



**STATE OF TENNESSEE
DEPARTMENT OF ENVIRONMENT AND CONSERVATION**

Division of Remediation, Oak Ridge Office
761 Emory Valley Road
Oak Ridge, Tennessee 37830

May 15, 2024

Mr. Roger Petrie
Federal Facility Agreement Manager
Oak Ridge Office of Environmental Management
U.S. Department of Energy
Post Office Box 2001
Oak Ridge, Tennessee 37831

TDEC Comments: Remedial Design Work Plan for the Environmental Management Disposal Facility, Oak Ridge, Tennessee (DOE/OR/01-2971&D1)

Dear Mr. Petrie

The Tennessee Department of Environment and Conservation (TDEC), Division of Remediation - Oak Ridge Office, received the draft (D1) of the subject document on March 25, 2024. TDEC reviewed the document in accordance with the [Federal Facility Agreement \(FFA\) for the Oak Ridge Reservation \(ORR\)](#).

TDEC comments are enclosed. In the interest of maintaining the project schedule, TDEC supports any discussions among the FFA Parties that will help clarify these comments and support their timely resolution.

Questions or concerns regarding this letter may be directed to Brad Stephenson at the above address, by phone at 865-352-1235, or by e-mail at brad.stephenson@tn.gov.

Sincerely

Randy C. Young
FFA Project Manager
Division of Remediation – Oak Ridge Office

Enclosure

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Enclosure - Comments

General Comment

1. The *Engineering Feasibility Plan for the Elevated Groundwater Levels in the Vicinity of PP-01, EMWMF, Oak Ridge, Tennessee* (UCOR-4517, p. 27) states the following:

While not part of this action, recommendations will be provided to the Environmental Management Disposal Facility (EMDF) to:

- Install pneumatic piezometers entirely within the geologic buffer to monitor groundwater levels.
- Install a few nested pairs of pneumatic piezometers to monitor the underlying formations in areas where elevated pore pressures are anticipated, particularly over potential fracture zones.
- Evaluate whether each installation should have one or more redundant piezometers to facilitate trouble shooting in the future.

The results of the continued monitoring will be provided to the EMDF staff to facilitate interpreting the future pneumatic piezometer data for that facility.

These recommendations do not require any revision of the draft Remedial Design Work Plan (RDWP). However, TDEC asks the U.S. Department of Energy to lead discussions among the FFA parties throughout the landfill design phase regarding these recommendations and other potential means of monitoring groundwater levels beneath EMDF. The goal is for the design to include appropriate methods for monitoring compliance with the Remedial Action Objective (RAO) requiring 15 feet of separation between the waste and the seasonal high water table.

Specific Comments

1. **Page 27, Section 3.3.6**

- a. For consistency with Applicable or Relevant and Appropriate Requirements (ARARs) in the Record of Decision (ROD), change the section title from *Performance Monitoring* to *Detection Monitoring*, and reword the first sentence as follows:

The design will provide the preliminary ~~performance~~ detection monitoring locations for EMDF ~~detection monitoring~~ in accordance with the ROD ARARs.

- b. In the third/final sentence, the wording about implementation through a Sampling and Analysis Plan/Quality Assurance Project Plan (SAP/QAPP) is appropriate. However, please revise the sentence, or add a sentence, to state the monitoring network design will be detailed in the Remedial Design Report (RDR).

2. **Appendix A**

The list of ARARs in Appendix A appears to be incomplete. Revise the RDWP to include the missing requirements or clarify how they are or will be presented in other documents.

Enclosure - Comments

- a. Page A-7: Table A.2 is blank. The location-specific ARARs should be incorporated or cited. If the requirements are presented in previous documents associated with the early site preparation and the groundwater field demonstration, reference the appropriate document(s) in the body of the RDWP.
- b. Page A-19 and following pages: There is a large gap in the action-specific ARARs listed in RDWP Table A.3 compared with EMDF ROD pages A-33 through A-47. Add the missing requirements. Alternatively, if the intent is to include these requirements in the RAWP, then state that in the RDWP text.