

Materials Licensing Branch U.S. Nuclear Regulatory Commission, Region III 2443 Warrenville Road, Suite 210 Lisle, IL 60532-4352

March 4, 2024

Mr. Jason Kelly:

This letter is in response to an NRC request for additional information, dated February 29, 2024, for the Central Michigan University license amendment. This is in reference to license number 21-01432-02, control no. 638849.

The information you requested is attached. Let me know if you have any further questions. My phone number is (989) 774-4189.

Sincerely,

Jennifer Walton, Ph.D. CIH

mp Walton

Director, Office of Laboratory and Field Safety

Radiation Safety Officer

U.S. NRC Materials License # 21-01432-02, Control No. 638849

Request for additional information for Central Michigan University (CMU) Nuclear Regulatory Commission (NRC) license amendment

Information due to the NRC March 15, 2024

Question from the NRC:

1. The request refers to the transfer/disposal of a single Am-241 foil source remaining in your inventory. Item 8, Part X, of your license identifies that you are licensed for up to five Am-241 foil sources. Please clarify if your institution had previously acquired any other such Am-241 foil sources and provide applicable records demonstrating that the sources were appropriately disposed and were not leaking radioactive material.

Response from CMU:

Central Michigan University did not acquire any other Am-241 foil sources. There was only one foil source.

Question from the NRC:

2. Submit a copy of the leak test record for the Nuclear Radiation Developments, Inc., Model A-1000-000-300 foil source demonstrating that the source was tested and found to not be leaking radioactive material ahead of being transferred for disposal. Please also include a letter from the waste broker identifying that the Nuclear Radiation Developments, Inc., Model A-1000-000-300 foil source was received. Note that the accompanying Waste Manifest for Shipment No. 0523CMU only identifies that a 0.28 mCi Am-241 source was received by consignee on May 23, 2023. Additional detail is needed.

Response from CMU:

The leak test record and the certificate of disposal are attached. This was the only Am-241 foil source in the CMU inventory.



Chase Environmental Group

200 Sam Rayburn Parkway Lenoir City, TN 37771 (865) 816-6015

LEAK TEST CERTIFICATE

Generator Information

Client #: 1186

Issued To: Central Michigan University

Office of Laboratory & Field Safety 600 E. Preston St., Foust Hall 108 Mt. Pleasant MI 48859

USA

Sample Information

Sample#: 3-CMU Location: Disk Source

 Sample Date
 Manuf.
 Model
 Device #

 12/6/22

 Sampled By:
 Isotope
 Activity
 Source S/N

 Jennifer Walton
 Am-241
 0.3 mCi
 165

Notes: Semi-Annual Inspection & Wipe Test

Laboratory Information

D.G. Hoover, Lab Tech

12/13/22

5964

<0.005 μC

Lab Results

<u>Instrumentation</u>

 $MDA (37 Bq. = 0.001 \mu Ci.)$

Instr.#: 060707 Det.#: 0 H-3: 0.000014 μ Ci C-14: 0.000011 μ Ci

0.0%

Removable contamination (leak test) analysis was obtained using detection configuration: 51

Sample results were less than 0.005 μCi. (<185 Bq.), and will not require regulatory notification. All documents, including this certificate, should be maintained on file for agency review. Services provided in accordance with Tennessee Radioactive Materials License # R-53008-G29.



Certificate of Disposal

Please keep a copy of this certificate filed with your copy of the manifest and receipt notification letter.

September 4, 2023

Jennifer Walton Central Michigan University – Biosciences 1455 Calumet Ct. Mt. Pleastant, MI 48859

Re: Central Michigan University – Biosciences Manifest #0523CMU picked up on 05/18/2023

Jennifer:

This is to certify that the radioactive material picked up from your facility on May 18, 2023 on manifest # 0523CMU has been disposed of at Waste Control Specialists, LLC. in Andrews, Texas.

Please reference the following tables for detailed disposal information.

| Manifest | Container | Disposal | Disposal |
|----------|-----------|--------------|------------|
| Number | Number | Volume (ft³) | Date |
| 0523CMU | BSU-3 | 0.01 | 08/25/2023 |

If you have any questions, please feel free to contact me at (865) 220-8501.

Sincerely,

Leyla Coleman

Leyla Coleman Marketing & Sales Manager Bionomics, Inc.

Martha Pavon

From: Jason Kelly

Sent: Monday, March 4, 2024 2:56 PM

To: Martha Pavon

Subject: FW: RE: [External] U.S. NRC Materials License #21-01432-02 - Request for Additional

Information

Attachments: License 21-01432-02 control no 638849 response 3-4-2024.pdf

Martha,

Good afternoon. Attached is an incoming Response to a Request for Additional Information for Materials License #24-32531-01 (Mid-America Calibrations), Docket No. 030-36634 for Control No. 638103.

Jason M. Kelly, MPH, CPH Health Physicist

U.S. NRC Region III - DRSS MLB

Phone: (630) 829-9737 E-mail: Jason.Kelly@nrc.gov

From: Walton, Jennifer <ehler1ja@cmich.edu>

Sent: Monday, March 4, 2024 2:12 PM **To:** Jason Kelly < Jason.Kelly@nrc.gov>

Subject: [External_Sender] RE: [External] U.S. NRC Materials License #21-01432-02 - Request for Additional Information

Mr. Kelly:

The request for additional information for license 21-01432-02, control no. 638849 is attached. Let me know if you have questions.



Jennifer Walton, Ph.D., CIH

Director / Office of Laboratory and Field Safety
Foust 108 | Central Michigan University | Mount Pleasant, MI 48859
P: 989-774-4189 | E: ehler1ja@cmich.edu | F: 989-774-2631

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Twitter: https://twitter.com/CmichOrgs



Stuff that Could Kill You - STCKY

From: Jason Kelly < <u>Jason.Kelly@nrc.gov</u>>
Sent: Thursday, February 29, 2024 1:38 PM
To: Walton, Jennifer < <u>ehler1ja@cmich.edu</u>>

Subject: [External] U.S. NRC Materials License #21-01432-02 - Request for Additional Information

Dr. Walton:

I have reviewed the application dated January 18, 2024, signed by David Weindorf, Vice President for Research and Innovation, for an amendment to your U.S. Nuclear Regulatory Commission (NRC) Materials License No. 21-01432-02.

The U.S. NRC's guidance document for your type of license is NUREG-1556, Volume 7, Rev. 1, dated February 2018, "Consolidated Guidance About Materials Licenses: Program-Specific Guidance About Academic, Research and Development, and Other Licenses of Limited Scope." This guidance is available on the U.S. NRC website at: https://www.nrc.gov/docs/ML1806/ML18065A006.pdf

Upon review of the request, I identified the following areas in which additional or clarifying information is needed:

- 1. The request refers to the transfer/disposal of a single Am-241 foil source remaining in your inventory. Item 8, Part X, of your license identifies that you are licensed for up to five Am-241 foil sources. Please clarify if your institution had previously acquired any other such Am-241 foil sources and provide applicable records demonstrating that the sources were appropriately disposed and were not leaking radioactive material.
- 2. Submit a copy of the leak test record for the Nuclear Radiation Developments, Inc., Model A-1000-000-300 foil source demonstrating that the source was tested and found to not be leaking radioactive material ahead of being transferred for disposal. Please also include a letter from the waste broker identifying that the Nuclear Radiation Developments, Inc., Model A-1000-000-300 foil source was received. Note that the accompanying Waste Manifest for Shipment No. 0523CMU only identifies that a 0.28 mCi Am-241 source was received by consignee on May 23, 2023. Additional detail is needed.

Please provide a written response to this request within 15 calendar days. To ensure proper routing, please include a reference to your institution's U.S. NRC Materials License No. 21-01432-02 along with Control No. 638849. Once you are ready to submit the response, you may forward it to me via e-mail. If you do not receive a prompt acknowledgement of receipt, you are also welcome to send a confirming hardcopy by U.S. Mail to the address in my signature block below.

As you will not receive a hardcopy of this request, please respond to this e-mail verifying that you have received it. Please contact me at (630) 829-9737 or Jason.Kelly@nrc.gov if you have any questions or if you need additional time to respond to this request.

Jason M. Kelly, MPH, CPH
Health Physicist
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U.S. Nuclear Regulatory Commission
Region III
2443 Warrenville Road, Suite 210
Lisle, IL 60532-4352
Office: (630) 829-9737

Fax: (630) 515-1078

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