



Department of Energy

Oak Ridge Office of Environmental Management
P.O. Box 2001
Oak Ridge, Tennessee 37831

September 8, 2023

Mr. Leon Shields
Chair
Oak Ridge Site Specific Advisory Board
Post Office Box 2001
Oak Ridge, Tennessee 37831

Dear Mr. Shields:

RESPONSE TO LETTER ENTITLED, *RECOMMENDATION 255: ON GROUNDWATER REMEDY SELECTIONS IN THE MAIN PLANT AND K-31/K-33 AREAS AT THE EAST TENNESSEE TECHNOLOGY PARK AT THE U.S. DEPARTMENT OF ENERGY OAK RIDGE RESERVATION, OAK RIDGE, TENNESSEE*

Reference: Letter from Leon Shields to Jay Mullis, *Recommendation 255: On Groundwater Remedy Selections in the Main Plant and K-31/K-33 Areas at the East Tennessee Technology Park at the U.S. Department of Energy Oak Ridge Reservation, Oak Ridge, Tennessee*, dated August 15, 2023

I appreciate the Oak Ridge Site Specific Advisory Board (ORSSAB) support of the U.S. Department of Energy (DOE) groundwater remedy selections for the East Tennessee Technology Park (ETTP) Main Plant Area and K-31/K-33 Area and additional recommendations. Provided below are responses to your recommendations. Please note the language in italics is taken from the subject letter.

1. *In addition to monitoring the six treated plumes, monitor downgradient and around those plumes to determine if the contaminants have migrated.*

Response: DOE will perform periodic monitoring in the vicinity of the six treatment areas to assess the remedy performance, check for containment migration, and most importantly, ensure protection of public health and the environment. This monitoring will yield the data necessary to adjust the injection design if warranted to improve treatment effectiveness even further in the complex setting.

2. *Monitor the microorganisms to evaluate continued viability.*

Response: As indicated in our response to Recommendation 1, DOE intends to monitor ETTP groundwater in the treatment areas during the post-injection. This monitoring will include submitting groundwater samples to specialized laboratories for analyses that assess the microorganism's viability (i.e., population growth), the suitability of geochemical conditions for their continued growth, and key indicators of their effectiveness in the breakdown of volatile organic compounds.

3. *Report the results of monitoring and evaluation to ORSSAB once this information is available.*

Response: DOE looks forward to providing updates of the remedy progress with the ORSSAB. These updates will include a summary of the monitoring results as the information becomes available and after assessments have been conducted that result in relevant findings, as discussed in our response to Recommendation 2. The results will also be available for review in the Five-Year Review.

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Based on information presented showing that the forces of nature appear to be lowering concentrations of contaminants in the K31/K33 area to acceptable levels, ORSSAB supports the selected alternative of monitored natural attenuation along with land use controls in this area.

Response: DOE is appreciative of the ORSSAB endorsing the preferred alternative of monitored natural attenuation for groundwater restoration in the K-31/K-33 area of ETTP. As described in the Proposed Plan for Groundwater in the K-31/K-33 Area Record of Decision at ETTP, land use controls will be implemented in parallel with the monitored natural attenuation action as an additional protective measure to minimize potential exposures to contaminated groundwater.


Thank you again for your continued support in this important component to the Oak Ridge Reservation Environmental Program.

If you have any questions or if we can be of further assistance, please contact Melyssa Noe at 241-3315 or me at 576-0742.

Sincerely,

**JOHN
MULLIS**

John A. Mullis II
Manager

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MULLIS
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cc:

Terry Frank, Anderson County Mayor
Samantha Urquhart-Foster, EPA Region 4
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