

August 18, 2015

Mr. Vito Nuccio
Reactor Administrator
Department of the Interior
U.S. Geological Survey
P.O. Box 25046 MS 911
Denver Federal Center
Denver, CO 80225-0046

SUBJECT: U.S. GEOLOGICAL SURVEY - REQUEST FOR ADDITIONAL INFORMATION
RE: LICENSE AMENDMENT REQUEST TO MODIFY THE SOURCE,
BYPRODUCT AND SPECIAL NUCLEAR MATERIAL POSSESSION LIMITS
FOR FACILITY OPERATING LICENSE NO. R-113 FOR THE U.S.
GEOLOGICAL SURVEY TRIGA REACTOR (TAC NO. ME9424)

Dear Mr. Nuccio:

By letter dated June 26, 2012 (Agencywide Documents Access and Management System Accession No. ML12180A270), as supplemented, the U.S. Geological Survey (USGS, or the licensee) requested an amendment to Facility Operating License No. R-113 for the USGS TRIGA Reactor (the facility) to modify the source, byproduct, and special nuclear material possession limits. The U.S. Nuclear Regulatory Commission staff has reviewed the information provided to date, and determined that additional information is required. As such, a request for additional information (RAI) is provided in the enclosure. We request a response to the RAI within 30 days of the date of this letter.

In accordance with Title 10 of the *Code of Federal Regulations* (10 CFR), Section 50.30(b), you must execute your response in a signed original document under oath or affirmation. Your response must be submitted in accordance with 10 CFR 50.4, "Written communications." Information included in your response that is considered sensitive or proprietary, that you seek to have withheld from the public, must be marked in accordance with 10 CFR 2.390, "Public inspections, exemptions, requests for withholding." Information related to security should be submitted in accordance with 10 CFR 73.21, "Protection of safeguards information: Performance requirements."

V. Nuccio

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If you have any questions regarding this review, or need additional time to provide RAI responses, please contact Geoffrey Wertz at (301) 415-0893 or by electronic mail at Geoffrey.Wertz@nrc.gov.

Sincerely,

/RA/

Alexander Adams, Jr., Chief
Research and Test Reactors Licensing Branch
Division of Policy and Rulemaking
Office of Nuclear Reactor Regulation

Docket No. 50-274

Enclosure:
Request for Additional Information

cc: See next page

U.S. Geological Survey

Docket No. 50-274

cc:

Environmental Services
Manager
480 S. Allison Pkwy.
Lakewood, CO 80226

State of Colorado
Radiation Management Program
HMWM-RM-B2
4300 Cherry Creek Drive South
Denver, CO 80246

Mr. Timothy DeBey
Reactor Manager
U.S. Geological Survey
Box 25046 - Mail Stop 424
Denver Federal Center
Denver, CO 80225

Test, Research, and Training
Reactor Newsletter
Universities of Florida
202 Nuclear Sciences Center
Gainesville, FL 32611

V. Nuccio

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***concurred via email**

NRR-088

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DATE	8/18/15	8/18/15	8/18/15	8/18/15

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REQUEST FOR ADDITIONAL INFORMATION
REGARDING LICENSE AMENDMENT REQUEST FOR
U.S. GEOLOGICAL SURVEY TRIGA RESEARCH REACTOR
DOCKET NO. 50-274
LICENSE NO. R-113

By letter dated June 26, 2012 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML12180A270), as supplemented, the U.S. Geological Survey (USGS) staff has requested an amendment to Facility Operating License No. R-113 for the USGS TRIGA Reactor to modify the source, byproduct, and special nuclear material (SNM) possession limits. Based on information received during the Nuclear Regulatory Commission (NRC) staff's site visit and facility tour conducted on August 4, 2015, the NRC staff has determined that the following additional information is needed:

1. The storage locations for the source, byproduct and SNM to be transferred from the materials license to the reactor license do not appear to be described in your license amendment application, as supplemented. In your response to Request for Additional Information (RAI) No. 11, by letter dated March 14, 2014 (ADAMS Accession No. ML14083A398), you provided a description of the source, byproduct and SNM that you proposed to be transferred with the license amendment. However, a description of the storage locations and any transportation methods between the storage locations and the locations where the material may be used was not provided.
 - a. Provide a description, which includes all of the licensed materials provided in your response to RAI No. 11 (as referenced above), of the locations where the listed materials are to be stored or used, or justify why no description is needed.
 - b. Describe the transport methods of any source, byproduct and SNM needed between the storage locations and the locations where the material may be used, or justify why no description is needed.
2. The USGS technical specifications do not define the Title 10 of the *Code of Federal Regulations* (10 CFR) Part 50 licensed area of the USGS research reactor. As such, it is not clear if the storage locations are within the 10 CFR 50 licensed area of the USGS research reactor. Determine if a USGS technical specification is needed to define the USGS licensed area to include the storage areas for the proposed license material is needed. If a technical specification is needed, propose a technical specification. Otherwise, justify why no change to the current technical specifications is needed.

Enclosure