

NUCLEAR REGULATORY COMMISSION

[Docket No. 40-00235; NRC-2015-0216]

AAR Site, Livonia, Michigan

AGENCY: Nuclear Regulatory Commission.

ACTION: Notice of completion of remediation; issuance.

SUMMARY: The U.S. Nuclear Regulatory Commission (NRC) is noticing the completion of remediation activities at the Brooks and Perkins Site at 12633 Inkster Road, in Livonia, Michigan.

DATES: This notice is effective as of September 23, 2015.

ADDRESSES: Please refer to Docket ID **NRC-2015-0216** 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 <http://www.regulations.gov> and search for Docket ID **NRC-2015-0216**. Address questions about NRC dockets to Carol Gallagher; telephone: 301-415-3463; e-mail: Carol.Gallagher@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 <http://www.nrc.gov/reading-rm/adams.html>. To begin the search, select "[ADAMS Public](#)

[Documents](#)” and then 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 (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: Theodore Smith, Office of Nuclear Material Safety and Safeguards, U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001; telephone: 301-415-6721, e-mail: Theodore.Smith@nrc.gov.

SUPPLEMENTARY INFORMATION:

The U.S. Atomic Energy Commission (AEC) issued License STB-0362 to Brooks and Perkins on January 17, 1957, and the license was terminated by the AEC on May 17, 1971. This license authorized Brooks and Perkins to conduct licensed activities at the site using thorium master alloy and thorium magnesium alloy.

In 1981, the AAR Corporation (AAR) purchased Brooks and Perkins and obtained ownership of the land. On February 23, 1994, an NRC inspector conducted an inspection of the AAR site, and subsequently notified AAR by letter dated March 29, 1994, that the NRC had “concluded that thorium was improperly disposed of at the site and certain areas of the building and grounds were in excess of the NRC release criteria for release of the facility for unrestricted use.” The AAR Corporation was directed to schedule and plan to characterize the extent of the

contamination and to decontaminate the area to current NRC release criteria (ADAMS Accession No. ML110670259).

The AAR site was subsequently legally divided into the Eastern and Western Parcels. The NRC staff had previously evaluated the Eastern Parcel of the AAR site, and in December 2009, determined that the potential dose from the Eastern Parcel was in conformance with the dose criteria for unrestricted use (ADAMS Accession No. ML093490979).

In 2013, the NRC approved a plan to remediate the Western Parcel of the site in accordance with an AAR proposed Site Remedial Action Work Plan (Work Plan) as amended (letters dated August 7, 2013, and October 30, 2013; ADAMS Accession Nos. ML13220A447 and ML13308A323, respectively). The Work Plan proposed that soil within 32 specified grids containing thorium be excavated to a depth of 1 meter (m) and transported offsite for disposal at a facility in Belleville, Michigan, known as the Wayne Disposal Facility. The excavated areas were to be backfilled with clean fill.

As part of the review of the Work Plan, the NRC staff independently evaluated the dose using a dose assessment that staff performed in 2009 (ADAMS Accession No. ML093490979), as a basis for determining dose for the expected concentrations that would remain at the AAR site. The maximum dose determined by the NRC staff for these expected concentrations is 14 mrem/yr, projected to occur at time around 600 years.

From April to July 2014, AAR conducted remediation of the 32 grids at the site. On May 21, 2015 (ADAMS Package Accession No. ML15148A656), AAR submitted a "Project Completion Report and Request for Approval of Unrestricted Use Designation, AAR Corporation, 12633 Inkster Road, Livonia, Michigan, 48150, Western Parcel, Strategic Waste Excavation and Site Restoration Project" (Completion Report). The Completion Report states that the grids specified in the Work Plan were excavated.

The NRC staff and its contractor observed and inspected work at the AAR site several times during the remediation. During the final NRC staff's visit in July 2014, the NRC staff walked the site with a survey instrument and confirmed that the 32 specified grids were excavated per the Work Plan commitment.

The NRC Region III Inspectors performed an inspection at the AAR facility during part of the remediation activities. Results of the inspection are documented in NRC Inspection Report 040-00235/2013-001 (DNMS), dated February 24, 2015, (ADAMS Accession No. ML15056A162). The report concluded that AAR conducted the remediation in accordance with the Work Plan. The report also concluded that the licensee (Solutient, AAR's contractor) had complied with NRC and Department of Transportation regulations for shipments of radioactive waste.

The NRC staff concludes that AAR met the commitments to excavate the 32 specified grids and to dispose the excavated material offsite at an appropriate facility.

Based on the considerations discussed above, the NRC staff concluded that:

1) radioactive material above release limits has been properly disposed for both Eastern and Western Parcels of the site; 2) reasonable effort has been made to eliminate residual radioactive contamination; and 3) final site surveys and associated documentation demonstrate that the entire site is suitable for unrestricted release in accordance with the criteria in 10 CFR part 20, subpart E.

Therefore, the AAR site at 12633 Inkster Road, Livonia, Michigan, is suitable for unrestricted use.

Dated at Rockville, Maryland this 23rd day of September, 2015.

For the Nuclear Regulatory Commission.

/RA/

Larry W. Camper, Director,
Division of Decommissioning, Uranium
Recovery, and Waste Programs,
Office of Nuclear Material Safety
and Safeguards.