

National Aeronautics and  
Space Administration

**John H. Glenn Research Center**  
**Lewis Field**  
Cleveland, OH 44135-3191



April 26, 2021

Reply to Attn of: QSH

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

Subject: Amendment Request to Allow for Possession of Thorium-230 (Th-230) Sources

Ref: License #34-00507-16, Docket #030-05626

The NASA Glenn Research Center (GRC) would like to update its allowable inventory of radioactive materials to include wide area or disk-type Th-230, sources manufactured using an anodized manufacturing or electroplating/electrodeposition processes. Individual sources will have a maximum activity of 3,700 Bq (0.1 microCuries) and this request is to allow for the possession of up to 10 such items.

These sources may be used for either research and development (R&D) purposes, as defined by 10 Code of Federal Regulation (CFR) 30.4, as well as for instrument calibration and/or performance testing of the licensee's instrumentation.

Employees accessing these alpha-emitting Th-230 sources will be trained as radiation workers and appropriate radiological controls will be implemented to assure the safe and secure handling, use and storage of the radioactive material. The Center's use authorization processes for R&D activities include participation by the Radiation Safety Officer (RSO), wherein relevant radiation safety requirements and protocols will be established. Use of such sources for instrument calibration and performance testing by health physics staff members shall be consistent with approved health physics procedures and applicable radiation safety work practices.

Use and storage locations of these anodized/electroplated/electrodeposited Th-230 sources, as well as all licensed radioactive materials at GRC, shall afford appropriate configuration controls and shielding to assure that external doses to members of the public are compliant with 10 CFR 20 - Subpart D and storage and security considerations satisfy requirements of 10 CFR 20 - Subpart I.

Should you have questions or require additional information, you may contact Mr. Christopher J. Blasio, RSO at (216) 433-6520.

STEVEN  
HERRON

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HERRON  
Date: 2021.05.06 07:39:57  
-04'00'

Steven L. Herron  
Chief, Safety and Health Division

bcc:

Q/K. S. Martzaklis

QSH/A. D. Windau

QSH/C. J. Blasio

QS/Official File

QSH/CJBlasio:psu:4/22/2021NRC

Letter\_Th230Sources\_Apr2021

## Song, Taehoon

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**From:** Tomczak, Tammy  
**Sent:** Monday, May 10, 2021 7:27 AM  
**To:** Pavon, Sandy; Song, Taehoon  
**Subject:** FW: License Amendment Request - NASA GRC  
**Attachments:** NRC Letter\_Th230 Sources\_Apr2021pc\_signed.pdf

Good morning, Sandy and Tae,

Can you please add the attached to ADAMS?

Thank you!!  
Tammy

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**From:** Blasio, Christopher J. (GRC-QSH0) <[christopher.j.blasio@nasa.gov](mailto:christopher.j.blasio@nasa.gov)>  
**Sent:** Friday, May 07, 2021 7:06 AM  
**To:** Orlikowski, Robert <[Robert.Orlikowski@nrc.gov](mailto:Robert.Orlikowski@nrc.gov)>  
**Cc:** Tomczak, Tammy <[Tammy.Tomczak@nrc.gov](mailto:Tammy.Tomczak@nrc.gov)>  
**Subject:** [External\_Sender] License Amendment Request - NASA GRC

Good Morning Bob and Tammy,

Attached find a licensing amendment request for NASA Glenn Research Center. Per previous guidance by someone, maybe Tammy, I will NOT be submitting a redundant hardcopy.

Thanks and have a nice weekend.

R/  
Chris B.

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Chris Blasio, CHP, CIH  
Radiation and Laser Safety Officer  
NASA John H. Glenn Research Center  
216.433.6520 (office) 216.903.9971 (mobile)

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**From:** "Orlikowski, Robert" <[Robert.Orlikowski@nrc.gov](mailto:Robert.Orlikowski@nrc.gov)>  
**Date:** Wednesday, April 21, 2021 at 4:17 PM  
**To:** "Blasio, Christopher J. (GRC-QSH0)" <[christopher.j.blasio@nasa.gov](mailto:christopher.j.blasio@nasa.gov)>  
**Cc:** "Tomczak, Tammy" <[Tammy.Tomczak@nrc.gov](mailto:Tammy.Tomczak@nrc.gov)>  
**Subject:** [EXTERNAL] RE: Email POC for Submittals

Good afternoon Chris,

For a standard amendment you can send to me with a cc to my Licensing Assistant Tammy Tomczak. I've cc'd her on this email so you have both of our email addresses.

Let me know if you have additional questions.

Respectfully,

Bob

Robert Orlikowski  
Materials Licensing Branch Chief  
Division of Nuclear Material Safety, Region III  
U.S. Nuclear Regulatory Commission  
Office: 630.829.9834