

STATE OF TENNESSEE DEPARTMENT OF ENVIRONMENT AND CONSERVATION Division of Remediation, Oak Ridge Office

761 Emory Valley Road Oak Ridge, Tennessee 37830

June 6, 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 RECEIVE JUN 10 2024 COUNTY MAYOR'S OFFICE

Dear Mr. Petrie

Department of Energy Oak Ridge Environmental Management Fiscal Year (FY) 2026 Budget Request

The Tennessee Department of Environment and Conservation (TDEC), Division of Remediation Oak Ridge Office (DoR-ORO) has identified the following priorities for inclusion with OREM's FY26 budget request. This information is being shared in accordance with the Oak Ridge Reservation (ORR) Federal Facility Agreement (FFA) Section XXXVIII (Funding).

PBS OR-00138

Sludge Management

TDEC's <u>interests include progress toward removal and treatment of the TRU tank sludges</u> <u>included in the Site Treatment Plan</u>. The U.S. Department of Energy (DOE) has recently proposed a several-year extension of milestones which were established to document progress toward the treatment of stored transuranic sludges in Melton Valley (MV) at Oak Ridge National Laboratory (ORNL). As additional sludges continue to be produced from ORNL processes, funding must be available to manage this waste stream before capacity becomes a limiting factor. Current OREM priorities for the FY26 budget request do not align with TDEC interests and neglect responsibilities of transuranic sludge processing in the Site Treatment Plan.

PBS OR-0030

Trench 13 Remedial Action

Appropriate prioritization for technology development efforts to ensure the eventual, safe remediation of transuranic waste in Trench 13 is a significant budget interest for the State. Information shared for the OREM FY26 budget request does not align with TDEC interests.

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PBS OR-0040

East Tennessee Technology Park (ETTP)

<u>Remediation of ETTP groundwater is a TDEC priority</u> for OREM's FY26 budget request. While most buildings and soils at the ETTP site have been remediated, decisions remain for other source areas and media (i.e., groundwater, burial grounds, ash pile, surface water, and sediment). Continuing momentum with ETTP groundwater decisions is critical to achieve final closure of ETTP. As final remedial decisions are being developed by the FFA parties for remaining contaminated media (groundwater, sediment, surface water, and ecological receptors), those decisions require actions such as developing characterization plans for plume delineation and remediation strategies for effective cleanup. Based on information shared to date regarding the OREM FY26 budget request, TDEC is unable to determine if OREM's commitment to ETTP groundwater remediation is in alignment with TDEC interests.

In addition, many areas of ETTP have been transferred to the public while contaminated groundwater remains to be addressed. Obtaining adequate funding to reach remediation decisions for these now public use areas is critical to ensure continued protectiveness of those now using the property. DOE must ensure the response action assurances under approved ORR covenant deferral requests are satisfied, specifically including funding requests prescribed in 42 USC 9620 (h)(3)(C)(ii)(IV) which states "... the Federal agency responsible for the property subject to transfer will submit a budget request to the Director of the Office of Management and Budget that adequately addresses schedules for investigation and completion of all necessary response action, subject to congressional authorizations and appropriations".

PBS OR-0041

Upper East Fork Poplar Creek (UEFPC) Watershed

Planning and initiation of <u>remediation within the UEFPC watershed</u> is apparent in the OREM FY26 budget request and is <u>a priority TDEC supports</u>. The long-term impacts from historic mercury releases in the watershed have contaminated buildings, soils, and groundwater, and contaminated surface water continues to exit the site at concentrations that is an order of magnitude higher than the Interim Record of Decision (ROD) goal.

Based on the information OREM has provided to date, <u>TDEC supports completing the</u> <u>construction and initiating operation of the Outfall 200 Mercury Treatment Facility</u> as prioritized in the budget request (PBS OR-0041.C2). Due to the widespread mercury contamination in the area, the project is critical to support necessary future remediation work in the watershed.

In addition to the OREM priorities described for PBS 0041 within the FY26 budget request, TDEC recommends the following additional projects be planned and funded to support effective remediation in the UEFPC watershed:

 Adequate <u>funding needs to be requested to remediate the mercury contaminated soils</u> <u>under Alpha 2 and other buildings as individual demolitions are completed</u>. Within the UEFPC watershed and consistent with the existing Interim ROD, soil remediation must be implemented as buildings are remediated and contaminated soils become accessible. As mercury contaminated soils beneath buildings become saturated with shallow groundwater during and after demolition (e.g., Alpha 2 D&D project), those soils will become a new saturated source of mercury releases to the environment. TDEC is concerned the current plan for UEFPC of using the ETTP remediation model, which effectively delayed soil remediation until all buildings were demolished to begin soil remediation, may present additional challenges for UEFPC remediation. The on-going DOE missions within the congested UEFPC watershed create a unique situation that differs significantly from ETTP. As properties are cleared of former facilities, they may become prime locations to construct support facilities for the mission prior to soils being remediated. In addition, prolonging remediation of the saturated mercury within the shallow soils underneath Alpha 2 will increase the amount of mercury released into the environment. The State cannot support delaying remediation of such soil areas as an effective remediation strategy within UEFPC. Recently, the demolished Biology Complex has become an example why this is not a good strategy and how it will cause delays in beneficial reuse of the properties as well as increased overall costs.

- <u>Obtaining funding for technology development for mercury characterization and remediation</u> is vital to overcoming the challenges to be encountered during remediation. With the scope of the mercury problem within the watershed, significant schedule and cost savings could be realized with development of effective mercury remediation technologies.
- Initiation of phased groundwater remedial investigations are a TDEC priority for the UEFPC watershed. Focused groundwater investigations can both assist with contaminant monitoring during building/soil remediation while also providing the data necessary to support future groundwater remediation decisions in the watershed. Near-term initiation should provide long-term cost savings.

Bear Creek Valley (BCV) Watershed

The BCV watershed contains numerous waste burial areas which continue to release contaminants to both surface water and groundwater flowing through the valley. TDEC interests include protecting waters of Tennessee from the continued releases of contaminants into both Bear Creek and surrounding groundwater. Therefore, TDEC supports OREM's planned remediation activities for areas such as NT-8 and the Bear Creek Burial Grounds (BCBGs) to mitigate releases of contaminants to *surface waters* in the valley. However, additional actions to mitigate the continued releases of contamination to *groundwater* are also a TDEC priority.

PBS OR-0041-C3

Environmental Management Disposal Facility (EMDF) Line Item 17-D-401

Within PBS OR-0041.C3 and consistent with the ROD for the EMDF, <u>TDEC places priority on</u> <u>actions to mitigate the presence of methylmercury in Bear Creek</u>. As described in the EMDF ROD, reducing the current generation of methylmercury in Bear Creek is vital to supporting planned mercury remediation schedules within UEFPC. Adequate funding should be requested to expeditiously satisfy this previous commitment of the FFA parties. Based on information shared to date, it is unclear if OREM and TDEC are in alignment to address methylmercury concerns in Bear Creek prior to the EMDF becoming operational.

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In addition, TDEC strongly suggests the FY26 budget request be capable of managing uncertainties from the results of the upcoming groundwater study at the EMDF site. There is enough uncertainty associated with the predicted results of the study that <u>DOE should ensure alternate designs are conceptualized and available to finalize if groundwater levels are different than those currently expected</u>. The EMDF is a critical project to support ORR wide remediation and the parties must attempt to avoid potential delays.

PBS OR-0042

Bethel Valley (BV) Watershed

TDEC's interests within BV at the ORNL include remediation of contaminated soils which are a continuing source of contamination. Addressing this contamination will allow for beneficial reuse of the property for the ORNL missions and for both surface water and groundwater to achieve their classified uses. However, the current strategy is based on goals of an Interim ROD the tri-parties approved nearly fifteen years ago. The limited scope of that Interim ROD will likely require areas to be remediated more than once as final groundwater decisions were not in the scope of that decision document. Now, some fifteen years later and with a better understanding of impacts to groundwater from these contaminated soils, DOE should make every effort <u>not</u> to plan for remediation of these soils twice: once for the BV Interim ROD and then again for a future ROD. Obviously, a more cost-effective strategy would be to remediate the same areas only once. <u>TDEC prioritizes the shifting of soil remediation strategies and the necessary funding to allow</u> efficient soil remediation to occur.

<u>Adequate funding of D&D activities in BV also requires priority funding in FY26</u>. OREM is proposing to extend completions of on-going projects (3001 Support Facilities, 3026-D Facility, Isotope Facilities, and B-3038) with approved work plans at least 3-4 years. Progress should continue to allow these projects to be completed and move closer to reuse of the property to support ORNL missions.

<u>Technology development resources are another necessary priority to finalize planning for</u> <u>remediation of the Molten Salt Reactor Experiment facility</u> to include moving the spent fuel out of the water table at the site. The FFA parties are working to complete the required Comprehensive Environmental Response, Compensation, and Liability Act documentation for the project, but the challenges of moving those fuel salt tanks likely requires new, innovative technology.

Many of these comments relay <u>TDEC's priorities to address contaminated groundwater across</u> the entire reservation, reduce overall project costs, and shorten schedules by changing the remediation approach to include soils and groundwater as soon as a given building is <u>demolished</u>. This allows for beneficial reuse years earlier than the approach used at ETTP where there was no immediate need for the property. Adequate funding is critical to address the dozens of groundwater projects identified in the approved, decade old 2014 ORR *Groundwater Strategy*. Substantial funding will be required to achieve progress and the ultimate completion of projects identified within that strategy document. Because of limitations regarding sharing of budget request information apparently being directed by the Office of Management and Budget (OMB) and followed by the OREM program, it seems impossible for TDEC to determine if or how its stated priorities would be affected by OMB target guidance. Over the last several years, Congress has consistently provide additional funding for actions which are apparently above the OREM budget request. Though these additional activities are worthwhile and warranted, TDEC has no practicable way to determine if and to what extent these activities would exceed target funding levels given the lack of information being shared. The ORR FFA sec. XXXVIII. B prescribes:

B. The parties shall attempt to reach agreement regarding work scope, priorities, schedules/milestones, and Program Baseline Summary (PBS) funding levels required to accomplish the purpose of the Agreement. These discussions shall be conducted before DOE-OR submits its annual budget request and supporting PBS to DOE-HQ. EPA and TDEC shall, to the extent practicable, identify in its comments to DOE whether additional or accelerated activities recommended by the EPA and/or TDEC are believed by the EPA or TDEC to be outside of target funding levels for the activities covered under this Agreement.

In accordance with Section XXXVIII, paragraph C of the ORR FFA, if the issues above cannot be resolved prior to the transmittal of DOE-OR's budget request to DOE-HQ, then TDEC's priorities should be forwarded by OREM along with the FY26 budget request. Questions or comments concerning the contents of this letter should be directed to Randy Young at (865) 310-1157.

Sincerely

Digitally signed by Randy Randy Young Date: 2024.06.06 09:02:11 -04'00'

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

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