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DOCKET NUMBER
PETITION RULE PRM 71-12
(63FR 8362)

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OFFICE OF THE SECRETARY
RULEMAKINGS AND
ADJUDICATIONS STAFF

February 6, 2004

Ms. Annette L. Vietti-Cook
Secretary of the Commission
United States Nuclear Regulatory Commission
Washington, D.C. 20555-0001

Dear Ms. Vietti-Cook:

Thank you for your letter dated December 29, 2003 in which you announce the Nuclear Regulatory Commission's (NRC's) decision on my petition for rulemaking, docketed as PRM-71-12, which I submitted to the NRC on September 25, 1997. In your letter you inform me that NRC has reached agreement with me about removal of the double containment requirement of 10 CFR 71.63(b) and that accordingly NRC will "remove the double containment requirement of § 71.63(b)" in keeping with my request.

Your letter continues beyond this announcement to assert that my original petition also requested elimination of 10 CFR 71.63(a). This assertion is not correct.

My original petition letter is explicit in the expression of the petition. My petition states, "I request that 10 CFR 71.63(b) be deleted in its entirety." There is no request for the elimination of 10 CFR 71.63(a). (For your convenience, I have enclosed a copy of my original letter dated September 25, 1997 which conveys my petition.)

My comment regarding 10 CFR 71.63(a) at the close of my original petition letter is simply an acknowledgment that 10 CFR 71.63(a) also relates only to a limited group of radionuclides as does 10 CFR 71.63(b), and therefore, NRC should consider the possible inference ("a corollary") that could be reached by an interested party regarding 10 CFR 71.63(a) if the requested elimination of 10 CFR 71.63(b) were to be accepted by NRC. This was not a request by me to eliminate 10 CFR 71.63(a).

I request that this clarifying letter be included in the record for the NRC rulemaking and decision for PRM-71-12.

Sincerely,

Frank P. Falci
President

Enclosure

Template= SECY-067

SECY-02

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September 25, 1997

Secretary
U.S. Nuclear Regulatory Commission
Attn: Chief, Docketing and Service Branch
Washington, DC 20555-0001

Re: Petition for Rulemaking Pursuant to Provisions of 10 CFR 2.802 Regarding the "Special Requirements for Plutonium Shipments", 10 CFR 71.63

Dear Mr. Secretary:

I have previously communicated with you about the NRC Rulemaking on Requirements for Shipping Packages Used to Transport Vitrified High Level Waste, Docket Number 71-11, by my letter to you dated July 22, 1997. Receipt of my letter was acknowledged by your office in a notice postmarked July 25,1997.

One of my earlier comments was:

> "The Notice of Proposed Rulemaking referred to a NRC Staff Requirements Memorandum (SRM) dated October 31, 1996. This SRM directed the staff to initiate and expedite the Notice of Proposed Rulemaking and this has been accomplished. The SRM also stated, 'In the longer term, the staff should also address whether the technical basis for 10 CFR 71.63 remain valid, or whether a revision or elimination of portions of 10 CFR 71.63 is needed to provide flexibility for current and future technologies.' This broader look at 10 CFR 71.63 is to be completed by September 26, 1997. I recommend that pursuit of the total elimination of 10 CFR 71.63 be undertaken forthwith."

In keeping with the intent of my earlier recommendation, I hereby petition the U. S. Nuclear Regulatory Commission (NRC) for a rulemaking under the provisions of 10 CFR 2.802. I request that 10 CFR 71.63 (b) be deleted in its entirety.

This action is needed to remove from Nuclear Regulatory Commission regulations, provisions which cannot be supported technically or logically. Based on the "Q-System for the Calculation of $A_1$ and $A_2$ Values", an $A_2$ quantity of any radionuclide has the same potential for damaging the environment and the human species as an $A_2$ quantity of any other radionuclide. Therefore, the requirement that a Type B package must be used whenever package content exceeds an $A_2$ quantity should be applied consistently for any radionuclide. That is, if a Type B package is sufficient for a quantity of radionuclide X which exceeds $A_2$, then a Type B package should be sufficient for a quantity of radionuclide Y which exceeds $A_2$. And this should be similarly so for every other radionuclide.

While the regulations do embrace this simple logical congruence for the most part, the congruence fails under 10 CFR 71.63 (b) wherein packages containing plutonium must include a separate inner container for quantities of plutonium having a radioactivity exceeding 20 curies (with certain exceptions).

If the NRC allows this failure of congruence to persist, these regulations will be vulnerable to the following challenges:

(1) The logical foundation of the adequacy of $A_2$ values as a proper measure of the potential for damaging the environment and the human species, as set forth under the Q-System, is compromised.

(2) The absence of a radioactivity limit for every radionuclide which, if exceeded, would require a separate inner container, is an inherently inconsistent safety practice.

(3) The performance requirements for Type B packages as called for by 10 CFR 71 establish containment conditions under different levels of package trauma. The satisfaction of these requirements should be a matter of proper design work by the package designer and proper evaluation of the design through regulatory review. The imposition of any specific package design feature such as that contained in 10 CFR 71.63 (b) is gratuitous. The regulations are not formulated as package design specifications, nor should they be.

In addition, the continuing presence of 10 CFR 71.63 (b) engenders excessively high costs in the transport of some radioactive materials with no clearly measurable net safety benefit. This is so in part because the ultimate release limits allowed under 10 CFR 71 package performance requirements are identical with or without a "separate inner container", and because the presence of a "separate inner container" promotes additional exposures to radiation through the additional handling required for the "separate inner container". Further, excessively high costs occur in some transport campaigns. One instance of such damage to our national budget is in the transport of transuranic wastes. Large numbers of transuranic waste drums must be shipped in packages which have a "separate inner container" to comply with the existing rule. Large savings would accrue without this rule.

The elimination of 10 CFR 71.63 (b) in its entirety would resolve these regulatory defects.

I recognize that the arguments presented here also reflect upon 10 CFR 71.63 (a) because 10 CFR 71.63 (a) also relates only to a limited group of radionuclides. I request that NRC consider this matter as a corollary to the basic petition.

Sincerely,

Frank P. Falci
President

FPF/aw