

August 25, 2011

Mr. Ralph A. Butler
Director
University of Missouri Research Reactor
1513 Research Park Drive
Columbia, MO 65211

SUBJECT: EXTENSION OF USE OF DOT SPECIFICATION 20WC AND 6M PACKAGES,
REVISION NO. 2

Dear Mr. Butler:

As requested by your application dated August 17, 2011, and pursuant to 10 CFR Part 71, this letter constitutes authorization for the transport of Type B quantities of radioactive material in DOT Specification 20WC-1 and 6M packages with the following conditions:

1. All shipments must be made in accordance with DOT Special Permit No. DOT-SP 14657, dated July 22, 2011.
2. The packaging and contents are as described in University of Missouri, Research Reactor Center, application dated August 17, 2011.
3. This authorization is for a total of 1500 shipments, to include shipments made beginning October 1, 2008, through August 31, 2012.
4. This authorization expires on August 31, 2012.

FOR THE U.S. NUCLEAR REGULATORY COMMISSION

/RA/

Michael D. Waters, Chief
Licensing Branch
Division of Spent Fuel Storage and Transportation
Office of Nuclear Material Safety
and Safeguards

Docket No. 71-9343
TAC No. L24563

Enclosures: Safety Evaluation Report

cc: R. Boyle, Department of Transportation

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SAFETY EVALUATION REPORT
Docket No. 71-9343
DOT SPECIFICATION 20WC AND 6M PACKAGES
UNIVERSITY OF MISSOURI RESEARCH REACTOR CENTER
Revision No. 2

SUMMARY

By application dated August 17, 2011, University of Missouri, Research Reactor Center (MURR), requested continued authorization to use DOT Specification 20WC-1 and 6M packages beyond the package authorization expiration date of October 1, 2008.

Based on the statements and representations in the application, the staff agrees that the extension of use of the package, with the additional conditions stated below, meets the requirements of 10 CFR Part 71.

BACKGROUND

NRC amended the regulations in 10 CFR Part 71, effective October 1, 2004, to be compatible with the 1996 edition of the International Atomic Energy Agency (IAEA), "Regulations for the Safe Transport of Radioactive Material" (TS-R-1, as amended in 2000). As a result, certain transportation packages that are compatible to the IAEA 1967 edition will no longer be authorized for use under the 10 CFR Part 71 general license after October 1, 2008.

By application dated August 22, 2008, MURR requested authorization to use DOT Specification 20WC-1 and 6M packages beyond the package authorization expiration date of October 1, 2008. MURR submitted the request and supplied the information as described in U.S. Nuclear Regulatory Commission, Regulatory Issue Summary 2008-18, "Information on Requests for Extending Use of Expiring Transportation Packages." DOT Special Permit No. DOT SP-14657 was issued on September 5, 2008, followed by NRC authorization on September 29, 2008, permitting MURR's use of the DOT Specification 20WC-1 and 6M packages until August 31, 2010. MURR requested additional continued use by letter dated June 25, 2010. On July 12, 2010, the U.S. Department of Transportation issued Special Permit No. DOT-SP 14657, to the University of Missouri, Columbia Research Reactor Facility, to authorize the subject shipments, expiring August 31, 2011. The NRC issued a corresponding authorization on August 5, 2010.

EVALUATION

The applicant has requested to increase the total number of shipments to 1500, but the types of material to be shipped are unchanged. MURR provided an update on the schedule for obtaining a replacement package, Docket No. 71-9337, which was approved by the NRC on January 24, 2011. MURR indicated that packaging manufacturing is the next step. MURR also identified that an additional package, Docket No. 71-9338, will be submitted to the NRC for review at the end of 2011.

DOT SPECIAL PERMIT

On July 22, 2011, the U.S. Department of Transportation issued Special Permit No. SP-14657 to MURR, to authorize the subject shipments. This permit expires on August 31, 2012.

CONDITIONS

Based on the statements and representations in the application, authorization is granted for the transport of Type B quantities of radioactive material by MURR using DOT Specification 20WC-1 and 6M packages with the following conditions:

1. All shipments must be made in accordance with DOT Special Permit No. DOT-SP 14657, dated July 22, 2011.
2. The packaging and contents are as described in University of Missouri, Research Reactor Center, application dated August 17, 2011.
3. This authorization is for a total of 1500 shipments, to include shipments made beginning October 1, 2008, through August 31, 2012.
4. This authorization expires on August 31, 2012.

CONCLUSIONS

Based on the statements and representations in the MURR application dated August 17, 2011, the staff agrees that the use by MURR of the DOT Specification 20WC-1 and 6M packages meets the requirements of 10 CFR Part 71, subject to the conditions listed above.

Issued with letter to R. Butler
dated August 25th.