



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

March 23, 2018

Ms. Catherine Ribaudo
Radiation Safety Officer
National Institutes of Health
Bethesda, Maryland 20892

SUBJECT: APPLICATION FOR EXEMPTION FOR TRANSPORT OF A SELF-SHIELDED
IRRADIATOR – ISSUANCE OF EXEMPTION

Ms. Ribaudo,

This is in response to the National Institutes of Health (NIH) letter dated January 19, 2017 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML17306A532), as supplemented on September 11, 2017 (ADAMS Accession No. ML17306A533), November 1, 2017 (ADAMS Accession No. ML17319A116), and November 15, 2017 (ADAMS Accession No. ML17320A867), requesting an exemption from the requirements of Title 10 of the *Code of Federal Regulations* (10 CFR) 71.5. Specifically, NIH requested exemption from the U.S. Department of Transportation (DOT) regulations incorporated into the U.S. Nuclear Regulatory Commission (NRC) transportation requirements in 10 CFR 71.5. This exemption is necessary for NIH to obtain NRC approval, via NIH's specific license, to perform a one-time movement of an irradiator. NIH proposes to move the irradiator in its current configuration (i.e., without disassembling the irradiator) 0.3 miles from one NIH building through an NIH parking lot, across a public road, and through another NIH parking lot to another NIH building.

Since the one-time movement by NIH will be accomplished using a motor vehicle operated by a Federal government employee solely for noncommercial Federal government purposes, the activity is not subject to the DOT's hazardous material regulations 49 CFR 171.1(d)(5). However, since NIH holds an NRC license for the irradiator, and will be moving licensed material across a public road, NIH is required to conform to the standards and requirements of specified DOT regulations to the same extent as if the shipment were subject to those regulations under 10 CFR 71.5, "Transportation of licensed material."

The NRC has reviewed the request for exemption from 10 CFR 71.5, and has determined that, pursuant to 10 CFR 71.12, the exemption is authorized by law, will not endanger life or property or the common defense and security. Therefore, the NRC is granting NIH an exemption from the requirements in 10 CFR 71.5. The details of the NRC's review are included in the enclosed safety evaluation report. The NRC has also determined that the movement will not significantly affect the public health and safety or adversely impact the environment (83 FR 8302 February 26, 2018). This exemption is subject to the following conditions:

1. The lowest point of the irradiator shall not be lifted higher than 4 ft.
2. The forklift shall have a minimum rating of 10,000 pounds, as determined using the American National Standards Institute/Industrial Truck Standards Development Foundation B56.1 "Safety Standard for Low Lift and High Lift Trucks."

3. The irradiator shall be secured to the masts of the forklift using two ratchet straps, one above and one below the irradiator's center-of-gravity. Each ratchet strap shall have a minimum rating of 5,000 pounds.
4. Once the irradiator is lifted, the lift mechanism on the forklift will be temporarily rendered inoperable, and the forklift operator shall be instructed not to operate the lifting mechanism until the forklift and irradiator is across the public road.
5. The forklift driver shall have a valid forklift driver's license and must be up-to-date on forklift training as provided by the NIH's Division of Occupational Health and Safety.
6. During the movement across the public road, the road shall be closed by the Montgomery County Police Department to other vehicular traffic.
7. NIH Radiation Safety personnel and armed Montgomery County Police Department Special Operations Division Officers will escort the irradiator with a leading and trailing vehicle during the one-time movement, will maintain constant surveillance, and have direct line-of-sight of the irradiator from the time the irradiator is moved out of the current building until the irradiator is in its destination.
8. The irradiator housing will be stamped with a "USA 7A Type A Radioactive Material" marking and a "RADIOACTIVE WHITE-I" label.
9. A United Nations Committee of Experts on the Transport of Dangerous Goods (UN) identification number "3332" will be affixed to the irradiator housing during the one-time movement.
10. A transfer document, including emergency response information, will be present during the one-time movement and will be maintained by a Montgomery County Police Department officer. The emergency response information will include Guide number 164 from the 2016 Emergency Response Guidebook, which is for UN3332 material.
11. This authorization expires on July 31, 2018.

In accordance with 10 CFR 2.390 of the NRC's "Rules of Practice," a copy of this letter will be available electronically for public inspection in the NRC Public Document Room or from the publicly available records component of the NRC's document system, ADAMS. ADAMS is accessible from the NRC Website at <http://www.nrc.gov/reading-rm/adams.html>.

If you have any questions, please contact me at (301) 415-5722, or Bernard White of my staff, at (301) 415-6577.

Sincerely,

/RA/

John McKirgan, Chief
Spent Fuel Licensing Branch
Division of Spent Fuel Management
Office of Nuclear Material Safety
and Safeguards

Docket No. 30-08478

CAC No. 001094

Enclosure:
Safety Evaluation Report

APPLICATION FOR EXEMPTION FOR TRANSPORT OF A SELF-SHIELDED IRRADIATOR –
ISSUANCE OF EXEPTION, DOCUMENT DATE: March 23, 2018

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ADAMS Package No.: ML18082B156 LTR: ML18082B157 SER: ML18082B159

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