



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

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

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COUNTY MAYOR'S OFFICE

July 1, 2025

Mr. Roger Petrie
Oak Ridge Office of Environmental Management
U.S. Department of Energy
Post Office Box 2001
Oak Ridge, Tennessee 37831

Dear Mr. Petrie

**RE: Addendum to the Removal Action Work Plan for the Y-12 Facilities
Deactivation/Demolition Project, Oak Ridge, Tennessee: Beta-4 Complex Pre-Demolition
(DOE/OR/01-2479&D1/A17)**

The Tennessee Department of Environment and Conservation (TDEC), Division of Remediation-Oak Ridge Office, received the above referenced submittal on April 4, 2025. The document has been reviewed pursuant to the Federal Facility Agreement (FFA) for the Oak Ridge Reservation (ORR). The following comments are relevant to the State's review:

General Comments:

1. An FFA Appendix I-5 meeting will need to be scheduled for this facility.
2. Which ORR water treatment system(s) are expected to be used for this facility? Please ensure that any system utilized will be included in the Y-12 Deactivation/Demolition Action Memorandum (DOE/OR/01-2462&D2).
3. A project scoping meeting and site visit should be held for larger facilities on the site. Please include a scoping meeting and FFA tri-party visit to the Beta-4 facility in this project schedule.
4. While this document includes tanks for the project, it lacks specificity regarding how the tanks will be individually managed in the process. TDEC requests a more detailed process of how interior tanks, exterior tanks, and transfer stations will be managed.
5. All instances of the Phase 2 Record of Decision (ROD) noted in this document should be corrected to the Phase 2 *Interim* ROD, as it is listed in the references.

Specific Comments:

1. **Page 1, fourth paragraph, last sentence**
Considering OD-7 (*Waste Oil Storage*) is an inactive Environmental Management (EM) facility part of the Beta-4 complex, why will it not be removed as part of this project?
2. **Page 3, Table 1**
Only two of the tanks listed in Table 1 are included in Appendix C of the FFA (YS-233 & F-102 YS-241). Please confirm whether the other tanks in this table are Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) facilities and should therefore be added to Appendix C.
3. **Page 4, Table 2**
Including the CERCLA screens in this project "portfolio" is helpful to understand the process knowledge (PK) and history of the facility complex. Please share the CERCLA screens for these facilities with TDEC and the U.S. Environmental Protection Agency (EPA) for reference. The U.S. Department of Energy (DOE) should also plan to include these screens as an attachment to the eventual Phased Construction Completion Report (PCCR), to ensure all relevant project information stays together.
 - A. Other than 9720-22, were any of the facilities in this table demolished under a CERCLA action?
4. **Page 10, Section 2.1.2, second paragraph, last sentence**
Please provide a map and description of the location of the pipe gallery relative to the building footprint.
5. **Page 15, second paragraph**
Please edit the end of the sentence to "...demolition of Bldg. 9204-4, 9501-9, transfer stations, and associated tanks."
6. **Page 15, third paragraph, fourth sentence**
Please provide further clarification on the timeline for using controlled low-strength material (CLSM) "prior to demolition." Is the action of pouring CLSM part of the pre-demolition or demolition scope?
7. **Page 17, first bullet- Elimination, first sub-bullet**
Please quantify the amount of piping expecting to be inspected with a boroscope in the facility. Is it 100% of the facility piping?
8. **Page 18, Pre-demolition activities, second bullet**
TDEC and EPA should be included on all Data Quality Objectives (DQO) discussions for waste going to an ORR CERCLA landfill. On previous projects, pre-demolition DQOs have been conducted without FFA tri-party involvement for waste planning to go offsite. During the characterization process, DOE determines that some of the material can

remain onsite to be combined with demolition waste. In these scenarios, it becomes challenging for EPA and TDEC to keep track of all sampling objectives and waste materials associated with the Waste Handling Plan.

9. **Page 18, eighth bullet, second sentence**

Additional characterization and FFA tri-party discussions need to be conducted before CLSM is poured into any areas of the basement.

10. **Page 18, eighth bullet, second sentence**

Is there any data on the effectiveness of using CLSM as a vapor barrier? Have there been any studies to measure the transit time of contaminant permeation through CLSM over an extended period of time?

11. **Page 18, eighth bullet**

Before FerroBlack becomes officially incorporated into the process of CERCLA project evaluation, TDEC requests a formal review of the FerroBlack material from the Mercury Task Force.

12. **Page 18, last bullet, first sentence**

Are there plans to not plug all drains within the facility? If there is an expectation that any drains will remain unplugged, provide additional information and justification as to why they are necessary to remain open.

13. **Page 18, last bullet, last sentence**

What is considered an "indication of contamination"? Will process knowledge be factored into the assessment of whether a floor drain will be sampled, or will it only be based upon a visual inspection?

14. **Page 19, sixth bullet**

Include additional clarification on whether all potentially mercury-contaminated pipe will be disposed during pre-demolition, or if there is any expectation that some will transfer to the demolition scope.

15. **Page 19, sixth bullet**

Please provide information further describing the process of determining mercury contamination in piping. Is there any other material, like water, in the piping that could affect such measurements as mercury vapor readings?

16. **Page 19, sixth bullet, third bullet, last sentence**

TDEC requests editing the last sentence to "...when this work is completed, it can be used with FFA tri-party agreement".

17. **Page 19, sixth bullet, last sub-bullet**

Please quantify what is meant by a “detectable vapor” measurement. TDEC also requests a description of the instrumentation and sensitivity that are expected to be used.

18. **Page 20, first sub-bullet, third sentence**

Please elaborate on the “if preferable” note. Where will there be further discussion about this material?

19. **Page 20, Section 4.2**

Please include a note that a Contamination Migration Control Plan (CMCP) with Best Management Practices (BMPs) will be provided to the FFA triparties prior to demolition beginning.

20. **Page 20, Section 4.2, second paragraph**

It is recommended to select sampling locations that are accessible during the pre-demolition, demolition, and post-demolition periods to allow stormwater quality comparison.

21. **Page 21, Figure 6**

An additional, zoomed-out figure of the stormwater network should be added to show where the pipeline connections eventually discharge into Upper East Fork Poplar Creek.

22. **Page 23, first paragraph**

Can the referenced *UCOR Waste Management Program Plan* be provided to TDEC and EPA? It is not listed in the references as an accessible document. Having this information would help TDEC understand the waste hierarchy and segregation plan applied in future DQO planning.

23. **Page 23, Section 5, third paragraph**

What happens if there are contaminants in the water that do not have a Waste Acceptance Criteria (WAC) at the treatment facility? Will a variance be requested, and the collected water sent to the facility?

24. **Page 25, Project Schedule**

A project milestone should be established for the pre-demolition PCCR.

Questions or comments concerning the contents of this letter should be directed to Cody Juneau at the above address or by phone at (865) 314-2328.

Sincerely

Randy Young

Digitally signed by Randy
Young
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Randy C. Young
FFA Project Manager
Division of Remediation – Oak Ridge Office

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