




**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION 1  
5 Post Office Square, Suite 100  
Boston, MA 02109-3912**

**Memorandum**

Date: August 14, 2024

Subject: Nuclear Metals, Inc. Superfund Site, Concord, Massachusetts  
Remedial Action Report: Knox Trail Groundwater Extraction System  
Expansion  
CERCLIS No: MAD062166335

From: Kara Nierenberg, Remedial Project Manager  
Massachusetts Superfund Section

Through: Matthew Audet, Section Chief  
Massachusetts Superfund Section  2024.08.2  
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To: Daniel Wainberg, Acting Chief  
Remediation Branch I

This memorandum is documentation for the remedial action construction completion for ex-situ off-property groundwater remedial action project at the Nuclear Metals, Inc. Superfund Site (Nuclear Metals) in Concord, Massachusetts, and EPA's approval of the final Remedial Action Report for the Knox Trail Groundwater Extraction System Expansion (Remedial Action Report) which was submitted on August 2, 2024.

The August 2, 2024 Remedial Action Report is available in SEMS (SEMS Document No. 100031172). The Remedial Action Report is subject to the terms and conditions specified in the Consent Decree (CD) for Remedial Design / Remedial Action (RD/RA) for the Nuclear Metals, Inc. Site, which has an effective date of December 6, 2019. The Remedial Action Report certifies that the Remedial Action construction to address off-property groundwater has been completed at the Nuclear Metals Site in accordance with the requirements of the Consent Decree. The report was prepared by Geosyntec Consultants, Inc. on behalf of the Settling Defendants under EPA oversight.

The Knox Trail treatment system was initially constructed in 2017 as part of the non-time critical removal action (NTCRA) in the downgradient off-property area at the Nuclear Metals Site. The Knox Trail NTCRA relied on a deep overburden extraction well, EW-1, to intercept Site groundwater upgradient of the Town of Acton wellfield. The purpose of the Knox Trail Groundwater Extraction System Expansion Remedial Action was to expand the Knox Trail

treatment system work under the NTCRA to include two additional extraction wells (EW-2 and BEW-5) located to the east of the Assabet River such that the expansion intercepts the 1,4-dioxane and Volatile Organic Compound (VOC) plume further upgradient of the initial extraction well, EW-1.

The Remedial Action Report provides: references to the Remedial Design (SEMS Document No. 100022002) and Remedial Action Work Plan (SEMS Document No. 100024188); a description of the Remedial Action activities; a description of groundwater remedy implementation; a description of construction quality control measures; and the documentation, findings and analyses which were utilized to demonstrate that the construction of the designed remedy is complete, the groundwater treatment facility is operational and functional, and discharging effluent consistent with the performance standards.

As documented in the Remedial Action Report, a pre-final/final inspection was performed May 22, 2024 (SEMS Document No. 100030105). EPA and the MassDEP concluded jointly at the inspection that the Remedial Action construction was complete and no additional punch list items remained. EPA determined the system to be operational and functional on July 17, 2024 (SEMS Document No. 100030838).

This memo does not pertain to the following actions at the Site, which still need to be completed: excavation and off-site disposal of contaminated sediments and non-Holding Basin soils, in-situ stabilization of depleted uranium contaminated soils in the Holding Basin, construction of the Holding Basin vertical containment wall and horizontal cover, ex-situ on-property bedrock and overburden groundwater treatment, and institutional controls. This memo also does not pertain to the continued operation and maintenance of the Knox Trail groundwater treatment system to achieve compliance with groundwater performance standards.

EPA has determined that construction of the ex-situ off-property groundwater RA project at the Nuclear Metals Site is complete and complies with all applicable and relevant and appropriate standards identified in the ROD. I recommend that you sign this memorandum to indicate EPA's acceptance of this as documentation of the ex-situ off-property groundwater Remedial Action construction completion.

DANIEL  
WAINBERG

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WAINBERG  
Date: 2024.08.29 14:05:25  
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Daniel Wainberg, Acting Branch Chief  
Remediation Branch I