



UNIVERSITY OF MISSOURI-COLUMBIA

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Research Reactor Center

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L22422

Research Park
Columbia, Missouri 65211
Telephone (573) 882-4211
FAX (573) 882-3443

March 13, 1997

Ms. Gloria Bennington
U.S. NRC, MS TWFN 8 F-5
1 Whiteflint North
11545 Rockville Pike
Rockville, MD 20852-2738

SUBJECT: Shipment of Spent Fuel: Radioactive Material, Fissile, N.O.S., UN2918, Highway Route Controlled Quantity.

The enclosed envelope contains information regarding radioactive spent fuel shipments from the University of Missouri Research Reactor. This information has been classified as SAFEGUARDS INFORMATION as per 10CFR73.21(b)2. No person may have access to Safeguards Information unless the person has an established "need to know" for this information and is authorized per 10CFR73.21(c). Regulations prevent the disclosure of this information over unsecured telephone communications except that the reporting of schedule changes are permitted to be made by phone in the form of time deviations from the original schedule. Please deliver the enclosed envelope which contains Safeguards Information to the addressee on the envelope. If this person is no longer employed at your facility or will be absent for an extended period, please call (573) 882-5205 for the correct disposition of this material.

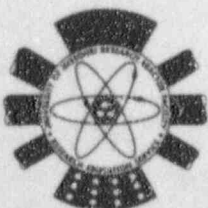
Armed escorts have been arranged for St. Louis, Nashville, Chattanooga, Atlanta, and Augusta, for these spent fuel shipments. Also, governors' designees of Missouri, Illinois, Kentucky, Tennessee, Georgia and South Carolina have been mailed notifications.

The following information and the enclosed SAFEGUARDS INFORMATION are supplied to comply with 10CFR73.37(f)(i)(ii)(iii).

Shipper: University of Missouri
Research Reactor Center
Columbia, MO 65211
Phone: (573) 882-5205
(Das Kutikkad)

Carrier: Tri-State Motor Transit Co
U.S. DOE Idaho Operations Office
785 DOE Place
Idaho Falls, ID 83403
Phone: (208) 526-2415
(Keith Nelson)

Receiver: Department of Energy
Westinghouse Savannah River Company
Savannah River Site
Aiken, SC 29802
David Blanchard
Building 105-L
Phone: (803) 208-8994



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49CFR172.202(a)(1)(2)(3)(4)

Proper shipping name, hazard
class, identification number,
gross weight

RQ radioactive material, fissile, n.o.s., 7, UN2918,
25,000 lbs.

172.203(c)

RQ (Reportable Quantity) 1.5 kg of fission products;
4.91 kg U-235

49CFR172.203(d)(1)

(i) 173.435, radionuclides

MFP (Mixed Fission Products)

(ii) Physical and chemical form

Solid metallic, UAl_3 and Al mixed with fission products
trapped in this matrix. The UAl_3 -Al-fission product
material is clad with aluminum as fuel plates of MTR-
type (Materials Testing Reactor) fuel elements.
Original fuel enrichment > 93%.

(iii) Activity (Curies)

119,000 Curies

49CFR173.403

Greater than 27,000 Ci or 3,000 x A_2 (1,500 curies), so
highway route controlled quantity.

(iv) Label category

RADIOACTIVE YELLOW III because it is highway
route controlled quantity.

(v) Transport index

Based on measurement of radiation level at 3.3 ft. from
cask cover. This is measured at the time of shipment,
and in our past shipments, has been < 0.5 millirem/hr.
Hence TI = .5 per 49CFR173.403.

(vi) Fissile material,
controlled shipment

49CFR173.45(7)(b). This means by 49CFR
173.457(b)(1) that transport must be with exclusive use
of shipper.

(vii) Package identification number

USA/5957/B()F (Model No. BMI-1)

Mode of transport

Highway truck, exclusive use. No transfer points.
Route enclosed as Safeguards Information.

Sincerely yours,



Das Kutikkad
Reactor Physicist

bjb

Enclosure: SAFEGUARDS INFORMATION