DOE Form EV-418 (11-77) 10 CFR 71

## U.S. DEPARTMENT OF ENERGY CERTIFICATE OF COMPLIANCE For Radioactive Materials Packages

1a. Certit	ficate Number	1b. Revision No.	1c. Package Identific	tion No.	1d. Page No.	1e. Total No. Pages.	
5740 1		1154/5740/BT (DOE-OR)		1	2		
2 PREA	MBLE		0001274075	1002 011	*****	4	
2a. 2b.	This certificate is issued Materials Regulations ( The packaging and cont Regulations, Part 71, "S Conditions."	to satisfy Sections 173.3 19 CFR 170-189). ents described in item 5 to Packaging of Radioactive I	93a, 173,394, 173,395, and 173,3 below, meets the safety standards s Material for Transport and Transpo im compliance with any requirement	96 of the Departr et forth in Subpa intation of Radioi nt of the regulatio	ment of Transpor rt C of Title 10, ( active Material Ur ons of the U.S. Di	tation Hazardous Code of Federal Inder Certain	
	Transportation or other will be transported.	applicable regulatory age	ncies, including the government of	any country thr	ough or into whic	the package	
3. This ce	rtificate is issued on the t	basis of a safety analysis re	aport of the package design or appl	ication-		Dara:	
(1) Prepared by (Name and address):			(2) Title and Identification of re	port or application	on: IS	( ) vale.	
Oak Ridge National Laboratory			(a) The TRU Ten-Ton	Callforniu	m Shipping	(a) Nov. 197	
Post Office Box X			concainer, Repor	C ORME-IM-	.3303.		
0	ak Ridge, Tenne	ssee 37830	(b) Safety Analysis (SARP) of the Oa oratory .RU Cali	Report for k Ridge Na fornium Sh	Packaging tional Lab tipping Con	(b) To be - issued	
4. COND	ITIONS		tainer, Report O	RNL-5409,	Rev. 1.	litions specified	
This	certificate is conditional im 5 below.	upon the fulfilling of the	requirements of Subpart D of 10 C	FR / I, as applica	Die, and the cond		
5. Descrip	ation of Packaging and A	uthorized Contents, Mode	I Number, Fissile Class, Other Con	ditions, and Refe	rences:		
(a)	Packaging						
,							
	(1) Model: 0	RNL TRU Califor	nium Shipping Contai	ner			
	(2) Descripti	on: A 304L sta	inless steel encased	concrete	shipping c	ask	
	The outer heads joi 1-in. thi ing consi ~175 1b/f filled pl utilize O cover pla permit st	shell consists ned by a 6-in. ck stainless st sts of 30-in. o t <sup>3</sup> . Upper and ugs define, iso -ring seals are te. Fusible pl eam release in	of two z-in. thick, cylindrical section. eel wall and is 3-in of Blackburn limonite lower level ball val blate, and seal the c bolted in place and ugs in the cover pla event of thermal exp	66-in. di The cyli . diamater concrete ves locate avity. Bo are prote tes and th osure.	ameter hem ndrical ca x 6-in. 1 having a d ad at the e oth of thes acted with the shell wi	ispherical vity has a ong. Shield- ensity of nd of concret, e plugs which a gasketed ll melt to	
	The top b shipments container	all valve and p . Sources are s.	lug may be replaced contained in DOT Spe	by other p cification 138	lugs for m 2R or spe 5 119	ultiple source cial-form	
	The cask NPS Sched trailer.	is mounted onto ule 40 pipe str The gross weig	a 1-in. thick steel uts. The cask is tr tht of the cask is 23	base plat ansported .500 lb.	e by eight on its own	steel 2½-in. special	
6a. Jate	of Issuance: J	anuary 19, 1979	6b. Expiration D	ate:			
		FOR THE	U.S. DEPARTMENT OF ENERGY				
/a. Addre	iss lot DOE Issuing Office	e.	7b. Signature, Na	me, and Title (of	DOE Approving	Official)	
IT & Desertment of French			ware	With man H Treams			
Poet Office Boy F			wi. am	wi. am H. fravis, Director			
Cale	Ridge Terres	37920	Salery	a Environm	ental Cont	rol Division	
	NAMES A LETTIESS						

7911230026

## Certificate 5740, Revision No. 1 2

(3) Drawings:

The package and special trailer are constructed in accordance with Oak Ridge National Laboratory (ORNL) Drawings M-11230-EN-001-D through 008-D, and 017-D, M-12166-CD-019-D and M11369-EM-011E and 012E.

- (b) Contents
  - (1) Type and Form of Material.

The contents consist of isotopes of Americium (Am), Curium (Cm), Berkelium (Bk), Californium (Cf), Einsteinium (ES), and Fermium (Fm) as a solid (metal, oxide, oxysulfate, or dry salt) that is contained in a DOT Specification 2R inner container(s) or in a special form capsule(s).

(2) Maximum Quantity of Material Per Package.

3g. (large quantity).

- (3) Other Limitations.
  - (1) Maximum heat load 5W.
  - (2) External radiation dose rates limited to DOT regulations, 49 CFR 173.393.

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