



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

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

April 20, 2021

Mr. James Y. Daffron
Acting Portfolio Federal Project Director
East Tennessee Technology Park Projects
Oak Ridge Office of Environmental Management
U.S. Department of Energy
P.O. Box 2001
Oak Ridge, TN 37831

Mr. Nathan Felosi
Portfolio Federal Project Director
Oak Ridge National Laboratory Projects
Oak Ridge Office of Environmental Management
U.S. Department of Energy
P.O. Box 2001
Oak Ridge, TN 37831

Mr. Brian Henry
Portfolio Federal Project Director
Y-12 National Security Complex Projects
Oak Ridge Office of Environmental Management
U.S. Department of Energy
P.O. Box 2001
Oak Ridge, TN 37831

Mr. Johnny O. Moore, Manager
Portfolio Federal Project Director
Oak Ridge National Laboratory Site Office
U.S. Department of Energy
BLDG. 4500N, MS-6269
P.O. Box 2008
Oak Ridge, TN 37831

Dear Mr. Daffron, Mr. Felosi, Mr. Henry and Mr. Moore:

Site Treatment Plan for Mixed Waste on the United States Department of Energy Oak Ridge Reservation- Submittal of the Annual Update (Version 25.0) and the Semiannual Progress Report

The Tennessee Department of Environment and Conservation (TDEC)'s divisions of Remediation (DoR) and Solid Waste Management (DSWM) acknowledge the receipt of the abovementioned update and the report in the following manner:

- The U.S. Department of Energy (DOE) Oak Ridge Office of Environmental Management (OREM)'s Semiannual Progress Report and Chapters 1, 2, 3, 4A, 5, Appendix A, Appendix B, Appendix C of the Annual Update (Version 25.0) were received electronically with a cover letter dated October 23, 2020.
- DOE Oak Ridge National Laboratory Site Office (OSO)'s Semiannual Progress Report and Chapter 4B of the Annual Update (Version 25.0) were received electronically with a cover letter dated October 25, 2020.

These submittals fulfilled the relevant requirements of Section 2.3.2 titled, "Timing of Updates" of the Site Treatment Plan (STP) for DOE's Oak Ridge Reservation (ORR).

For the purpose of review and approval process, the separately submitted sections of the Annual Update (Version 25.0) were integrated into one document titled, "Site Treatment Plan for Mixed Wastes on the U.S. Department of Energy Oak Ridge Reservation." Similarly, the Semiannual Progress Reports were also combined and accepted as a single report titled, "Semiannual Progress Report for the Site Treatment Plan."

Prior to these submittals, a virtual meeting was held on October 8, 2020 with OREM and OSO. After thorough discussions, an understanding was reached during the meeting of the possible changes to be included in the Annual Update (Version 25.0) of the STP. In this context, the proposed extension of the pertinent STP milestones is already being honored.

Our staff have thoroughly reviewed the submittals. We find the reports to be informative. We have noticed that no changes were made to the text of section 3.5 titled, "Mercury-Contaminated Mixed Waste" of the Annual Update (Version 25.0) from the previous year's submittal (Version 24.2), approved by us on May 13, 2020. Additional comments are as follows:

- Although there is mention of the use of MACRO bags for mixed low-level waste debris being generated from Decontamination and Decommission activities at Y-12 in the Semi-annual Progress Report, there is no reference to it in the Annual Update (Version 25.0). The confusion due to this discrepancy requires to be addressed.
- There is a need to differentiate and provide additional information between the mercury in debris that would send to Nevada National Security Site vs. the mercury that can be recovered separately from the debris. In the latter case it would be sent offsite for retorting depending on the concentration or treated by other specified methods or to a specified concentration.
- A separate writeup on topic of soils is required as these, too, have another treatment requirement under 40 Code of Federal Regulations 268.49.
- Both the Annual Update (Version 25.0) and the Semi-annual Progress Report state that DOE's September 2020 submission entitled "Treatment of Mercury-Bearing Mixed Waste Treatment Technologies and Timeline, Oak Ridge, Tennessee" fulfilled the STP Annual Update Revision 24.2's milestone to submit a detailed report on the plans and schedules for characterization and treatment of mixed mercury waste streams. However, after lengthy discussions between TDEC and DOE, TDEC has returned that submittal with comments to DOE with the expectation that DOE will submit an updated version of the submittal reflecting TDEC's comments. The above referenced milestone will be met upon submittal of the revised report reflecting TDEC's comments.

Therefore, as per section 2.8.5.1 of the STP, TDEC is returning this deliverable with comments to DOE. TDEC anticipates approving these deliverables on the condition that DOE re-submits them with the information requested above within 30 days of the receipt of this letter. For consistency,

we take this opportunity to request this information be also included in the upcoming Semi-annual Progress Report that is due by April 30, 2021.

If we can be of assistance on this or a related matter, please do not hesitate to contact either Revendra Awasthi at Revendra.Awasthi@tn.gov 865-594-5468; or Ashwin Brahmbhatt at Ashwin.brahmbhatt@tn.gov 865-220-6560.

Sincerely

AjBrahmbhatt

Revendra Awasthi
STP Coordinator
Division of Solid Waste Management
Knoxville Field Office

Ashwin Brahmbhatt
STP Manager
Division of Remediation - Oak Ridge

ec: Lisa Hughey, DSWM
Steve Sanders, DoR
Chris Thompson, TDEC
Colby Morgan, DoR
Steve Stout, OGC
Peter Murrey, AGO
Steve Cooke, DOE-EM
Michelle Lohmann, ORSSAB

xc: Ron Woody, ORRCA
Amy Fitzgerald, ORRCA
Amanda Daugherty, ORRCA
Shelley Kimel, ORSSAB