



June 14, 2021

US NRC Region 1
2100 Renaissance Blvd., Suite 100
King of Prussia, PA 19406-2713

Via Email: RidsRgn1MailCenter@nrc.gov

Subject: AmeriPhysics, LLC Notification to NRC of Work Activity under License Number 41-35264-01, Amendment No.2 at Curium US LLC in Maryland Heights, MO

Please accept this letter as our notification to the Regional Administrator, U.S. Nuclear Regulatory Commission, at the Region 1 Office in accordance with Section 18 A. of AmeriPhysics, LLC NRC Radioactive Materials License Number 41-35264-01.

AmeriPhysics, LLC (AmeriPhysics) has been contracted to perform decontamination and removal of specific activated cyclotron vault walls and flooring of the Curium US LLC facility located at 2703 Wagner Place, Maryland Heights, MO 63043. These work activities include:

- Removal of specific concrete cyclotron vault walls and flooring to allow access for the installation of a new cyclotron. This will include aggressive demolition that will include wire saw cutting and the use of demolition hammers. The facility is not being decommissioned. The facility will retain the space as a radiologically restricted area.
- Performance of radiological surveys in support of the work.
- Packaging, manifesting, and shipment of the material for disposal at Waste Control Specialists in Andrews, TX.

In accordance with Section 18 A of AmeriPhysics, LLC NRC Radioactive Materials License Number 41-35264-01, the following information is provided:

- **(1) Estimated type, quantity, and physical/chemical form(s) of material:**
 - AmeriPhysics will not be introducing any new radioactive material to the facility.
 - The most significant radionuclides are Eu-152 and Co-60 in activated concrete and steel rebar – these two nuclides typically account for greater than 90% of the dose. Concrete samples were collected after the cyclotron was removed in February 2021. Additional radionuclides present in the concrete were H-3, Na-22, Mn-54, Fe-59, Zn-65, Cs-134, and Eu-154. Ge-68 was also present on the samples from the storage of contaminated materials in the cyclotron vault, and Ge-68 decays to radioactive Ga-68. The physical and chemical forms of the material is solid oxides.

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- **(2) Specification of Site Location:**
 - Curium US LLC– The facility is located at 2703 Wagner Place, Maryland Heights, MO 63043.
- **(3) Description of project activities including waste management and disposition:**
 - In general, the work consists of cutting, breaking, unstacking, drilling, and scabbling activated concrete. A variety of demolition tools will be used including concrete saws, wire saws, demolition hammers, and core drills. The resulting wastes will be collected, packaged, and disposed according to the residual radioactivity they contain. Some of the forementioned tools rely on water for cooling and lubrication, and this water and any potentially contaminated cuttings it contains must also be collected and disposed. The activated material will be packaged, manifested, and shipped for disposal at Waste Control Specialists in Andrews, TX.
- **(4) Estimated project start date and duration:**
 - Estimated start date is 6/29/2021 with an expected duration of seventeen (17) weeks.
- **(5) Identification of, and information on how to contact, key project personnel:**
 - Ameriphysics Radiation Safety Officer – Timothy J. Pratt
 - Cell Phone – (865) 386-8066
 - Office Phone – (865) 470-4171
 - Email – tpratt@ameriphysics.com
 - Ameriphysics President – Tom Hansen Jr.
 - Cell Phone – (865) 228-1997
 - Email – tom@ameriphysics.com
 - Ameriphysics On-site Project Manager – Tom Hansen III.
 - Cell Phone – (865) 705-2796
 - Email – twhansen@ameriphysics.com
 - Curium US LLC Contact – Manuel Diaz
 - Cell Phone – (314) 225-8628
 - Email – -manuel.diaz@curiumpharma.com

If you have any questions regarding this notification, please feel free to contact me at your convenience.

Sincerely,



Timothy J. Pratt
Ameriphysics, LLC
Radiation Safety Officer