

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

In the Matter of

NRC CERTIFICATE OF COMPLIANCE
NO. 6698 FOR RADIOACTIVE
MATERIALS PACKAGES

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) Docket No. 71-6698
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ORDER TO SHOW CAUSE (IMMEDIATELY EFFECTIVE)

I

On November 14, 1972, a Certificate of Compliance under 10 CFR Part 71 was issued to Nuclear Fuel Services, Inc., for Model No. NFS-4 cask design. The latest license expired on December 31, 1980, and is currently under timely renewal.

The packaging ("cask") identified as Serial No. NAC-1D is one of seven casks manufactured to the Model No. NFS-4 design. All seven were suspended from service by the Commission's April 6, 1979 Order concerning structural integrity. On December 12, 1979, after further evaluation of the structural integrity, the Commission permitted three casks, including Cask Serial No. NAC-1D, to return to service with certain restrictions on their use.

II

On at least seven occasions between August 1980 and July 1981, following offsite transportation, the cask displayed impermissibly high levels of surface contamination under the Department of Transportation's regulations, 49 CFR §173.397. Following the discovery of the excessive contaminations, the cask, before reshipment, was required to be decontaminated to the levels permitted by 49 CFR §173.397. After transportation following the decontaminations, the cask repeatedly arrived with surface contamination exceeding the permissible limits of 22,000 dpm/100 cm² by as much as 2,000,000 dpm/100 cm². The increase in surface contamination exhibited following transport suggests that contamination which originally was fixed, was released in transit. The reason for this excessive contamination, which may be related to the surface finish of the cask, is not fully understood. There appears to be no reasonable assurance that future shipments of the cask would be within the surface contamination limits set forth in 49 CFR §173.397.

III

In view of the repeated instances of excessive surface contamination, in violation of 49 CFR §173.397, reasonable assurance does not now exist that the public health and safety will not be jeopardized by the continued use of this cask. Therefore, I find that the public health, safety and interest require immediate suspension of use of cask Model No. NFS-4, Serial No. NAC-1D.

IV

In view of the foregoing and pursuant to Sections 57, 62, 81, and 161(b) of the Atomic Energy Act of 1954, as amended, and the Commission's regulation in 10 CFR Parts 2 and 71, IT IS HEREBY ORDERED THAT:

- (A) Use of the cask designated as Model No. NFS-4, Serial No. NAC-1D, outside the confines of a licensed facility or plant is suspended, effective immediately; provided that, for the sole purpose of attempting to requalify the cask for use outside the confines of a licensed facility or plant, it may be transported (empty) once to an appropriate testing/rehabilitation site, subject to the following procedures:
- (1) Prior to shipment, surface contamination of the cask shall not exceed the levels permitted by 49 CFR §173.397.
 - (2) The cask shall be packaged in plastic bagging covering the entire external surface of the cask except the trunnions, which shall be covered with tape. The bagging shall be secured with tape and banding.
 - (3) A health physics technician carrying monitoring instruments and extra tape, shall accompany the shipment.
 - (4) The integrity of the bagging shall be verified at transport intervals of not more than 80 miles.
- (B) The owner/user show cause, as specified in Section V of this Order, why the suspension of the general license should not be continued until the Director, Office of Nuclear Material Safety and Safeguards, finds there is reasonable assurance that surface contamination levels will not exceed the requirements of 49 CFR §173.397 at any point during future shipments of the cask.

In determining whether there is reasonable assurance that the cask will not experience excessive contamination levels in transport, the Director will consider among other things:

- (1) The extent of the understanding of the cause of the excessive surface contamination (e.g., improper decontamination of cask surfaces and condition of cask surfaces).
- (2) The action taken to refurbish the cask surfaces and/or decontamination procedures to be used compatible with user waste treatment facilities.
- (3) Tests performed which simulate transport conditions to demonstrate the response to Items (1) and (2) above are correct and that excessive contamination levels will not be experienced.

V

An owner/user to whom this order applies may show cause within 25 days of the date of this Order by filing a written answer under oath or affirmation which sets forth the matters of fact and law on which the licensee relies. The owner/user may answer, as provided in 10 CFR §2.202(d), by consenting to the entry of an order in substantially the form proposed in this Order to Show Cause. Upon failure of the owner/user to file an answer within the specified time, the Director, Office of Nuclear Material Safety and Safeguards, may issue without further notice an order continuing the suspension as described in Section IV above.

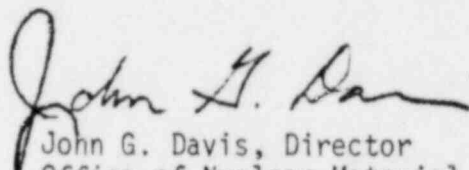
VI

The owner/user or any other person who has an interest affected by this order may request a hearing within 25 days of the date of this Order. Any answer to this Order or any request for hearing shall be filed with Mr. John G. Davis, Director, Office of Nuclear Material Safety and Safeguards, U.S. Nuclear Regulatory Commission, Washington, DC 20555. Copies shall also be sent to the Secretary of the Commission and the Executive Legal Director at the same address. If a person other than the owner/user requests a hearing, that person shall describe specifically, in accordance with 10 CFR §2.714(a)(2), the nature of the person's interest and the manner in which that interest is affected by this Order. ANY REQUEST FOR A HEARING SHALL NOT STAY THE IMMEDIATE EFFECTIVENESS OF SECTION IV (A) OF THIS ORDER.

VII

If a hearing is requested, the Commission will issue an Order designating the time and place of any hearing. If a hearing is held, the issue to be considered at any such hearing shall be whether this Order should be sustained.

FOR THE NUCLEAR REGULATORY COMMISSION



John G. Davis, Director
Office of Nuclear Material Safety
and Safeguards

Dated at Bethesda, Maryland
this 22 day of July 1981.