



**UNITED STATES
NUCLEAR REGULATORY COMMISSION**

REGION III
2443 WARRENVILLE ROAD, SUITE 210
LISLE, ILLINOIS 60532-4352

November 13, 2019

Mr. Richard Proehl
Vice President, Operations, North America
Curium US LLC
2703 Wagner Place
Maryland Heights, MO 63043

SUBJECT: NRC SPECIAL INSPECTION REPORT NO. 03000001/2019002(DNMS)
CURIUM US LLC

Dear Mr. Proehl:

On October 17, 2019, an inspector from the U.S. Nuclear Regulatory Commission (NRC) conducted a special inspection at your Maryland Heights, Missouri, facility. The purpose of the inspection was to observe and evaluate the biennial emergency response exercise. The inspector discussed the inspection findings with you and members of your staff during the onsite exit meeting.

The inspection was conducted to determine whether Curium US LLC personnel could successfully implement the Contingency Plan for the Maryland Heights, Missouri, facility. The inspection consisted of observations of selected exercise activities and evaluation of exercise performance. Areas observed and evaluated during the exercise included, in part, the licensee's preparation for and control of the exercise; the Emergency Control Center (ECC) activation and staffing; timeliness of required notifications; command and control of the exercise scenario from in the field and the ECC; Fire Department response; and staff accountability. The inspector also observed and evaluated contamination control, use of protective equipment, personnel and area surveys, communication effectiveness, dose estimates to licensee personnel and members of the public, and the post-exercise critique by the licensee staff.

Based on the results of this emergency response exercise, the NRC determined that Curium US LLC personnel successfully demonstrated their capability to implement the Contingency Plan for the Maryland Heights, Missouri facility, in response to a simulated radiological accident. The exercise of the Contingency Plan adequately tested your capability to respond to a radiological accident. Your staff completed an evacuation of the building involved in the exercise scenario and took appropriate and timely emergency response actions in response to the accident scenario. Command and control, hazard assessment, and communication were implemented according to the Contingency Plan. Your staff proposed several improvements to the emergency response during the post-exercise critique; the inspector's findings were consistent with those identified by your staff. No violations of NRC requirements were identified during this inspection.

The inspection also reviewed your implementation of corrective actions described in your letter dated June 7, 2019, in response to a violation identified during our inspection conducted on March 18–22, 2019, with continued in-office review through April 11, 2019. The violation involved your staff's failure to perform surveys of three radioactive packages within three hours

of receipt, as required by Title 10 of the *Code of Federal Regulations* (CFR) 20.1906(b). We determined that your corrective actions were adequate and consider the violation closed. In addition, our inspection included a review and discussion of a significant molybdenum-99 contamination incident that occurred in August 2019. Your staff identified this incident and entered it into your corrective action program. The NRC will review this contamination incident during a separate inspection.

In accordance with 10 CFR 2.390 of the NRC's "Rules of Practice," a copy of this letter will be made available electronically for public inspection in the NRC's Public Document Room or from the NRC's Agencywide Documents Access and Management System (ADAMS), accessible from the NRC's website at <http://www.nrc.gov/reading-rm/adams.html>.

Please feel free to contact Ms. Piskura of my staff if you have any questions regarding this inspection. Ms. Piskura can be reached at 630-829-9867.

Sincerely,

/RA/

Robert Ruiz, Acting Chief
Materials Inspection Branch
Division of Nuclear Materials Safety

Docket No. 030-00001
License No. 24-04206-01

cc: Manuel Diaz, Radiation Safety Officer
State of Missouri

Letter to Richard Proehl from Robert Ruiz dated November 13, 2019.

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CURIUM US LLC

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