71-5-942

MAR 2 1 1906

FCTC:RH0 71-5942

Neutron Products, Inc. ATTN: Mr. Frank Schwoerer P.O. Box 68 Dickerson, MD 20842

Gentlemen:

This refers to your application dated November 11, 1985, as amended, requesting an amendment to the Model No. 700 package.

In connection with our review, we need the information identified in the enclosure to this letter.

Please advise us within 30 days from the date of this letter when this information will be provided. The additional information requested by this letter should be submitted in the form of revised pages. If you have any questions regarding this matter, we would be pleased to meet with you and your staff.

Sincerely,

Original Signed by R. H. Odegaarden

Charles E. MacDonald, Chief Transportation Certification Branch Division of Fuel Cycle and Material Safety, NMSS

Enclosure: As stated

N

	Distribut RHOdegaar DTHuang EPEaston Docket Fi NRC PDR IE HQ Region I NMSS R/F FCTC R/F	den (2)	8603310156 PDR ADOC C	B603310158 B60321 PDR ADOCK 07105942 PDR							
FFICE.	RETC	FCTC	FCTC 4PW	FCTC	FCTC D						
RHO	degaarden:alm	DTHuang	EPEaston	CEMacDonald	CEWIIIams						
DATE	03/\%/86	03/18/86	03/20/86	03/2 /86	03/18/86		*********************				
C FORM	318 (10-80) NRCM 0	1240	OFFICIAL	RECORD CO	OPY						

Neutron Products, Inc. Model No. 700 Package Docket No. 71-5942

Encl to Itr dtd: MAR 2 1 1986

## DRAMINCS

 The liner shown on Neutron Products Drawing No. 240139, Rev. D is the primary containment vessel which will contain a large quantity (approximately 400,000 curies) of Cobalt 60 not in special form. The applicant should consider the recommendations of NUREG/CR-3019 in specifying the section and subsection of the ASME Code applicable to drawing Notes 1.A. and 1.D. (any deviation should be justified).

It is noted that the recommended welding criteria given in NUREG/CR-3019 for containment related welds in Category I (quantity of radioactive material 3x10<sup>°</sup> curies), is ASME Code Section III, Subsection NB.

- 2. The reference to ASME in Notes 1.B and 1.C. should be corrected.
- The weld symbol for each fillet weld should specify the size of fillet weld required.
- Note 3 should be deleted. Material substitution by satisfying an "or equivalent" requirement is unsatisfactory. Alternate materials must be identified by a recognized specification.

## STRUCTURAL

- 1. For both the top-end drop and side drop, the calculations on the retention of isolation valves have incorrectly taken credit for two #10-32 screws in the bottom of the valve body and four welds at the base of the hold-down channel. Since neither the screw nor the weld physically tie the valve body down to the lid of the liner, the loads generated by both top-end drop and side drop will not be carried by them. Calculations on the retention of isolation valves should be revised accordingly.
- It is noted that the Model No. 700 shipping cask has a dimensional tolerance of ±0.5" (GE Drawing No. 129D 4770, Rev. 5). The nominal dimensions of the liner should be revised as necessary to accommodate the dimensional variations in the Model No. 700 cask.
- Address the potential effects of axial thermal expansion of the aluminum sleeve on the lid closure.
- Address the potential effects of circumfrential thermal expansion of the aluminum sleeve on the cask.

			-	-	-		-	-	-	_			-						-				-		 	-		-	-					-		-		-	-	i
OFFICE				1.							d.						÷.,										1				1	i.			i.					
				10.0																							1													
DATE																																								
				* * *	* * *	* * *		**	1			**	* *	* * *	* *	* * *			* *	* * *			1.4	4.8	 		1'	* *	* *	1.1	* *	* *	3.0	*, ×	1.1	* *	4.4	* *	* *	ľ
NRC FORM 318 (10-80) NRCM 0240							C	F	F١	CI	A	L	RI	EC	00	R	D	C	OF	PY																				