STATE OF TENNESSEE
DEPARTMENT OF ENVIRONMENT AND CONSERVATION
Division of Remediation - Oak Ridge
761 Emory Valley Road
Oak Ridge, Tennessee 37830

February 14, 2023

Mr. Roger Petrie
Federal Facility Agreement Manager
Oak Ridge Office for Environmental Management
Department of Energy
PO Box 2001
Oak Ridge, TN 37831

Dear Mr. Petrie

RE: Addendum 15 to the Remedial Design Report/Remedial Action Work Plan for Zone 2 Soils, Slabs, and Subsurface Structures at East Tennessee Technology Park, Oak Ridge, Tennessee: Water Management in Exposure Unit Z2-13 (DOE/OR/01-2224&D5/A15)

The Tennessee Department of Environment and Conservation (TDEC) Division of Remediation, Oak Ridge Office (DoR-OR) is in receipt of the Department of Energy (DOE) letter dated December 5, 2022, transmitting the above referenced document. DoR-OR received the transmittal the same day. TDEC has completed a review of the document pursuant to Federal Facility Agreement (FFA) for the Oak Ridge Reservation and offers the following comments for consideration:

General Comment

1. To clarify the application of Tennessee Antidegradation rules which have been discussed among the FFA parties during the development of this work plan, please include the following text in the document:
   No provision of Tennessee Antidegradation rules, which are mandated by the federal CWA regulations, see 40 CFR sec. 131.12, was listed as an ARAR in the ETTP Zone 2 Soils ROD because when the ROD was approved by the parties it had identified DOE Order requirements as TBCs for radionuclides and had placed reliance for discharge limits based on water quality and treatment technology for conventional CWA pollutants on the nearby Central Neutralization Facility (CNF).

   The FFA parties have agreed, however, that the requirements of Tenn. Comp. R. & Regs. 0400-40-03-.06(2)(a) should be applied to any "new or increased discharges" caused by CERCLA remedial activities. The FFA parties find that the discharges of wastewater resulting from this soil excavation project would not "trigger" the most stringent requirements for antidegradation because actions authorized by the ROD within its scope would not be considered "new or increased" discharges, since they were previously authorized by the ROD. Specifically, the FFA parties find that the ARAR should be in place, but the prerequisite requirements are not triggered by this specific project.

The FFA parties further recognize that the proposed soil excavation is necessary to meet remedial action objectives for the Zone 2 remedy and the soil removed may contribute to groundwater contamination. Groundwater contamination, given the complexity of the hydrogeology under the site, may find access to surface waters through various routes. Therefore, although the excavation of contaminated soils for this project is solely justified for the cleanup of soils as a separate operable unit, the soil excavation and removal from this project may also be permanently removing a contamination source for surface and groundwater contamination and be contribute as an interim measure - in practical effect though not signed as such - moving forward toward the eventual remediation for the groundwater and surface water in the Zone 2 area.

Given the closure of the CNF, EPA and TDEC have taken the position that there needs to be an Explanation of Significant Differences (ESD) to the Zone 2 ROD to rectify the issues caused by improper reliance on a dose-based DOE Order that could allow water discharges to exceed CERCLA guidance for radionuclides based on its risk range, and to authorize for the discharge of pollutants covered under the CWA. A draft ESD was prepared but not approved. The issue remains in the status of an informal dispute.

The FFA parties agree the approval of this plan does not waive the asserted positions of EPA and TDEC with respect to the need to finalize an ESD which will include appropriate ARARS to either be satisfied or waived as part of the remedy.

The FFA parties agree to the proposals described in this work plan for the sampling, treatment, and discharge of potentially contaminated water which collects during the excavation of contaminated soils. DOE will follow the processes described in this work plan to ensure contaminated water is managed in a manner protective of human health and the environment. DOE agrees to a discharge limit based on meeting the most stringent AWQC for PCBs and mercury at the point of the discharge without mixing.

Specific Comments

1. **Page 5, Section 2, second paragraph**
   Please change "Clean Water Act" to "Tennessee Water Quality Control Act", as the Aquatic Resource Alteration Permit is a state permit.

2. **Page 11, Section 3, first sentence**
   Please provide the numerical limits for contaminants that will be discharged rather than simply referencing the practices implemented at the EU Z2-21 excavation site.

3. **Pages 15-16, Section 5**
   Please include the following narrative restrictions to address potential impacts from the discharge:

   The discharge shall not:

   - *Result in distinctly visible solids, scum, foam, oily slick, or the formation of slimes, bottom deposits, or sludge banks of such size or character as may be detrimental to fish and aquatic life.*

- *Result in total suspended solids, turbidity, or color in such amounts or character that will result in any objectionable appearance to the water, considering the nature and location of the water.*
- *Contain pollutants in quantities that will be hazardous or otherwise detrimental to humans, livestock, wildlife, plant life, or fish and aquatic life in the receiving stream.*

4. **Pages 15-16, Section 5**
   Please state whether sludge or other material may be generated during operations and the disposition of such waste.

5. **Page 16, Section 5, last paragraph**
   Does the use of "an off-site disposition pathway" include NPDES permitted or other wastewater facilities on the ORR? If yes, then please identify the facility so TDEC can evaluate whether the facility is adequate to treat the wastewater.

6. **Page A-4**
   In accordance with Tenn. Comp. R. & Regs § 0400-40-03-.05(8), data generated should use a "sufficiently sensitive" analytical method for detection. EPA Method 1668 A-C should be used to ensure adequate detection of PCBs.

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) 220-6583.

Sincerely

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

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