



DEPARTMENT OF TRANSPORTATION
HAZARDOUS MATERIALS REGULATIONS BOARD
WASHINGTON, D.C. 20590 22181

[49 CFR Parts 173, 174, 175, 177]

[Docket No. HM-73; Notice No. 71-30]

**TRANSPORTATION OF HAZARDOUS
MATERIALS**

**Design Approvals for Radioactive
Materials Packages**

On January 8, 1971, the Hazardous Materials Regulations Board published Docket HM-73; Notice 71-1 (36 F.R. 292), proposing to transfer the administrative requirements for the approvals of certain radioactive materials packages from the Department of Transportation to the U.S. Atomic Energy Commission (USAEC). That notice further stated that it would be in the public interest and would not adversely affect safety in transportation to eliminate the present duplicative ministerial procedure of the issuance of special permits for packages which have been reviewed and approved by the U.S. Atomic Energy Commission.

Several comments were received by the Board, including those of the USAEC. The majority of the comments expressed support for the proposal. Several commenters qualified that support, requesting that additional information regarding concurrent changes be made to the USAEC regulations in conjunction with the DOT proposal.

One commenter indicated an objection to the proposal and questioned the advisability and need for changing the present division of responsibility between the USAEC and DOT. The commenter further stated that the proposal appears to be inconsistent with the intent of the Congress in amending the Transportation of Explosives Act of 1960. The amendment placed responsibility for regulating the transport of radioactive materials with the ICC. (That responsibility has since been transferred to the Department.) The Board has concluded that the proposal is not inconsistent with that amendment. Only the ministerial system for issuance of certain package design approvals is involved in the proposal. The Department would

continue to be responsible for its regulatory role as directed by the Transportation of Explosives Act.

After further discussion with the USAEC, it has become apparent that several additional sections of the Hazardous Materials Regulations will be needed to fully implement a transition from the present system of "special permit" issuances to the "AEC approvals." The related requirements of the International Atomic Energy Agency's (IAEA) regulations concerning competent authority certifications of package design also need clarification.

Under the regulations proposed in this second notice, petitioners for TYPE B, Fissile, and large quantity packages would apply directly to the USAEC for package review, evaluation, and approval. The standards and requirements which must be met to obtain AEC approval are published in the USAEC Regulations (10 CFR Part 71). In a separate document on page 22184 of this issue of the FEDERAL REGISTER, the AEC is publishing a notice of proposed rule making to add procedures for review and approval of Type B packages to 10 CFR Part 71.

This proposal would require non-AEC licensees, including licensees of agreement states to which the AEC has transferred certain regulatory authority over radioactive material by formal agreement, and radium shippers in nonagreement states, to apply to the AEC for approval of Type B, fissile material, and large quantity packages. Non-AEC licensees, other than license-exempt contractors of the AEC, would apply to the AEC in the same manner as AEC licensees. These persons would be required to submit an application containing the information set forth in 10 CFR 71.21, 71.22, 71.23, and 71.24, to the Director, Division of Materials Licensing, U.S. Atomic Energy Commission, Washington, D.C. 20545. License-exempt AEC contractors would apply to the appropriate AEC field office.

The DOT requirements for the AEC approval proposed in this notice would, therefore, be satisfied by:

1. A license or license amendment issued by the AEC under 10 CFR Part 71; or

2. an administrative approval issued by the AEC's Division of Materials Licensing; or

3. an administrative approval issued to AEC license-exempt contractors by AEC Field Offices under AEC Manual Chapter 0529.

With the adoption of these proposed amendments, a fissile class III shipment would no longer require a special permit by regulation. However, the Board is concerned that the absence of special permits for fissile class III shipments may contribute or create an inability to identify these shipments by carrier personnel who must handle and stow them. A normal means of control by carriers of radioactive materials packages is through the transport index entry on the package label. Since fissile class III packages require special stowage controls based on the number of packages to be transported together, and since the package label does not convey this information, the Board believes that the additional warning statement proposed in § 173.427(a) must be added to the shipping papers for fissile class III shipments, to warn the carrier that he is to exercise special stowage controls on that shipment. This statement would therefore effectively replace the language formerly conveyed by certain provisions of the special permit.

This notice also contains a proposal to change the section of the regulations applicable to transport of fissile class III radioactive materials by aircraft. The proposed changes to § 173.396(g) are in response to a recent petition by the Air Transport Association of America. The petition stated that the present wording of § 173.396(g) (2) is impracticable for transportation of fissile class III shipments by air, and suggested that a new § 173.396(g) (3) be added which would be applicable to fissile class III shipments by air. The Board agrees with the Association's petition and accordingly has included proposed changes in the appropriate sections of the shipper and air carrier sections for fissile class III shipments.

In 14 CFR Part 103, the Board is also proposing to limit the transport of radioactive materials packages on passenger-carrying aircraft to those packages containing less than a large quantity of radioactive material (§ 173.389(b)), except as specifically approved on an individual shipment basis. This proposal is consistent with the present limitation appearing in the International Atomic Energy Agency's Regulations, the IATA Restricted Articles Regulations, and in the Air Tariff No. 6D.

Notice 71-1 is superseded by this second notice of proposed rule making.

In consideration of the foregoing, the Board proposes to amend 49 CFR Parts 171, 173, 174, 175, and 177 as follows:

PART 171--GENERAL INFORMATION AND REGULATIONS

In § 171.7 paragraphs (c) (12) and (13) and (d) (8) and (9) would be added to read as follows:

§ 171.7 Matter incorporated by reference.

* * * * *

(c) * * *

(12) IAEA: International Atomic Energy Agency, Karnter Ring 11, Post Office Box 590, A-1011, Vienna, Austria (IAEA publications may be purchased in the U.S. from: Unipub, Inc., Post Office Box 433, New York, N.Y. 10016).

(13) USAEC: U.S. Atomic Energy Commission, Washington, D.C. 20545. Regulations of the USAEC are available from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402. Other publications by the USAEC may be obtained from the National Technical Information Center, U.S. Department of Commerce, Springfield, Va. 22151.

(d) * * *

(8) IAEA "Regulations for the Safe Transport of Radioactive Materials," 1967 Edition, Safety Series No. 6.

(9) U.S. Atomic Energy Commission (USAEC).

(i) Title 10, Code of Federal Regulations, Part 71 is titled "Packaging of Radioactive Materials for Transport."

PART 173--SHIPPERS

(A) In part 173 table of contents, §§ 173.393a and 173.393b would be added to read as follows:

Sec.

173.393a U.S. Atomic Energy Commission approved packages; standard requirements and conditions.

173.393b International shipments and foreign-made packages; standard requirements and conditions.

(B) § 173.393a would be added to read as follows:

§ 173.393a U.S. Atomic Energy Commission approved packages; standard requirements and conditions.

(a) In addition to the applicable requirements of the USAEC approval and Parts 170-189 of this chapter, each shipper of a package containing radioactive material, which has been approved by the U.S. Atomic Energy Commission in accordance with §§ 173.394(b) (3) and (c) (2), 173.395(b) (2) and (c) (2), 173.396(b) (4), or § 173.396(c) (3), also shall comply with the following:

(1) Before the first shipment in a package approved by the U.S. Atomic Energy Commission for use by another person, each shipper shall register in writing with the USAEC, Division of Materials Licensing, his name and address, the name of the person to whom the USAEC approval was issued, and the approval number assigned to the package. Each shipper shall have a copy of the

USAEC approval and the document referred to in the approval in his possession. All shipments must be made in compliance with the terms and conditions of the approval.

(2) The outside of each package must be durably and legibly marked with the package identification marking indicated in the USAEC approval.

(3) Each shipping paper related to the shipment of this package must bear a notation of the package identification marking indicated in the USAEC approval.

(4) Before the first export shipment of the package, the shipper shall furnish a copy of the applicable competent authority certificate to the foreign consignee and to the competent national authority of each country into or through which the package will be transported (see § 173.393b).

(5) Packages of fissile radioactive material must be marked with the numerical value for the transport index if the shipment is fissile class II. Any vehicle limitation indicated in the USAEC approval shall apply if the shipment is fissile class III.

(6) For fissile class III shipments the statement as prescribed in § 173.427(a) (5) (v) must be included with the shipping papers.

(C) § 173.393b would be added to read as follows:

§ 173.393b International shipments and foreign-made packages; standard requirements and conditions.

(a) In addition to the other applicable requirements of Parts 170-189 of this chapter, each shipper of a package containing radioactive material, for which the foreign competent authority certificate prescribed by § 173.394(b) (4) or § 173.395(b) (3) has been issued and has been revalidated if the requirements of §§ 173.394(c) (3), 173.395(c) (3), 173.396(b) (5), or § 173.396(c) (4) apply, also shall comply with the following:

(1) Before the first shipment of the package, each shipper shall register his identity and type of package in writing with the Office of Hazardous Materials, U.S. Department of Transportation, Washington, D.C. 20590, furnishing a copy of the foreign certificate or revalidation thereof which is applicable to that package.

(2) The outside of each package must be durably and legibly marked with the competent authority identification marking indicated on the certificate or revalidation.

(3) Each shipping paper related to the shipment of this package must bear a notation of the package identification marking indicated in the certificate or revalidation.

(4) Before the first export shipment of the package, the shipper shall furnish a copy of the applicable certificate and any required revalidation to the competent national authority of each country into

or through which the package will be transported.

(5) A copy of the certificate or revalidation must be furnished to each carrier for fissile class III shipments, by any mode of transport.

(b) The designated competent authority in the United States responsible for administering the requirements (marginal C-6) of the International Atomic Energy Agency's (IAEA) "Regulations for the Safe Transport of Radioactive Materials," Safety Series No. 6, 1967 edition, is:

Office of Hazardous Materials, U.S. Department of Transportation, Washington, D.C. 20590.

(c) Any request for a competent authority certificate required by the IAEA regulations should be submitted in writing to the address given in paragraph (b) of this section. This request must be in duplicate and must contain all the information required by the applicable subsection of marginal C-6 of the IAEA regulations.

(D) In § 173.394 paragraphs (b) (3) and (c) (2) would be amended; paragraphs (b) (4) and (c) (3) would be added to read as follows:

§ 173.394 Radioactive material in special form.

* * * * *

(b) * * *

(3) Any other type B packaging approved by the U.S. Atomic Energy Commission.

(4) Any other type B packaging which meets the pertinent requirements in the 1967 regulations of the International Atomic Energy Agency, and for which an appropriate certificate has been issued by a foreign competent authority.

(c) * * *

(2) Any other type B packaging which meets the pertinent requirements for large quantities of radioactive materials in the regulations of the U.S. Atomic Energy Commission (10 CFR Part 71) and is approved by the U.S. Atomic Energy Commission.

(3) Any other type B packaging which meets the pertinent requirements for large quantities of radioactive materials in the 1967 regulations of the International Atomic Energy Agency, and for which the foreign competent authority certificate has been revalidated by the Department.

(E) In § 173.395 paragraphs (b) (2) and (c) (2) would be amended; paragraphs (b) (3) and (c) (3) would be added to read as follows.

§ 173.395 Radioactive material in normal form.

* * * * *

(b) * * *

(2) Any other type B packaging approved by the U.S. Atomic Energy Commission.

(3) Any other type B packaging which meets the pertinent requirements in the 1967 regulations of the International Atomic Energy Agency, and for which an

appropriate certificate has been issued by a foreign competent authority.

(c) * * *

(2) Any other type B packaging for large quantities of radioactive materials which meets the pertinent requirements in the regulations of the U.S. Atomic Energy Commission (10 CFR Part 71) and is approved by the U.S. Atomic Energy Commission.

(3) Any other type B packaging which meets the pertinent requirements for large quantities of radioactive materials in the 1967 regulations of the International Atomic Energy Agency, and for which the foreign competent authority certificate has been revalidated by the Department.

(F) In § 173.396 paragraphs (b) (4) and (c) (3) would be amended; paragraphs (b) (5) and (c) (4) would be added; paragraph (d) and note following would be canceled; the introductory text of paragraph (g) and paragraph (g) (2) would be amended; paragraph (g) (3) would be added to read as follows:

§ 173.396 Fissile radioactive material.

* * * * *

(b) * * *

(4) Any other type A or B packaging for fissile radioactive materials which also meets the pertinent standards for packaging in the regulations of the U.S. Atomic Energy Commission (10 CFR Part 71), and is approved by the U.S. Atomic Energy Commission.

(5) Any other type A or B packaging for fissile radioactive materials which also meets the pertinent requirements in the 1967 regulations of the International Atomic Energy Agency, and for which the foreign competent authority certificate has been revalidated by the Department.

(c) * * *

(3) Any other type B packaging which also meets the standards for packaging for fissile radioactive materials in the regulations of the U.S. Atomic Energy Commission (10 CFR Part 71), and is approved by the U.S. Atomic Energy Commission.

(4) Any other type B packaging which also meets the pertinent requirements for fissile radioactive materials in the 1967 regulations of the International Atomic Energy Agency, and for which the foreign competent authority certificate has been revalidated by the Department.

(d) [Canceled]

NOTE: [Canceled]

* * * * *

(g) Fissile class III shipments may be made only in accordance with subparagraph (1), (2), or (3) of this paragraph, or in accordance with other procedures authorized by the Department. The transport controls must provide nuclear criticality safety and shall be carried out by the shipper or carrier, as appropriate, to protect against loading, storing, or transporting of that shipment together with other fissile material.

* * * * *

(2) Except for shipments by aircraft, transportation under escort by a person

in a separate vehicle, with the escort having the capability, equipment, authority, and instructions to provide administrative controls adequate to assure compliance with this paragraph.

(3) Transportation in a transport vehicle containing no other packages of radioactive material which bear either of the "Radioactive" labels described in § 173.414.

* * * * *

(G) In § 173.427 paragraphs (a) (5) (v) and (vi) would be amended to read as follows:

§ 173.427 Shipping papers.

(a) * * *

(5) * * *

(v) For fissile radioactive materials, the fissile class of the package(s). For fissile class III shipments, the additional notations: "Warning—Fissile Class III Shipment. Personnel handling and stowing this shipment must be advised to not load more than * * * packages per vehicle." (* * * to be replaced by appropriate number). "In any loading or stowage area, this shipment must be segregated by at least 20 feet from other packages bearing radioactive labels." If a fissile class III is to be transported by water the supplementary notation must also include the following statement: "For shipment by water only one fissile class III shipment is permitted in a hold."

(vi) For export shipments, a copy of any special permit or IAEA Certificate of Competent Authority (see § 173.393b) issued by the Department for the package.

PART 174—CARRIERS BY RAIL FREIGHT

In § 174.586 paragraph (h) (3) would be added to read as follows:

§ 174.586 Handling hazardous materials.

* * * * *

(h) * * *

(3) Fissile class III radioactive material shipments (as defined in § 173.389 (a) (3) of this chapter) must be transported in accordance with either of the methods as prescribed in § 173.396(g) of this chapter. The transport controls must be adequate to assure that no fissile class III shipment is transported in the same transport vehicle with any other fissile radioactive material shipments. In loading and storage areas each fissile class III shipment must be segregated by a distance of at least 20 feet from other packages bearing either of the "radioactive" labels described in § 173.414.

PART 175—CARRIERS BY RAIL EXPRESS

In § 175.655 paragraph (j) (4) would be added to read as follows:

§ 175.655 Protection of packages.

(j) * * *

(4) Fissile class III radioactive material shipments (as defined in § 173.389

(a) (3) of this chapter) must be transported in accordance with either of the methods as prescribed in § 173.396(g) of this chapter. The transport controls must be adequate to assure that no fissile class III shipment is transported in the same transport vehicle with any other fissile radioactive material shipments. In loading and storage areas each fissile class III shipment must be segregated by a distance of at least 20 feet from other packages bearing either of the "radioactive" labels described in § 173.414 of this chapter.

* * * * *

**PART 177—SHIPMENTS MADE BY
WAY OF COMMON, CONTRACT,
OR PRIVATE CARRIERS BY PUBLIC
HIGHWAY**

In § 177.842 paragraph (f) would be added to read as follows:

§ 177.842 Radioactive material.

* * * * *

(f) Fissile class III radioactive material shipments (as defined in § 173.389 (a) (3) of this chapter) must be transported in accordance with either of the methods as prescribed in § 173.396(g) of this chapter. The transport controls must be adequate to assure that no fissile class III shipment is transported in the same transport vehicle with any other fissile radioactive material shipments. In loading and storage areas each fissile class III shipment must be segregated by a distance of at least 20 feet from other packages bearing either of the "radioactive" labels described in § 173.414 of this chapter.

Interested persons are invited to give their views on this proposal. Communications should identify the docket number and be submitted in duplicate to the Secretary, Hazardous Materials Regulations Board, Department of Transportation, 400 Sixth Street SW., Washington, DC 20590. Communications received on or before February 29, 1972, will be considered before final action is taken on the proposal. All comments received will be available for examination by interested persons at the Office of the Secretary, Hazardous Materials Regulations Board, both before and after the closing date for comments.

This proposal is made under the authority of sections 831-835 of Title 18, United States Code, section 9 of the Department of Transportation Act (49 U.S.C. 1657), and title VI and section 902(h) of the Federal Aviation Act of 1958 (49 U.S.C. 1421-1430 and 1472(h)).

Issued in Washington, D.C., on November 17, 1971.

W. J. BURNS,
*Chairman, Hazardous
Materials Regulations Board.*

[FR Doc.71-17037 Filed 11-19-71;8:52 am]



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

22181

[14 CFR Part 103]

[Docket No. 11558; Notice No. 71-39]

TRANSPORTATION OF HAZARDOUS
MATERIALS

Design Approvals for Radioactive
Materials Packages

On January 8, 1971, the Hazardous Materials Regulations Board published Docket HM-73; Notice 71-1 (36 F.R. 292), proposing to transfer the administrative requirements for the approvals of certain radioactive materials packages from the Department of Transportation to the U.S. Atomic Energy Commission (USAEC). That notice further stated that it would be in the public interest and would not adversely affect safety in transportation to eliminate the present duplicative ministerial procedure of the issuance of special permits for packages which have been reviewed and approved by the U.S. Atomic Energy Commission.

As a result of the comments received and the discussion on page 22181 of this issue of the FEDERAL REGISTER, the Hazardous Materials Regulations Board is publishing a second notice of proposed rule making in Docket No. HM-73 incorporating several additional proposed changes needed to fully implement a transition from the present system of "special permit" issuances to the "AEC approvals".

In conjunction with the proposed changes by the Board to 49 CFR Part 173, this document proposes to amend 14 CFR Part 103 as follows:

(A) In § 103.19 paragraph (e) would be added to read as follows:

§ 103.19 Quantity limitations.

* * * * *

(e) No person may carry aboard a passenger-carrying aircraft any package of radioactive material which contains a large quantity of radioactivity (as defined in 49 CFR 173.389(b)), except as specifically approved by the Administrator.

(B) § 103.24 would be added to read as follows:

§ 103.24 Special requirements for fissile class III radioactive materials.

(a) No person may carry aboard any aircraft any package of fissile class III radioactive material (as defined in 49 CFR 173.389(a)(3)), except as follows:

(1) On a cargo-only aircraft which has been assigned for the sole use of the consignor for the specific shipment of fissile radioactive material. Instructions for such sole use must be provided for in special arrangements between the consignor and carrier, with instructions to that effect issued with shipping papers; or

(2) On any aircraft on which there are no other packages of radioactive material bearing either of the "radioactive" labels as described in 49 FCR 173.414; or

(3) In accordance with any other procedure specifically approved by the Administrator.

Interested persons are invited to give their views on this proposal. Communications should identify the docket number and be submitted in duplicate to the Secretary, Hazardous Materials Regulations Board, Department of Transportation, 400 Sixth Street SW., Washington, DC 20590. Communications received on or before February 29, 1972 will be considered before final action is taken on the proposal. All comments received will be available for examination by interested persons at the Office of the Secretary, Hazardous Materials Regulations Board, both before and after the closing date for comments.

This proposal is made under the authority of title VI and section 902(h) of the Federal Aviation Act of 1958 (49 U.S.C. 1421-1430, 1472(h)).

Issued in Washington, D.C., on November 17, 1971.

JAMES F. RUDOLPH,
Board Member for the
Federal Aviation Administration.

[FR Doc.71-17038 Filed 11-19-71;8:52 am]

NOTE: For the convenience of persons reviewing Docket No. HM-73, Notice No. 71-30, related documents published by the Atomic Energy Commission and the United States Coast Guard follow:

ATOMIC ENERGY COMMISSION

[10 CFR Part 71]

SHIPMENT OF RADIOACTIVE MATERIAL

Approval of Type B, Large Quantity and Fissile Material Packagings

On January 8, 1971, with the agreement of the Atomic Energy Commission, the Hazardous Materials Regulations Board of the Department of Transportation (DOT) published in the FEDERAL REGISTER a notice (Docket No. HM-73; Notice 71-1) proposing to transfer the administrative requirement for approvals of radioactive materials packages from the Department to the U.S. Atomic Energy Commission (AEC). Interested persons were invited to comment on the proposal within 60 days after publication of the notice in the FEDERAL REGISTER. After consideration of the comments and consultation with the AEC and the atomic energy industry, in a separate document published on page 22181, the DOT is publishing a revised notice of proposed rule making proposing amendments to 49 CFR Part 173 which would transfer the administrative requirement for approvals of radioactive materials packages to the AEC. The amendment would provide, inter alia, that DOT discontinue issuing special permits for packagings except for waivers or exemptions from DOT regulations and that shippers be required to have AEC approval for routine packaging for type B, large quantity, and fissile material shipments.

The proposed changes in 10 CFR Part 71 set out below would provide a means for implementing the transfer of packaging approvals from DOT to AEC by adding to Part 71, standards and requirements for AEC approval of type B packagings and describing the procedures for obtaining AEC approval of type B, large quantity, and fissile material packagings.

The provisions of Part 71, in effect since August 1966, require AEC licensees who wish to ship fissile material or large quantities of byproduct, source, or special nuclear material to apply to the AEC for a license or license amendment indicating AEC approval of the type of package to be used. The amendments published herein would require AEC licensees also to apply for a license or license amendment approving of the package to be used to deliver to a carrier type B quantities of radioactive material.

The proposed amendments to the DOT regulations, published concurrently, would require AEC approval of packagings, other than specification packagings prescribed in the DOT regulations, which are used to ship any quantity of fissile material, or more than a type A quantity (i.e., a type B or large quantity) of other radioactive material. AEC approval could be (1) a license (either

specific or general) or license amendment issued under 10 CFR Part 71, (2) an administrative approval issued to AEC contractors by AEC field offices in accordance with standards and procedures published in the AEC manual, or (3) an approval issued by the AEC's Division of Materials Licensing to persons under DOT jurisdiction who are not AEC licensees. The latter category of non-AEC licensees would include, for example, agreement State licensees and radium shippers who wish to ship type B or large quantities of radioactive material.

To obtain AEC approval, all persons, other than AEC license-exempt contractors, would be required to submit an application to the Director, Division of Materials Licensing, U.S. Atomic Energy Commission, Washington, D.C. 20545. The contents of the application are set forth in §§ 71.21, 71.22, 71.23, and 71.24 of 10 CFR Part 71.

AEC license-exempt contractors would apply to the appropriate AEC field office for approval in accordance with the provisions of the AEC manual.

Provisions would be made for uninterrupted use of containers which have been in use under DOT special permits which are valid on the date the revised rule goes into effect. Each AEC licensee would be permitted to continue to use fissile material and large quantity packagings under the AEC license or license amendment which was issued to him by the AEC under 10 CFR Part 71. Under the proposed § 71.8, an AEC licensee using a type B container under a valid DOT special permit would be allowed to continue to use that container until the AEC acts on an application which he had submitted no later than 90 days after the effective date of the rule or the expiration date of the special permit, whichever date is later.

A non-AEC licensee, other than a license-exempt contractor, would be considered to have AEC approval for continued use of a type of packaging for which he had a DOT special permit in effect on the effective date of the amendments provided he submitted to the AEC a request for approval of that type of packaging within 90 days of the effective date or prior to the date on which the special permit expires, whichever date is later. This AEC approval would remain in effect until the application has been approved or rejected by the Commission.

The proposed amendment to the DOT regulations, published concurrently, would authorize the use of packaging approved by the AEC. The amendment to DOT regulations also would require each person using a design of packaging approved for use by another to register with AEC prior to first use and to comply with the conditions of the original approval. AEC licensees are already required to follow that same procedure under the conditions of the general license in § 71.7(b) of the AEC regulations.

EXEMPTIONS

§ 71.5 [Redesignated]

4. Section 71.11 is redesignated § 71.5.
 5. Section 71.5 is redesignated § 71.6, the heading is revised to read § 71.6 *Exemption for no more than Type A quantities*, and paragraph (b) is amended to read as follows:

§ 71.6 Exemption for more than Type A quantities.

* * * * *
 (b) Packages each of which contains no more than a Type A quantity of radioactive material, as defined in § 71.4 (q), which may include one of the following:

- (1) Not more than 15 grams of fissile material; or
- (2) Thorium, or uranium containing not more than 0.72 percent by weight of fissile material; or
- (3) Uranium compounds, other than metal (e.g., UF₄, UF₆, or uranium oxide in bulk form, not pelleted or fabricated into shapes) or aqueous¹ solutions of uranium, in which the total amount of uranium-233 and plutonium present does not exceed 1.0 percent by weight of the uranium-235 content, and the total fissile content does not exceed 1.00 percent by weight of the total uranium content; or
- (4) Homogeneous hydrogenous² solutions or mixtures containing not more than:

- (i) 500 grams of any fissile materials, provided the atomic ratio of hydrogen to fissile material is greater than 7600; or
- (ii) 800 grams of uranium-235: *Provided*, That the atomic ratio of hydrogen to fissile material is greater than 5200, and the content of other fissile material is not more than 1 percent by weight of the total uranium-235 content; or
- (iii) 500 grams of uranium-233 and uranium-235: *Provided*, That the atomic ratio of hydrogen to fissile material is greater than 5200, and the content of plutonium is not more than 1 percent by weight of the total uranium-233 and uranium-235 content; or
- (5) Less than 350 grams of fissile material: *Provided*, That there is not more than 5 grams of fissile material in any cubic foot within the package.

6. A new § 71.7 is added to read as follows:
 § 71.7 Exemption for fissile material.
 A licensee is exempt from requirements in §§ 71.33, 71.35(b), 71.36(b), 71.37, 71.38, 71.39, and 71.40 to the extent that he delivers to a carrier for transport packages each of which contains one of the following:

- (a) Not more than 15 grams of fissile material; or

¹ This applies to light water and does not apply to heavy water.

² This applies to light hydrogen and does not apply to heavy hydrogen (i.e., deuterium or tritium).

(b) Thorium, or uranium containing not more than 0.72 percent by weight of fissile material; or

(c) Uranium compounds, other than metal, (e.g., UF₄, UF₆, or uranium oxide in bulk form, not pelleted or fabricated into shapes) or aqueous¹ solutions of uranium, in which the total amount of uranium-233 and plutonium present does not exceed 1.0 percent by weight of the uranium-235 content, and the total fissile content does not exceed 1 percent by weight of the total uranium content; or

(d) Homogeneous hydrogenous² solutions or mixtures containing not more than:

- (1) 500 grams of any fissile material, provided the atomic ratio of hydrogen to fissile material is greater than 7600; or
- (2) 800 grams of uranium-235: *Provided*, That the atomic ratio of hydrogen to fissile material is greater than 5200, and the content of other fissile material is not more than 1 percent by weight of the total uranium-235 content; or
- (3) 500 grams of uranium-233 and uranium-235: *Provided*, That the atomic ratio of hydrogen to fissile material is greater than 5200, and the content of plutonium is not more than 1 percent by weight of the total uranium-233 and uranium-235 content; or
- (e) Less than 350 grams of fissile material: *Provided*, That there is not more than 5 grams of fissile material in any cubic foot within the package.

7. Section 71.12 is deleted.
 8. Section 71.13 is redesignated § 71.8 and the heading and text are revised to read as follows:

§ 71.12 [Deleted]
 § 71.8 Limited exemption for shipment of Type B quantities of radioactive material.
 A person delivering a Type B quantity of radioactive material, as defined in § 71.4(q), to a carrier for transport in accordance with the provisions of a special permit, which has been issued by the Department of Transportation and is in effect on (the effective date of this amendment), is exempt from the requirements in this part with respect to such shipments. The exemption granted by this section shall terminate on (3 months after the effective date of this amendment) or on the date on which the DOT special permit expires, whichever date is later, except as to activities described in an application for a license which the person has, prior to the termination date of the exemption, filed with the Commission. If the person has filed such an application, the exemption granted by this section shall continue until the application has been finally determined by the Commission.

9. An undesignated centerhead preceding § 71.9 is added to read as follows:
 GENERAL LICENSES
 10. Section 71.6 is redesignated as § 71.9 and paragraphs (a)(1) and (b)(1) are amended to read as follows:

9. An undesignated centerhead preceding § 71.9 is added to read as follows:

Other changes being proposed in 10 CFR Part 71 are minor editorial changes, redesignation of some sections to bring together the exemption provisions, and addition of a new § 71.7 to exempt certain fissile materials from the nuclear criticality safety provisions of Part 71. Section 71.12, *Limited exemption for shipment of special nuclear material* would be deleted, since the authority granted by that section has expired.

Pursuant to the Atomic Energy Act of 1954, as amended, and section 553 of title 5 of the United States Code, notice is hereby given that adoption of the following amendments to 10 CFR Part 71 is contemplated. All interested persons who desire to submit written comments or suggestions for consideration in connection with the proposed amendments should send them to the Secretary of the Commission, U.S. Atomic Energy Commission, Washington, D.C. 20545, Attention: Chief, Public Proceedings Branch, within 60 days after publication of the notice in the FEDERAL REGISTER. Comments received after that period will be considered if it is practical to do so, but assurance of consideration cannot be given except as to comments filed within the period specified. Copies of comments on the proposed amendments may be examined at the Commission's Public Document Room at 1717 H Street NW., Washington, DC.

1. Paragraph (a) of § 71.1 of Part 71 is amended to read as follows:

§ 71.1 Purpose.

(a) This part prescribes procedures and standards for approval by the Atomic Energy Commission of packaging and shipping procedures for fissile material (uranium-233, uranium-235, plutonium-238, plutonium-239, and plutonium-241) and for quantities of licensed materials in excess of type A quantities, as defined in § 71.4(q), and prescribes certain requirements governing such packaging and shipping.

* * * * *
 2. A new paragraph (q) is added to § 71.4 to read as follows:

§ 71.4 Definitions.

* * * * *
 (q) "Type A quantity" and "Type B quantity" means a quantity of radioactive material the aggregate radioactivity of which does not exceed that specified in the following table:

Transport groups [Paragraph (p) of this section]	Type A quantity (in curies)	Type B quantity (in curies)
I.....	0.001	20
II.....	0.05	20
III.....	3	200
IV.....	20	200
V.....	20	5,000
VI and VII.....	1,000	50,000
Special form.....	20	5,000

3. An undesignated centerhead preceding § 71.5 is added to read as follows:

§ 71.9 General license for shipment of licensed material.

(a) * * *

(1) No single package contains more than a Type A quantity of radioactive material, as defined in § 71.4(q); and

(b) * * *

(1) No package contains more than a Type A quantity of radioactive material, as defined in § 71.4(q); and

11. Section 71.7 is redesignated § 71.10 and paragraph (a) is amended to read as follows:

§ 71.10 General license for shipment in DOT specification containers and in packages licensed for use by another licensee.

(a) In a specification container for fissile material as specified in § 173.396 (b) or (c) or for a Type B quantity of radioactive material as specified in § 173.394(b) or § 173.395(b), or for a large quantity of radioactive material as specified in § 173.394(c) or § 173.395(c) of the regulations of the Department of Transportation, 49 CFR Part 173; or

§§ 71.11, 71.12, 71.13 [Redesignated]

12. Sections 71.8, 71.9, and 71.10 are redesignated as §§ 71.11, 71.12, and 71.13, respectively.

13. The section heading and the first sentence of § 71.32 are amended to read as follows:

§ 71.32 Structural standards for Type B and large quantity packaging.

Packaging used to ship a Type B or a large quantity of radioactive material, as defined in § 71.4 (q) and (f), shall be designed and constructed in accordance with the structural standards of this section.

14. The introductory language of paragraph (a) and paragraph (c) of § 71.35 are amended to read as follows:

§ 71.35 Standards for normal conditions of transport for a single package.

(a) A package used for the shipment of fissile material or more than a Type A quantity of radioactive material, as

defined in § 71.4(q), shall be so designed and constructed and its contents so limited that under the normal conditions of transport specified in Appendix A of this part:

(c) A package used for the shipment of more than a Type A quantity of radioactive material, as defined in § 71.4(q), shall be so designated and constructed and its contents so limited that under the normal conditions of transport specified in Appendix A of this part, the containment vessel would not be vented directly to the atmosphere.

15. The introductory language of paragraph (a) of § 71.36 is amended to read as follows:

§ 71.36 Standards for hypothetical accident conditions for a single package.

(a) A package used for the shipment of more than a Type A quantity of radioactive material, as defined in § 71.4(q), shall be so designed and constructed and its contents so limited that if subjected to the hypothetical accident conditions specified in Appendix B of this part as the Free Drop, Puncture, Thermal, and Water Immersion conditions in the sequence listed in Appendix B, it will meet the following conditions:

16. The introductory language of paragraph (a) of § 71.62 is amended to read as follows:

§ 71.62 Records.

(a) The licensee shall maintain for a period of 2 years after its generation a record of each shipment of fissile material or of more than a Type A quantity of radioactive material as defined in § 71.4(q), in a single package, showing, where applicable:

(Sec. 53, 62, 81, 161; 68 Stat. 930, 932, 935, 948, as amended; 42 U.S.C. 2073, 2092, 2111, 2201)

Dated at Germantown, Md., this 16th day of November 1971.

For the Atomic Energy Commission,

W. B. McCool,
Secretary of the Commission.

[FR Doc.71-16969 Filed 11-19-71;8:51 am]

Coast Guard

[46 CFR Part 146]

[CGFR 71-136]

RADIOACTIVE MATERIALS

Notice of Proposed Rule Making

The Coast Guard is considering amending the dangerous cargoes regulations to adopt the procedures being proposed by the Hazardous Materials Regulations Board for the approval of certain radioactive materials, to prescribe certain transport controls for Fissile Class

III shipments, to provide for additional packaging for Fissile Radioactive Material authorized in 49 CFR 173.396 but previously not in 46 CFR 146.19-100, and relocating the requirements of 46 CFR 146.19-12, 146.19-18, and 146.19-20 into 146.10-100.

Interested persons may participate in this proposed rule making by submitting written data, views, or arguments to the Commandant (MHM), U.S. Coast Guard, Washington, D.C. 20590. Each person submitting comments should include his name and address, identify the notice (CGFR 71-136), and give reasons for any recommendations. Comments received will be available for examination by interested persons in Room 8306, Department of Transportation, Nassif Building, 400 Seventh Street SW., Washington, DC.

The Coast Guard will hold an informal hearing on Tuesday, February 22, 1972, at 9:30 a.m. in Conference Room 8332, Department of Transportation, Nassif Building, 400 Seventh Street SW., Washington, DC. Interested persons are invited to attend the hearing and present oral or written statements on this proposal. There will be no cross examination of persons presenting statements.

The Commandant will evaluate all communications received before February 29, 1972 and take final action on this proposal. The proposed regulations may be changed in the light of comments received.

By a separate document published at page 22181 of this issue of the FEDERAL REGISTER, the Hazardous Materials Regulations Board of the Department of Transportation proposes amendments to Part 173 of Title 49, Code of Federal Regulations §§ 173.393, 173.394, 173.395, 173.396, and 173.427 which will transfer the administration of approvals for certain radioactive materials packages from the Department of Transportation to the U.S. Atomic Energy Commission (USAEC). For reasons fully stated in that document, the Board has proposed these changes to eliminate the present duplicate ministerial procedures for the issuance of special permits for packages which have been reviewed and approved by the U.S. Atomic Energy Commission.

The hazardous materials regulations of the Department of Transportation in title 49 apply to shippers by water, air, and land, and to carriers by air and land. The adoption of this proposed amendment to title 46 would make the proposal of the Hazardous Materials Regulations Board applicable to carriers by water.

The Coast Guard proposes to incorporate the substance of the Board's proposal in 46 CFR 146. Additionally certain controls must be adopted for fissile class III shipments before this ministerial procedure can be removed. These controls are unique to the marine mode.

In consideration of the forgoing, it is proposed that Part 146 be amended as follows:

1. By adding in Table of Contents of Part 146 the following:

PART 146—TRANSPORTATION OR STORAGE OF EXPLOSIVES OR OTHER DANGEROUS ARTICLES OR SUBSTANCES, AND COMBUSTIBLE LIQUIDS ON BOARD VESSELS

Subpart 146.19—Detailed Regulations Governing Radioactive Materials

- Sec. 146.19-10a U.S. Atomic Energy Commission approved packages; standard requirements and conditions.
- 146.19-10b International shipments and foreign-made packages; standard requirements and conditions.

2. By revising § 146.05-12(f) (9) and (vi) to read as follows:

§ 146.05-12 Originating shipping order, transfer shipping paper.

- * * *
- (f) * * *
- (9) * * *

(v) For fissile class III shipments, the additional notations: "Warning—fissile class III shipment. Personnel handling and stowing this shipment must be advised to not load more than * * * packages per vehicle." * * * to be replaced by appropriate number). "In any loading or stowage area, this shipment must be segregated by at least 20 feet from other packages bearing radioactive labels. For shipment by water only one fissile class III shipment is permitted in a hold."

(vi) For export shipments, a copy of any special permit or IAEA Certificate of Competent Authority (see § 146.19-106(b)) issued by the Department of Transportation for the package.

3. By adding § 146.19-1 (o) and (p) to read as follows:

§ 146.19-1 Radioactive materials; definition.

(o) As used in this subpart the abbreviation USAEC represents the U.S. Atomic Energy Commission, Washington, D.C. 20545. Applicable regulations of the USAEC are published in Title 10, Code of Federal Regulations, Part 171, and entitled "Packaging of Radioactive Materials for Transport." (These regulations are available from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402.) Other publications of the USAEC may be obtained from the National Technical Information Center, U.S. Department of Commerce, Springfield, Va. 22151.

(p) As used in this subpart the abbreviation IAEA represents the International Atomic Energy Commission, Karnter Ring 11, Post Office Box 590, A-1011, Vienna, Austria, IAEA publications may be purchased in the U.S. from: Unipub, Inc., Post Office Box 433, New York, NY 10016. Regulations of IAEA are published as "Regulations for the Safe Transport of Radioactive Materials," 1967 Edition, Safety Series No. 6.

4. By adding § 146.19-10a to read as follows:

§ 146.19-10a U.S. Atomic Energy Commission approved packages; standard requirements and conditions.

Each shipper of a package containing radioactive material, which has been approved by the U.S. Atomic Energy Commission in accordance with § 146.19-12, 146.19-18, 146.19-20 or 146.19-100, shall also comply with the following:

(a) Before the first shipment of a package, containing radioactive material, which has been approved by the U.S. Atomic Energy Commission, for use by another person, each shipper shall register in writing with the USAEC, Division of Materials Licensing, his name and address, the name of the person to whom the USAEC approval is issued, and the approval number assigned to the package.

(b) Each shipper shall have a copy of the USAEC approval and any other documents referred to in the approval.

(c) Each shipper shall comply with all the terms and conditions stated in the USAEC approval.

(d) Each shipper shall mark the outside of each package with the package identification marking, indicated in the USAEC approval, in a durable and legible manner.

(e) The shipper shall note the package identification marking, indicated in the USAEC approval on each shipping paper, related to the shipment of a package containing radioactive material.

(f) Before the initial export shipment of a package containing radioactive material, the shipper shall furnish a copy of the applicable competent authority certificate to the foreign consignee and to the competent national authority of each country into or through which the package will be transported (see § 146.19-10(b)).

(g) If fissile class II radioactive materials are shipped, the shipper shall mark each package with the numerical value for the transport index.

(h) If fissile class III radioactive materials are shipped, each shipper shall comply with any vehicle limitation indicated in the USAEC approval.

(i) If fissile class III radioactive materials are shipped the shipper shall include in the shipping papers the statement as prescribed in § 146.05-12(f) (9) (v).

5. By adding § 146.19-10b to read as follows:

§ 146.19-10b International shipments and foreign-made packages; standard requirements and conditions.

(a) Each shipper of a package containing radioactive material, for which a certificate has been issued by a foreign competent authority and which is otherwise in compliance with §§ 146.19-12, 146.19-10, 146.19-20, and 146.19-100, shall also comply with the following:

(1) Before the first shipment of package containing radioactive material, each shipper shall register his identity in writing with the Office of Hazardous

Materials, U.S. Department of Transportation, 400 Sixth Street SW., Washington, DC 20590, and furnish a copy of the foreign certificate or revalidation thereof, which is applicable to that package.

(2) The shipper shall mark the outside of each package containing radioactive material with the competent authority identification marking, indicated in the certificate or revalidation, in a durable and legible manner.

(3) Each shipper shall note the package identification marking, indicated in the certificate or revalidation on all shipping papers related to the shipment of a package containing radioactive material.

(4) Before the initial export shipment of a package containing radioactive material, the shipper shall furnish a copy of the certificate and any required revalidation to the competent national authority of each country into or through which the package will be transported.

(5) Each shipper shall furnish a copy of the certificate or revalidation to each carrier of fissile class III shipments, by any mode of transport.

(b) The designated competent national authority in the United States responsible for administering the requirements (Marginal C-6) of the International Atomic Energy Agency's (IAEA) "Regulations for the Safe Transport of Radioactive Materials," Safety Series No. 6, 1967 Edition, is:

Office of Hazardous Materials, Department of Transportation, 400 Sixth Street SW., Washington, DC 20590.

(c) Any request for a competent authority certificate required by the IAEA regulations should be submitted in writing to the address given in paragraph (b) of this section. Request must be in duplicate and must contain all the information required by the applicable subsections of Marginal C-6 of the IAEA regulations.

6. In § 146.19-12 by deleting paragraph (d) and by revising paragraph (g) and the first line of paragraph (b) (3) to read as follows:

§ 146.19-12 Fissile radioactive material.

(b) * * *

(3) Additional packagings are listed in § 146.19-100 for not more than the following:

(d) [Deleted]

(g) Fissile class III shipments must be in accordance with the provisions of this paragraph, or in accordance with other procedures authorized by the Coast Guard.

(1) The shipper shall provide a knowledgeable representative in attendance during the loading of fissile class III shipments to assure that nuclear criticality safety is maintained; or

(2) The shipper shall provide for special arrangements and/or instructions on the shipping papers to assure that

nuclear criticality safety is maintained during loading.

(3) The carrier shall load only one fissile class III shipment in a hold and shall protect against loading, transportation or storing of that with other fissile materials.

(4) The carrier shall separate fissile class III shipment by at least 20 feet from other packages bearing the radioactive-yellow labels during handling and storing.

7. By revising § 146.19-18 to read as follows:

§ 146.19-18 Radioactive material in normal form.

Radioactive material in normal form in Type A, Type B, and large quantities must be packaged in authorized packages as listed in § 146.19-100 under radioactive materials, n.o.s.

8. By revising § 146.19-20 *Radioactive material in special form*:

§ 146.19-20 Radioactive material in special form.

Radioactive material in special form in Type A, Type B and large quantities must be packaged in authorized packages as listed in § 146.19-100.

9. By revising § 146.19-35(e) to read as follows:

§ 146.19-35 Stowage and handling aboard vessels.

(e) The carrier shall separate fissile class III shipment from other packages bearing radioactive-yellow labels during handling and stowage by at least 20 feet. The carrier must stow only one fissile class III shipment in any one hold.

§ 146.19-100 [Amended]

10. In § 146.19-100 *Table—Classification: Radioactive materials*, the entry "Fissile radioactive materials" is amended by revising the list of "Outside packaging" in columns 4, 5, 6, and 7, by revising Notes 1 and 2 and by adding Note 3 to read as follows:

Outside packaging:
Authorized for Type A quantities in normal or special form:

Metal packaging (DOT-6L, 6M). See Note 1.
Metal drums (DOT-5B, 5D, 6A, 6B, 6C, 6J, 6K, 17C, 17H, 42B, 42C). See Note 2.

Fiber drums (DOT-21C). See Note 2.
Wooden boxes (DOT-14, 15A, 15B, 15C, 15D, 19A, 19B). See Note 2.

Fiberboard boxes (DOT-12 series, 200-lb. test minimum, DOT 23F, 23H). See Note 2.
Cylinders (DOT-3, 4 series). See Note 2.

Metal-encased shielded packaging (DOT-55). See Note 2.

Type A general package (DOT-7A). See Note 2.

Foreign-made packagings bearing the symbol "Type A," for export and import shipments only. See Note 2.

Any other Type A or B packaging which also meets the pertinent requirements for fissile radioactive materials in the 1967 regulations of the International Atomic Energy Agency, and for which the foreign competent authority certificate has been revalidated by the Department of Transportation.

Any other Type A or B packaging which also meets the standards for packaging for fissile radioactive materials in the regulations of the U.S. Atomic Energy Commission (10 CFR Part 71), and is approved by the U.S. Atomic Energy Commission.

Authorized for Type B quantities in normal or special form:

Metal packaging (DOT-6L, 6M). See Note 3.
Any other Type B packaging which also meets the standards for packaging for fissile radioactive materials in the regulations of the U.S. Atomic Energy Commission (10 CFR Part 71), and is approved by the U.S. Atomic Energy Commission.

Any other Type B packaging which also meets the pertinent requirements for fissile radioactive materials in the 1967 regulations of the International Atomic Energy Agency, and for which the foreign competent authority certificate has been revalidated by the Department of Transportation.

Note 1: See § 146.19-12(b) (1) and (2) for limitations on contents.

Note 2: See § 146.19-12(b) (3) for limitations on contents.

Note 3: See § 146.19-12(c) (1) and (2) for limitations on contents.

11. In § 146.19-100 *Table—Classification: Radioactive materials*, the entry "Radioactive materials, special form" is amended by adding to the list of "Outside packaging" in columns 4, 5, 6, and 7:

(a) Under the heading "Authorized for Type B quantities":

Any other Type B packaging approved by the U.S. Atomic Energy Commission.

Any other Type B packaging which meets the pertinent requirements in the 1967 regulations of the International Atomic Energy Agency, and for which an appropriate certificate has been issued by a foreign competent authority.

(b) Under the heading "Authorized for large quantities":

Any other Type B packaging which meets the pertinent requirements for large quantities of radioactive materials in the regulations of the U.S. Atomic Energy Commission (10 CFR Part 71) and is approved by the U.S. Atomic Energy Commission.

Any other Type B packaging which meets the pertinent requirements for large quantities of radioactive materials in the 1967 regulations of the International Atomic Energy Agency, and for which the foreign competent authority certificate has been revalidated by the Department of Transportation.

12. In § 146.19-100 *Table—Classification: Radioactive materials* the entry "Radioactive materials, n.o.s." is amended:

(a) In column 4 by striking out "Fiber drums (DOT-21)" and inserting "Fiber drums (DOT-21C)" in place thereof.

(b) In column 4 by striking out "Fiberboard boxes (DOT-12 series, 200-lb. test minimum)" and inserting "Fiberboard boxes (DOT-12 series (200-lb. test minimum), DOT-23F, 23H)" in place thereof.

(c) By striking out in columns 4, 5, 6, and 7 "For large quantities, see § 146.19-18" and by inserting in place thereof the following:

Any other Type B packaging approved by the U.S. Atomic Energy Commission.

Any other Type B packaging which meets the pertinent requirements in the 1967 regulations of the International Atomic Energy Agency, and for which an appropriate certificate has been issued by a foreign competent authority.

Authorized for large quantities:

Metal packaging (DOT-6M), authorized only for solid or gaseous radioactive materials which will not decompose up to 250° F. Radioactive thermal decay energy must not exceed 10 watts.

Any other Type B packaging which meets the pertinent requirements for large quantities of radioactive materials in the regulations of the U.S. Atomic Energy Commission (10 CFR Part 71) and is approved by the U.S. Atomic Energy Commission.

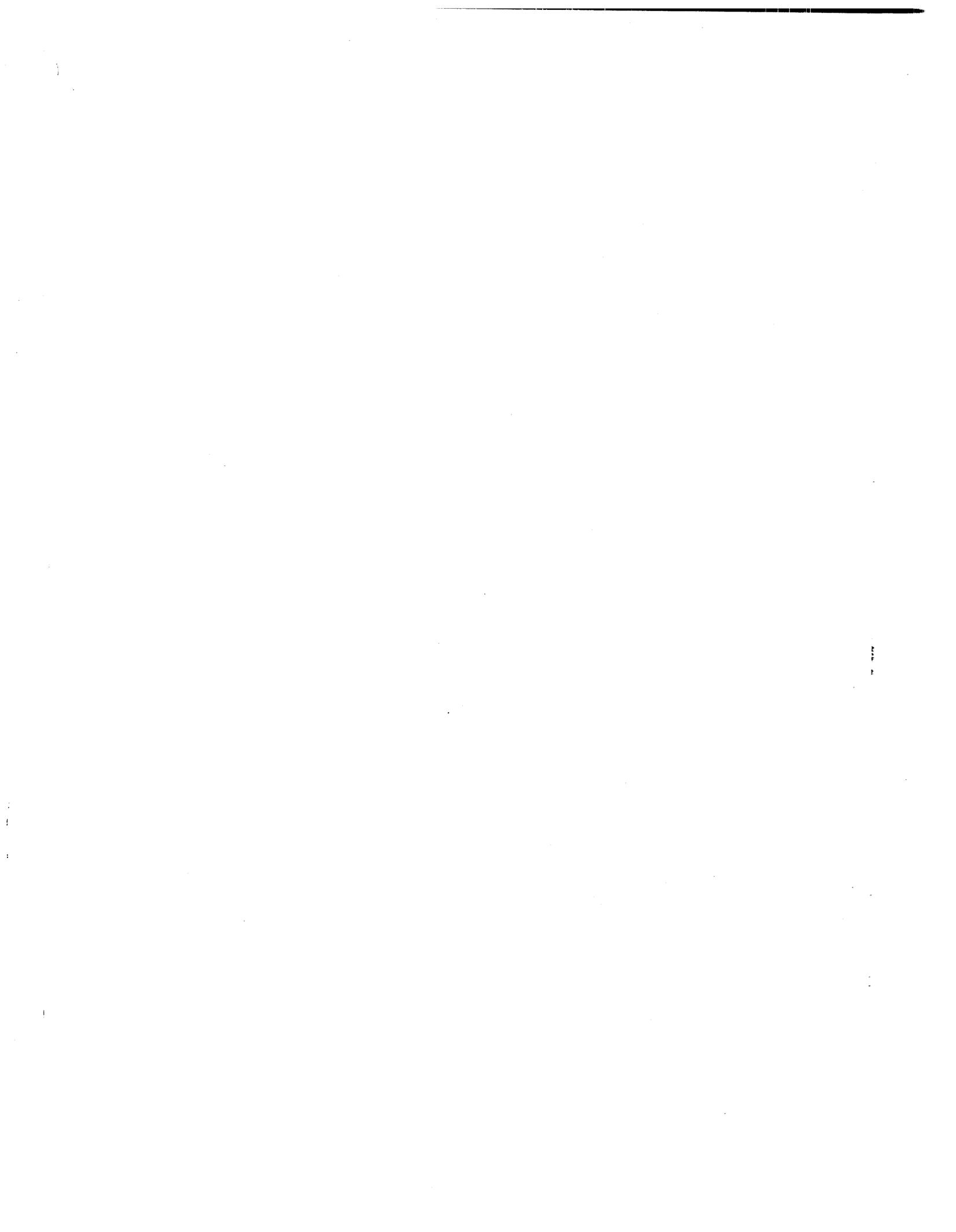
Any other Type B packaging which meets the pertinent requirements for large quantities of radioactive materials in the 1967 regulations of the International Atomic Energy Agency, and for which the foreign competent authority certificate has been revalidated by the Department of Transportation.

(R.S. 4472, as amended; sec. 1, 19 Stat. 252, sec. 6(b)(1), 80 Stat. 937; 46 U.S.C. 170, 49 U.S.C. 1655(b)(1); 49 CFR 1.46(b))

Dated: November 5, 1971.

G. H. READ,
*Captain, U.S. Coast Guard, Acting
Chief, Office of Merchant
Marine Safety.*

[FR Doc. 71-17039 Filed 11-19-71; 8:52 am]



DEPARTMENT OF TRANSPORTATION
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