



## Department of Energy

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

March 28, 2019

### CERTIFIED MAIL

Mr. David W. Salyers, P.E., Commissioner  
State of Tennessee  
Department of Environment and Conservation  
312 Rosa L. Parks Avenue  
Tennessee Tower, 2nd Floor  
Nashville, Tennessee 37243

Dear Mr. Salyers:

### PROVISION OF INFORMATION ON POTENTIAL MIXED WASTES

- References:
1. Letter from Shari Meghreblian, Ph.D. to Jay A. Mullis, dated December 14, 2018
  2. Letter from John A. Mullis II to David Salyers, *Response to December 14, 2018 Letter Regarding Site Treatment Plan Notification Obligations for the Oak Ridge Reservation*, dated January 25, 2019
  3. Letter from David W. Salyers, P.E. to John A. Mullis II, *RE: Response to January 25, 2019 Letter Regarding Site Treatment Plan Notification Obligations for the Oak Ridge Reservation*, dated February 12, 2019
  4. Electronic mail from Colin Colverson to Steven Stout, *Extension Request*, dated March 11, 2019, at 12:59 PM
  5. Electronic mail from Steven Stout to Colin Colverson, *RE: Extension Request*, dated March 12, 2019, at 2:30 PM

Thank you for taking time recently to discuss ongoing environmental cleanup activities for the Oak Ridge Reservation (ORR). The purpose of this letter is to respond to Tennessee Department of Environment and Conservation (TDEC) letters dated December 14, 2018 and February 12, 2019, enclosed. These letters request provision of information related to mercury-containing mixed waste streams anticipated to be generated by future environmental restoration activities.

Available information indicates future cleanup activity may generate up to 177,000 cubic yards of soil and debris containing sufficient concentrations of mercury to require application of treatment technology prior to disposal. This estimate is based upon characterization data acquired during Comprehensive Environmental Response, Compensation, and Liability Act site investigation activities. Current Comprehensive Environmental Response, Compensation, and Liability Act activities underway on the ORR are being conducted pursuant to the ORR Federal Facility

**CERTIFIED – RETURN RECEIPT REQUESTED**  
(Salyers 7009 2820 0001 9922 3037)

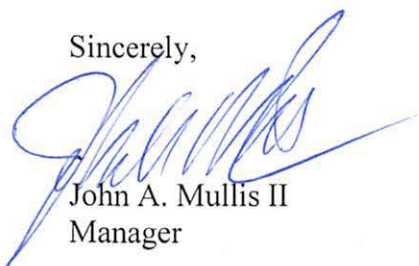
**PROVISION OF INFORMATION ON POTENTIAL MIXED WASTES**

Agreement in coordination with TDEC and the U.S. Environmental Protection Agency. The ORR Federal Facility Agreement provides milestones for the treatment, storage, and/or disposal of mixed low-level waste streams generated by cleanup activities on the ORR.

Consistent with agreements made by TDEC, U.S. Environmental Protection Agency, and U.S. Department of Energy (DOE), selection of specific treatment and disposition methods for these future waste streams has been deferred. DOE will meet all substantive regulatory requirements for the treatment and disposal of mercury-bearing wastes, including Resource Conservation and Recovery Act-driven mercury waste acceptance criteria. For remediation projects generating waste streams bound for onsite disposal, DOE will take all practicable measures to remove mercury content prior to disposal. It is expected that over 95 percent of the mercury generated by Oak Ridge cleanup activity will be diverted away from onsite disposal. Additional information on future waste streams, including new characterization data and treatment requirements, will continue to be provided to TDEC as it is generated, and is consistent with negotiated enforceable schedules.

Thank you for your continued interest in the DOE Oak Ridge Office of Environmental Management program. Please feel free to contact me at (865) 576-0742, or David Adler at (865) 576-4094. If Steve Stout is the lead counsel for TDEC on this project, the DOE counterpart with whom he should communicate is Colin Colverson of the DOE Office of Chief Counsel, at (865) 576-1205.

Sincerely,



John A. Mullis II  
Manager

Enclosures (5)

cc w/o enclosures:

Pat Flood, TDEC, Nashville  
Steve Stout, TDEC, Nashville  
Chris Thompson, TDEC, Nashville  
Colby Morgan, TDEC, Oak Ridge  
Geoff Beausoleil, NPO  
Colin Colverson, CC-10, SC-OR

Don Thress, CC-10, SC-OR  
Kim Walling, CC-10, SC-OR  
Johnny Moore, SC-OSO  
David Adler, EM-94  
Steve Cooke, EM-942  
Laura Wilkerson, EM-90

**CERTIFIED – RETURN RECEIPT REQUESTED**  
**(Salyers 7009 2820 0001 9922 3037)**





STATE OF TENNESSEE  
DEPARTMENT OF ENVIRONMENT AND CONSERVATION  
NASHVILLE, TENNESSEE 37243-0435

SHARI MEGHREBLIAN, PhD  
COMMISSIONER

BILL HASLAM  
GOVERNOR

December 14, 2018

Jay A. Mullis, Manager  
Oak Ridge Office of Environmental Management  
U.S. Department of Energy  
Post Office Box 2001  
Oak Ridge, Tennessee 37831

Dear Mr. Mullis:

The purpose of this letter is to inform the Oak Ridge Office of Environmental Management of its obligations related to notification and other requirements of a new waste stream for mixed wastes - wastes that are both hazardous and radioactive - on the Oak Ridge Reservation. Specifically, this letter is intended to have DOE address under the Site Treatment Plan (STP) its obligations for waste streams associated with mixed waste debris having been previously identified in several documents for the CERCLA cleanup process. While the latest annual STP Update (Version 23.0) was recently approved by TDEC without any mention of new mixed waste stream(s) expected to result from the Y-12 West End Mercury Area (WEMA) and other projects, the process for notification and inclusion of new waste streams is a separate requirement independent of the annual update process covered in section 2.3.

As early as September 2010, DOE identified in its *Action Memorandum for Y-12 Facilities Non-Time-Critical Deactivation/Demolition Project Oak Ridge, Tennessee* (2010 Y-12 AM) (DOE/OR&01-2462&D2) that it expected to generate mixed waste streams comprised of debris from demolition at the Y-12 facility. (2010 Y-12 AM).

While the CERCLA hazardous substances cleanup process is governed by the terms of the Federal Facilities Agreement (FFA), the 1995 Commissioner's Order that placed in effect the STP encompasses all mixed wastes - including even mixed waste generated from CERCLA response actions. Specifically, section 2.4.1 expressly applies to "mixed wastes that are newly discovered, identified, generated during a CERCLA cleanup\*\*\*\*." Later in the same subsection, another statement refers to "mixed wastes that are generated by decommissioning and decontamination activities to the extent that such mixed wastes cannot be included in an existing waste stream in Appendix A of this STP."

Mercury contamination has been confirmed in Y-12 buildings slated for demolition, such as the Alpha 5 building. This characterization data was referenced in the *Focused Feasibility Study for Water Management for the Disposal of CERCLA Waste on the Oak Ridge Reservation Oak Ridge, Tennessee* (DOE/OR/01-2664&D2) submitted in 2016. Although this same document is presently subject to a formal dispute, it is not disputed that the leachate resulting from waste placement for the disposal generated by WEMA demolition is expected to contain concentrations of mercury much higher than previously experienced at the EMWMF site.

18 DEC 19 PM 1:55

Jay A. Mullis, Manager  
Page 2  
December 14, 2018

Because mixed wastes will be generated from the Y-12 project, particularly buildings in WEMA, the Tennessee Department of Environment & Conservation (TDEC) invokes the requirement at STP section 2.4.2 as to the mixed waste debris to be generated:

#### **2.4.2 Notification**

DOE shall, within forty-five days of its discovery, notify TDEC of newly found existing LDR mixed waste streams being generated or stored. DOE shall also notify TDEC of any new LDR mixed waste streams that are anticipated to be generated or stored on the Oak Ridge Reservation within forty-five (45) days of the decision to generate or store such waste. DOE will provide a description of the waste code, waste form, volumes, technology and capacity needs, and similar pertinent information in the notification. Additional details about the waste stream and the proposed plan and schedules, consistent with Section 2.2, "Compliance Schedules," will be provided within 45 days of notification for waste which, in the absence of an STP, would be in violation of RCRA Section 3004(j). The information provided pursuant to this subsection is subject to TDEC's approval as provided for in Section 2.4.4.

While there has been some discussion of mercury and Land Disposal Restrictions (LDR) in different versions of the Remedial Investigation/Feasibility Study – lastly the 2017 D5 (DOE/OR/01-2535&D5) *Remedial Investigation/Feasibility Study for the Comprehensive Environmental Response Compensation and Liability Act Oak Ridge reservation Waste Disposal Oak Ridge, Tennessee* in February 2017, the issue has not been addressed in sufficient detail as yet. While CERCLA has been the vehicle used to this point, the basis of the Site treatment Plan rests on the foundation of RCRA and specifically compliance with the Land Disposal Restrictions (LDR) requirements. As a fully authorized RCRA program, the State of Tennessee is the lead agency for RCRA including LDR compliance.

The STP presents the proper framework to address the critically important issue of treatment of disposal of mixed waste and particularly those containing mercury. Because DOE has anticipated generating this mixed waste stream since 2010, the first deliverable under the STP should be due within 45 days from the date of this letter.

Sincerely,



Shari Meghreblian, Ph. D.  
Commissioner

cc: Chris Thompson, Director, TDEC Division of Remediation  
Colby Morgan, TDEC Division of Remediation, Oak Ridge  
Steven Stout, TDEC Office of General Counsel  
Peter Murrey, Attorney General  
Barry Turner, Attorney General  
ORRCA  
SSAB





## Department of Energy

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

January 25, 2019

### CERTIFIED MAIL

Mr. David Salyers, Commissioner  
State of Tennessee  
Department of Environment and Conservation  
312 Rosa L. Parks Avenue  
Tennessee Tower, 2nd Floor  
Nashville, Tennessee 37243

Dear Mr. Salyers:

### RESPONSE TO DECEMBER 14, 2018 LETTER REGARDING SITE TREATMENT PLAN NOTIFICATION OBLIGATIONS FOR THE OAK RIDGE RESERVATION

This letter is in response to the letter from the Tennessee Department of Environment and Conservation (TDEC) dated December 14, 2018. The U.S. Department of Energy (DOE) appreciates the opportunity to continue our strong working relationship with Site Treatment Plan (STP) implementation on the Oak Ridge Reservation. Our STP partnership has supported the safe and permanent disposition of more than 100 million kilograms of mixed low-level waste, helping ensure that these wastes do not pose a threat to the health and safety of the citizens of Tennessee.

TDEC requested DOE provide an STP deliverable within 45 days of receipt of the above referenced letter. DOE received the letter on December 15, 2018, and, therefore, understands the expectation of the State to receive an STP deliverable by January 29, 2019. Due in part to the lapse of federal appropriations, coupled with recent conversations among our respective attorneys about clarifying understanding and expectations, I am requesting an extension for the DOE response. DOE would ideally like to time the due date of the deliverable aligned with the STP Semi-Annual Progress report, which is due on April 30, 2019. At a minimum, DOE requests a 30-day extension from the date that federal appropriations are authorized for other federal agencies, so that DOE can receive necessary and appropriate support and guidance in preparing the formal DOE STP deliverable as requested.

Please let me know if you are amenable to this extension request. Questions should be directed to me or Dave Adler. I can be reached at 865-576-0742, and Dave can be reached at 865-576-4094. Questions from the Tennessee Attorney General's Office or from TDEC Counsel should be directed to Colin Colverson of the DOE Office of Chief Counsel and can be reached at 865-576-1205.

Sincerely,

A blue ink signature of John A. Mullis II is written over the word "Sincerely,".

John A. Mullis II  
Manager

See Page 2 for cc list.

**CERTIFIED – RETURN RECEIPT REQUESTED**  
(Salyers 7009-2820-0001-9922-3020)

Mr. David Salyers

-2-

January 25, 2019

**RESPONSE TO DECEMBER 14, 2018 LETTER REGARDING SITE TREATMENT PLAN  
NOTIFICATION OBLIGATIONS FOR THE OAK RIDGE RESERVATION**

cc:

Pat Flood, TDEC, Nashville  
Peter Murrey, TN AG Office, Nashville  
Steve Stout, TDEC, Nashville  
Chris Thompson, TDEC, Nashville  
Dave Adler, EM-94  
Geoff Beausoleil, NPO  
Steve Cooke, EM-942  
Johnny Moore, SC-OSO  
Don Thress, CC-10, SC-OR  
Kim Walling, CC-10, SC-OR  
Laura Wilkerson, EM-90

**CERTIFIED – RETURN RECEIPT REQUESTED  
(Salyers 7009-2820-0001-9922-3020)**



STATE OF TENNESSEE  
DEPARTMENT OF ENVIRONMENT AND CONSERVATION  
NASHVILLE, TENNESSEE 37243-0435

DAVID W. SALYERS, P.E.  
COMMISSIONER

BILL LEE  
GOVERNOR

February 12, 2019

Mr. John A. Mullis II, Manager  
U.S. Department of Energy  
Oak Ridge Office of Environmental Management  
P.O. Box 2001  
Oak Ridge TN 37831

**RE: RESPONSE TO JANUARY 25, 2019 LETTER REGARDING SITE TREATMENT PLAN NOTIFICATION  
OBLIGATIONS FOR THE OAK RIDGE RESERVATION**

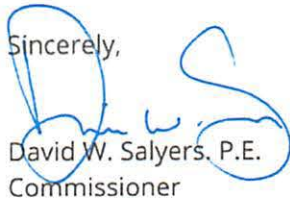
Dear Mr. Mullis:

This letter is in response to the letter from the U.S. Department of Energy, Office of Environmental Management (OREM) dated January 25, 2019. We concur that a strong working relationship exists between us in the implementation of the Site Treatment Plan (STP) for the Oak Ridge Reservation (ORR). We also agree with your assessment that our STP partnership has supported safe and permanent disposal of millions of kilograms of mixed low-level waste. This has contributed significantly towards the protection of human health and the environment on the ORR and its vicinity.

We have deliberated internally on your request to extend the due date of the STP deliverable. An extension is approved for 45 days to March 16, 2019.

Steven Stout, Office of General Counsel, is the point of contact. Please contact him if you have questions.

Sincerely,

A handwritten signature in blue ink, appearing to read "D. W. Salyers", is written over the word "Sincerely," and the printed name "David W. Salyers, P.E.".

David W. Salyers, P.E.  
Commissioner

CC: Pat Flood, TDEC, Director, Division of Solid Waste Management  
Chris Thompson, TDEC, Director, Division of Remediation  
Colby Morgan, TDEC, Division of Remediation, Oak Ridge  
Steve Stout, TDEC, Office of General Counsel  
Amy Fitzgerald, ORRCA  
Ron Woody, Chair, ORRCA  
Traci Cofer, ORRCA  
Shelley Kimel, OR-EM SSAB  
Connie Jones, US EPA Region IV

19 FEB 19 PM 1:58

**From:** Colverson, Colin D [mailto:Colin.Colverson@Science.doe.gov]  
**Sent:** Monday, March 11, 2019 12:59 PM  
**To:** Steven Stout  
**Subject:** Extension Request

**\*\*\* This is an EXTERNAL email. Please exercise caution. DO NOT open attachments or click links from unknown senders or unexpected email - STS-Security. \*\*\***

Steve,

The purpose of this Email is to formally seek additional time for DOE to prepare a response to TDEC's letters of December 14, 2018 and February 12, 2019 regarding Site Treatment Plan notification for forecasted mixed waste streams. Based on several conversations that we have had, DOE understands that TDEC is preparing a letter to provide responses to a number of questions that DOE has posed. Given that, when considered in the context of the complexity of these issues, DOE would ask that TDEC provide additional time from the March 16<sup>th</sup>, 2019 deadline identified in the February 12, 2019 letter. DOE would appreciate an additional 30 days to provide a reply, and could instead be amenable to an additional 20 days, if TDEC could see fit to granting that additional time. If TDEC supports granting an additional extension, ideally TDEC's agreement that the extension request is warranted could be reflected in the forthcoming letter referenced above; an Email reply would be fine too, so long as all parties agree that these Email communications provide an appropriate extension request under applicable STP provisions.

Thanks,

Colin Colverson  
Attorney-Advisor  
Oak Ridge Office of Chief Counsel  
PO Box 2001  
Oak Ridge, TN 37831  
Phone - 865-576-1205  
Cell - 865-255-7820  
E-mail - [colin.colverson@science.doe.gov](mailto:colin.colverson@science.doe.gov)

U.S. DEPARTMENT OF

**ENERGY**

*This email and any attachments are intended for the review and use of the intended recipient only. Please be advised that this communication may contain information that is nonpublic, proprietary, privileged, confidential, exempt from disclosure under applicable law, and/or may be confidential attorney-client communication. Please be advised that any use, dissemination, distribution, or copying of this communication may be strictly prohibited. If you have received this communication in error, please (1) notify me immediately by email at the originating address, (2) disregard the contents of the communication or email, and (3) permanently delete it.*



**From:** Steven Stout [mailto:Steven.Stout@tn.gov]  
**Sent:** Tuesday, March 12, 2019 2:30 PM  
**To:** Colverson, Colin D <Colin.Colverson@Science.doe.gov>  
**Cc:** Chris P. Thompson <Chris.P.Thompson@tn.gov>  
**Subject:** RE: Extension Request

Colin-

Based on this request and further discussion today, an extension is hereby granted.

Additionally, since we are not going to be forthcoming with positions on clarifications of further implications of the Site Treatment Plan for management of CERCLA-generated mixed wastes until you and I have further discussion, we extend the response deadline out till April 30, 2019.

Thanks,

*Steven R. Stout*



**Steven R. Stout** | Senior Counsel  
Office of the General Counsel  
Tennessee Tower, 2<sup>nd</sup> Floor  
312 Rosa L. Parks Ave., Nashville, TN 37243  
p. 615-532-0138 c. 615-571-9328  
[steven.stout@tn.gov](mailto:steven.stout@tn.gov)  
[tn.gov/environment](http://tn.gov/environment)  
[tnstateparks.com](http://tnstateparks.com)