

## NEUTRON PRODUCTS inc

Dickerson, Maryland 20753

U. S. A.

301/349-5001 TWX: 710-828-0542

March 26, 1974

U. S. Atomic Energy Commission  
Washington, D. C. 20545

Attention: Mr. Charles E. MacDonald  
Chief, Transportation Branch  
Directorate of Licensing



Gentlemen:

I am writing to apply for relicensing of our existing system of shipping casks which was originally licensed by the Atomic Energy Commission in 1967 as License Number 8-13332-1 and subsequently changed to License Number 19-12867-02 (71-1) in August 1968. We are presently shipping in these casks under DOT Special Permit Number 5364 which expires on April 30, 1974. It is our understanding that after April 30, 1974 the Atomic Energy Commission will again be responsible for the licensing of our shipping containers and that the method of making the transition is by way of application for a new license.

We recognize that there have been substantial changes in both the technology and doctrine of cask design since our original application was made in June 1967, and we are prepared to consider modifications to our casks in order to have them conform to the latest thinking with regard to design against a fire accident. However before considering any specific step in that direction we believe a technical conference would be desirable. For the purpose of applying for a continuation or reissue of our license, we are resubmitting at this time the materials furnished in June, July and August of 1967 which formed the basis of the original license and the permit under which we are presently operating.

We respectfully request that this be considered a timely submittal and that whatever steps are necessary be taken to extend our permit past the presently

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scheduled expiration date of April 30. Also we would like to take this opportunity to request an appointment for a meeting to discuss the latest technology and doctrine, particularly with regard to the use of fuse plugs.

Very truly yours,

NEUTRON PRODUCTS, INC.

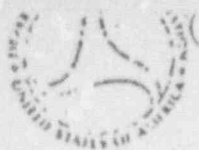
Respectfully,  
J. A. Ransohoff

J. A. Ransohoff, President

JAR:cbl

Enclosures

NEUTRON PRODUCTS inc



DEPARTMENT OF TRANSPORTATION  
HAZARDOUS MATERIALS REGULATIONS BOARD  
WASHINGTON, D.C. 20590

Box 95, Dickerson, Md.  
DATE & REPT (381) 549-5051

SPECIAL PERMIT NO. 5364  
FOURTH REVISION  
(REINSTATEMENT)

Pursuant to 49 CFR 170.15 of the Department of Transportation (DOT), Hazardous Materials Regulations, as amended, and on the basis of the March 29, 1972, petition by Neutron Products, Inc., Dickerson, Maryland.

Special Permit No. 5364 is hereby reinstated and amended by revising paragraph (12) to read as follows:

"12. This permit expires on April 30, 1974."

All other terms of this permit, as revised, remain unchanged. The complete permit currently in effect consists of the Third and Fourth Revisions.

Issued at Washington, D.C.:

for B. J. Miltner  
W.R. Fiste  
For the Administrator  
Federal Highway Administration

14 APR 1972  
(DATE)

Mac E. Rogers  
Mac E. Rogers  
For the Administrator  
Federal Railroad Administration

APR 4 1972  
(DATE)

Address all inquiries to: Secretary, Hazardous Materials Regulations Board, U.S. Department of Transportation, Washington, D.C. 20590.  
Attention: Special Permits.

Dist: a, d, e, h, i  
U.S. Nuclear Corporation, Burbank, California  
North American Rockwell Corporation, Canoga Park, California



DEPARTMENT OF TRANSPORTATION  
HAZARDOUS MATERIALS REGULATIONS BOARD  
WASHINGTON, D.C. 20590

THIRD REVISED SPECIAL PERMIT NO. 5364  
(COMPLETE REVISION)

This special permit is reissued pursuant to 49 CFR 170.15 of the Department of Transportation (DOT) Hazardous Materials Regulations, as amended, and on the basis of the June 26, 1969, petition by Neutron Products Incorporated, Dickerson, Maryland, as amended July 11, 1969.

1. Shipments of large quantities of radioactive materials, special form, are hereby authorized in the packaging as described in this special permit. This packaging, when constructed and assembled as prescribed herein, with the contents as authorized herein meets the standards prescribed in the DOT regulations, Sections 173.395(c)(2) and 173.398(c). Shipments must be in accordance with the provisions of the U. S. Atomic Energy Commission (USAEC), license number 19-12657-02 (71-1) dated September 10, 1968, and as further provided for herein.
2. Each user of this permit, other than the petitioner named above, shall register his identity with this Board prior to his first use of the permit.
3. The packaging authorized by this permit consists of a leak-filled, right-circular, steel weldment, with bolted gasketed closure, approximately 114" long by 38" in diameter, weighing about 30,000 pounds, providing a minimum of 8.9" of lead shielding. The cask is sectioned with bolted, flanged type connections at about its mid-length to permit the shipment of shorter length fuels in the cask thus formed. The cask, which is surrounded by a steel shock protection frame, is mounted horizontally on a modified depressed platform, heavy duty highway trailer. The trailer is equipped with an expanded metal aluminum cage which surrounds the package as a barrier to contact with the thermally hot surface of the cask. The package is identified as the Model No. NP1-67-0442 Shipping Cask, and is described on O. G. Kelly & Company's drawing numbers 67-0442-1 through -7, as revised.
4. The contents of each package authorized by this permit consists of cobalt-60 as encapsulated sources, limited according to the assembly mode in which the cask is prepared for shipment, as follows:

<u>Assembly Mode</u>	<u>Maximum Contents Per Package (Curies)</u>
Mode I	600,000
Mode II	400,000
Mode III	200,000
Mode IV	120,000

Encapsulated Cobalt-60 sources shall meet the definition of "special form" as prescribed in §173.389(g) of the DOT regulations.

5. Prior to each shipment authorized by this permit, the shipper shall notify the consignee of the dates of shipment and expected arrival. The shipper shall notify each consignee of any special loading/unloading instructions prior to his first shipment.

6. The outside of each package must be plainly and durably marked "DOT SP 5364", in connection with and in addition to the other markings and labels prescribed by the DOT regulations. Each shipping paper issued in connection with shipments made under this permit must bear the notation "DOT SPECIAL PERMIT NO. 5364", in connection with the commodity description thereon.

7. Each package must have its gross weight plainly and durably marked on the outside of the package.

8. Shipments are authorized only by motor vehicle and rail.

9. The shipper is required to furnish an experience report to this Board before expiration of the permit and when any amendment is requested. This report must include the approximate number of packages shipped, and the number of packages involved in any loss of contents. The modes of transportation used for these shipments must also be shown.

10. Any incident involving loss of contents of the package must be reported to this Board at the earliest feasible moment following the incident.

11. This permit does not relieve the shipper or carrier from compliance with any requirement of the DOT regulations, except as specifically provided for herein.

12. This permit expires September 30, 1971.



Issued at Washington, D.C.:

*for* *A. W. Morrison*  
for *W. R. Fiste*  
For the Administrator  
Federal Highway Administration

*27 August 1969*  
(Date)

*Mac E. Rogers*  
*Mac E. Rogers*  
For the Administrator  
Federal Railroad Administration

*AUG 28 1969*  
(Date)

Address all inquiries to: Secretary, Hazardous Materials  
Regulations Board, U.S. Department of Transportation,  
Washington, D.C. 20590. Attention: Special Permits.

Dist: a, d, c, h, i  
U. S. Nuclear Corporation, Burbank, Calif.