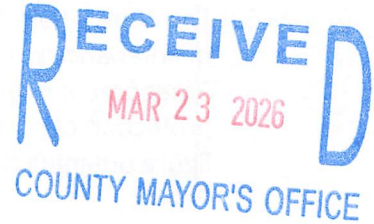




STATE OF TENNESSEE
DEPARTMENT OF ENVIRONMENT AND CONSERVATION

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



March 16, 2026

Mr. Roger Petrie
Federal Facility Agreement Manager
U.S. Department of Energy
Oak Ridge Office of Environmental Management
Post Office Box 4067
Oak Ridge, TN 37831

Dear Mr. Petrie

RE: Final Phased Construction Completion Report for Exposure Units Z2-20, Z2-21, and Z2-22 in Zone 2, East Tennessee Technology Park, Oak Ridge, Tennessee (DOE/OR/01-2991&D1)

The Tennessee Department of Environment and Conservation (TDEC) Division of Remediation, Oak Ridge Office (DoR-OR) is in receipt of the U.S. Department of Energy (DOE) letter dated December 17, 2025, transmitting the above referenced document. DoR-OR received the transmittal the same day. TDEC has completed a review of the document pursuant to the Federal Facility Agreement (FFA) for the Oak Ridge Reservation and offers the following comments:

General Comments

1. "Target depth" is a term used in the document when discussing the trichloroethene (TCE) soils remedial action (RA) in Exposure Unit (EU) Z2-21. The term is defined on page 45 as "the minimum depth of excavation and the point where confirmation sampling will begin. Within the TCE RA, target depths vary between 20 and 35 ft bgs." In other discussions, the target depth was used as the elevation at which excavation ceased, i.e., no further vertical advancement due to achieving the target depth. An example is in the second paragraph on page 164 where it states, "Some of the TCE concentrations at the 38-ft depth interval may exceed the respective remediation level (RL) (400 µg/kg) at some locations (e.g., Z2-EU21-W-9 [571 µg/kg] and Z2-EU21-NW-R05 [1130 µg/kg]); however, as stated previously, these concentrations are in the target of 35 ft or deeper and, therefore, do not drive the excavation vertically or horizontally." There seems to be ambiguity in the use of the term "target depth". Please consider adding clarifying text so the reader clearly understands the meaning and usefulness of the term.

2. Please add in the main text a discussion of how target depths were determined. The main text and modelling reports provided in Appendix C identify the target depths, however, the document lacks information on how those depths were determined.
3. The Zone 2 Soils Record of Decision (ROD) does not include a discussion of the maintenance worker scenario. Does an Explanation of Significant Differences or a ROD Amendment need to be completed to include risk-based soil remediation levels for protection of human health associated with a maintenance worker end use to 10 ft? A figure outlining the end uses should be included in this Phased Construction Completion Report.

Specific Comments

1. **Page 38, Section 4.2.2.8 and page 343, Section 9**
Please add a sentence in both sections stating, "Land use controls for the Zone 2 Duct Bank will be evaluated and established in a future CERCLA document."
2. **Page 38, Section 4.2.3 and page 55, Section 4.2.4**
The text should be revised in both sections (and elsewhere, as appropriate) to state that "the maintenance worker evaluation requirements are higher than those for the industrial worker." As written, the text implies the maintenance worker criteria are lower than the industrial worker scenario, which contradicts Section 4.2.1 which indicates that maintenance worker criteria are higher, or less restrictive, than the industrial worker scenario. It may be better to compare scenarios in terms of restrictiveness rather than "higher" or "lower".
3. **Page 145, Section 5.3.4, first paragraph**
The paragraph states soil TCE concentrations at the 38-ft depth interval exceeded the RL, but soil excavation stopped since the target depth was reached. The modeling report in Appendix C.2 uses a vadose zone thickness of 13.7m, or 44.9ft. Based on this information and the depth to water table potentiometric surface map, the TCE RA could have left 10ft of contaminated soil above the water table in some locations. Please add text discussing the excavations relative to depth to groundwater including remaining soil TCE concentrations and thicknesses of remaining contaminated soil above the water table. Also, please discuss how the smear zone was determined and estimates of mass that remain in and above the smear zone. This added information should be submitted to the groundwater project team to support future groundwater decisions.
4. **Page 145, Section 5.3.4, first paragraph**
Please revise the text at the end of the paragraph to state the data will be submitted to the East Tennessee Technology Park (ETTP) groundwater project team rather than the sitewide groundwater project. Also, if appropriate, please state the data will be addressed in the ETTP Main Plant Area Groundwater ROD.

5. **Page 150, Section 5.3.4.1**

Please consider adding a figure or revising an existing figure (e.g., Figure 81 or Figure 82) to help the reader visualize the different RLs used for varying depths of excavation. Also, please include in the text references to the respective modeling reports that identified RLs used with depth.

6. **Page 175, Section 5.3.4.3**

Please include in Appendix L.7-1 an estimate of the volume of elemental mercury recovered from the subsurface piping and soil near the K-1024 slab area.

7. **Pages 232 through 261, Sections 5.4.2 through 5.4.7**

For each RA discussed, please include a statement for the basis of the RA and reference Section 4.2.4 for a complete basis description.

This letter meets the FFA review cycle protocol of 90 days for the subject document. TDEC looks forward to working with DOE to ensure timely resolution of these comments. Questions or comments concerning the contents of this letter should be directed to Randy Hoffmeister at the above address or by phone at (865) 985-2513.

Sincerely



Eileen Marcillo
FFA Project Manager
Division of Remediation - Oak Ridge Office

ec: Mark McIntosh, DOE
Sam Scheffler, DOE
Carl Froede, EPA
Cathy Amoroso, EPA
Jana Dawson, EPA
Tanya Salamacha, UCOR
Sid Garland, UCOR
OREM Mailroom
ORSSAB

xc: Wade Creswell, ORRCA
Amy Fitzgerald, ORRCA
Terry Frank, ORRCA
Warren Gooch, ORRCA

COPY