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P. O. BOX 1883
365 WINCHESTER AVENUE
NEW HAVEN, CONN. 06508
777-5361

September 11, 1968

Regulatory Suppl File Cy.

Mr. Donald A. Nussbaumer, Chief
Source & Special Nuclear Materials Branch
Division of Materials Licensing
U. S. Atomic Energy Commission
4915 St. Elmo Place
Bethesda, Maryland 20014

Subject: Modification of Amendments 71-20, 71-18, 71-15 for SNM-33,
SNM-368, SNM-777 respectively.

Reference: 1) NLS:REK-1830, dated June 14, 1968, Licensing of Shipping Containers
Model UNC-260C.

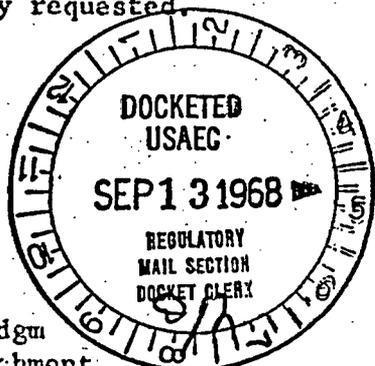
2) DML:CEM 70-36 - SNM-33, Amendment No. 71-20, 70-371 - SNM-368, Amend-
ment No. 71-18, 70-820 - SNM-777, Amendment No. 71-15.

Dear Mr. Nussbaumer:

UNC requests that the Amendments referenced above be modified to permit the use of dry unirradiated Uranium Zirconium or Uranium Aluminum alloys or compounds with densities not exceeding 1 kilogram per liter in plate or sheet form, rather than being restricted to such materials as clad plates.

As discussed with your Mr. MacDonald, copies of the revised page 11 of Section 703 are attached. No changes are required in the safety evaluation due to the modification. A copy of this letter and revised page will be sent concurrently to the Department of Transportation.

Your early consideration and approval of these minor modifications is respectfully requested.



Very truly yours,

D. F. Cronin

D. F. Cronin, Manager
Nuclear & Industrial Safety Department
Naval Products Division

DFC:dgm
Attachment

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LICENSE: SNH-33, Docket: 70-36
SNM-368, Docket: 70-371
SNM-777, Docket: 70-820
SECTION: 700 - TRANSPORTATION
Subsection: 703 - Shipping Containers

Approved

ISSUED SEP 10 1968

SUPERSEDES

703. Shipping Containers

1. Container Number or Identification

UNC-2600

2. Description of Container

- 2.1 Inner Container: 25 sq. inch or less cross-section x 96 inch long 11 gage steel box with 1/4 sheet handles at each end.
- 2.2 Inner Container Closure: Continuous length metal hinged 11 gage steel top seal welded the length of the container. Hinge constructed of 0.093 inch thick steel utilizing a 1/4 inch steel pin.
- 2.3 Inner Container Supports: Insertable cage formed by nine 21 1/2 inch dia. x 3/8 inch thick sheet steel plates spaced approximately 12 inches apart. A 25 sq. inch channel is formed down the center of the plates by eight 1 inch x 1 inch x 1/8 inch or 1 1/2 inch x 1 1/2 inch x 1/8 inch angle iron supports. The entire structure is strengthened by the addition of sixteen 1 inch x 1 inch x 1/8 inch stiffener angle iron supports plus eight 1 3/4 inch x 1/4 inch steel ribs which are spaced evenly around the plates. The entire cage is welded construction. Two 1 inch x 3/8 inch x various length steel stop bars each bolted with two standard 1/2 inch bolts and nuts are placed across the cage opening.
- 2.4 Outer Container: 22 1/2 inch ID x 101 inch inner length extended drum constructed of 14 gage steel. Two 19 inch OD x 1 7/8 inch thick Buna Rubber bumper rings are inserted at each end of the container.
- 2.5 Outer Container Closure: 14 gage steel head with bolt locking clamp utilizing a 5/8 inch steel bolt or lock nut with a tamper proof seal.

3. Description of Material to be Packaged in Container

- 3.1 Dry unirradiated uranium-zirconium alloys and compounds with densities not exceeding 1 kg U-235 per liter in plate or sheet form. Enrichments up to and including fully enriched.
- 3.2 Dry unirradiated uranium-aluminum alloys and compounds with densities not exceeding 1 kg U-235 per liter in plate or sheet form. Enrichments up to and including fully enriched.
- 3.3 UO₂ pellets in the form of stainless steel, aluminum or zircaloy clad rods. Enrichments up to and including 5%.