

MEMORANDUM

Date: March 19, 1998

From: Roy McLain *ARM*
Department of Energy-Savannah River Operations Office
P.O. Box A
Aiken, SC 29801

To: Gloria Hennington, Fax 301-415-8555

Confirming our conversation yesterday with Franchone at Edlow, I have included two letters which I think will provide the information you need. The route mentioned in the letters (I-26, US 301, SC 125) has since changed to I-26, US 301, SC 70, SC 64 to comply with the provisions of 49 CFR 397.101 [c] [2].

The last attachment is a page from the Tri-State Transportation Plan for spent fuel shipments from Brookhaven Labs to Savannah River Site. The route includes US 301, SC 70, SC 64.

If you have any questions my phone number is 803-725-2206 or e-mail
roy.mclain@srs.gov.

Thanks

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PDR ADOCK 07001252
C PDR

Office of the Commissioner Telephone: (803)734-4880 Fax: (803)734-3319

January 17, 1997

Hon. Hazel R. O'Leary
Secretary of Energy
U.S. Department of Energy
1000 Independence Avenue, S.W.
Washington, DC 20585

Re: Foreign Research Reactor Spent Fuel Transportation
Proposed Highway Routing

Dear Secretary O'Leary,

Staff of the Department of Energy are about to initiate transportation of foreign research reactor spent fuel using the wrong highway route. Your staff is apparently deferring to the contractor, who in turn apparently bases its choice of route on overly simplistic criteria.

The Department of Energy proposes to bring spent fuel from foreign research reactors into the Port of Charleston, S.C., and then transport the fuel elements by highway to the Savannah River Site. Shipments of high-level nuclear materials have been moved over South Carolina highways without incident for a number of years; however, DOE and its contractor now propose to change the routing in a way which I think is most unwise.

DOE's contractor for this project has stated its intention to bring the fuel casks up I-26 from Charleston all the way to Columbia, then down I-20 to one of the exits near the Savannah River Site. DOE contractors and other shipper have successfully used a shorter and more direct route since 1975 for shipments of spent fuel and Highway Route Controlled quantities of low level waste.


While it is true that the primary interstate system is typically the "Preferred Route," it makes no sense in this situation to haul spent fuel from Charleston to Columbia to SRS over interstates. The route is 50% longer than the direct route, and it transits the I-26/I-126/I-20 interchange, which has one of the highest accident rates in the state. In fact, the area surrounding this interchange is known locally as "Malfunction Junction." The direct and customary route is an acceptable alternative meeting the 49 CFR Subpart D criteria for alternative

routing of Class 7 (Radioactive) materials. Neither the contractor nor SRS staff have offered any explanation for the choice of I-26/I-20 other than that it is interstate.

The alternative route (from Charleston via I-26 to US 301; US 301 to SC 125; SC 125 to the Savannah River Site) is safer, shorter, and faster. The Nuclear Regulatory Commission has approved it in accordance with nuclear safeguards criteria. State and local officials are familiar with it. If there is some compelling reason DOE is unwilling to consider it now, after using it for 20 years or more, we have not been told what that reason is.

Please review this with your staff. I believe you will find that the shorter, less congested route is the safer and wiser choice.

Sincerely,


Douglas E. Bryant
Commissioner

cc: Hon. David M. Beasley
Hon. Strom Thurmond
Hon. Fritz Hollings
Hon. Floyd Spence
Hon. John Spratt
Hon. James Clyburn
Hon. Robert Inglis
Hon. Mark Sanford
Hon. Lindsey Graham

August 30, 1996

Mr. Roy McLain, Transportation Manager
U.S. Department of Energy
Savannah River Operations Office
P.O. Box A
Aiken, SC 29802

Dear Mr. McLain:

During the July 30, 1996, meeting held by the Department of Energy (DOE) with representatives of the Foreign Research Reactor Spent Nuclear Fuel Transportation Group, DOE requested comments and concerns regarding the highway routing in South Carolina as an alternative to rail shipments.

Members of my staff expressed their concerns of using the I-26 and I-20 route. It was recommended that if it becomes necessary to make highway shipments from Charleston, these shipments should depart I-26 at the US 301 intersection, proceed on US 301 to Allendale, to North 125, to the Savannah River Site (see attachment 1).

This route is considered consistent with the intent of 49-CFR Subpart D-Routing of Class 7 (Radioactive) Materials (attachment 2), avoids heavily populated areas and minimizes travel time. Section 397.101(a)(2) requires the consideration of accident rates, transit time, population densities, the time of day and level of radiological risk. In addition, paragraph (c)(2) allows deviation from the interstate system if the delivery route is the shortest-distant and more direct to reduce travel time.

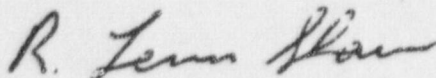
The US 301 route is similar and consistent with those which have been used in the past since highway routing of large quantities of radioactive material was first mandated by HM-164. Those routes were also approved by the U.S. Nuclear Regulatory Commission (NRC) for security purposes.

It is therefore recommended that DOE consider the I-26, to US 301 to 125, to SRS route for the proposed foreign spent fuel shipments, and for the contract carrier (licensee) to submit this route to the NRC for their approval. Similarly, proposed shipments which originate in Canada and Northern States and enter South Carolina on I-95, should also be routed on US 301 below Santee. We also encourage DOE to route all Idaho bound highway shipments through SRS for inspection purposes, and depart South Carolina via 125, 25, and I-20 thus avoiding other heavily populated areas.

Mr. Roy McLain
U.S. Department of Energy
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Should you have any questions, please do not hesitate to contact me or Virgil Autry of my staff at (803) 896-4244.

Sincerely,



R. Lewis Shaw, P.E.
Deputy Commissioner for EQC

MCLAIN/sdl

Attachments

cc: Beth Partlow, Office of the Governor
Captain Ben Thomas, SLED
Bob Duggleby, EPD
Bill Clark, DOE-SRS
Ron Kinney, Emergency Planning
Virgil Autry, Radioactive Waste Mgmt.

HIGHWAY ROUTE CONTROLLED RADIOACTIVE MATERIAL SHIPMENT

PRO NO. _____

SHIPPER Portsmouth Marine Terminal

CITY & STATE Portsmouth VA

CONSIGNEE Savannah River Plant

CITY & STATE Dunbarton SC

EQUIPMENT _____

DRIVERS _____

DATE _____

ROUTING VA-Seaboard Road-Wesley Street-Chataugua Ave-S164

I664-U58-I95-NC-I95-SC-I95-I301-SC70-SC64

DEPARTURE & TIME _____

ETA AT CONSIGNEE _____

PLANNED STOPS See below

TELEPHONE # FOR EMERGENCY ASSISTANCE EACH STATE

VA 804-674-2400 _____

NC 919-733-5282 (after hours) _____

NC 919-733-3861 _____

SC 803-896-4244 _____

Planned stops will be at major truck stops on the designated route or tri-state terminals no more than five (5) miles from the designated route. Any deviations from this must be brought to the attention of the RAM people in Joplin, MO when it happens.

MUST HAVE ESCORT FROM PORT TO STATE LINE