



DOCKET NUMBER  
PROPOSED RULE ~~PR 71~~  
(67FR21390)

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July 25, 2002

DOCKETED  
USNRC

Secretary  
U.S. Nuclear Regulatory Commission  
Washington, DC 20555-0001

August 6, 2002 (3:30PM)

OFFICE OF SECRETARY  
RULEMAKINGS AND  
ADJUDICATIONS STAFF

Attn. Rulemaking and Adjudications Staff

**Subject: Proposed Rulemaking Pursuant to Provisions of 10 CFR 2.802 Regarding PRM-71-12**

Dear Secretary:

For the reasons set forth below, the Arizona Radiation Regulatory Agency (ARRA) strongly opposes the Nuclear Regulatory Commission (NRC) proposal under Issues 17 to remove the double containment requirement of Sec. 71.63(b) for shipments of radioactive material containing quantities of plutonium exceeding 20 curies. Existing container requirements for these shipments represent the minimum standards necessary for safety, security, and public acceptance. We believe that NRC's proposed relaxation of these requirements would be unacceptable. ARRA also strongly endorses the NRC's proposal to retain the requirement that shipments whose contents exceed 20 curies of plutonium must be made in a solid form as provided under Section 71.63(a).

The proposed rule change to remove the double containment requirement is inconsistent with our nation's commitment to reducing vulnerabilities to emerging terrorist threats. Given the heightened awareness of possible terrorist attacks, widespread public fear of anything "nuclear" or "radioactive", and public concern over the safety of nuclear waste shipments, We believe that the NRC should not relax the double containment requirement until NRC completes a valid safety assessment comparing the vulnerability of single versus double containment to acts of terrorism. A recent National Academy of Sciences study to develop recommendations for making the nation safer against terrorism concluded that the NRC should "tighten regulations for obtaining and possessing radiological sources that could be used in terrorist attacks, as well as requirements for securing and tracking these sources." Clearly, the trend post-September 11 is toward stricter, rather than more relaxed, safety standards for radioactive materials.

The original rationale for establishing the double containment requirement in 1974 is still valid. In 1974, the Atomic Energy Commission (AEC) imposed the double containment requirement, when large numbers of plutonium shipments were anticipated from commercial reprocessing of spent nuclear fuel. AEC's regulatory concern was on the increased possibility of human error combined with the expected increase in the number of shipments and that this would yield an increased probability of leakage during shipment. Although commercial reprocessing was abandoned in the US in the late 1970's, a large increase in plutonium shipments is once again anticipated from the US Department of Energy's programs for facilities' clean-up, waste management, R & D, and weapons dismantlement. With such an increase in shipments, the potential for human error (e.g., improperly assembled and closed packages) and transport incidents would similarly be expected to increase.

The NRC justifies its recommendation for eliminating the double containment requirement by arguing that "the worldwide performance record over 40 years of Type B packages demonstrates that a single containment barrier is adequate". However, this record only reflects accidental releases of plutonium, not potential deliberate acts of aggression or terrorism. As no new risk related studies were cited in the proposed rulemaking, it appears that none have been conducted on this issue.<sup>1</sup> Further, the petitioner who originally proposed the rule change argues that single containers would be safer for the personnel who currently must handle the inner container. Adopting a single containment requirement may, in effect, just be shifting the probabilities of risk from the package handlers to the general public. However, until studies are done, such a shift cannot be justified

Managing the transportation of transuranic (TRU) waste from United States Department of Energy (DOE) facilities to the Waste Isolation Pilot Plant (WIPP) in southeastern New Mexico is the joint responsibility of federal, state, local, and tribal governments. At the heart of this WIPP transport safety program is the TRUPACT II double containment packaging. The public was led to believe that the extra barrier provided by double containment along with adoption of the other transportation safety protocols and double containment packaging would lead to safe shipments. We are concerned that removal of the double containment requirement could seriously erode public confidence in the WIPP transportation safety program, particularly since it is not supported by any studies to show that the change in risk is minimal.

In the two and a half years since WIPP opened, the WIPP transport safety protocols have been fully implemented and are now accepted. Western Governors believe strict adherence to these protocols has not only resulted in the safe and uneventful transportation of more than 1,000 truckloads of TRU waste to WIPP but fostered public confidence as well. Yet, this safety record could be jeopardized if the rule on double containment is relaxed, unless the NRC obtains scientific evidence that demonstrates beyond a reasonable doubt that single containment is as safe as double containment. The NRC should also weigh the potential damage to public confidence in the WIPP shipments if the double containment requirements are relaxed.

In conclusion, we believe that it is inappropriate for NRC to reduce the required levels of protection for plutonium shipments, when there is no compelling technical or scientific basis provided for doing so, when the numbers and quantities of plutonium shipments are expected to sharply increase, and when concern about potential acts of aggression against RAM shipments has risen. The NRC's proposal to relax the double containment requirement for plutonium shipments is flawed in its failure to provide the necessary analyses needed to compare the costs, safety benefits, and radiation exposure trade-offs for single versus double containment or to demonstrate that the existing regulations are overly burdensome. We are concerned that eliminating the requirement for double containment could jeopardize existing transportation programs, such as the WIPP transport safety program. DOE's commitment to using double containment packages for transporting wastes to WIPP is fundamental

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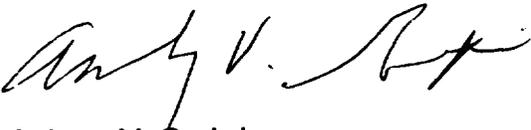
<sup>1</sup>It is worth noting that in July 1986 EEG "EEG-33: Adequacy of TRUPACT-1 Design for Transporting Contact-Handled Transuranic Waste to WIPP. On page -iv- of this document EGG states: A *principal advantage of a TRUPACT with double containment is the estimated decrease from 12 to .02 in the number of accidents involving radionuclide releases during the WIPP Project. Even minor accidents involving little public radiation exposure are costly to monitor and clean up and can decrease public confidence in the safety of radioactive material shipments. An additional advantage of double containment is the extra protection it is expected to provide in the event of a low level probability (0.1-1%) high consequence accident. These very severe accidents could result in up to 10-30 latent cancer fatalities with the present design. Double containment is estimated to reduce this by at least 60% to 80%.*

to the WIPP transport program and the public acceptance of these shipments. We strongly oppose the proposed elimination of the double containment standard.

Should the NRC continue to pursue the proposal to relax the plutonium shipment double containment standards, then, we believe it necessary for the NRC to conduct a series of hearings on the rulemaking, with at least one of those hearings held in the west.

In addition we wish to point out that Issue 8 will have a major impact on future clean up operations in this country. Proposed 19CFR71.19 would make the return of fixed gauges to the manufacturer extremely expensive after three years. All of the returns of these gauges, i.e. clean-ups, would have to be in a special overpack to make the container comply with the new standards. From the information presented in the proposal it is not clear how much improvement in the protection of the public health and safety is to be achieved

Sincerely,

A handwritten signature in black ink, appearing to read "Aubrey V. Godwin". The signature is fluid and cursive, with a prominent initial "A" and a long, sweeping tail.

Aubrey V. Godwin  
Director