

NUCLEAR REGULATORY COMMISSION

[Docket No. 50-57; NRC-2018-0166]

**Termination of Operating License for the Buffalo Materials
Research Center Reactor**

AGENCY: Nuclear Regulatory Commission.

ACTION: License termination; issuance.

SUMMARY: The U.S. Nuclear Regulatory Commission (NRC) is providing notice of the termination of Facility Operating License No. R-77 for the Buffalo Materials Research Center (BMRC). The NRC has terminated the license of the decommissioned BMRC at the State University of New York at Buffalo (UB or the licensee) facility in Buffalo, New York, and has released the site for unrestricted use.

DATES: Notice of termination of Facility Operating License No. R-77 given on August 14, 2018.

ADDRESSES: Please refer to Docket ID **NRC-2018-0166** when contacting the NRC about the availability of information regarding this document. You may obtain publicly-available information related to this document using any of the following methods:

- **Federal Rulemaking Web Site:** Go to <https://www.regulations.gov> and search for Docket ID **NRC-2018-0166**. Address questions about NRC dockets to Jennifer Borges; telephone: 301-287-9127; e-mail: Jennifer.Borges@nrc.gov. For

technical questions, contact the individual listed in the **FOR FURTHER INFORMATION CONTACT** section of this document.

- **NRC's Agencywide Documents Access and Management System**

(ADAMS): You may obtain publicly-available documents online in the ADAMS Public Documents collection at <https://www.nrc.gov/reading-rm/adams.html>. To begin the search, select "[Begin Web-based ADAMS Search](#)." For problems with ADAMS, please contact the NRC's Public Document Room (PDR) reference staff at 1-800-397-4209, 301-415-4737, or by e-mail to pdr.resource@nrc.gov. The ADAMS accession number for each document referenced in this document (if that document is available in ADAMS) is provided the first time that a document is referenced.

- **NRC's PDR:** You may examine and purchase copies of public documents at the NRC's PDR, Room O1-F21, One White Flint North, 11555 Rockville Pike, Rockville, Maryland 20852.

FOR FURTHER INFORMATION CONTACT: Kim Conway, Office of Nuclear Material Safety and Safeguards, U.S. Nuclear Regulatory Commission, Washington D.C. 20555-0001; telephone: 301-415-1335; e-mail: Kimberly.Conway@nrc.gov.

SUPPLEMENTARY INFORMATION:

The BMRC reactor in Buffalo, New York, was located on the south campus of UB. The BMRC reactor began operation in 1961 and was shut down on June 23, 1994. On June 6, 1997, the license was amended to possession only.

By letter dated February 17, 2012 (ADAMS Package No. ML120540187), as supplemented by letters dated June 20, 2012 (ADAMS Accession No. ML121870132), September 21, 2012 (ADAMS Accession No. ML122780454), and October 15, 2012

(ADAMS Accession No. ML12297A237), the licensee submitted a request to the NRC to approve a license amendment and a revised decommissioning plan (DP) for the BMRC reactor. The NRC approved the UB revised DP by Amendment No. 27, dated November 5, 2012 (ADAMS Accession No. ML12290A694).

In the Safety Evaluation Report related to the DP approval (ADAMS Accession No. ML12286A352), the NRC staff determined that the revised Final Status Survey (FSS) Plan for the BMRC (ADAMS Accession No. ML12278A373) was consistent with the guidance and methodology in NUREG-1575, "Multi-Agency Radiation Survey and Site Investigation Manual (MARSSIM)," and NUREG-1757, "Consolidated Decommissioning Guidance." The licensee's decommissioning activities included decontamination, dismantlement, and demolition of various systems, structures, and components followed by MARSSIM-based FSS.

By letter dated January 12, 2017, UB submitted the FSS Report for the BMRC and requested the termination of Facility Operating License No. R-77 (ADAMS Accession No. ML17039A897). The NRC staff reviewed the FSS Report, which states that the criteria for termination set forth in UB's license, and as established in its DP and FSS Plan, have been satisfied. Supplemental information was provided in an e-mail from the licensee dated February 13, 2018 (ADAMS Accession No. ML18075A415), which addressed additional questions and items requiring clarification that were provided to the licensee.

Throughout the decommissioning process, inspectors from the NRC's Region I office conducted routine safety inspections at the BMRC, as documented in the following NRC Inspection Reports (IRs): IR 050-00057/2015-001 (ADAMS Accession No. ML16007A027), IR 050-00057/2014-001 (ADAMS Accession No. ML15027A411), IR 050-00057/2013-003 (ADAMS Accession No. ML14219A022),

IR 050-00057/2013-002 (ADAMS Accession No. ML13204A096), and IR 050-00057/2013-001 (ADAMS Accession No. ML13106A379). The inspections consisted of observations by the inspectors, interviews with BMRC and contractor personnel, confirmatory measurements, collection of soil samples, and a review of work plans and work instructions. The NRC inspections also verified that radioactive waste associated with the decommissioning project had been shipped offsite and that the decommissioning and final status survey activities were being conducted safely and in accordance with regulatory requirements, licensee commitments, and the NRC-approved DP. No health or safety concerns were identified during the NRC inspections.

During the periods of January 26-29, February 3-6, and August 17-21, 2015, the Oak Ridge Associated Universities (ORAU) performed confirmatory surveys in support of the BMRC excavation, which included surveys of surrounding soils, backfill material, and soil laydown areas. The survey activities included visual inspections, gamma radiation surface scans, gamma and beta radiation measurements, and soil sampling activities of six FSS units, which were combined into two confirmatory survey units. At the time of confirmatory survey activities, structures associated with the BMRC had been demolished and removed from the site. The site consisted of exposed bedrock where the BMRC facility was located, and the impacted soils surrounding the excavation. The ORAU provided the results of the confirmatory surveys in a report dated January 6, 2016 (ADAMS Accession No. ML16006A200). The ORAU site data support the conclusion that the residual activity levels satisfy the DCGLs.

Based on observations during NRC inspections, decommissioning activities have been carried out by UB in accordance with the approved BMRC DP. Additionally, the NRC staff evaluated the licensee's FSS Report and the results of the independent

confirmatory survey conducted by ORAU. Based on the NRC staff's evaluation of the FSS Report sampling and scanning data, NRC staff inspections, ORAU confirmatory analysis, and comparison to the BMRC reactor DP and FSS Plan criteria, the NRC staff concludes that the BMRC reactor decommissioning has been performed and completed in accordance with the approved DP, and that the facility and site are suitable for unrestricted release in accordance with the radiological criteria for license termination in 10 CFR part 20, subpart E.

Therefore, pursuant to 10 CFR 50.82(b)(6), Facility Operating License No. R-77 is terminated.

Dated at Rockville, Maryland, this 6th day of August, 2018.

For the Nuclear Regulatory Commission,

/RA/

Andrea L. Kock, Acting Director,
Division of Decommissioning, Uranium
Recovery,
and Waste Programs,
Office of Nuclear Material Safety and
Safeguards.