

STATE OF TENNESSEE DEPARTMENT OF ENVIRONMENT AND CONSERVATION

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

December 4, 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



Dear Mr. Petrie

RE: Phased Construction Completion Report for Exposure Unit Z2-13 in Zone 2, East Tennessee Technology Park, Oak Ridge, Tennessee (DOE/OR/01-2983&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 September 18, 2024, 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 Comment

1. Confirmation sample results showed exceedances for remedial action (RA)-specific Remediation Levels in floor and wall samples for some excavations, yet the digs were not expanded due to close proximities to the groundwater (GW) table (approximately 1 ft above the water table). Wall samples appeared to have been taken at various intervals depending on the excavation (e.g., 15-22 ft at the K-631 North TCE RA). Please add text describing where samples were collected within each interval and discuss how much contamination may have been left in place by not expanding the respective digs.

Specific Comments

1. Page 73, Figure 21

Wall confirmation sample Z2-EU13-1514 is shown to have passed RA completion criteria in the figure, however, Tables 3 and 4 indicate that this sample location failed and was not removed as part of excavation expansion. Please address this discrepancy.

2. Page 75, Section 5.2.7, second paragraph

The text states that floor samples Z2-EU13-1218 and Z2-EU13-1221 exceeded the groundwater soil screening levels (SSLs) for both U-234 and U-238 and are identified as isolated and not a threat to groundwater. Section 5.4.3 includes a brief discussion of these results and relies on a soil-to-groundwater model to support the no threat to groundwater determination. Previously collected data from wells and piezometers in the area (e.g., UNP-007, BRW-016, EU13B-581 PIEZ) have shown high uranium concentrations greater than the maximum contaminant level suggesting the area may have a uranium source to groundwater. These two GW SSL exceedances seem to be related that should not be easily dismissed. DOE should consider re-evaluating the no threat to groundwater determination based on all available data.

3. Page D-8, Table D3

Please revise the table to include all the non-radiological analytes and chemical discharge goals included in *Addendum 15 to the Remedial Design Report/Remedial Action Work Plan for Zone 2 Soils, Slabs, and Subsurface Structures* (DOE/OR/01-2224&D5/A15/R1). Please confirm the discharge goals listed in Table D3 are the approved discharge goals in Addendum 15.

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.

XC:

Sincerely

Randy Young Digitally signed by Randy Young Date: 2024.12.03 16:00:24 -05'00'

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

ec: Mark McIntosh, DOE
Joanna Hardin, DOE
Sam Scheffler, DOE
Samantha Urquhart-Foster, EPA
Constance Jones, EPA
Tanya Salamacha, UCOR
Sid Garland, UCOR
OREM Mailroom
ORSSAB

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

