NRC FORM 618 (6-83) 10 CFR 71			CERTIFICA FOR RADIOAC	ATE OF COMPLIANCE TIVE MATERIALS PACKAGES	UCLEAR REGUL	ATORY COMMISSIC	
	UMBER		b REVISION NUMBER	C PACKAGE IDENTIFICATION NUMBER	d PAGE NUMBER	e TOTAL NUMBER PAG	
2 PREAMBLE a. This certific of Federal R b. This certific applicable n	ate is issu legulation ate does egulatory	ied to certify that the pa is. Part 71. Packaging not relieve the consign agencies, including th	ckaging and contents d of Radioactive Material or from compliance wit te government of any c	escribed in Item 5 below, meets the applicable si is for Transport and Transportation of Radioact h any requirement of the regulations of the U.S. ountry through or into which the package will	afety standards set fo ive Material Under G Department of Tran be transported	rth in Title 10. Code ertain Conditions sportation or other	
THIS CERTIFICAT	TE IS ISSU	ED ON THE BASIS OF A	SAFETY ANALYSIS REPOR	RT OF THE PACKAGE DESIGN OR APPLICATION	ION		
Nuclear Packaging, Inc. 1010 South 336th Street Federal Way, WA 98003				Nuclear Packaging, Inc. application dated dated March 31, 1983, as supplemented.			
CONDITIONS			c. DOC	KET NUMBER 71-9181			
This certificate	is condit	ional upon fulfilling the	requirements of 10 CF	H Part 71, as applicable, and the conditions sp	becified below		
(a)	Pack	aging					
	(1)	Model Nos.: PAS-2 and PAS-2A					
	(2)	Description The packaging consists of an outer overpack, inner overpack, optional secondary containment vessel (Model No. PAS-2A), sample shield, and a sample vial. The outer foam filled overpack is constructed identical to the Model No. N-55 overpack (Docket No. 9070), 32" OD x 48" high. The inner overpack consists of a Department of Transportation Specifi- cation 17H steel drum lined with rigid polyurethane foam cut to fit the outside dimensions of the secondary containment vessel. The optional secondary containment vessel is fabricated from carbon or stainless steel (17.7" OD x 24 3/4" high) and is provided with a Viton O- ing and eight, 5/16" cap screws. The secondary containment vessel is equipped with a test port. The sample shield consists of a lead filled steel weldment (16.5" OD x 22.75" high) provided with four shielded wall penetrations and a shielded lid (all gasketed with Viton O-rings). The 3-3/4" ID x 8-1/4" high sample shield cavity contains a valved sample vial surrounded by absorbent vermiculite and lead shot. The vial may contain about 50 milliliters of liquid (reactor coolant water sample). The gross weight of the package is approximately 2,400 pounds.					
	(3)	Drawings					
		The package Inc. Drawin 200D, Rev.	s are constru g Nos.: X-20 C.	cted in accordance with Nu -220D, Sheets 1 through 4,	uclear Packa , Rev. D and	ging, I X-60-	
85(PDF	0124(ADC	0667 850115 DCK 0710918	1				

Page 2 - Certificate No. 9181 - Revision No. 1 - Docket No. 71-9181

- 5. (b) Contents
 - (1) Type and form of material

Radioactive material in the form of liquid coolant sample obtained from a reactor coolant system.

CONDITIONS (continued)

(2) Maximum quantity of material per package

50 milliliters with a thermal heat load not to exceed 3.0 watts.

- 6. In addition to the requirements of Subpart G of 10 CFR Part 71, each package prior to first use must meet the acceptance tests and criteria specified in Section 8.1, must be maintained in accordance with Section 8.2, and prepared for shipment in accordance with Section 7.0 of the application. The sample vial must be annually leak tested to the requirements of LT-12 (Appendix 8.3.2).
- 7. The statement of acceptance in NUPAC's test, Assembly Helium Sniffer Test for the NUPAC PAS-2 Packaging (5.1, LT-16, Rev. 2, March 9, 1984) must be replaced by the following acceptance criteria: For each assembly to have an acceptably low_leakage rate, the detection equipment must be capable of detecting a leak of 10 scc/sec or smaller. Any detected leakage rate greater than the acceptance criteria prior to first use is not acceptable.
- 8. Prior to first use of each package, the leak tests specified as Notes 8 and 14 on Drawing No. X-20-220D, Rev. C must be performed, as required.
- 9. The package authorized by this certificate is hereby approved for use under the general license provisions of 10 CFR §71.12.

10. Expiration date: March 31, 1989.

REFERENCES

Nuclear Packaging, Inc. application dated March 31, 1983.

Supplements dated: September 9, 1983; and February 17, March 9, and December 19, 1984.

FOR THE U.S. NUCLEAR REGULATORY COMMISSION

Charles Skialin

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

Date JAN 1 5 1985



UNITED STATES NUCLEAR REGULATORY COMMISSION WASHINGTON, D. C. 20555

Transportation Certification Branch <u>Approval Record</u> <u>Model Nos. PAS-2 and PAS-2A Packages</u> <u>Docket No. 71-9181</u>

By application dated December 19, 1984, Nuclear Packaging, Inc. requested minor changes to the package drawings. These changes effect the secondary containment vessel lid, an alternate test port bolt, and various non-structural material substitutions.

Specifically, the changes to the drawing include allowing 304 stainless for the fill port tubes, where only 316 was previously specified; mandating hard chrome plating on the secondary containment vessel sealing surface; making the material of the test port closure bolt on the SCV optional; allowing an alternate design for the test port closure bolt; and allowing the exact configuration of the test port duct and O-ring gland to be optional. A placard has been added to the lid of the secondary containment vessel to warn the operator that the test port bolt should be open when installing or removing the lid. This avoids having to apply undue force while performing these tasks due to the piston action of the lid and bore seal design.

The NRC staff agrees with the applicant that these changes have no effect on the package's ability to meet the requirements of 10 CFR Part 71.

harles / he MacDonald, Chief

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

Date: JAN 1 5 1985