)-565

**Westinghouse  
Electric Corporation**

Bettis Atomic Power Laboratory

Box 79  
West Mifflin Pennsylvania 15122

Direct correspondence authorized by NR  
letter NR:DRS:RSB Z#46 dated March 23, 1972

**FEB 3 1983**

Manager, Pittsburgh Naval Reactors Office  
U. S. Department of Energy  
Post Office Box 109  
West Mifflin, Pennsylvania 15122-0109

Subject: Revision 2 of the WAPD-40 Cask Safety Analysis Report for  
Packaging (SARP) and Certificate of Compliance -  
Request for Approval  
REFUELING ENGINEERING AND OPERATIONS  
Contract No. N4026; Funding No. AKRS412

References: (a) FCTC:RHO 71-5874 dated July 30, 1982  
(b) WAPD-REO(C)-441 dated March 24, 1982  
(c) WAPD-REO(C)-470 dated April 13, 1982  
(d) NR:RM:MAPetitclair - S#5767 dated April 16, 1982

Dear Sir:

This letter transmits, for approval, Revision 2 of the WAPD-40 Cask Safety Analysis Report for Packaging (SARP), and the proposed Certificate of Compliance. Revision 2 of the SARP consists of changes made to resolve Nuclear Regulatory Commission comments provided in Reference (a). These comments pertain to Revision 1 of the SARP which was transmitted for approval by References (b) and (c), and was subsequently approved by Naval Reactors in Reference (d).

The location of each SARP change is identified with a vertical line in the margin of the page opposite the change being made. If the text on any page differs from the Revision 1 format because of text flowing over from one page to another, the affected pages are marked Revision 2 without making a line in the margin.

The Revision 2 changes do not result in any additional structural damage that would compromise the thermal, containment, or shielding safety limits. However, due to a revised, more conservative thermal model which has been introduced to satisfy one of the Reference (a) comments, additional lead melting is predicted in the thermal accident analysis. Furthermore, the shielding analysis has been revised accordingly, resulting in more restrictive cargo limits, to be consistent with this prediction of additional lead melting. These additional restrictions resulting from the revised analyses have no adverse effect on known shipments to be made in the WAPD-40 cask.

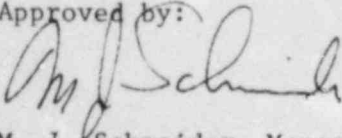
The enclosed Revision 2 of the SARP has received a management review.  
Your approval of this submittal is requested.

Very truly yours,



D. N. Barrett, Cognizant Engineer  
Shipping Container Analysis  
Refueling Engineering & Operations

Approved by:



M. J. Schneider, Manager  
Shipping Container Analysis  
Refueling Engineering & Operations

Enclosures: (1) Certificate of Compliance, USA/5874/BLF (DOE-NR)  
(2) Revision 2 of WAPD-40 Cask SARP