

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Nuclear Fuel Services, Inc. 1205 Banner Hill Road Erwin, TN 37650

(423) 743-9141

ACF-97-244 21G-97-0144 GOV-01-55 December 22, 1997

Mr. Cass R. Chappell, Chief
Package Certification Section
Spent Fuel Project Office
Office of Nuclear Material Safety & Safeguards
U. S. Nuclear Regulatory Commission
Washington, DC 20555

SUBJECT: Certificate of Compliance No. 6400, Docket No. 71-6400, Request for Exemption

Nuclear Fuel Services, Inc. (NFS) hereby requests an exemption from the requirements of paragraphs 5.(b)(2) and 5.(b)(4) of the subject certificate. Information supporting this request is attached for your review and approval.

If you have any questions, please contact me at the above address or telephone me at 423-743-1721. Please reference our unique document identification number 21G-97-0144 in any correspondence related to this matter.

Very truly yours,

NUCLEAR FUEL SERVICES, INC.

Thomas S. Baer, PhD

Vice President

Safety and Regulatory

/ln-pdj

Attachment

MOI



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# Copy:

Mr. William Gloersen
Project Inspector
U.S. Nuclear Regulatory Commission
Region II
Atlanta Federal Center
61 Forsyth Street, SW
Suite 23T85
Atlanta, GA 30303

Mr. Gary Humphrey
US NRC Resident Inspector

Regional Administrator
U.S. Nuclear Regulatory Commission
Region II
Atlanta Federal Center
61 Forsyth Street, SW
Suite 23T85
Atlanta, GA 30303

# ATTACHMENT to Letter T. S. Baer to C. R. Chappell dated December 22, 1997

# I. REQUEST FOR EXEMPTION TO PARAGRAPH 5.(b)(2)

#### Introduction

NFS is requesting an exemption to paragraph 5.(b)(2) of Certificate of Compliance No. 6400 to allow for alternative packaging of hard waste items.

## Discussion

The current language in paragraph 5.(b)(2) requires that hard waste items "must be double bagged in 12-mil thick PVC, with each bag heat sealed." Research by NFS into the basis for this requirement reveals that it is identical to the soft waste packaging requirement.

The requirement for double bagging in a specified thickness of PVC reflects the in-plant contamination control operations conducted by Westinghouse at the time. The hard waste items were contained in gloveboxes. Double-bagging operations were performed, as submitted in Section 2.2.2 of the Westinghouse reference document, for contamination control in the specific operations unique to Westinghouse's facility. The bag specifications and the double bagging requirement were not based on transportation issues.

### **Proposed Exemption**

NFS requests an exemption to the double-bagging requirement specified in paragraph 5.(b)(2) for situations where hard waste items have already been placed in DOT specification packages, such as 17H or 17C steel drums (maximum size of 55 gallons) equipped with a lid and closed with a standard drum closing device, but the hard waste items within the packages have not been double bagged. In such situations, the entire drum will have fixative applied and will be double bagged with 12-mil thick poly bags. Each bag will be individually heat sealed. The external double bagging of the entire drum will be considered equivalent to the requirements of paragraph 5.(b)(2).

#### **Justification**

The proposed exemption will be applied only when a documented ALARA determination has been made by the waste generator and demonstrates that opening and repackaging the hard waste items would violate the ALARA principles of the waste generator.

The proposed exemption does not reduce the level of contamination control currently in the Certificate of Compliance. This change will allow safe transport of previously packaged TRU waste without requiring the inherent worker exposure and violation of ALARA that would result if these drums required repackaging to comply with the existing paragraph 5.(b)(2).

Double bagging of the package contents is a reasonable practice for on-site contamination control and for ease of packaging of waste prior to shipment, but adds little or nothing to the safe transportation of the waste. NFS is addressing only the cases where the waste material has already been packaged in a manner different from that contemplated in the Certificate of Compliance, as described in the Westinghouse packaging procedure.

## **Reference**

Westinghouse Nuclear Fuels Division, Plutonium Fuels Development Laboratory, "Information For Plutonium Waste Drum Shipments," April 3, 1979.

# II. REQUEST FOR EXEMPTION TO PARAGRAPH 5.(b)(4)

#### Introduction

NFS is requesting an exemption to paragraph 5.(b)(4) of Certificate of Compliance No. 6400, to allow for alternative packaging of soft waste items.

#### **Discussion**

The current language in paragraph 5.(b)(4) requires that soft waste items "must be double bagged in 12-mil thick PVC, with each bag heat sealed (bag size must not exceed 22" X 16" X 10")." Research by NFS into the basis for this requirement indicates it was the result of a submittal to the NRC by Westinghouse dated April 5, 1979. A close review of the original Westinghouse text reveals that the "typical" bag size was 22" X 16" X 10". When Certificate of Compliance 6400, Rev. 5 was issued, the words were changed by the NRC staff to "must not exceed."

The requirement for double bagging in a specified thickness of PVC reflects the contamination control operations conducted by Westinghouse at the time. The operation was a bag-out operation from gloveboxes. Double-bagging was performed, as submitted for contamination control in the specific operations unique to the Westinghouse facility. The bag specifications and the double bagging requirement were not based on transportation issues.

# **Proposed Exemption**

NFS requests an exemption to the double-bagging requirement specified in paragraph 5.(b)(4) for situations where soft waste items have already been placed in DOT specification packages, such as 17H or 17C steel drums (maximum size of 55 gallons) equipped with a lid and closed with a standard drum closing device, but the soft waste items within the packages have not been double bagged. In such situations, the entire drum will have fixative applied and will be double bagged with 12-mil thick poly bags. Each bag will be individually heat sealed. The external double bagging of the entire drum will be considered equivalent to the requirements of paragraph 5.(b)(4).

#### **Justification**

The proposed exemption will be applied only when a documented ALARA determination has been made by the waste generator and demonstrates that opening and repackaging the soft waste items would violate the ALARA principles of the waste generator.

The proposed exemption does not reduce the level of contamination control currently in the Certificate of Compliance. This change will allow safe transport of previously packaged TRU waste without requiring the inherent worker exposure and violation of ALARA that would result if these drums required repackaging to comply with the existing paragraph 5.(b)(4).

Double bagging of the package contents is a reasonable practice for on-site contamination control and for ease of packaging of waste prior to shipment, but adds little or nothing to the safe transportation of the waste. NFS is addressing only the cases where the waste material has already been packaged in a manner different from that contemplated in the Certificate of Compliance, as described in the Westinghouse packaging procedure.

#### Reference

Westinghouse Nuclear Fuels Division, Plutonium Fuels Development Laboratory, "Information For Plutonium Waste Drum Shipments," April 3, 1979.