

# Oak Ridge Site Specific Advisory Board 2016 Annual Planning Meeting



**Saturday, August 6, 2016**

**Tremont Lodge & Resort  
7726 E. Lamar Alexander Parkway  
Townsend, Tennessee**

The mission of the Oak Ridge Site Specific Advisory Board (ORSSAB) is to provide informed advice and recommendations concerning site specific issues related to the Department of Energy's (DOE's) Environmental Management (EM) Program at the Oak Ridge Reservation. In order to provide unbiased evaluation and recommendations on the cleanup efforts related to the Oak Ridge site, the Board seeks opportunities for input through collaborative dialogue with the communities surrounding the Oak Ridge Reservation, governmental regulators, and other stakeholders.



# OAK RIDGE SITE SPECIFIC ADVISORY BOARD 2016 ANNUAL PLANNING MEETING

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*Memo from ORSSAB Chair Belinda Price*

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# I. WELCOME

# MEMO



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Oak Ridge Site Specific Advisory Board  
P.O. Box 2001, EM-942, Oak Ridge, TN 37831  
Phone 865-241-4583, 865-241-4584 • Fax 865-574-3521

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To: ORSSAB members & liaisons  
From: Belinda Price, Chair  
Date: July 29, 2016  
RE: Annual Planning Meeting

Enclosed are materials for our annual planning meeting at Tremont Lodge in Townsend on Saturday, August 6. A map and directions to the lodge are included.

The meeting will be held in the lodge where hotel registration is located.

For those of you coming to dinner Friday evening, we'll be dining at Riverstone Family Restaurant, 8503 State Highway 73 in Townsend, at 5:30 p.m.

For those of you eating breakfast at the lodge, the buffet will be available in the meeting room from 8:00 to 9:00 a.m. The cost of the breakfast will be added to individual room charges.

Please take a minute to review the agenda and other materials in your packet and come prepared to express your viewpoints on the agenda topics. I know this will be the very first SSAB meeting for our new members. You should feel free to ask questions and make comments whenever you like. The decisions made at the meeting will guide our work in FY 2017, so your participation is important and will help make the coming year more productive.

The agenda includes provision for follow-on discussion from 1:30 to 2:30 should we require it, but if we accomplish everything we've set out to do by lunchtime, we will adjourn at that time.

If you have any questions or need help finding the lodge, please contact Pete Osborne of our support office at 414-0314.

I think this meeting promises to be very productive, and I look forward to seeing you there.

Belinda

## II. GENERAL INFORMATION



## OAK RIDGE SITE SPECIFIC ADVISORY BOARD 2016 ANNUAL PLANNING MEETING

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### SCHEDULE OF EVENTS

#### FRIDAY, AUGUST 5, 2016, 5:30 P.M.

Evening Dinner (Optional):

*Riverstone Family Restaurant | 8503 State Highway 73, Townsend, TN*

#### SATURDAY, AUGUST 6, 2016, 9:00 A.M. – 2:30 P.M.

Annual Meeting:

*Tremont Lodge & Resort | 7726 E. Lamar Alexander Pkwy, Townsend, TN*



## OAK RIDGE SITE SPECIFIC ADVISORY BOARD 2016 ANNUAL PLANNING MEETING

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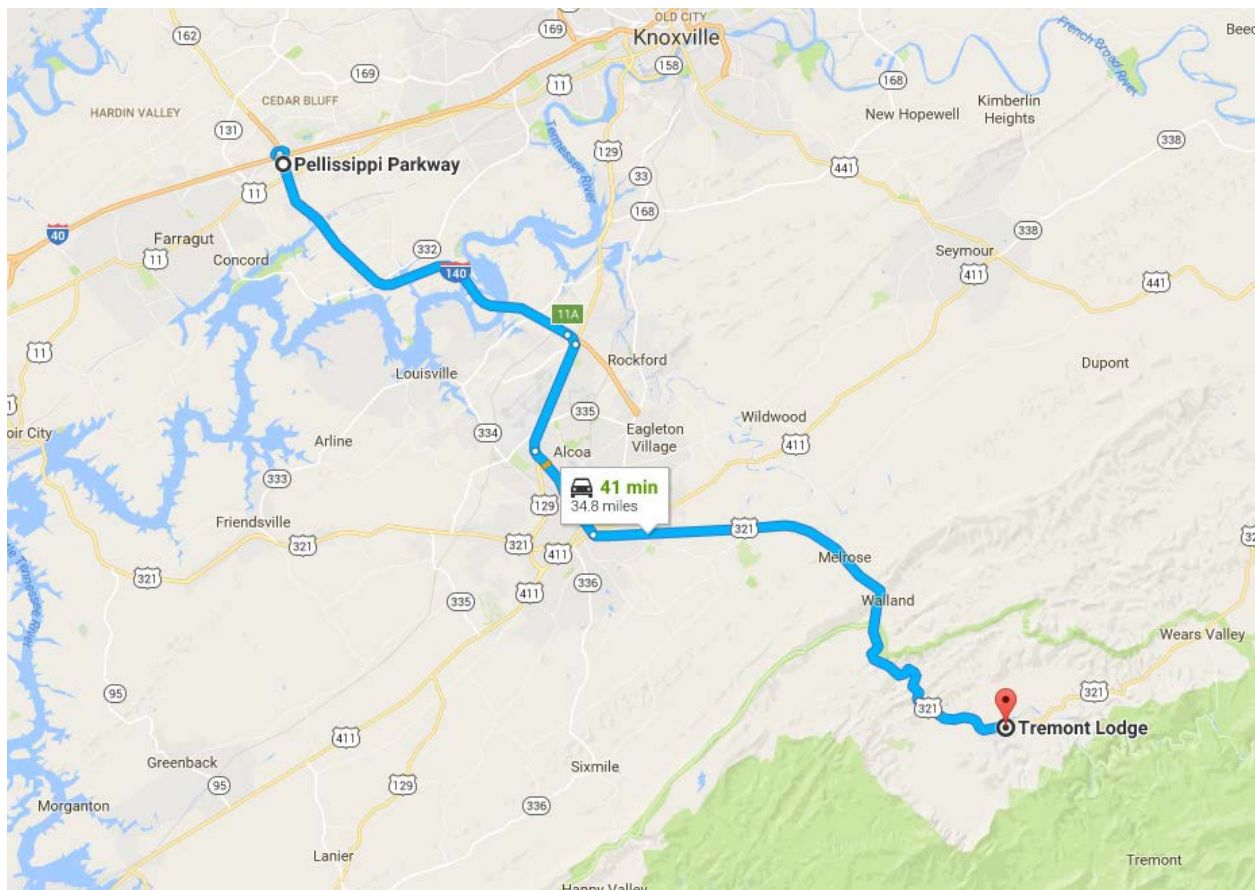
### Map & Directions to Tremont Lodge & Resort

7726 E. Lamar Alexander Parkway  
Townsend, TN 37882  
Phone: 1 (865) 448-3200

From Knoxville: (distance ~35 mi.)

1. From the intersection of I-40 and Pellissippi Parkway go south on Pellissippi Parkway (I-140) to Alcoa Highway.
2. Take Alcoa Highway/US-129 S toward Maryville.
3. Stay to the left at the "Y" (just past the airport) to continue on N Hall Road/US-35.
4. Follow N Hall Road/US-35 through Alcoa and Maryville. N Hall Road becomes Washington Street in Maryville.
5. Continue onto N Washington Street.
6. Use right 2 lanes to turn left onto US-321 N/E Lamar Alexander Parkway.
7. Follow US-321 N/E Lamar Alexander Parkway through Walland to Townsend.
8. The Tremont Lodge is on the right in Townsend at 7726 E Lamar Alexander Parkway.

<https://goo.gl/maps/yPs3WSv6Nz62>





## OAK RIDGE SITE SPECIFIC ADVISORY BOARD 2016 ANNUAL PLANNING MEETING

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### Map & Directions to Riverstone Family Restaurant

8503 State Highway 73  
Townsend, TN 37882  
Phone: (865) 448-8816

From Knoxville: (distance ~37 mi.)

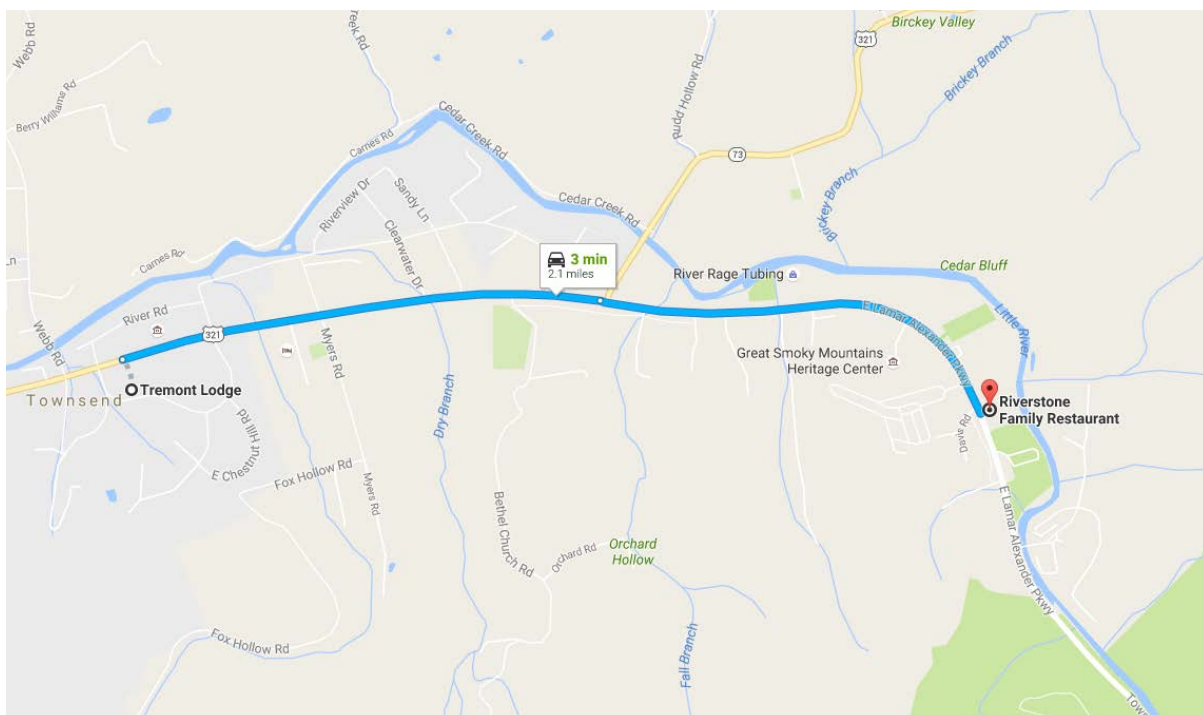
1. From the intersection of I-40 and Pellissippi Parkway go south on Pellissippi Parkway (I-140) to Alcoa Highway.
2. Take Alcoa Highway/US-129 S toward Maryville.
3. Stay to the left at the "Y" (just past the airport) to continue on N Hall Road/US-35.
4. Follow N Hall Road/US-35 through Alcoa and Maryville. N Hall Road becomes Washington Street in Maryville.
5. Continue onto N Washington Street.
6. Continue straight onto E Lamar Alexander Parkway.
7. Riverstone Family Restaurant will be on the left.

<https://goo.gl/maps/Xzr4T6Qjcvy>

From Tremont Lodge: (distance ~2 mi.)

8. From the Tremont Lodge, go east on US-321 N/E Lamar Alexander Parkway toward Chestnut Hill Road.
9. Continue straight onto E Lamar Alexander Parkway.
10. Riverstone Family Restaurant will be on the left.

<https://goo.gl/maps/s5UKwKoeaew>







## Oak Ridge Site Specific Advisory Board

# Annual Meeting

Saturday, August 6, 2016

9:00 a.m. – 2:30 p.m.

Tremont Lodge & Resort

7726 E. Lamar Alexander Pkwy, Townsend, TN

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### OBJECTIVES

1. Develop an increased understanding of and commitment to the goals of the board
2. Evaluate the effectiveness and achievements of FY 2016
3. Begin development of the FY 2017 work plan

### AGENDA

- 9:00–9:05 ..... Welcome (5)\*
- Opening Remarks – Belinda Price
  - Introduction of New Members – Sue Cange
- 9:05–9:10 ..... Objectives, Logistics, Keys to Success – Jenny Freeman (5)
- 9:10–9:40 ..... Deputy Designated Federal Officer Comments – Sue Cange (30)
- 9:40–9:50 ..... Board Mission and Accomplishments – Belinda Price (10)
- 9:50–10:30 ..... Board Operations – Jenny Freeman (40)
- Results of Member Survey
- 10:30–10:40 ..... Break (10)
- 10:40–12:00 ..... Work Plan Topics (1:20)
- Process – Melyssa Noe
  - Presentations by Agencies – Dave Adler, Kristof Czartoryski, Jeff Crane
  - Suggestions by Members
- 12:00–12:10 ..... Implementation of Work Plan – Melyssa Noe (10)
- Board Meetings/Tours/Follow-on EM/Stewardship Presentations
  - Training (e.g., Federal Advisory Committee Act, Federal Facility Agreement Appendices, Other Suggestions?)
  - Plan for Issue Group Sign-up
- 12:10–12:15 ..... Summary of Morning Discussions – Jenny Freeman (5)
- 12:15–12:20 ..... Board Business (5)
- Presentation of the Slate of Candidates for FY 2017 Officers – Mary Smalling
- 12:20–12:25 ..... Public Comment Period (5)
- 12:25–12:30 ..... Remarks – Melyssa Noe, Belinda Price (5)
- 12:30–1:30 ..... Lunch Break (60)
- 1:30–2:30 ..... Follow-on Discussion – Jenny Freeman (60)

### III. FY 2016 REVIEW



# OAK RIDGE SITE SPECIFIC ADVISORY BOARD 2016 ANNUAL PLANNING MEETING

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## FY 2016 ORSSAB Accomplishments

1. Submitted three recommendations to DOE:
  - Recommendations on the FY 2018 DOE Oak Ridge Environmental Management (EM) Budget Request
  - Recommendation on the Final Proposed Plan for Soils in Zone 1 at East Tennessee Technology Park
  - Recommendation on the Preferred Alternative for the Proposed Plan for Water Treatment at Outfall 200 at Y-12 National Security Complex
2. Submitted comments to DOE on the K-25 Virtual Museum.
3. Approved two SSAB chairs recommendations:
  - Recommendation to EM on the Waste Isolation Pilot Plant
  - Recommendation on Supplemental Environmental Projects.
4. Hosted the spring SSAB chairs meeting, April 19–21 at the DoubleTree Hotel in Oak Ridge. Representatives from DOE Headquarters and from the eight local advisory boards around the nation attended. The three-day event included a site tour of the Oak Ridge Reservation on April 19, a full day meeting on April 20, and a half day on April 21. An EM SSAB staff meeting was arranged for the afternoon of April 19, and a reception and dinner was arranged for the evening of April 20.
5. Participated in a SSAB chairs working group to address a number of charges for the chairs to focus on for the coming year. The first charge the group is taking on is developing a white paper for inclusion in the transition materials DOE prepares for the next administration. The document will highlight the EM SSAB and will highlight each of the eight SSABs' priorities, issues, and perceived challenges.
6. Took part in the DOE EM Community Workshop on May 26, where ORSSAB Secretary Dave Hemelright presented the board's recommendations on the FY 2018 Oak Ridge EM budget request.
7. Represented ORSSAB at the 2016 Waste Management Symposium, March 6–10 in Phoenix, where ORSSAB Chair Belinda Price presented a paper co-authored by Dave Hemelright titled "The Effectiveness of Advisory Boards: the U.S. DOE EM Site-Specific Experience." Dave also represented ORSSAB on a panel titled "Partnering for Success."
8. Completed a number of public outreach goals: Issued five news releases, four *Advocate* newsletters, and the FY 2015 annual report. Participated in Oak Ridge Earth Day. Continued with broadcast of board meetings on local cable stations, postings on Facebook and YouTube, and the board's exhibit at the American Museum of Science and Energy. Launched a Flickr photo stream, and made significant upgrades to the board's Facebook presence.
9. Attended in a number of national meetings and conferences:
  - Perma-Fix Nuclear Waste Management Forum, Nov. 30 – Dec. 3, Nashville
  - 2016 Waste Management Symposium, March 6–10, Phoenix
  - National Environmental Justice Conference & Training, March 9–12, Washington, D.C.
  - 2016 Ohio Brownfield Conference, April 6–7, Columbus, Ohio
  - SSAB Chairs Meeting, Aug. 30 – Sept. 1, Las Vegas
  - DOE National Cleanup Workshop, Sept. 14–15, Alexandria, Virginia

10. Participated in a variety of special events and site tours:

- East Tennessee Technology Park tour, Oct. 24
- Dinner meeting at Chuy's Restaurant, Nov. 10
- Y-12 landfill tour, Jan. 19
- K-27 demolition celebration, Feb. 8
- Groundwater modeling demonstrations at Leidos offices, Feb. 24
- ORNL Aquatics Lab tour, June 16



## OAK RIDGE SITE SPECIFIC ADVISORY BOARD 2016 ANNUAL PLANNING MEETING

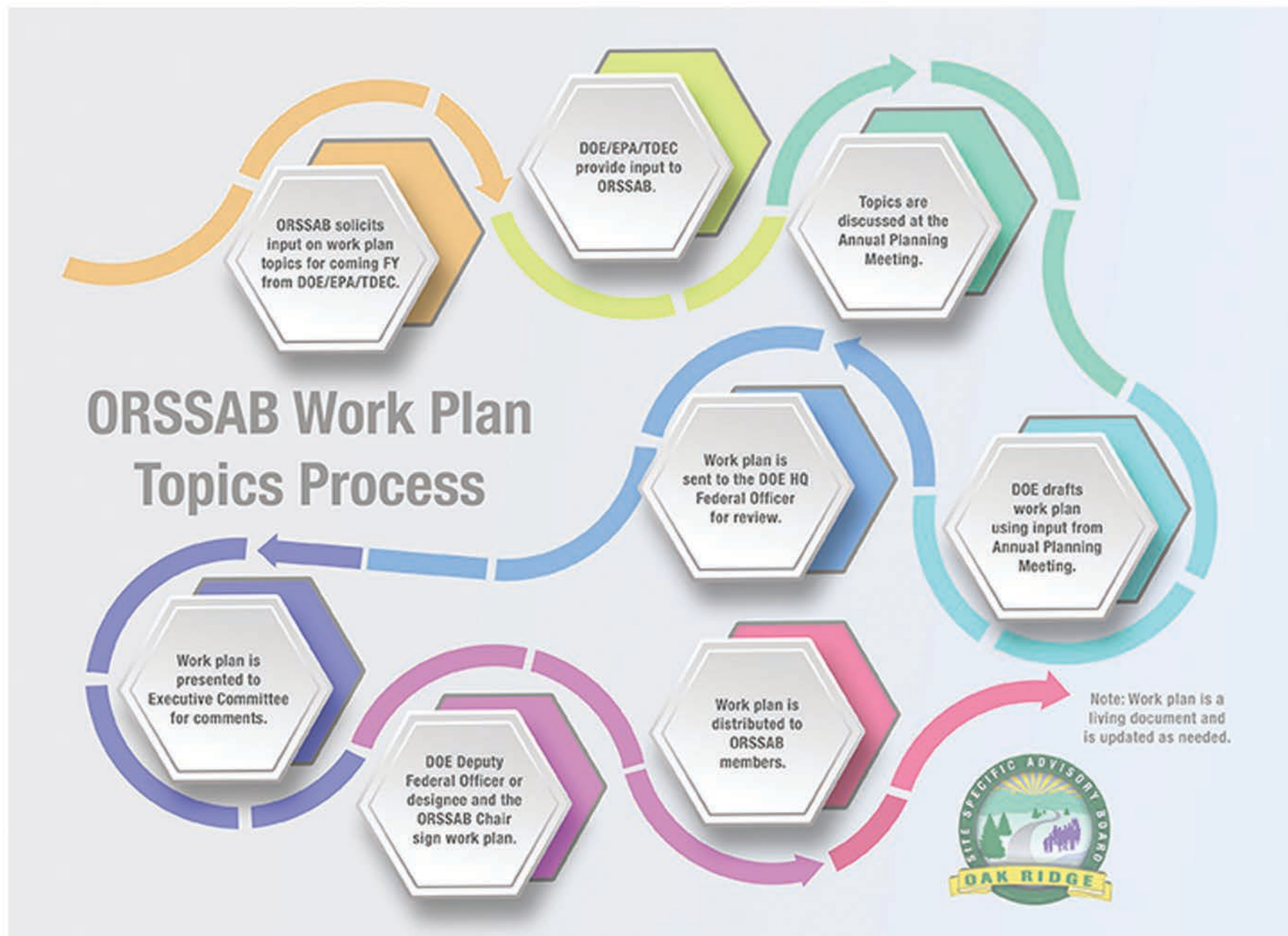
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### Results of the 2016 ORSSAB Member Survey

1. Did you like the changes made in the structure of your meeting schedule with shorter meetings, a dinner meeting, tours, etc.?
  - Clear majority agreed that the changes improved the Board's work
  - Most (with two exceptions) would like more dinner meetings, and one or two suggested other social gatherings, maybe including spouses
  - Length of meetings is adequate, and the facilitator at the annual meeting is helpful.
2. What kind of information do you need to make you comfortable with an issue?
  - Facts specific to the issue so an informed response can be made
  - Knowledge about a specific issue and the required level of effort
  - Getting involved requires a commitment of at least 3 touch points: presentation at ORSSAB meeting, field trip, presentation/discussion at an Environmental Management/Stewardship Committee meeting. The challenge is being able to attend all 3 touch points in order to get all the information necessary to be informed.
  - Knowledge about how the work done by the group will play into how the issue will be resolved.
3. What steps should we put in place to ensure that each issue has a sufficient number of Board members involved?
  - The Executive and Environmental Management/Stewardship committees should identify an issue leader for each of the work plan topics early on.
  - Issue leaders should recruit Board members to join and establish a team early on. Based on the makeup of the team and complexity of the issue, additional information meetings on a topic could be planned.
  - No additional steps are needed because they might discourage people from becoming involved because of their schedules and other obligations.
  - The group's schedule should reflect that the volunteer members' time is very important.
4. What is the one thing that would encourage you to become involved in 1 or 2 issue groups?
  - Presentation with photos/depictions on a particular issue
  - More onsite follow-ups after a presentation
  - An understanding that one does not need to be a scientists or an engineer to find the topics interesting
  - More time
  - Interest in or passion about a particular issue
  - Important issues to the community and the ability to demonstrate that to the community.
5. What would you like for the Board to do to make your participation more active and engaged?
  - Address issues that are important to group members and the community
  - Meeting times occur during meal times; serve food.

## IV. FY 2017 WORK PLAN DEVELOPMENT

# A Visual Guide to ORSSAB's Annual Planning







## Department of Energy

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

July 19, 2016

Ms. Belinda Price, Chair  
Oak Ridge Site Specific Advisory Board  
Post Office Box 2001  
Oak Ridge, Tennessee 37831

Dear Ms. Price:

### **FISCAL YEAR 2017 TOPICS FOR THE OAK RIDGE SITE SPECIFIC ADVISORY BOARD**

Thank you for your recent letter requesting suggestions for topics on which to focus the resources of the Oak Ridge Site Specific Advisory Board (ORSSAB) during Fiscal Year (FY) 2017. ORSSAB's input on the following program areas in FY 2017 would be most appreciated:

1. Input on Reuse and Historic Preservation Activities at the East Tennessee Technology Park (ETTP)

Completion of site cleanup measures across large portions of ETTP is accelerating and, in the near-term, is expected to present opportunities for land transfer and site redevelopment, including new facilities to interpret and commemorate the site's history.

The U.S. Department of Energy (DOE) has established an important near-term vision (Vision 2020) that supports completion of cleanup of the remaining portion of ETTP. Much work remains to be completed to meet regulatory requirements as well as to prepare the site for reuse. ORSSAB's awareness and input on these important program objectives, as well as the methods that will be used to be successful are requested.

2. Participation in Ongoing Efforts to Assure Sufficient Waste Disposal Capacity

Provision of additional disposal capacity is of paramount importance to the Oak Ridge cleanup program so we can transition from the cleanup of ETTP to the Y-12 National Security Complex and the Oak Ridge National Laboratory (ORNL) without interruption. Current schedules call for issuance of a proposed plan for addressing future disposal capacity needs in FY 2017, and at least one (1) meeting will be scheduled during the public comment period to discuss the preferred alternative to ensure sufficient waste disposal capacity. DOE would appreciate ORSSAB's input on both the desirability of constructing additional disposal capacity as well as input on potential facility locations.

3. Participation in Efforts to Address Excess Contaminated Facilities

In response to reports issued by the General Accounting Office and the Inspector General in 2015, Oak Ridge has developed a plan and begun addressing excess contaminated facilities located at the Y-12 National Security Complex and ORNL. The DOE Oak Ridge Office of Environmental Management (OREM) has partnered with the National Nuclear Security Administration and Office of Science to build an integrated cleanup plan, and it has been



**FISCAL YEAR 2017 TOPICS FOR THE OAK RIDGE SITE SPECIFIC ADVISORY BOARD**

submitted to DOE Headquarters. The FY 2016 appropriation provided OREM and the National Nuclear Security Administration funds to begin work. The primary purpose of the Excess Contaminated Facilities Plan is to abate hazards, reduce risks, and stabilize facilities until they can be demolished. This work is critical to future DOE missions; ORSSAB's awareness and input on this important initiative is requested.

**4. Evaluation of Ongoing Groundwater Efforts**

DOE, in coordination with the Tennessee Department of Environment and Conservation and U.S. Environmental Protection Agency, will continue to evaluate results from the offsite groundwater characterization effort that is currently underway. This effort is focused on evaluating potential contaminant migration pathways from ORR, and the results will be utilized to assure that public health and groundwater resources adjacent to ORR are protected. Also, DOE continues to develop a site-wide groundwater flow model to ensure a single, regional calibrated flow model exists for all remaining decisions. We would like to brief the ORSSAB on the results of these evaluations and modeling efforts and incorporate any input into the planning process for future groundwater evaluation activities.

Discussions are underway between DOE, the Tennessee Department of Environment and Conservation, and the U.S. Environmental Protection Agency to identify priorities for additional action once current efforts are completed. These discussions are primarily concerned with whether the next project should be to investigate possible groundwater plumes that have the potential to migrate off ORR, or a remediation project of a known groundwater plume within the interior of ORR. The ORSSAB's input regarding which project should be next would be appreciated.

**5. Maintain ORSSAB Awareness on Key Material Disposition Activities**

During FY 2017, DOE will continue with the direct disposal of some U-233 material as well as planning for Uranium-233 downblending activities at ORNL. Ultimately, elimination of the Uranium-233 stockpile within ORNL's Central Campus is key to downgrading security requirements for ORNL.

During FY 2017, DOE will also continue with its Transuranic (TRU) waste management activities, including processing of legacy TRU waste (debris), and planning for construction and operation of a test facility for future treatment of TRU-contaminated sludge. Elimination of the stored inventory of TRU wastes and associated program costs remains a high priority for the DOE OREM Program and the State of Tennessee.

Maintaining awareness of these disposition activities, including OREM's response to the shutdown of the Waste Isolation Pilot Project and improvements to our operational awareness and oversight of contractor activities, is requested.

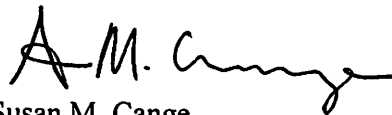
**FISCAL YEAR 2017 TOPICS FOR THE OAK RIDGE SITE SPECIFIC ADVISORY BOARD**

**6. Provision of Input into the FY 2019 Budget Development Effort**

ORSSAB's annual participation in this effort remains important, particularly with a focus on establishing program priorities. We would like to brief ORSSAB on all major projects underway and obtain project prioritization input. In particular, participation by ORSSAB members in the annual community workshop, where program priorities are discussed, is requested.

We look forward to providing additional information concerning these topics during the ORSSAB retreat in August. If you have any questions or if we can be of further assistance, please contact me at 576-0742 or Dave Adler at 576-4094.

Sincerely,

A handwritten signature in black ink, appearing to read "A.M. Cange". The signature is fluid and cursive, with the first letters of the first and last names being capitalized and prominent.

Susan M. Cange  
Manager

cc:

Jeffrey Crane, EPA, Region 4  
Connie Jones, EPA, Region 4  
Kristof Czartoryski, TDEC, Oak Ridge  
Dave Adler, EM-942  
Jay Mullis, EM-90  
Melyssa Noe, EM-942  
Ed Worth, EM-94



STATE OF TENNESSEE  
DEPARTMENT OF ENVIRONMENT AND CONSERVATION  
DIVISION OF REMEDIATION - DOE OVERSIGHT OFFICE  
761 EMORY VALLEY ROAD  
OAK RIDGE, TN 37830

July 28, 2016  
Ms. Belinda Price, Chair  
Oak Ridge Site Specific Advisory Board  
P.O. Box 2001  
Oak Ridge, Tennessee 37831

Dear Ms. Price,

**FY 2017 Topics for the Oak Ridge Site Specific Advisory Board**

Thank you for your request for input from the Tennessee Department of Environment and Conservation (TDEC) on issues for the Oak Ridge Site Specific Advisory Board (ORSSAB) to consider during fiscal year (FY) 2017. The TDEC Division of Remediation, DOE Oversight Office recommends the following program areas where stakeholder comments and recommendations would be most beneficial:

**Future disposal for the Environmental Management generated waste**

The U.S. Department of Energy (DOE), Environmental Protection Agency (EPA) and TDEC continue consideration of waste disposal for future Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) generated waste. TDEC continues to work with DOE and EPA to assure that the selected option would provide for compliant, cost effective disposal that is protective of human health and the environment. Lessons learned from the construction and operation of the Environmental Management Waste Management Facility (EMWMF) should be taken into account when planning for this new facility.

The ORSSAB may assist in a programmatic look at future onsite waste disposal on the Oak Ridge Reservation (ORR), and the topics that were proposed by TDEC for ORSSAB consideration last year continue to be applicable. These topics include: potential facility location; the viability of volume reduction technologies; offsite versus onsite disposal for various types of waste; suitability of the onsite disposal for the mercury contaminated soils and debris and, if deemed suitable, acceptable levels of mercury for disposal and the need for the treatment of effluents for mercury. Input from SSAB on extend of site characterization, risk modeling and acceptable waste acceptance criteria would increase public awareness and assist in recommended path forward.

July 28, 2016

### **Processing and disposition of Transuranic (TRU) waste**

TDEC is working with DOE on the path forward to disposition transuranic sludge stored in Melton Valley Storage Tanks. Though currently stable and safely stored, this waste stream represents one of the highest levels of risk to the public and the environment. By September 30, 2016, DOE is scheduled to provide to TDEC an updated sludge disposition project lifecycle planning schedule. The successful design and construction of the sludge treatment facility requires a steady fiscal environment.

To adhere to the policy that all defense-related transuranic waste must be disposed in the designated repository located in New Mexico, retrievably stored transuranic waste in Trench 13 needs to be excavated and processed at the Transuranic Waste Processing Center. Input from SSAB on these matters will increase public awareness of transuranic wastes in need of disposition.

### **Assessment of Groundwater**

Offsite groundwater contamination from the Oak Ridge Reservation (ORR) has been documented across the Clinch River. An ORR Groundwater Strategy document was developed in 2014 by the U.S. Department of Energy (DOE), Environmental Protection Agency (EPA) and TDEC. The objectives of the strategy were to assess potential threats to off-site public health and the environment due to groundwater contamination from sources on the ORR and to aid in selection of remedial actions to prevent unacceptable risk and groundwater degradation/migration and to restore groundwater to beneficial use wherever practicable.

Phase I of the Remedial Site Investigation for the offsite groundwater study was completed with the sampling performed by both DOE and TDEC. Implementation of the Phase II depends on the findings of the Remedial Site Investigation Report to be issued by DOE in November 2016. TDEC will continue its focus on additional offsite groundwater sampling and is in the process of obtaining background data that would assist in the report findings evaluation. TDEC supports DOE modeling effort which will be a useful tool for identification of data gaps and limitations in current ORR conceptual models of groundwater flow and contamination.

TDEC also sees a need for investigation of extent and migration of the groundwater plumes, and more aggressive implementation of groundwater remedies following successful treatability studies. TDEC continues to work with DOE and EPA to achieve a balanced approach to the remediation of the Oak Ridge Reservation. Continued input from the SSAB on the ORR groundwater strategy and these projects will maintain public awareness concerning the need to better understand and evaluate the nature and extent of ORR groundwater contamination. This could include input on changes to the ORR DOE Life Cycle Baseline with regard to the timing of groundwater actions.

Ms. Belinda Price

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July 28, 2016

**Mercury Remediation**

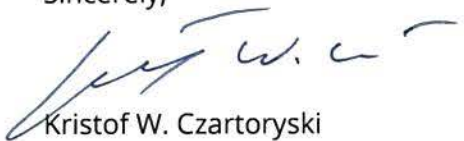
Releases of mercury from the Y-12 National Security Complex continue to exceed State of Tennessee and EPA water quality criteria. TDEC and EPA approved Amendment to the Record of Decision for Phase I Interim Source Control Actions in the Upper East Fork Poplar Creek Characterization Area.

This modification includes the construction and operation of a new water treatment facility to further reduce mercury discharges from the Y-12 National Security Complex to UEFPC surface water at Outfall 200.

The water treatment plant is crucial to the continued clean-up efforts at the Y -12 National Security Complex and the reduction of discharges into the East Fork Poplar Creek and beyond. This system needs to be operating prior to the commencement of the Decontamination and Decommissioning (D&D) of Beta 4, Alpha 5, and Alpha 4 in order to capture as much mercury discharge from those sites as possible. Because mercury is a principal threat waste, the treatment facility at Outfall 200 and how the West End Mercury Area D&D is conducted is extremely important. Input from SSAB on this project and strategies for mercury waste management would increase public awareness of the nature of the mercury problem and the path forward for mercury remediation at Y-12.

I will be glad to discuss these issues in further detail with the SSAB and look forward to the ORSSAB annual planning meeting in August. Please contact me at (865) 220-6580.

Sincerely,



Kristof W. Czartoryski

Environmental Restoration Program Manager

xc Steve Goins, TDEC  
Constance Jones, EPA  
Jeffrey Crane, EPA  
Susan Cange, DOE  
Dave Adler, DOE  
Melyssa Noe, DOE  
Ron Woody, ORRCA





UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION 4  
ATLANTA FEDERAL CENTER  
61 FORSYTH STREET  
ATLANTA, GEORGIA 30303-8960

July 13, 2016

Ms. Belinda Price, Chair  
Oak Ridge Site Specific Advisory Board  
Post Office Box 2001  
Oak Ridge, Tennessee 37831

Dear Ms. Price:

This letter is written to respond to the Oak Ridge Site Specific Advisory Board's (ORSSAB) June 15, 2016, to the U.S. Environmental Protection Agency requesting identification of issues the ORSSAB should consider during its Fiscal Year 2017 planning activities. The issues identified below are intended to focus on current and future Department of Energy, Oak Ridge Reservation (DOE-ORR) remedial actions and activities consistent with the goals established under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) and the National Contingency Plan. The issues are submitted to focus on areas of where citizens can be informed and engaged in DOE's cleanup program and are not listed in order of priority.

1) ORR Groundwater Projects:

A) The DOE will submit the Remedial Site Investigation Report for the offsite groundwater study in November 2016. It is anticipated that DOE may need to conduct some additional offsite groundwater sampling where questions remain regarding possible DOE-related contamination.

B) The DOE completed a pilot-scale Treatability Study at the Bethel Valley 7000 Area (i.e., East Bethel Valley Volatile Organic Compound (VOC) Plume) in 2012. The project was very successful in treating areas with high concentrations of VOC contaminants in groundwater. However, the DOE has not committed to finishing the clean-up. The EPA and the Tennessee Department of Environment and Conservation (TDEC) have issued a joint letter (June 2016) to the DOE stating that it should be the next groundwater project. The current long-term schedule for this project, as listed in Appendix J to the FFA, includes a Record of Decision in 2027 and a one year duration for remedy implementation with a Remedial Action Completion Report in 2028. Long term deferral of this project with an expectation for a limited remedial action duration is not appropriate.

C) Balancing the investigation and cleanup of groundwater contamination with DOE's current efforts to prioritize the demolition of abandoned structures is important in addressing the large-scale contaminant plumes and their current state of uncontrolled migration across the complex. Although many groundwater source areas have installed engineered covers to reduce contaminant migration from waste sources, only limited efforts have been initiated to control the migration of contaminant plumes. The EPA has designated the DOE ORR as a facility that has not attained the Government Results Performance Act Goal of "Groundwater Migration Under Control." This is an important measure for ensuring groundwater protection at Superfund sites (See attached letter). In addition to the Bethel Valley 7000 Area described in B) above, other priority groundwater projects should be identified in FFA Appendix J that lead to the final watershed RODs.

Timeframe for Consideration: Quarter 1 FY 17

## 2) The DOE Groundwater Strategy

The DOE-ORR Groundwater Strategy has been developed. It is critical that groundwater remediation not be deferred to the end of the DOE's CERCLA cleanup program. The ORSSAB should assist DOE in ensuring the efforts that were critically important in developing the Groundwater Strategy and its priorities for phased cleanup not be deferred to final groundwater RODs with the potential for significant increase in cleanup costs due to the expansion of contaminated plumes. The ORSSAB should assist DOE in ensuring the Groundwater Strategy will lead to timely, phased cleanup of groundwater to protect the groundwater resource and the ongoing impacts to surface water resources on the ORR that migrates offsite. This activity will assist in efforts to plan cleanup for the protection of groundwater and surface water resources and will benefit the community at-large.

Timeframe for Consideration: Quarter 1 FY 17

## 3) Evaluating Intermediate Project Implementation

Assist DOE in identifying all near term (e.g., next five years out to 2021) and intermediate term (e.g., subsequent ten years out to 2031) project milestones that lead to CERCLA project completion. This approach should result in detailed milestones for all CERCLA project events (e.g., Primary Document submissions and field starts) for the near term milestones and "decision project starts and completions" for phased groundwater cleanup in the intermediate term. These intermediate term project targets should support the final watershed RODs beyond the intermediate term. CERCLA project planning and milestones should be implemented and documented in a transparent manner that shows the strategic approach for site cleanup. Without a clear logical path to the key events in the CERCLA cleanup strategy (e.g., documents and timelines) per project that ties to funding and milestones, it is difficult to understand the end point and general approach to the strategic plan for cleanup. The detailed milestones for the near term are especially important to effectively coordinate regulator and stakeholder interface and oversight. A better understanding of intermediate actions is needed to ensure that a sustainable pace of cleanup and necessary funding will support completion of cleanup of the entire.

Timeframe for Consideration: Quarter 2 FY 17

## 4) Ensure effective DOE community outreach activities

The ORSSAB could assist in ensuring that proactive project-specific DOE community outreach plans are developed for CERCLA projects (removal and remedial). These community outreach plans are "living documents" that provide the community with the status of planned activities for the duration of the project-specific cleanup. An outreach plan is consistent with the document, *"Final Report of the Federal Facilities Environmental Restoration Dialogue Committee"*, dated April 1996 and the *"Superfund Community Involvement Handbook"*, released January 2016 and would be more specific

than the DOE Public Involvement Plan (PIP) for the overall cleanup program. The PIP does not provide the details for individual projects nor the details of project activities to completion for the public's understanding of the approach and status of a particular project. Assisting the DOE in ensuring enhanced communication will assist in consensus building with the general Oak Ridge community and its residents.

Timeframe for Consideration: Quarter 2 FY 17

We appreciate your continued involvement regarding environmental cleanup at the Department of Energy - Oak Ridge Reservation. If you have any questions regarding any of the issues stated above, please do not hesitate to contact me at (404) 562-8551.

Sincerely,

A handwritten signature in cursive script, appearing to read "Constance A. Jones".

Constance A. Jones, EPA ORSSAB Liaison  
Restoration and DOE Coordination Section  
Restoration and Site Evaluation Branch  
Superfund Division

Enclosure

cc: Kristof Czartoryski, TDEC  
David Adler, DOE  
Melissa Noe, DOE





UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, D.C. 20460

JUL 12 2010

OFFICE OF  
SOLID WASTE AND  
EMERGENCY RESPONSE

The Honorable Ines R. Triay  
Assistant Secretary for  
Environmental Management  
U.S. Department of Energy  
1000 Independence Avenue, SW  
Washington, D.C. 20585-0113

Dear Ms. Triay:

The purpose of this annual letter is to ensure close coordination between the U.S. Department of Energy (DOE) and the U.S. Environmental Protection Agency (EPA) in meeting key Government Performance and Results Act (GPRA) measures. As you know, EPA annually tracks accomplishments at Superfund NPL sites, of which DOE NPL sites are a part. These measures include: Human Exposure Environmental Indicator (EI); Migration of Contaminated Groundwater (EI); Sitewide Ready for Anticipated Use (SWRAU); Construction Completions (CC); and Five-Year Reviews (5YR). Although 5YRs are not GPRA measures, they are a very important activity and EPA reports annually to Congress our progress towards meeting these targets. Please see attached charts for site-specific data on these measures.

We appreciate DOE's continued efforts to work with EPA to ensure that we are accurately capturing our progress toward protection of human health and the environment. Below is a status update of the aforementioned measures:

- **Environmental Indicators**

*By the end of FY2010, EPA has a nationally established overall goal of 148 Federal NPL sites (out of 173) achieving the Human Exposure Under Control EI status and 109 federal NPL sites achieving the Groundwater Migration Under Control EI status. Using our FY2010 mid-year data, EPA believes that all DOE sites are Human Exposure Under Control. For your convenience, the complete list is attached to this letter.*

*However, EPA believes that there are 8 DOE NPL sites (out of 21 sites with Groundwater) at which Groundwater Migration is Not Under Control or has Insufficient Data (38%). Please provide us with your estimate of when DOE expects these 8 sites to achieve a status of Groundwater Migration Under Control.*

- **Sitewide Ready for Anticipated Use**

*EPA's Superfund program has its own acreage measure independent of any state or agency. EPA measures acres with two distinct indicators: 1) Acres Protected for People (PPF)*

and 2) Acres Ready for Anticipated Use (RAU). Additionally, the Superfund program measures the number of sites which are Sitewide Ready for Anticipated Use (SWRAU). All land-based Superfund acres are designated by Operable Unit (OU) or parcel.

The PFP designation is used for acres which are currently protective for human health (i.e. Human Exposure is Under Control). The RAU designation is used for acres which are protective for human health, all cleanup goals in the Decision Document(s) have been achieved, and all institutional controls (if necessary) have been put in place. Once all OU's or parcels have been designated as RAU, and the facility is already Construction Complete, the installation meets the criteria for becoming SWRAU (for NPL sites only).

There is one DOE NPL site targeted for SWRAU in FY2010. Please confirm that this site will be able to reach this milestone this fiscal year. There also is currently one DOE Federal facility NPL site which is planned to achieve this milestone in FY2011, and two in FY2012 (please see attached list). Please verify whether this planning data is accurate.

- **Construction Completion**

As you are aware, EPA's CC measure is one of the primary tools used by EPA to report the progress of cleanup activities. We are very interested in accurately and realistically projecting the achievement of CCs at all Federal sites in the context of ensuring the protection of human health and the environment. However, zero DOE NPL sites are currently planned to accomplish this measure within the next several years.

- **Five-Year Reviews**

Five-Year Reviews are conducted to evaluate the implementation and performance of a remedy in order to determine if the remedy is, or will be, protective of human health and the environment. Zero DOE 5YRs are targeted for completion in FY2010, and zero DOE 5YRs are currently overdue.

In FY2010, EPA's Inspector General (IG) performed an audit on Federal Facility Five-Year Review reports, their associated data, their Issues and Recommendations, timeliness of the reports, etc. The IG recommends that EPA improve its role in, and management of, Federal facility 5YRs. We have transmitted this report to you under separate cover.


The agency considers all of these measures of critical importance because they enable us to report to the public and Congress where actions have been taken to protect human health and the environment at Superfund NPL sites. Achievement of these measures is based on a continually successful partnership between EPA and DOE. Many communities have expressed an interest in more transparency, and involvement in the cleanup of contaminated sites. EPA is committed to implementing a management strategy to identify opportunities for more community involvement.

In addition, EPA is initiating an aggressive multi-year effort, called the Integrated Cleanup Initiative (ICI), to integrate and leverage its land cleanup authorities (i.e., Superfund Remedial, Removal, Federal Sites, and Brownfields) to address a greater number of contaminated sites, accelerate cleanups, and put sites back into productive use while protecting

human health and the environment. As a first step, EPA has committed to a new publicly reported performance measure in FY2011 - an increase in completion of Superfund remedial action projects. This new measure better demonstrates ongoing progress and risk reduction at Superfund sites and provides the opportunity to better manage our cleanup program. We will be talking with DOE more about this new measure as we move forward toward the 2011 reporting date.

Thank you in advance for your efforts to work with EPA in ensuring that we continue to protect human health and the environment at Superfund NPL sites. I ask that your organization work with our regional offices, and the Federal Facilities Restoration and Reuse Office (FFRRO), to continue efforts to achieve protective cleanups and utilize these measures to communicate our joint successes in doing so. FFRRO's Office Director is John Reeder and he can be reached at (703) 603-9089 or at [reeder.john@epa.gov](mailto:reeder.john@epa.gov). You can also contact Gail A. Cooper, FFRRO's Deputy Director and management lead for measures at (703) 603-0049 or at [cooper.gailann@epa.gov](mailto:cooper.gailann@epa.gov).

Sincerely,



Mathy Stanislaus  
Assistant Administrator

cc: John Reeder, FFRRO  
Gail A. Cooper, FFRRO  
James Woolford, OSRTI  
Superfund Regional National Program Managers, Regions I - X  
RCRA Regional National Program Managers, Regions I - X  
Federal Facility Program Managers, Regions I - X

**FIVE YEAR REVIEWS (as of April 1, 2010)**

<b>DEPARTMENT OF ENERGY (DOE)</b>						
<b>FY</b>	<b>REG</b>	<b>STATE</b>	<b>FACILITY NAME</b>	<b>NPL</b>	<b>ACTUAL COMP</b>	<b>FYR DUE DATE</b>
2011	02	NY	BROOKHAVEN NATIONAL LABORATORY (USDOE)	FINAL		8/9/2011
2011	05	OH	FEED MATERIALS PRODUCTION CENTER (USDOE)	FINAL		9/16/2011
2011	05	OH	MOUND PLANT (USDOE)	FINAL		9/28/2011
2011	07	MO	WELDON SPRING QUARRY/PLANT/PITS (USDOE/ARMY)	FINAL		9/29/2011
2011	09	CA	LAWRENCE LIVERMORE NATL LAB (SITE 300) (USDOE)	FINAL		10/1/2010
<b>2011 Count</b>						<b>5</b>
2012	04	TN	OAK RIDGE RESERVATION (USDOE)	FINAL		3/19/2012
2012	08	CO	ROCKY FLATS PLANT (USDOE)	FINAL		9/14/2012
2012	08	UT	MONTICELLO MILL TAILINGS (USDOE)	FINAL		6/11/2012
2012	09	CA	LAWRENCE LIVERMORE NATL LAB (SITE 300) (USDOE)	FINAL		12/14/2011
2012	09	CA	LAWRENCE LIVERMORE NATL LAB (SITE 300) (USDOE)	FINAL		4/19/2012
2012	09	CA	LAWRENCE LIVERMORE NATL LAB, MAIN SITE (USDOE)	FINAL		8/29/2012
2012	10	ID	IDAHO NATIONAL ENGINEERING LABORATORY (USDOE)	FINAL		12/4/2011
2012	10	ID	IDAHO NATIONAL ENGINEERING LABORATORY (USDOE)	FINAL		12/4/2011
2012	10	ID	IDAHO NATIONAL ENGINEERING LABORATORY (USDOE)	FINAL		12/21/2011
2012	10	WA	HANFORD 100-AREA (USDOE)	FINAL		5/4/2012
2012	10	WA	HANFORD 1100-AREA (USDOE)	DELETED		5/4/2012
2012	10	WA	HANFORD 200-AREA (USDOE)	FINAL		5/4/2012
2012	10	WA	HANFORD 300-AREA (USDOE)	FINAL		5/4/2012
<b>2012 Count</b>						<b>13</b>
<b>Grand Count</b>						<b>18</b>

**SITEWIDE READY FOR ANTICIPATED USE (as of April 1, 2010)**

FY 2010			
Planned NPL Sitewide Ready-for-Reuse			
<u>EPA Region</u>	<u>Military Service</u>	<u>State</u>	<u>Facility Name</u>
10	DEPT. OF ENERGY	WA	HANFORD 1100-AREA (USDOE)
FY 2011			
Planned NPL Sitewide Ready-for-Reuse			
<u>EPA Region</u>	<u>Military Service</u>	<u>State</u>	<u>Facility Name</u>
02	DEPT. OF ENERGY	NJ	W.R. GRACE & CO., INC./WAYNE INTERIM STORAGE SITE (USDOE)
FY 2012			
Planned NPL Sitewide Ready-for-Reuse			
<u>EPA Region</u>	<u>Military Service</u>	<u>State</u>	<u>Facility Name</u>
05	DEPT. OF ENERGY	OH	MOUND PLANT (USDOE)
07	DEPT. OF ENERGY	MO	WELDON SPRING QUARRY/PLANT/PITS (USDOE/ARMY)

ENVIRONMENTAL INDICATORS (as of April 1, 2010)

DEPARTMENT OF ENERGY (DOE)					
EPA REGION	STATE	FACILITY NAME	NPL STATUS	HUMAN EXPOSURE	GROUNDWATER MIGRATION
02	NJ	MIDDLESEX SAMPLING PLANT (USDOE)	FINAL	HE UNDER CONTROL	GM UNDER CONTROL
02	NJ	W.R. GRACE & CO., INC./WAYNE INTERIM STORAGE SITE (USDOE)	FINAL	HE UNDER CONTROL	GM UNDER CONTROL
02	NY	BROOKHAVEN NATIONAL LABORATORY (USDOE)	FINAL	HE UNDER CONTROL	GM NOT CONTROLLED
04	KY	PADUCAH GASEOUS DIFFUSION PLANT (USDOE)	FINAL	HE UNDER CONTROL	GM NOT CONTROLLED
04	SC	SAVANNAH RIVER SITE (USDOE)	FINAL	HE UNDER CONTROL	GM NOT CONTROLLED
04	TN	OAK RIDGE RESERVATION (USDOE)	FINAL	HE UNDER CONTROL	GM NOT CONTROLLED
05	OH	FEED MATERIALS PRODUCTION CENTER (USDOE)	FINAL	HE CONTROLLED, PROT. REM.	GM UNDER CONTROL
05	OH	MOUND PLANT (USDOE)	FINAL	HE UNDER CONTROL	GM UNDER CONTROL
06	TX	PANTEX PLANT (USDOE)	FINAL	LONG TERM PROTECT	GM UNDER CONTROL
07	MO	WELDON SPRING QUARRY/PLANT/PITS (USDOE/ARMY)	FINAL	HE CONTROLLED, PROT. REM.	GM UNDER CONTROL
08	CO	ROCKY FLATS PLANT (USDOE)	FINAL	HE CONTROLLED, PROT. REM.	GM UNDER CONTROL
08	UT	MONTICELLO MILL TAILINGS (USDOE)	FINAL	HE UNDER CONTROL	GM UNDER CONTROL
09	CA	LABORATORY FOR ENERGY-RELATED HEALTH RESEARCH/OLD CAMPUS LANDFILL (USDOE)	FINAL	HE UNDER CONTROL	GM UNDER CONTROL

DEPARTMENT OF ENERGY (DOE)					
EPA REGION	STATE	FACILITY NAME	NPL STATUS	HUMAN EXPOSURE	GROUNDWATER MIGRATION
09	CA	LAWRENCE LIVERMORE NATL LAB (SITE 300) (USDOE)	FINAL	HE UNDER CONTROL	GM NOT DETERMINED
09	CA	LAWRENCE LIVERMORE NATL LAB, MAIN SITE (USDOE)	FINAL	HE UNDER CONTROL	GM UNDER CONTROL
10	ID	IDAHO NATIONAL ENGINEERING LABORATORY (USDOE)	FINAL	HE UNDER CONTROL	GM UNDER CONTROL
10	WA	BONNEVILLE POWER ADMINISTRATION ROSS COMPLEX (USDOE)	DELETED	LONG TERM PROTECT	NOT A GM SITE
10	WA	HANFORD 100-AREA (USDOE)	FINAL	HE UNDER CONTROL	GM NOT CONTROLLED
10	WA	HANFORD 1100-AREA (USDOE)	DELETED	LONG TERM PROTECT	GM UNDER CONTROL
10	WA	HANFORD 200-AREA (USDOE)	FINAL	HE UNDER CONTROL	GM NOT CONTROLLED
10	WA	HANFORD 300-AREA (USDOE)	FINAL	HE UNDER CONTROL	GM NOT CONTROLLED

## FY 2016 ORSSAB Work Plan/Schedule

Executive	Monthly meeting	Site tour	EM/Stewardship
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Date	Event	Topic	Presenter	Issue Group	Location
<b>OCTOBER 2015</b>					
Wed., 10/7	Executive	Work plan rollout			DOEIC
Wed., 10/14	Monthly meeting	Progress at ETTP	Cain		DOEIC
Sat., 10/24	Site tour	On-site tour Q&A			ETTP
Wed., 10/28	EM/Stewardship	Work plan rollout; ETTP Zone 1 Proposed Plan detailed discussion			DOEIC

<b>NOVEMBER</b>					
Wed., 11/4	Executive	General business			
Tues., 11/10	Monthly meeting	The Federal Oversight Model- Ensuring a Safe Work Environment <i>(Meeting date changed due to Veteran's Day on 11/11)</i>	Armstrong		Chuy's, 9235 Kingston Pike, Knoxville
	Site tour	<i>(No site tour)</i>			
Wed., 11/25	EM/Stewardship	<i>(No meeting--due to upcoming Thanksgiving holiday)</i>			

<b>DECEMBER</b>					
Wed., 12/2	Executive	<i>(No meeting)</i>			
Wed., 12/9	Monthly meeting	<i>(No meeting)</i>			
	Site tour	<i>(no site tour)</i>			
Wed., 12/23	EM/Stewardship	<i>(No meeting--due to holidays)</i>			

<b>JANUARY 2016</b>					
Wed., 1/6	Executive	General business			DOEIC
Wed., 1/13	Monthly meeting	Waste Management	McMillan, Henry, DeMonia		DOEIC
Postponed	Site tour	On-site tour/Q&A			TWPC
Wed., 1/27	EM/Stewardship	Waste Management detailed discussion			DOEIC

<b>FEBRUARY</b>					
Wed., 2/3	Executive	General business			DOEIC
Wed., 2/10	Monthly meeting	Groundwater Monitoring Program	McMillan	Cook, Hatcher, Deaderick, Smalling	DOEIC
TBD	Site tour	On-site tour/Q&A			ORR



Date	Event	Topic	Presenter	Issue Group	Location
Wed., 2/24	EM/Stewardship	Groundwater Monitoring Program presentation detailed discussion			Leidos offices

MARCH					
Wed., 3/2	Executive	General business			DOEIC
Wed., 3/9	Monthly meeting	FY 2018 Budget Formulation and Prioritization of Projects	Thompson		DOEIC
	Site tour	<i>(No site tour)</i>			
Wed., 3/23	EM/Stewardship	FY 2018 Budget Formulation and Prioritization of Projects detailed discussion			DOEIC

APRIL					
Wed., 4/6	Executive	General business			DOEIC
Wed., 4/13	Monthly meeting	(No ORSSAB monthly meeting due to Chairs meeting)			
Tues., 4/19	Chairs meeting tour	Chairs meeting tour			ORR
Wed., 4/20 Thurs., 4/21	Chairs meeting	Chairs meeting			DoubleTree, Oak Ridge
Wed., 4/27	EM/Stewardship	Continued discussion of FY 2018 budget formulation and project prioritization and preview of Community Budget Workshop			DOEIC

MAY					
Wed., 5/4	Executive	General business			DOEIC
Wed., 5/11	Monthly meeting	EM Disposal Facility (EMDF)	Henry	Cook, Bignell, Hatcher, Wilson, Trujillo, Smalling	DOEIC
<i>Postponed</i>	Site tour	On-site tour Q&A			EMDF/EMWMF
Wed., 5/25	EM/Stewardship	EMDF detailed discussion			DOEIC
Thurs., 5/26	Community budget workshop	Community Budget Workshop			Pollard Auditorium

JUNE					
Wed., 6/1	Executive	General business			DOEIC
Wed., 6/8	Monthly meeting	Technology Development to Support Mercury Cleanup Strategy	Peterson	Wilson, Trujillo, Bignell, Smalling	DOEIC
Thurs., 6/16	Site tour	On-site tour Q&A	Phillips		ORNL Aquatics Lab

Date	Event	Topic	Presenter	Issue Group	Location
Wed., 6/22	EM/Stewardship	Technology Development to Support Mercury Cleanup Strategy detailed discussion	Darby, Peterson		DOEIC

JULY					
Wed., 7/6	Executive	Annual meeting planning			DOEIC
Wed., 7/13 Sat., 7/23	New member training & tours	<i>(No ORSSAB monthly meeting)</i>	Adler		New Hope Center/ORR
Wed., 7/27	EM/Stewardship	<i>(No meeting)</i>			DOEIC

AUGUST					
Wed., 8/3	Executive	<i>(No meeting)</i>			
Sat., 8/6	Annual meeting	FY 2016 review and planning for FY 2017			Tremont Lodge, Townsend
Wed., 8/10	Monthly meeting	(No ORSSAB monthly meeting due to Annual meeting)			
	Site tour	<i>(No site tour)</i>			
Wed., 8/24	EM/Stewardship	<i>(No meeting)</i>			

SEPTEMBER					
Wed., 9/7	Executive	General business			DOEIC
Wed., 9/14	Monthly meeting	Vision 2020-Planning for the Future of ETTP including Reuse, Historic Preservation and Stewardship	Cooke, Adler	Deaderick	TBD
TBD	Site tour	On-site tour/Q&A			ETTP
Wed., 9/28	EM/Stewardship	Vision 2020 detailed discussion; update from the groundwater model Technical Advisory Group	Cooke, Adler; Goode	Deaderick; Cook, Hatcher, Deaderick, Smalling	DOEIC