



Missouri Department of dnr.mo.gov

NATURAL RESOURCES

Eric R. Greitens, Governor

Carol S. Comer, Director

DEC 18 2017

Nuclear Regulatory Commission
11555 Rockville Pike
Rockville, MD 20852

Re: Docket No. 50-609; NRC-2013-0235
Northwest Medical Isotopes, LLC

To Whom It May Concern:

The Missouri Department of Natural Resources reviewed the Northwest Medical Isotopes (NWMI) construction permit application and offers the following comments.

In Section 2.3.1.3, Page 2-11 “Irradiated LEU targets would be disassembled by puncturing and severing the target in half...” Other methods should be explored if feasible.

In Section 2.3.1.3, Page 2-11 “LEU material would then be transferred from the target disassembly hot cell to the target dissolution hot cell...” Material should be transferred between locations at the site in a manner that minimizes exposure and contamination of workers and the facility.

In Section 2.3.1.3, Page 2-11 “an offgas system would be used during this stage to capture fission product gases released from the target dissolution process.” The percentage of gases captured by the system should be clearly described here.

In Section 2.7.3, there is discussion of a waste minimization program that mentions recovery of trichloroethylene solvent. It should be noted that this type of activity would potentially be subject to the resource recovery certification process spelled out in 10 CSR 25-9.010 and in statute at 260.395 RSMo.

In Section 2.8, regarding transportation of radioactive materials and waste, in addition to federal regulations mentioned, Missouri Revised Statute 260.392, regarding applicable fees for shipments of certain radioactive material, may also apply to some of the shipments of materials and wastes to and from the facility.

In Section 2.8.1.1, Page 2-20, shipments of both unirradiated and irradiated materials back and forth to MURR should be handled with both appropriate vehicles and appropriate packaging in order to ensure that materials are shipped in a manner that minimizes the possibility of a release.

In Section 2.8.1.1, Page 2-20, Waste should be transported between the RPF building and the waste building in a manner that minimizes the chance of release.



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In Section 2.8.1.2, NWMI indicates that it does not anticipate any long-term storage or disposal of nonradioactive (hazardous or nonhazardous) materials on site (NWMI 2015a) and that it will treat and temporarily store liquid and solid nonradioactive waste generated as part of the radioisotope production process within the facility until it can ship the waste off site for disposal. It should be noted that treatment of hazardous waste is only allowed in very limited circumstances.

Also in Section 2.8.1.2, NWMI states hazardous waste will be handled in accordance with applicable regulations (e.g., the Resource Conservation and Recovery Act) and would be collected by a hazardous waste disposal company for separation, processing, and disposal. It should be noted that Missouri regulations for accumulation of hazardous waste on-site are different than the federal regulations in that they are based on the amount of hazardous waste accumulated on site at any one time, and not on the amount generated within a calendar month.

In Section 3.8.3 there is a reference to reporting releases but no specific reference to a telephone number. Also, in Sections 4.4.1.2 and 4.8.1.2 there are references to emergency response plans – a specific telephone number would need to be included in those plans. The emergency telephone number for the State of Missouri EER is 573-634-2436.

The facility should ensure that information is provided on a regular basis, similar to the annual radioactive effluent release report required by the Nuclear Regulatory Commission and the annual radiological environmental operating report submitted by Callaway Energy Center, sufficient to document the nature of these types of releases from the facility.

The Department recommends that the document clearly specify the type and level of security that will be necessary at the site, and also the hours of operation, specifically whether operating only during normal business hours or on a 24/7 basis.

We appreciate the opportunity to provide comments for the NWMI construction permit application. If you have any questions or need clarification, please contact Mr. Rob Hunt with the Department of Natural Resources, P.O. Box 176, Jefferson City, MO 65102 or by phone at 573-522-2656. Thank you.

Sincerely,



Dru Buntin
Deputy Director

DB/rhm