

# Department of Energy

I-22133-0021

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

December 20, 2016

Mr. Randall Chaffins
Deputy Director
U.S. Environmental Protection Agency
Region 4
61 Forsyth Street, SW
Atlanta, Georgia 30303-8960

Dr. Shari Meghreblian
Deputy Commissioner
Tennessee Department of Environment
and Conservation
William R. Snodgrass, Tennessee Tower
312 Rosa L. Parks Avenue, 2<sup>nd</sup> Floor
Nashville, Tennessee 97243-0435

Dear Mr. Chaffins and Dr. Meghreblian:

#### INFORMAL DISPUTE RESOLUTION AGREEMENT

Thank you for the recent supportive letter from U.S. Environmental Protection Agency (EPA) and Tennessee Department of Environment and Conservation (TDEC) staff concerning efforts to assure adequate disposal capacity for the Oak Ridge Reservation cleanup.

As requested, enclosed please find an Informal Dispute Resolution Agreement for EPA and TDEC approval intended to outline conditions and expectations for proceeding with creation of new onsite disposal capacity. While this Informal Dispute Resolution Agreement generally comports with provisions stipulated by the recent EPA/TDEC letter, there are areas where the U.S. Department of Energy (DOE) seeks modification. In particular, the Informal Dispute Resolution Agreement contains modified language regarding use of underdrains as a part of disposal facility design. As discussed in the TDEC/EPA letter, Site 7c in Central Bear Creek Valley is promising as a protective option that does not rely on the use of a permanent underdrain. Given the State's preferences, DOE has agreed to pursue development of this site as the proposed alternative for the next onsite disposal facility. DOE's position, however, is that alternative sites requiring underdrains can be utilized as fully protective options for waste disposal facilities.

Our objective with the Informal Dispute Resolution Agreement is to provide an unambiguous, mutually acceptable path forward that is compliant with regulatory requirements and sensitive to avoiding interruption of Oak Ridge Reservation cleanup activity.

#### INFORMAL DISPUTE RESOLUTION AGREEMENT

If acceptable to you, please sign and date the Informal Dispute Resolution Agreement by January 6, 2017. If you would like to discuss the contents of the Informal Dispute Resolution Agreement, I would be happy to set up a teleconference to do so. If it is not possible to reach closure by January 6, 2017, our plan is to pursue closure via formal resolution protocols under the Oak Ridge Reservation Federal Facility Agreement.

Thank you for your engagement on this effort. If you have any questions or if we can be of further assistance, please contact me at (865) 576-0742.

Sincerely.

John A. Mulfis II Acting Manager

### Enclosure

cc w/enclosure:
Rich Campbell, EPA, Region 4
Jeffrey Crane, EPA, Region 4
Don Rigger, EPA, Region 4
Andy Binford, TDEC, Nashville
Steve Goins, TDEC, Nashville
Chris Thompson, TDEC, Oak Ridge
Randy Young, TDEC, Oak Ridge
David Adler, EM-94
John Blevins, EM-90
Brian Henry, EM-92
Laura Wilkerson, EM-90

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This Informal Dispute Resolution Agreement resolves select issues associated with the informal dispute regarding the D4 Remedial Investigation/Feasibility Study (RI/FS) for Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) Waste Disposal for Oak Ridge Reservation Waste Disposal Oak Ridge, Tennessee (DOE/OR/01-2535&D4).

### Background:

The process of developing a RI/FS for CERCLA waste disposal has been underway since 2010. Many issues have been resolved to the satisfaction of all the Federal Facility Agreement (FFA) parties over the years; however, several issues remain unresolved. At the initiation of the U.S. Department of Energy (DOE), a subset of these issues were elevated for discussion amongst management representatives from the U.S. Environmental Protection Agency (EPA), Tennessee Department of Environment and Conservation (TDEC), and DOE with the objective of facilitating finalization of the RI/FS document.

### Issues Discussed:

DOE, EPA, and TDEC discussions focused on the D4 RI/FS regarding the following:

- Suitability of Bear Creek Valley sites for onsite waste disposal.
- Sufficiency of characterization to provide evidence to support selecting a site.
- Modeling used to develop preliminary Waste Acceptance Criteria (WAC).

### Resolution:

This Agreement is based on two (2) principles for Site 7c:

- 1. Additional information shall be obtained to confirm certain assumptions made in the RI/FS, based on available data. These assumptions will be tested by parallel data gathering and analysis efforts concurrent with other CERCLA remedy selection activities, including formal and informal public comment activities.
- 2. The RI/FS and subsequent Proposed Plan (PP) will be "caveated" to recognize assumptions that additional factual information will either substantiate or call in to question; the parties will not move forward with signature of a Record of Decision (ROD) before they all agree that the assumptions have been validated.

Actions to be completed before final approval of the ROD are:

- Development of waste acceptance criteria and waste acceptance implementation protocols.
- Implementation of the DOE Order 435.1 process as if the Environmental Management
  Disposal Facility was not being developed pursuant to CERCLA, including acquisition of a
  preliminary Disposal Authorization Statement prior to signing the ROD.
- TDEC independent modeling of the Central Bear Creek Valley site (i.e., Site 7c) to support review of WAC. DOE shall fund this activity upon reaching agreement with TDEC on a scope of work, cost, and schedule for it.

## Informal Dispute Resolution Agreement

- Characterization of Site 7c to confirm that the landfill can be constructed and operated without the need for a permanent underdrain under the waste<sup>1</sup>. The assumption to be carried through the ROD is that Site 7c can be constructed without a permanent underdrain unless new information is gathered to dispute this assumption.
- If site assessment activities confirm the suitability of Site 7c upon completion of the site characterization and independent modelling activities, DOE. EPA, and TDEC shall collaborate on documentation of these activities compliant with regulatory requirements and the Oak Ridge Reservation FFA, including requirements associated with maintenance of an Administrative Record.
- Community outreach efforts will include a status presentation to the public following approval of the RI/FS and preceding submission of the PP to the public. Completion of the assessment activities will be followed by additional community outreach, including the acceptance of public comment.

#### Documents:

The parties agree that, in order to gain approval for the below documents, the following will be accounted for:

#### D5 RI/FS

- Throughout the document, modeling information and all references to modeling will be removed. A range of potential waste acceptance criteria values, independent of site location, will be included instead to demonstrate the feasibility of operating an onsite disposal cell.
- The D5 RI/FS will contain statements recognizing that: If site characterization indicates that there is an upward hydraulic head gradient underneath the proposed waste placement footprint, no construction (including placement of the geologic buffer) will take place at or beneath the anticipated post-closure groundwater level, considering both the existing groundwater conditions and post-closure elimination of local recharge within the waste placement footprint. This will ensure that the proposed site will not rely on a permanent underdrain, consistent with TDEC's and EPA's preference that no permanent underdrain underlay the facility footprint. If the resulting landfill design has insufficient volume to meet projected needs, then other disposal alternatives will be considered.
- The D5 RI/FS will contain language specifying that final waste acceptance criteria and an approach for implementation will be developed prior to signature of the ROD. RI/FS document conclusions regarding protectiveness will specify that protectiveness determinations are premised upon the development of protective WAC. If final WAC do not allow for a sufficient quantity of projected waste volume to be disposed onsite, then other disposal alternatives will be considered.
- Resolution of all other comments on the D4 RI/FS will occur.

<sup>&</sup>lt;sup>1</sup> A permanent underdrain is defined, for purposes of this remedial activity, as a drainage feature beneath the waste that continues to discharge water after final capping and closure of the facility.

# Informal Dispute Resolution Agreement

# Proposed Plan

• The PP will identify Site 7c as the proposed site and carry forward, all caveat language captured in the RI/FS.

# Record of Decision

• Waste minimization/onsite capacity preservation will be addressed in the final ROD.

John A. Mullis II Acting Manager	12/21/2016 Date
Oak Ridge Office of Environmental Management	
Randall Chaffins	Date
Deputy Director	
U.S. Environmental Protection Agency, Region 4	
Shari Meghreblian	Date
Deputy Commissioner	

Tennessee Department of Environment and Conservation