



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

July 22, 2016

Mr. Don Burman, Director
Department of Veterans Affairs
Nebraska-Western Iowa Health
Care System
4101 Woolworth Avenue
Omaha, NE 68105

SUBJECT: TERMINATION OF FACILITY OPERATING LICENSE NO. R-57 FOR THE U.S.
DEPARTMENT OF VETERANS AFFAIRS ALAN J. BLOTCKY REACTOR
FACILITY

Dear Mr. Burman:

By letter dated May 21, 2014 (Agencywide Documents Access and Management System (ADAMS) Package No. ML14150A404), as supplemented by letter dated November 12, 2014 (ADAMS Accession No. ML14335A597), the U.S. Department of Veterans Affairs (VA) submitted a request to the U.S. Nuclear Regulatory Commission (NRC) to approve a license amendment and a revised decommissioning plan (DP) for the Alan J. Blotcky Reactor Facility (AJBRF). The NRC approved the VA revised DP by Amendment No. 12, dated January 8, 2015 (ML14318A872) contingent upon submittal of an acceptable Final Status Survey (FSS) Plan for the AJBRF.

You submitted the AJBRF FSS Plan on October 15, 2015 (ADAMS Accession No. ML15299A385) for NRC review and approval. The VA also submitted a site characterization by letter dated April 6, 2006 (ADAMS Accession No. ML061140054), as supplemented by letters dated May 2, 2006 (ADAMS Accession No. ML061380584), and August 15, 2011 (ADAMS Accession No. ML11255A334). By letter dated November 4, 2015 (ADAMS Accession No. ML15302A508) the NRC reviewed the FSS Plan, determined that it was consistent with the guidance in NUREG-1757, "Consolidated Decommissioning Guidance" and the methodology in NUREG-1575, "Multi-Agency Radiation Survey and Site Investigation Manual (MARSSIM)," and approved it as a supplement to the AJBRF DP.

The licensee's decommissioning activities included decontamination, dismantlement, and demolition of various systems, structures, and components followed by MARSSIM-based FSS.

By letter dated February 29, 2016, you submitted the FSS Report for the AJBRF (ADAMS Accession No. ML16068A254) and requested license termination. The NRC staff reviewed the FSS Report, which states that the criteria for termination set forth in VA's license (R-57), and as established in its DP and FSS Plan have been satisfied.

As stated in the report, the facility was divided into six individual survey units. A total of 173 measurement locations were used to assess the final radiological status of the facility, and direct beta contamination measurements and smear samples for removable beta contamination were taken at each location. The FSS Report states that all individual radiological

measurement determinations made throughout the facility for surface contamination (both total and removable) were found to be less than the criteria established in the DP and FSS Plan. All beta measurements taken during the FSS were less than the minimum detectable concentration. The average level of residual radioactive material on building surfaces was 11 percent of the applicable screening values which results in a dose to a member of the general public of less than 3 mrem per year total effective dose equivalent (TEDE). The average sum of fractions for the remaining reactor pit concrete results in a dose to a member of the general public of less than 7 mrem per year TEDE.

Additionally, all the radioactive waste has been removed from the facility, and documentation regarding its removal disposition is provided in the FSS Report. Based on the review of the FSS Report, the NRC staff concludes that the survey was conducted in accordance with the guidelines and recommendations presented in NUREG-1757 and NUREG-1575.

Inspectors from Region IV of the NRC conducted a routine safety inspection at the AJBRF on September 21-23, 2015, as documented in NRC Inspection Report 050-00131/15-001 (ADAMS Accession No. ML15316A495). The inspectors followed the NRC's program for overseeing the safe decommissioning of a Research and Test Reactor (RTR) as described in the NRC's Inspection Manual Chapter (IMC) 2545, "Research and Test Reactor Inspection Program." (available at <http://www.nrc.gov/reading-rm/doc-collections/>). The inspection consisted of observations by the inspectors, interviews with VA and contractor personnel, and a review of procedures and records. No health or safety concerns were identified during the NRC inspection.

On December 8-9, 2015, Oak Ridge Associated Universities (ORAU) performed confirmatory surveys. The survey activities performed included cursory gamma scans, 100% of the facility floor, judgment scans of surfaces (based on unusual appearance, location relative to known contaminated areas, and high potential for residual radioactivity), direct measurements, and smear collection (wet and dry). ORAU provided the results of the confirmatory surveys in a report dated February 24, 2016 (ADAMS Accession No. ML16173A165). The ORAU report showed that results of all samples were less than the volumetric radionuclide concentration criteria established in the DP. One location on the floor near the reactor pit showed elevated activity on the concrete. The location was immediately remediated to background levels of activity. Both VA and ORAU site data support the conclusion that the residual activity levels satisfy the derived concentration guideline levels.

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 AJBRF DP and FSS Plan criteria, NRC staff concludes that the AJBRF decommissioning has been performed and completed in accordance with the approved DP, as supplemented by the FSS Plan, and that the facility and site are suitable for unrestricted release in accordance with the criteria for license termination in 10 CFR Part 20, subpart E. Thus, NRC staff concludes that VA has demonstrated that the site meets the radiological conditions for license termination pursuant to 10 CFR 50.82(b)(6). Accordingly, Facility Operating License No. R-57 is hereby terminated.

In connection with the license termination, enclosed are two copies of Amendment No. 10 to Indemnity Agreement No. D-8. Please sign and return one copy to this office.

Also enclosed is a copy of the Notice of License Termination, which is being sent to the Office of the *Federal Register* for publication. In accordance with 10 CFR 2.390 of the NRC's "Agency Rules of Practice and Procedure," a copy of this letter will be available electronically for public inspection in the NRC Public Document Room or from the Publicly Available Records component of NRC's Agencywide Documents Access and Management System (ADAMS). ADAMS is accessible from the NRC Web site at <http://www.nrc.gov/reading-rm/adams.html>.

If you have any questions concerning this matter, please contact Kim Conway at (301) 415-1335 or kimberly.conway@nrc.gov.

Sincerely,

/RA/

John R. Tappert, Director
Division of Decommissioning,
Uranium Recovery, and Waste Programs
Office of Nuclear Material Safety
and Safeguards

Docket No.: 50-131

Enclosures:

1. Two copies of Amendment No. 10 to Indemnity Agreement No. D-8
2. *Federal Register* Notice

cc: Docket Service List

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