Oak Ridge Site Specific Advisory Board Monthly Meeting

Wednesday, June 12, 2013
6 p.m., DOE Information Center
1 Science.gov Way
Oak Ridge, 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.

CONTENTS

Oak Ridge Site Specific Advisory Board
Wednesday, June 12, 2013, 6:00 p.m.
DOE Information Center
1 Science.gov Way, Oak Ridge, Tenn.

AGENDA

I. Welcome and Announcements (D. Martin) 6:00–6:05
   A. No meeting in July. Next meeting: Annual Meeting, August 17, Pigeon Forge, Tenn.
   B. Presentation of Service Awards to Outgoing Members (S. Cange)

II. Comments from the Deputy Designated Federal Officer, and the DOE, EPA, and TDEC Liaisons (S. Cange, D. Adler, C. Jones, J. Owsley)..... 6:05–6:20

III. Public Comment Period (G. Hall)..... 6:20–6:30

IV. Presentation: National Environmental Management Program (D. Adler)..... 6:30–7:05
Question and Answer Period 7:05–7:20

BREAK..... 7:20–7:30

V. Additions/Approval of Agenda..... 7:30

VI. Motions 7:30–7:35
   A. May 8, 2013, Meeting Minutes (C. Jensen)
   B. First Reading— Proposed Amendment to the ORSSAB Bylaws (D. Martin)
   C. Recommendations
      1. Fact Sheet on Site Transition at Ongoing Mission Sites (L. Sigal)
      2. Test Site Transfer (L. Sigal)
      3. Stewardship Point of Contact for the Oak Ridge Reservation (L. Sigal)
   D. Second Consecutive Absence—Howard Holmes (C. Jensen)
   E. Election of Nominating Committee (C. Jensen)

VII. Responses to Recommendations & Comments (D. Adler)..... 7:35–7:40

VIII. Committee Reports..... 7:40–7:50
   A. Board Finance & Process (G. Paulus)
      1. Annual Meeting Planning Committee (D. Hemelright)
   B. Environmental Management (B. Hatcher)
   C. Public Outreach (J. Hart)
   D. Stewardship (C. Staley)
   E. Executive (D. Martin)

IX. Federal Coordinator's Report (M. Noe) 7:50–7:55

X. Additions to Agenda 7:55–8:00

XI. Adjourn 8:00

Oak Ridge Site Specific Advisory Board

June 2013

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
						1
2	3	4	5	6	7	8
9	10	11	12 Monthly SSAB Meeting 6 p.m.	13	14	15
16	17	18 Stewardship Committee 5:30 p.m.	19 EM Committee 5:30 p.m.	20 Executive Committee 9 a.m. teleconference	21	22
23	24	25 Public Outreach 5:30 p.m. teleconference	26	27	28	29
30						

All Meetings will be held at the DOE Information Center, Office of Science and Technical Information, 1Science.gov Way, Oak Ridge unless noted otherwise.

ORSSAB Support Office: (865) 241-4583 or 241-4584 **DOE Information Center:** (865) 241-4780

Board Finance & Process Committee will not meet in June.

Board meetings on cable TV and YouTube	
Knoxville: Charter Channel 6, Comcast Channel 12	Sundays at 4 p.m.
Lenoir City: Charter Cable Channel 3	Wednesdays, 4 p.m.
Oak Ridge: Channel 12	Thursday, June 20, 9 p.m.
Oak Ridge: Channel 15	Monday, Wednesday, Friday, 8 a.m. & noon
YouTube	http://www.youtube.com/user/ORSSAB

Oak Ridge Site Specific Advisory Board

July 2013

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
	1	2	3	4 **Independence Day** DOE/staff holiday 	5	6
7	8	9	10 No board meeting in July	11	12	13
14	15	16 Stewardship Committee 5:30 p.m.	17 EM Committee 5:30 p.m.	18	19	20
21	22	23 Public Outreach 5:30 p.m. teleconference	24 Board Finance & Process Committee 5 p.m. Executive Committee 5:30 p.m.	25	26	27
28	29	30 2013 EPA Community Involvement Training Conference July 30-Aug. 1, Boston, Mass.	31	Aug. 1		

All Meetings will be held at the DOE Information Center, Office of Science and Technical Information, 1Science.gov Way, Oak Ridge unless noted otherwise.

No board meeting in July.

ORSSAB Support Office: (865) 241-4583 or 241-4584 **DOE Information Center:** (865) 241-4780

Board member travel: C. Staley, 2013 EPA Community Involvement Training Conference, July 30-Aug. 1, Boston, Mass.

Board meetings on cable TV and YouTube	
Knoxville: Charter Channel 6, Comcast Channel 12	Sundays at 4 p.m.
Lenoir City: Charter Cable Channel 3	Wednesdays, 4 p.m.
Oak Ridge: Channel 12	Thursday, July 18, 9 p.m.
Oak Ridge: Channel 15	Monday, Wednesday, Friday, 8 a.m. & noon
YouTube	http://www.youtube.com/user/ORSSAB

DRAFT

Many Voices Working for the Community

Oak Ridge Site Specific Advisory Board

Unapproved May 8, 2013 Meeting Minutes

The Oak Ridge Site Specific Advisory Board (ORSSAB) held its monthly meeting on Wednesday, May 8, 2013, at the DOE Information Center, 1 Science.gov Way, Oak Ridge, Tenn., beginning at 6 p.m. A video of the meeting was made and may be viewed by contacting the ORSSAB support offices at (865) 241-4583 or 241-4584. The presentation portion of the video is available on the board's YouTube site at www.youtube.com/user/ORSSAB/videos.

Members Present

Jimmy Bell
Lisa Hagy
Gracie Hall[1]
David Hemelright, Vice Chair
Chuck Jensen, Secretary
Jennifer Kasten
Jan Lyons
David Martin, Chair
Fay Martin
Scott McKinney
Donald Mei
Greg Paulus
Belinda Price
Julia Riley[1]
Coralie Staley
Scott Stout
Thomas Valunas

Members Absent

Janet Hart
Bob Hatcher
Bruce Hicks
Howard Holmes[2]

[1]Student Representative
[2]Second consecutive absence

Liaisons, Deputy Designated Federal Officer, and Federal Coordinator Present

Dave Adler, Liaison and Alternate Deputy Designated Federal Officer, Department of Energy-Oak Ridge Office (DOE-ORO)
Susan Cange, DOE-ORO Deputy Manager for Environment Management (EM) and Deputy Designated Federal Officer
Connie Jones, Liaison, Environmental Protection Agency (EPA), Region 4
Melyssa Noe, ORSSAB Federal Coordinator, DOE-ORO
John Owsley, Liaison, Tennessee Department of Environment and Conservation (TDEC)

Others Present

Jason Darby, DOE
Spencer Gross, ORSSAB Support Office
Dick Ketelle, UCOR
Pete Osborne, ORSSAB Support Office
Wanda Smith

Six members of the public were present.

Liaison Comments
Mr. Adler – no comments

Ms. Cange – Ms. Cange said that on Thursday, May 2 the DOE EM Program celebrated all of the accomplishments since the program's inception in 1983. A number of dignitaries including Dave Huizenga, the Senior Advisor for the DOE EM Program in Washington, DC, TDEC Commissioner Robert Martineau, EPA Region 4 Deputy Administrator Stan Meiburg, a number of state and congressional representatives, and several hundred guests attended the event. A video was premiered as part of the DOE oral history project that featured three former Oak Ridge Office managers who had key roles in advancing the EM Program in Oak Ridge.

On Friday, May 3 Tennessee Senator Lamar Alexander participated in a round table discussion at Y-12 National Security Complex about mercury issues at Y-12. Senator Alexander followed the discussion with a press conference with DOE Oak Ridge EM Manager Mark Whitney, Mr. Martineau, and Mr. Meiburg where they talked about the Outfall 200 Project at Y-12 to help capture mercury before it enters Upper East Fork Poplar Creek, which runs through Y-12.

Ms. Cange said DOE EM Headquarters has provided the site offices guidance on formulating their FY 2015 budget requests. Oak Ridge EM is busy developing several budget planning scenarios for the FY 2015 request. She said an agreement has been reached with EPA and TDEC on out-year planning milestones for FY 2016 and beyond.

Ms. Jones – no comments

Mr. Owsley – no comments

Public Comment
None

Presentation
The presentation for the evening was on the 2013 Remediation Effectiveness Report (RER) by Mr. Darby and Mr. Ketelle. The main points are included in Attachment 1.

Mr. Darby began by saying the RER was created in 1996 to consolidate in one location all of the available monitoring data being collected on the Oak Ridge Reservation (ORR). The purpose of the RER is to determine the effectiveness of remedial actions in achieving a stated goal and compliance with long-term stewardship requirements. Mr. Darby said all the remedial action decisions that have been made to date are reviewed to see what the remediation goals were. The data collected since those actions were taken are evaluated to see if the goals are being met.

Another component of the RER is the long-term stewardship evaluation of areas where remediated waste was left in place and could cause harm to human health and the environment if stewardship controls are not working. Mr. Darby said various controls are in place to protect individuals from harm. The controls are inspected annually to make sure they are effective. Controls could be a cap over a disposal area or fencing to prevent intrusion.

Mr. Darby explained that while the title of the document is the 2013 RER the information it contains is based on data gathered during FY 2012. Based on that information determinations are made on the effectiveness of remedial actions. If actions are not performing as expected additional actions or recommendations could be made to ensure effectiveness. Mr. Darby said recommendations could be made if monitoring is not adequate, additional parameters are needed, or monitoring frequency needs to be increased.

Mr. Darby noted the 2013 RER long-term stewardship verification results (Attachment 1, page 3). Fifty-five sites, totaling more than 200 checks, were evaluated. He said an additional appendix to track slab stewardship was added. No new issues or recommendations were identified.

Mr. Ketelle provided more detail on some of the sites around the ORR. He began by discussing some mercury reduction projects for Upper East Fork Poplar Creek (UEFPC) (Attachment 1, page 4). Five different projects were undertaken including the installation of mercury traps in selected storm drain locations in the western end of Y-12. He said the traps have been effective in removing free mercury. A treatability study and conceptual design had been done for the proposed mercury treatment plant at Outfall 200. A soil treatability study was done to determine how to stabilize mercury in soil so it can be disposed without causing risk to the environment. Designs were completed to retrofit drains at some of the process buildings at Y-12 to prevent additional releases of mercury to the environment, and five tanks were removed that had been used in mercury-related processes at Y-12. They were characterized and disposed offsite.

Another significant project that was completed was soil remediation at the Old Salvage Yard as well as three phased construction completion reports for three projects that had been completed earlier.

Mr. Ketelle showed a map of UEFPC at Y-12 (Attachment 1, page 5) that shows the locations of Outfall 200, the Big Springs Water Treatment System that treats mercury contaminated water, and monitoring Station 17 where UEFPC leaves Y-12. He explained that stippled and shaded portions of the map indicate areas of groundwater contamination.

Mr. Ketelle showed a chart of mercury flux and concentrations at Station 17 (Attachment 1, page 6). The lower portion of the chart shows annual rainfall from 2000 to 2012 that indicates when rainfall levels varied above or below the average rainfall for this area, about 54 inches per year. The upper portion of the chart shows that mercury discharges at Station 17 closely follow rainfall amounts. One part of the upper chart notes in red when the West End Mercury Project was underway in 2009-2011 to remove mercury from storm drains in the western portion of Y-12. During that period mercury flux and concentrations increased at Station 17 because the system was disturbed upstream.

Mr. Ketelle showed a map of the East End Volatile Organic Compound plume on the east end of Y-12 that extends offsite (Attachment 1, page 7). The plume used to extend farther to the east. The stippled area indicates where the most success has been achieved in reducing the plume concentrations through a pump and treat system. The RER includes tables that indicate the amount of contaminants that have been removed and treated.

Mr. Ketelle then discussed activities in Bear Creek Valley. He showed a map of the area (Attachment 1, page 8) and described the various sites within the three zones of the Bear Creek Valley watershed area. In the Bear Creek Valley Record of Decision (ROD) three land use zones were established. Zone 3 is designated as a waste management area. Zone 1 has a cleanup goal for unrestricted use, and Zone 2 is buffer that separates the clean Zone 1 and the active waste disposal areas of Zone 3. Past disposal activities in Zone 3 have resulted in widespread groundwater contamination. A number of monitoring locations are shown in the three zones, and sampling is done continuously for flux of uranium and nitrates. A number of groundwater wells are sampled regularly in Bear Creek Valley and farther to the west where Bear Creek turns north toward Lower East Fork Poplar Creek.

Mr. Ketelle showed a chart of uranium flux for Bear Creek Valley from 2001 to 2013 (Attachment 1, page 9). Again it indicates flux closely follows rainfall amounts. There are two locations where there are uranium flux goals based on the Bear Creek ROD. One is at BCK 12.34 for uranium

discharges from the S3 Ponds. Another is at integration point BCK 9.2. BCK 12.34 flux goals have been met six of 11 years when rainfall is at or below average. The flux goal for BCK 9.2 has never been met.

The chart on page 10 of Attachment 1 shows the breakdown of the uranium and nitrate contaminants for Bear Creek Valley.

Mr. Ketelle then discussed at activities at East Tennessee Technology Park (ETTP). A list of accomplishments during FY 2012 is noted on page 11 of Attachment 1. Much of the work at ETTP has been decontamination and demolition (D&D) work, but Mr. Ketelle noted an activity not related to D&D. The chromium water treatment system at Mitchell Branch went into operation in 2012. The system collects groundwater contaminated with hexavalent chromium that was seeping into a storm drain and discharging into Mitchell Branch. Monitoring of groundwater and surface water at ETTP indicates contaminate conditions are generally stable.

ETTP is separated into Zone 1 and Zone 2. Zone 1 is the area that surrounds the main industrial portion of the site (Attachment 1, page 12). The left side of the map shows the status of exposure unit cleanup in Zone 1. The map on the right is of Zone 2 exposure unit cleanup. Green areas are complete, yellow areas have incomplete characterization, and red areas are where remedial actions are required on soils. Mr. Ketelle said since Zone 2 is the primary industrial area where building demolition of former process buildings is underway there is residual contamination that can't be accessed until all of the buildings are gone.

Page 13 of Attachment 1 shows a list of activities completed in FY 2012 in Bethel Valley. Mr. Ketelle said a number of the projects were D&D projects and the conclusion of projects funded by the American Recovery and Reinvestment Act. One of the most notable projects completed in FY 2012 was the excavation and disposal of Tank W-1A from the central campus of Oak Ridge National Lab (ORNL). That had been a project that experienced several stops and starts over a number of years.

Another significant accomplishment was the closure of Solid Waste Disposal Area 3 and the contractor's landfill on the west end of Bethel Valley.

Monitoring of surface water, groundwater, and aquatic biota are ongoing projects in Bethel Valley. Page 9 of Attachment 1 is a map of Bethel Valley surface water monitoring locations. Mr. Ketelle said there was a mercury spill at Building 4501 that resulted in a legacy of mercury discharges. Some of the discharge was going out with storm water to White Oak Creek. The left side graph on page 15 of Attachment 1 shows mercury concentrations from 2004 to 2012 at the 7500 Bridge in Melton Valley, the exit pathway for surface water from the lab, and at monitoring location WOC-105. Mercury concentrations were reduced significantly beginning in 2007 when basement sump water in Building 4501/4505 was routed for treatment. Despite a couple of spikes, the concentrations are generally below the ambient water quality criteria of 51 parts per trillion, TDEC's limit for mercury in surface water.

The right hand chart shows mercury concentrations in fish tissue at several locations. Concentrations in fish from the middle part of White Oak Creek in plant area have dropped below the .3 part per million regulatory threshold, the EPA limit for consumption of fish tissue. Mr. Ketelle said this is the only place on the reservation where that goal has been accomplished.

Mr. Ketelle said the Core Hole 8 plume collection system was refurbished in FY 2012. As a result strontium-90 levels in White Oak Creek at the 7500 Bridge decreased to Bethel Valley ROD goal levels. Prior to the refurbishment strontium-90 levels exceeded ROD goals (Attachment 1, page 16).

In Melton Valley, ROD actions were completed in 2006. Remedy operations and monitoring have been conducted since then (Attachment 1, page 17). Mr. Ketelle said there are a number of downgradient collection trenches around caps in Melton Valley to collect seepage. Water collected varies from a half-million gallons to 1.5 million gallons a month depending on the season. Mr. Ketelle said it was discovered that there were some problems with the Solid Waste Storage Area 4 downgradient collections trench wells. During FY 2012-13 the wells were refurbished, and the system is now working better than before the refurbishment.

Monitoring in Melton Valley continues to demonstrate effectiveness of the hydrologic isolation of buried waste. Monitoring also continues to evaluate the recovery of the aquatic ecosystem. Mr. Ketelle said there have been noted improvements in species diversity.

A map of Melton Valley and surface water monitoring locations is noted on page 18 of Attachment 1. The map also shows major capped areas where groundwater monitoring is done. The red lines are downgradient collection trenches. Mr. Ketelle said the large area caps have done a good job of keeping water from getting into the waste areas. By comparison, he said the smaller caps had not performed as well as the larger ones because water adjacent to the caps would get into the waste areas.

White Oak Dam is the integration point where surface water is sampled continuously. Mr. Ketelle said radionuclides are the risk-producing issues in surface water at ORNL. The three major contaminants are strontium-90, cesium-137, and tritium. Goals for those radionuclides at White Oak Dam were attained even before the Melton Valley remediation was completed, which is an indication that hydrologic isolation is an effective remedy for the discharges (Attachment 1, page 19).

Mr. Ketelle reviewed Melton Valley Exit Pathway and offsite groundwater issues (Attachment 1, page 20). Earlier detection of DOE-related contaminants in the onsite exit pathway monitoring wells led to the installation of several offsite monitoring wells on private property on the west side of the Clinch River. In addition DOE has provided utility water to a number of households on that side of the river. DOE-related contaminants were detected in the first round of sampling in the newly-installed offsite wells in 2010, but no similar detections have been observed since. Monitoring continues at 16 DOE off-site wells and seven offsite residential wells.

Offsite monitoring also continues in Lower East Fork Poplar Creek and in Lower Watts Bar Reservoir/Clinch River/Poplar Creek (Attachment 1, page 21). Mercury concentrations in fish in Lower East Fork continue to exceed EPA criteria. Mr. Ketelle said a number of investigations are underway to examine soil, sediment, and surface water and mechanisms to prevent mercury from being taken up in fish tissue.

In Lower Watts Bar Reservoir PCB levels in fish have been trending downward and mercury levels in fish in Lower Watts Bar are below EPA criteria.

Mr. Ketelle reviewed a number of issues and recommendations that were included in the 2013 RER (Attachment 1, page 22) some of which continue from previous RERs. Five issues were closed from the 2012 RER.

The 2013 RER is available for public review and comments on the document are due to Mr. Darby (darbyjd@emor.doe.gov) by July 1.

After the presentation a number of questions were asked. Following are abridged questions and answers.

Mr. Hemelright - Has the Land Use Manager program helped with the RER? Mr. Ketelle – Yes. The Land Use Manager is operating very well. We have a lot of the site information in it. It allows us to more easily track the inspections processes. It's proving to be very beneficial.

Mr. Bell – What do you do with the water that is pumped from the solid waste storage areas? Mr. Ketelle – We pump it into the main wastewater treatment plant at ORNL. All of that goes through piping into the process waste treatment system where radionuclides, organics and mercury are removed before the water is discharged.

Mr. Valunas – Is the new mercury treatment plant designed to bring mercury levels down to the goal during the rainy season or dry season or both? Mr. Ketelle – Right now it's in a conceptual design level. We're still waiting for money to take the next step. The effluent goal at present is set to be consistent with 200 parts per trillion for the ROD for Lower East Fork Poplar Creek. Mr. Valunas – What is the amount of water to be treated? Mr. Ketelle – Right now the capacity being discussed is 1,500 gallons per minute. There will be some storm water that bypasses during flows of that capacity. Mr. Valunas – Is the increase in mercury from added rain due to the force of the flow or the volume of the flow? Mr. Ketelle – There are a couple of answers to that. There is still residual contamination in the storm drains so flow velocities help mobilize contaminated sediment that is still in there and that pushes mercury out. The regulation is for total mercury, both the dissolved part and mercury contained in or on sediment. If there is mercury contaminated sediment back in the pipe and flow velocities increase during storms some of that sediment is being pushed out. Also elevated groundwater levels because of above average rain causes more mobilization of mercury from material in the soil outside of the pipe. So there are multiple causes of increasing mercury. And there is still a lot of elemental mercury outside of the buildings and storm drains. Mr. Valunas - In the one area where there is less mercury in the fish, is that perhaps all the mercury has been washed away? Mr. Ketelle – No, there is still elevated mercury in the basement sump water and that's being diverted to treatment.

Ms. Smith – How did the PCB levels in fish in Watts Bar decrease? Mr. Ketelle – Over time PCBs in the environment get buried in the sediment so as sediment accumulates in the floor of the lake less and less gets in the water column and fish. Ms. Smith – I do not eat fish from Watts Bar. Is it OK to eat fish now? Mr. Ketelle – I can't say anything about eating fish. The state is responsible for those postings. Mr. Owsley – The fish consumption advisory remains that most people should limit the number of servings of fish during a month. It also advises pregnant women and young children to avoid consumption of any fish. It is simply an advisory to limit the amount of fish eaten over a given period.

Committee Reports

Board Finance & Process – Mr. Paulus reported that the committee did not meet in April because the meeting time conflicted with the EM SSAB Chair's webinar on April 25.

He said the committee decided to change its meeting day from the second Thursday after the board meeting to the second Wednesday to coincide with the change made by the Executive Committee.

Mr. McKinney reminded the board that the ORSSAB annual meeting will return to the Holiday Inn in Pigeon Forge on Saturday, August 17. Work continues on the agenda for the meeting and any activities on Friday, August 16.

Mr. McKinney said volunteers are needed for the Nominating Committee for FY 2014 board officers. He asked that anyone interested in serving on the committee to contact staff.

EM – Ms. Cook reported that the committee will not meet in May in lieu of a tour of the Transuranic Waste Processing Center on Wednesday, May 22 at 2 p.m. All board members are

welcome to go on the tour and should contact staff if interested. The next scheduled meeting will be June 19.

At the April meeting, the committee received an update on the Uranium-233 Disposition Project.

There were two additional called meetings on the Groundwater Strategy Workshops on April 30 and May 2. Dan Goode with the U.S. Geological Survey, who is acting as the committee and board liaison, provided the updates on the progress and status of the workshops.

Public Outreach – Mr. McKinney reported that the committee did not meet in April. The next meeting is scheduled for May 21. The topic for that meeting will be on signage and stream postings around the ORR. The Stewardship Committee has been invited to attend that meeting.

Stewardship – Ms. Staley reported the committee voted to send drafts of three recommendations to the Executive Committee for review to place on the board's agenda for consideration. One recommendation is a re-statement of a previous recommendation to develop a fact sheet on transition of remediated parcels at ongoing mission sites. The second is a recommendation to conduct a test transfer of a remediated parcel, and the third is to make provision for a permanent DOE stewardship point of contact for the ORR.

The committee will not meet in May. The next scheduled meeting is on June 18.

Executive – Mr. Martin reported that the committee met on April 25 immediately following the EM SSAB Chairs' webinar. He said the webinar included presentations on the EM budget and ongoing activities at the various sites around the DOE complex.

He said there was discussion among some of the other boards, primarily Portsmouth and Paducah, about developing a chairs' recommendation on nickel. Mr. Martin said he would talk more with the EM Committee at its next meeting about beginning a draft recommendation.

Mr. Martin referenced the three Stewardship recommendations that came before the committee. He said Executive Committee members had some questions about the recommendations, but since there was no Stewardship representative at the meeting, the committee tabled the recommendations until a later date.

Mr. Martin reported that some travel requests submitted had been turned down by DOE. Mr. Adler explained that DOE has a list of approved of travel events and destinations. He said the issue is somewhat uncertain because of federal budget restraints at this time. He said a request was made for travel to a highly technical event, which was disallowed. For the most part, he said, other requests are granted if the travel is of value to the participating member and the board.

Mr. Martin noted that he and Mr. Jensen will roll off the board after the June meeting. He said Mr. Hemelright will be acting chair at the July, August, and September meetings. If for some reason he cannot be at one of those meetings, provisions are in the bylaws that a board member can be asked to chair a meeting. He encouraged board members to consider serving on the Nominating Committee and also consider a leadership position if asked to serve by the Nominating Committee.

The committee will meet on its new meeting day of the second Wednesday after the board meeting on May 22.

Announcements and Other Board Business

ORSSAB will have its next meeting on Wednesday, June 12 at 6 p.m. at the DOE Information Center.

Ms. Cange introduced Ms. Hall and Ms. Riley as the new student representatives to the board.

The minutes of the April 10, 2013, meeting were approved.

The Recommendation on Remaining Legacy Materials on the Oak Ridge Reservation was approved (Attachment 2).

The Recommendation on the FY 2015 DOE Oak Ridge Environmental Management Budget Request was approved (Attachment 3).

Federal Coordinator Report
No report.

Additions to the Agenda
None.

Motions

5/8/13.1
Mr. Jensen moved to approve the minutes of the April 10, 2013 meeting. Mr. Valunas seconded and the motion passed **unanimously.**

5/8/13.2
Mr. Hemelright moved to approve the Recommendation on Remaining Legacy Materials on the Oak Ridge Reservation (Attachment 2). Mr. Bell seconded and the motion passed **unanimously**.

5/8/13.3
Mr. Valunas moved to approve the Recommendation on the FY 2015 DOE Oak Ridge Environmental Management Budget Request (Attachment 3). Mr. Hemelright seconded and the motion passed **unanimously**.

The meeting adjourned at 7:37 p.m.

Action items
None.

Attachments (3) to these minutes are available on request from the ORSSAB support office.

I certify that these minutes are an accurate account of the April 10, 2013, meeting of the Oak Ridge Site Specific Advisory Board.

Chuck Jensen, Secretary

David Martin, Chair DATE
Oak Ridge Site Specific Advisory Board
DM/rsg

Proposed revision to the ORSSAB Bylaws
June 2013

Current wording:

XII. AMENDING THE BYLAWS

A. Policy: The Board shall have the power to alter, amend, and repeal these bylaws in ways consistent with the Amended Charter of the EM Site Specific Advisory Board, and other applicable laws, regulations and guidelines. Any member of the public, the Board, or one of the Agencies may propose an amendment. However, to be considered by this Board the proposed amendment must be sponsored by a Board member. The Board may consider and take action on the amendment to the bylaws at the meeting following the introduction of the proposed amendment.

Proposed revision:

XII. AMENDING THE BYLAWS

A. Policy: The Board shall have the power to alter, amend, and repeal these bylaws in ways consistent with the Amended Charter of the EM Site Specific Advisory Board, and other applicable laws, regulations and guidelines. Any member of the public, the Board, or one of the Agencies may propose an amendment. However, to be considered by this Board the proposed amendment must be sponsored by a Board member. ~~The Board may consider and take action on the amendment to the bylaws at the meeting following the introduction of the proposed amendment.~~ The bylaws may be amended at any regular meeting of the Board by a two-thirds vote of the entire Board membership, provided that the proposed amendment was submitted in writing and read at a previous regular business meeting.

DRAFT

Oak Ridge Site Specific Advisory Board Recommendation: Recommendation to Develop a Fact Sheet on Site Transition at On-going Mission Sites

Background
In June 2011, the Oak Ridge Site Specific Advisory Board (ORSSAB) recommended to the Department of Energy (DOE) Assistant Secretary for Environmental Management (Attachment 1) that it develop a fact sheet similar to one used by the Office of Legacy Management (LM) that describes a site transition process upon completion of cleanup at remediated DOE sites (Attachment 2).

The recommendation included a number of points suggested to be part of the fact sheet that would be applicable for a site transition process at on-going mission sites, such as Oak Ridge.

DOE accepted the recommendation (Attachment 3) and developed a document called "Site Transition: Cleanup Completion to Long-term Stewardship at DOE On-going Mission Sites (September 2011).

ORSSAB's Stewardship Committee provided comments on the document both by mail and via teleconference. In February 2012, DOE issued another document that reflected input provided by ORSSAB and other site specific advisory boards (Attachment 4).

Discussion
ORSSAB sincerely appreciates the work that has been done on the site transition document. It is useful and provides much good information related to turning remediated areas back to original landlords when DOE's Environmental Management Program is completed at an on-going mission site.

Even though we have provided comments on the document, we still believe that the format used in the LM fact sheet is more user-friendly and better suited for public use.

Recommendation
ORSSAB re-states its recommendation of June 2011 that DOE develop a site transition document in a similar format as the LM fact sheet (Attachment 2).

We are not suggesting that the February 2012 site transition summary be scrapped. Indeed it has a place in the process, but ORSSAB feels the LM formatted fact sheet is much easier for the general public to understand and provides the best first step for the public to learn more about the site transition process at on-going mission sites.

Oak Ridge Site Specific Advisory Board Recommendation 198: Recommendation to Establish a Site Transition Process Upon Completion of Remediation at Ongoing Mission Sites

Background

Almost since its establishment the Oak Ridge Site Specific Advisory Board (ORSSAB) has been interested in stewardship of Department of Energy (DOE) lands after cleanup is completed, especially areas where contamination has been remediated in place. This interest is evident in the landmark documents "Final Report of the Oak Ridge Reservation End Use Working Group" and the two "Stakeholder Reports on Stewardship," Volumes 1 and 2.

DOE has established stewardship policies for remediated sites that have been permanently closed. However, the department does not have similar policies in place for sites such as Oak Ridge where contamination remains at remediated sites and the Office of Environmental Management (EM) returns the land to its original landlords when its mission is complete.

In 1998 the Oak Ridge End Use Working Group recommended that the Secretary of Energy establish a national policy for long-term stewardship. In 2001, the Deputy Secretary of Energy directed landlord Program Secretarial Officers to assume responsibility for conducting long-term stewardship activities after EM completes cleanup at sites with a continuing non-EM mission. In 2007, ORSSAB asked DOE to reaffirm that policy of providing stewardship at sites with residual contamination and ongoing missions. In response to that recommendation EM assigned Dr. Vincent Adams as a headquarters liaison for long-term stewardship.

Before Dr. Adams could have any impact he was reassigned to other duties and the responsibilities of a liaison for long-term stewardship were not immediately assigned to anyone else.

In 2009, ORSSAB recommended that DOE support a nationwide stewardship workshop. Such a workshop was held by the Office of Legacy Management in November 2010 and a result of that workshop was the naming of Letitia O'Conor as the EM point of contact for long-term stewardship within the DOE Office of EM. Ms. O'Conor came to the January 2011 meeting of the ORSSAB Stewardship Committee and discussed her new role with the committee. At that time she left a number of documents for the committee members to review. They included:

- Use of Institutional Controls; DOE P 454.1, April 9, 2003
- Real Property Asset Management; DOE O 430.1B, September 24, 2003
- Implementation Guide for Use with DOE P 454.1 Use of Institutional Controls; DOE G 454. 1-1, October 14, 2005
- Site Transition Process Upon Cleanup Completion; DOE Fact Sheet, May 19, 2009
- Institutional Controls: A Citizen's Guide to Understanding Institutional Controls at Superfund, Brownfields, Federal Facilities, Underground Storage Tanks, and Resource Conservation and Recovery Act Cleanups; Office of Solid Waste and Emergency Response 9355.0-99, Environmental Protection Agency (EPA), February 2005

- Institutional Controls Bibliography: Institutional Control, Remedy Selection, and Post-Construction Completion Guidance and Policy; Office of Solid Waste and Emergency Response, EPA 9355.0-110, December 2005

Except for the DOE Fact Sheet, the documents were prepared prior to 2006 and thus reflect the early work that was done to establish institutional controls (ICs) as part of overall cleanup at a site.

Discussion
The DOE documents describe the department's approach to ICs and the associated what, why, where, and who aspects of ICs. According to Ms. O'Conor these documents will form the basis of new and/or revised DOE IC directives. However, the early documents side-step elements of long-term stewardship that ORSSAB believes must be addressed in future documents. These elements include long-term funding and transfer of remediated sites with ongoing missions.

The most useful document is the DOE Fact Sheet prepared by the Office of Legacy Management (Attachment 1). A similar fact sheet could be prepared for transfer of sites with ongoing missions that includes discussion of needs and options for long-term funding.

The conditions for 10 Areas of the Site Transition Framework at the end of the fact sheet are particularly useful for guiding the development of DOE's policy, orders, and guidance for long-term stewardship of remediated sites.

Furthermore this list of 'conditions' includes the elements of long-term stewardship described in the ORSSAB Stakeholder Reports on Stewardship.

Recommendation
The Oak Ridge Site Specific Advisory Board recommends that the Office of Environmental Management working in conjunction with the ongoing mission sites develop a fact sheet similar to the Legacy Management Site Transition Process Upon Cleanup Completion Fact Sheet that would explain the process for transferring sites from EM's responsibility when remediation is completed to the ultimate landlords of the sites with continuing missions.

The board asks that the fact sheet include a Site Transition Framework that establishes the following conditions:

1. Authorities and accountabilities are assigned and documented.
2. Site conditions are accurately and comprehensively documented.
3. Engineered controls, operation and maintenance requirements, and emergency/contingency planning are documented.
4. Institutional controls and enforcement authorities are identified.
5. Regulatory requirements and authorities are identified.
6. Long-term surveillance and maintenance budget, funding, and personnel requirements are identified.
7. Information and records management requirements are satisfied.
8. Public education, outreach, information and notice requirements are documented.

U.S. DEPARTMENT OF ENERGY | Legacy Management

Site Transition Process Upon Cleanup Completion

FACT SHEET

This fact sheet explains the process for transferring a site to the U.S. Department of Energy Office of Legacy Management.

Introduction

After environmental remediation is completed at a site and there is no continuing mission, responsibility for the site and the associated records are transferred to the U.S. Department of Energy (DOE) Office of Legacy Management for post-closure management. Where residual hazards (e.g., disposal cells, ground water contamination) remain, active long-term surveillance and maintenance will be required to ensure protection of human health and the environment.

Transition Process

The DOE Office of Legacy Management (LM) established transition guidance for remediated sites that will transfer to LM for long-term surveillance and maintenance.

The primary DOE Orders related to the transition process are:

- DOE Order 430.1B *Real Property Asset Management*. This order specifies the requirements of real property and asset management including the disposition and transition of the real property and assets.
- DOE Order 413.3A *Program and Project Management for Acquisition of Capital Assets*. This order specifies a disciplined process for project management using the Critical Decision process.

The transition process is the passage from the phase during which engineered, near-term actions are taken to mitigate environmental and human health risks to the next phase where residual risks are maintained in a sustainable safe condition to allow beneficial use.

Seven fundamental steps are implemented during the transition process to ensure a successful transfer to LM. These steps are identified as (1) notification, (2) site transition plan, (3) determination of long-term surveillance and maintenance requirements, (4) communication and outreach, (5) budget and authority documentation, (6) verification of readiness, and (7) transfer.

Notification

Notification is an ongoing dialogue between the responsible agency, usually the DOE Office of Environmental Management (EM), and LM. EM and LM communicate quarterly about projected dates that environmental remediation is estimated to be complete at a site. The notification allows enough time for both organizations to work jointly on the transition and for LM to engage in remediation considerations that may impact long-term surveillance and maintenance costs and effectiveness. For a small site, notification of 4 to 6 months prior to completion may be adequate. For a larger site (e.g., Fernald, Mound, Rocky Flats), notification of 2 years or longer is necessary to ensure a smooth transition.

Site Transition Plan

The transition plan identifies and guides the execution of the actions needed to move the site to a point where responsibility can be transitioned from EM to LM. The transition plan is jointly developed, approved by EM-1 and LM-1, and jointly executed by EM and LM staff. The transition plan should meet the requirements of DOE Order 430.1B *Real Property Asset Management* and include the disposition of federal work force responsibilities. The transition plan structure is based on transition guidance established by DOE-LM. The Site Transition Framework (STF) defines site conditions, documentation, and the long-term surveillance and maintenance aspects that must be addressed. However, it does not prescribe a transition process.

Long-Term Surveillance and Maintenance (LTS&M) Requirements

Post-closure activities should be identified and clearly documented in a LTS&M Plan. The LTS&M Plan should include those actions that are required to maintain the protection of the remedy (e.g., remedy performance monitoring, ground water pump and treat); manage the natural, cultural, and historical resources; and involve and inform the public. For Comprehensive Environmental Response, Compensation, and Liability Act sites, the LTS&M Plan will meet the requirements of the Operations and Maintenance Plan and include the enforceable activities to be administered under a post-closure agreement. LM will require support from EM but will lead the development of the LTS&M Plan.

Communication and Outreach

Communication with the site's stakeholders and regulatory agencies builds on existing communication and outreach efforts. One goal of the transition process is to ensure stakeholders and regulators are aware of the plan to transition, and participate in the development of the LTS&M Plan.

Budget and Authority Documentation

EM and LM will work together to ensure appropriate cost estimates are developed for the post-closure management of the site. This will require cost estimates for LTS&M, contractor pensions and benefits, and other costs that are needed for post-closure management. It is important that both organizations understand the post-closure cost estimates as those estimates define the planned target transfer from EM to LM.

Prior to the expected transfer of the site, DOE will prepare a Program Budget Decision (PBD) document. The PBD is signed coincident with the preparation of the President's Request for the fiscal year LM is expected to receive the site. The document is the official notification that the Department intends to transfer budget and scope from EM to LM.

Verification of Readiness

The Critical Decision 4 (CD-4) package is a formal determination that addresses commitments to be met before a project is allowed to be designated as completed in accordance with DOE O. 413.1A. The CD-4 package documents the completion of the EM mission at the site and validates the successful execution of the transition plan. Thus, the CD-4 package includes a final assessment of the site readiness to transfer. The CD-4 package represents agreement between EM and LM on the conditions of the site and associated activities at the time of transfer. The CD-4 package is signed by the Under Secretary for Energy, Science and Environment.

Transfer

Once the budget request has been approved by Congress and the CD-4 package is signed, the site is officially transferred from EM to LM. It should be noted that even though the site has been transferred, there may be some remaining activities that remain for EM to complete. These activities will be documented in the approved CD-4 package.

Site Transition Framework Establishes Conditions for 10 Areas

1. Authorities and accountabilities are assigned and documented.
2. Site conditions are accurately and comprehensively documented.
3. Engineered controls, operation and maintenance requirements, and emergency/contingency planning are documented.
4. Institutional controls and enforcement authorities are identified.
5. Regulatory requirements and authorities are identified.
6. Long-term surveillance and maintenance budget, funding, and personnel requirements are identified.
7. Information and records management requirements are satisfied.
8. Public education, outreach, information and notice requirements are documented.
9. Natural, cultural, and historical resource management requirements are satisfied.
10. Business functions including contractor benefits are addressed.

Attachment 3

Department of Energy
Washington, DC 20585

July 13, 2011

Mr. Ron Murphree, Chair
Oak Ridge Site Specific Advisory Board
P.O. Box 2001, EM-91
Oak Ridge, Tennessee 37831

Dear Mr. Murphree:

Thank you for the June 9, 2011, letter transmitting the Oak Ridge Site Specific Advisory Board (ORSSAB) Recommendation #198. That recommendation concerns the site transition process following completion of cleanup activities by the Department of Energy's (DOE) Office of Environmental Management (EM). Specifically, the ORSSAB asks EM to develop a fact sheet explaining the post-cleanup process by which land and management responsibilities are transferred to other program offices within DOE. We fully accept this recommendation and have initiated efforts to draft a fact sheet that provides, as you suggested, content similar to the Legacy Management Site Transition Process upon Cleanup Completion Fact Sheet. We know that there are many questions about transfers to landlords other than Legacy Management, and we commend you on pursuing answers to those questions as a local board of the EM Site Specific Advisory Board (EM SSAB).

Once the fact sheet is drafted it will be circulated for input by stakeholder groups, including your own. We anticipate this draft will be ready for review in fall, 2011.

Thank you for your ongoing engagement with the EM SSAB. Your efforts and those of your board members are highly valued and greatly appreciated. If you have any questions about this matter, please contact Ms. Melissa A. Nielson, Director, Office of Public and Intergovernmental Accountability, at (202) 586-0356, or Ms. Cate Alexander Brennan, EM SSAB Designated Federal Officer, at (202) 586-7711.

Sincerely,

Frank Marcinowski
Deputy Assistant Secretary for
Technical and Regulatory Support

cc: J. Eschenberg, OR
D. Adler, OR
P. Halsey, OR
B. Levitan, EM-41
T. O'Conor, EM-41
M. Nielson, EM-42
C. Brennan, EM-42

Attachment 4

UNITED STATES DEPARTMENT OF
ENERGY

Site Transition Summary: Cleanup Completion to Long-Term Stewardship at Department of Energy On-going Mission Sites

February 2012

Introduction

Long-term stewardship (LTS) includes the physical controls, institutions, information, and other mechanisms needed to ensure protection of people and the environment at sites where the U.S. Department of Energy (DOE) has completed or plans to complete cleanup (e.g., landfill closures, remedial actions, removal actions, and facility stabilization). This concept includes land-use controls, information management, monitoring and maintenance.

DOE has ongoing mission areas related to advancing energy and nuclear security, promoting scientific discovery and innovation, and ensuring environmental responsibility and management. Programs in these mission areas are sponsored by several Program Secretarial Offices (PSOs), and most DOE sites have multiple programs operating in parallel at a site. DOE assigns a lead PSO responsibility for proper stewardship of real property assets at its sites, including maintaining the condition of infrastructure to support primary mission and "tenant" activities. Typical landlord activities include maintaining safeguards and security access, utilities, safety and health, general environmental monitoring, and facilities management and maintenance. DOE landlord programs include the National Nuclear Security Administration (NNSA), Office of Science (SC), Office of Nuclear Energy (NE), Office of Environmental Management (EM), and others. After EM completes environmental cleanup of a site where there is a continuing DOE mission, EM transfers responsibility for any associated LTS requirements, such as maintaining caps on disposal cells, monitoring contaminant levels in environmental media, operation of ground water pump and treat system(s), etc., to the appropriate DOE receiving site landlord program(s). The receiving DOE landlord program budgets for and conducts LTS requirements in parallel with similar mission-related environmental activities such as radiological and non-radiological dose assessment; air surveillance; groundwater, surface water, and sediment monitoring and analysis; soil monitoring; and foodstuffs and biota monitoring. The landlord program usually reports the results of such monitoring in its Annual Site Environmental Reports. LTS requirements remain with the responsible site landlord until such time as there is a determination to start final closure of a site, i.e., all active DOE missions cease. For DOE sites that have no ongoing mission, any LTS scope, including management of all

government-owned records, is transferred to the DOE Office of Legacy Management (LM) for continued post-closure LTS and associated long-term surveillance and maintenance (LTSM).

On a site-specific basis, where residual hazards (e.g., capped disposal cells, ground water contamination) remain after cleanup activities, management of any associated LTS is conducted in accordance with DOE Orders and guidance; Federal, State and local environmental and resource protection (e.g., natural and cultural resources) laws; and site-specific agreements between DOE and State and Federal environmental regulators. DOE Policy 454.1 *Use of Institutional Controls* requires DOE to maintain responsibility for protection of the public and the environment as long as the hazards are present. https://www.directives.doe.gov/directives/0454.1-APolicy/view

.
The site transition process at ongoing mission sites is consistent with Terms and Conditions (T&C) agreements executed by EM and NNSA, and by EM and SC. Both T&C agreements were modeled after an earlier T&C agreement between EM and LM for the non-mission closure sites. All three T&C agreements include a framework for conducting site transition planning activities across the following ten functional areas:

1. *Authorities and Accountabilities*
2. *Site Conditions*
3. *Engineering Controls, Emergency/Contingency Planning*
4. *Institutional Controls, Property management*
5. *Regulatory Requirements*
6. *Budget, Funding, and Personnel*
7. *Information and Records management*
8. *Public Outreach and Information*
9. *Natural, Cultural, and Historic Resources*
10. *Business and Contract Closeout*

All three T&C agreements are available:

EM and NNSA T&C, dated 09/05/2006
www.em.doe.gov/pdfs/lts/EM-NNSA-Terms-and-Conditions-for-Site-Transition.pdf

EM and SC T&C, dated 02/09/2006
www.em.doe.gov/pdfs/lts/EM-SC-TermsConditions-for-Site-Transition.pdf

EM and LM T&C, dated 02/15/2005
www.lm.doe.gov/LTSM/Site_Transition_Documents.aspx

For sites where no agreement exists with EM (e.g., Nuclear Energy landlord program sites), EM and the landlord program will take a tailored approach to site (or a portion of a site) transition planning, building upon the most applicable T&C requirements from any/all of the three T&C agreements published to date.

Transition Process Summary

Primary DOE Orders and guidance for the site transition process include:

DOE Order 430.1B *Real Property Asset Management*. This order specifies the requirements for management of real property assets, including their disposition and transition. www.directives.doe.gov/directives/current-directives/430.1-BOrder-bc2/view?searchterm=430.1b

DOE Order 413.3B. *Program and Project Management for the Acquisition of Capital Assets.* This order specifies a disciplined process for project management using the DOE-internal Critical Decision (CD) process throughout all stages of the project lifecycle. In particular, CD 4 (Approve Project Completion) occurs upon EM's completion of physical work and the successful transfer of LTS activities to the DOE landlord program. www.directives.doe.gov/directives/archive-directives/413.3-BOrder-ac1/view

The transition process from EM cleanup to another DOE program office for LTS is the passage from the phase during which engineered and administrative near-term actions are taken to mitigate environmental and human health risks, to the next phase, in which residual risks are managed along with long-term response actions (LTRA) in a sustainable, safe condition. This latter phase may include new use of lands or buildings. The following two Assistant Secretary for Environmental Management (EM-1) memoranda provide additional information on this subject:

Definition of Environmental Management Completion, dated 02/12/2003
www.em.doe.gov/pdfs/lts/Definition-of-EM-Completion-EM1-memo-dtd-2-12-03.pdf

Transition of Long-Term Response Action Management Requirements, dated 06/10/2003
www.em.doe.gov/pdfs/lts/TransitionofLTRAManagementReqs2003.pdf

One of the first steps in the transition process is the formation of an EM/DOE landlord site transition team, usually initiated three years before the planned transfer date. The team is responsible for defining actions required to accomplish a smooth transition of responsibilities from EM cleanup to site landlord program LTS.

Site Transition Plan

The site transition team develops a Site Transition Plan (STP), or a Project Closeout and Transition Plan (PCTP), in accordance with the applicable T&C agreement. The STP/PCTP includes ten functional areas that apply to all DOE site transitions, including ongoing mission sites and non-mission closure sites. The analysis of each functional area includes a description of site conditions, documentation and LTSM requirements, as well as roles and responsibilities for EM and the landlord program office. EM, LM and SC follow the *Site Transition Framework (STF) for Long-Term Surveillance and Maintenance,* which establishes requirements for the format and content of the STP. EM and NNSA follow the *Project Closeout and Transition Plan Guidance for*

Environmental Projects at NNSA Sites, which defines similar requirements for the format and content of the PCTP. The above guidance is included in the aforementioned EM/LM and EM/NNSA T&C agreements. EM leads the development of the initial draft STP or PCTP. Development of the STP/PCTP facilitates discussions between EM and the landlord program office on LTS budget requirements for post-closure care as well as roles and responsibilities for EM and the landlord program office leading up to the date of site transition.

Budget Documentation

To pay for the LTS activities, EM and the landlord program develop cost estimates for the first five years of LTRA activities after the transfer, and request that the budget authority for these funds be transferred from EM to the landlord program. In order to accommodate the standard federal budget cycle, a *Program Decision Memorandum* is signed by the Deputy Secretary of Energy two years before the planned transfer date. Also, funding liabilities associated with LTS for the next 75 years are updated and reported annually in the DOE's formal financial accountability statements.

Transfer

Once the Deputy Secretary of Energy signs the *Program Decision Memorandum*, the budget request is submitted to Congress for approval, and once the necessary funds are received, the responsibility for LTS activities transfers to the landlord program office. In some cases, EM maintains responsibility for certain activities at a site (such as obtaining regulator-approval of a final cleanup record of decision, even though the landlord program office has received funding and has begun performing LTS activities.

Additional Guidance

Visit DOE's LTS Information Resource Center at:
http://www.em.doe.gov/ltstewardship/ltstewardship.aspx

Oak Ridge Site Specific Advisory Board Recommendation: Recommendation on Test Site Transfer

Background
The Oak Ridge Site Specific Advisory Board (ORSSAB), since its inception in 1995, has been instrumental in developing long-term stewardship requirements for areas where radioactive and hazardous wastes remain after remediation is completed.

ORSSAB is also interested in the transition of responsibility for these remediated areas from the Department of Energy's (DOE) Environmental Management Program to the landlords at DOE sites that have continuing missions, such as Oak Ridge National Laboratory or Y-12 National Security Complex.

ORSSAB's Stewardship Committee has recommended that DOE prepare a fact sheet describing the transition process for sites with on-going missions similar to the DOE Legacy Management fact sheet for closed sites (Attachment 1). During committee discussions of property transitions at on-going mission sites an idea was presented of conducting a test transfer of a small remediated area from Environmental Management to the site landlord (e.g. the Office of Science).

Discussion
The purpose of conducting a test would be to determine if steps for transition are workable and to make any adjustments before larger scale transitions are conducted in years to come as more parcels are remediated and are ready for transfer.

Recommendation
ORSSAB recommends that the DOE Oak Ridge Environmental Management Program conduct a transition of a small remediated parcel on the Oak Ridge Reservation where a final record of decision has been signed. A possible site is the South Campus Facilities on Bethel Valley Road near the Oak Ridge Institute of Science and Education. The important areas/issues for consideration are listed in the DOE February 2012 "Site Transition Summary: Cleanup Completion to Long-Term Stewardship at DOE On-going Mission Sites" (Attachment 2).

U.S. DEPARTMENT OF ENERGY | Legacy Management

Site Transition Process Upon Cleanup Completion

FACT SHEET

This fact sheet explains the process for transferring a site to the U.S. Department of Energy Office of Legacy Management.

Introduction

After environmental remediation is completed at a site and there is no continuing mission, responsibility for the site and the associated records are transferred to the U.S. Department of Energy (DOE) Office of Legacy Management for post-closure management. Where residual hazards (e.g., disposal cells, ground water contamination) remain, active long-term surveillance and maintenance will be required to ensure protection of human health and the environment.

Transition Process

The DOE Office of Legacy Management (LM) established transition guidance for remediated sites that will transfer to LM for long-term surveillance and maintenance.

The primary DOE Orders related to the transition process are:

- DOE Order 430.1B *Real Property Asset Management*. This order specifies the requirements of real property and asset management including the disposition and transition of the real property and assets.
- DOE Order 413.3A *Program and Project Management for Acquisition of Capital Assets*. This order specifies a disciplined process for project management using the Critical Decision process.

The transition process is the passage from the phase during which engineered, near-term actions are taken to mitigate environmental and human health risks to the next phase where residual risks are maintained in a sustainable safe condition to allow beneficial use.

Seven fundamental steps are implemented during the transition process to ensure a successful transfer to LM. These steps are identified as (1) notification, (2) site transition plan, (3) determination of long-term surveillance and maintenance requirements, (4) communication and outreach, (5) budget and authority documentation, (6) verification of readiness, and (7) transfer.

Notification

Notification is an ongoing dialogue between the responsible agency, usually the DOE Office of Environmental Management (EM), and LM. EM and LM communicate quarterly about projected dates that environmental remediation is estimated to be complete at a site. The notification allows enough time for both organizations to work jointly on the transition and for LM to engage in remediation considerations that may impact long-term surveillance and maintenance costs and effectiveness. For a small site, notification of 4 to 6 months prior to completion may be adequate. For a larger site (e.g., Fernald, Mound, Rocky Flats), notification of 2 years or longer is necessary to ensure a smooth transition.

Site Transition Plan

The transition plan identifies and guides the execution of the actions needed to move the site to a point where responsibility can be transitioned from EM to LM. The transition plan is jointly developed, approved by EM-1 and LM-1, and jointly executed by EM and LM staff. The transition plan should meet the requirements of DOE Order 430.1B *Real Property Asset Management* and include the disposition of federal work force responsibilities. The transition plan structure is based on transition guidance established by DOE-LM. The Site Transition Framework (STF) defines site conditions, documentation, and the long-term surveillance and maintenance aspects that must be addressed. However, it does not prescribe a transition process.

Long-Term Surveillance and Maintenance (LTS&M) Requirements

Post-closure activities should be identified and clearly documented in a LTS&M Plan. The LTS&M Plan should include those actions that are required to maintain the protection of the remedy (e.g., remedy performance monitoring, ground water pump and treat); manage the natural, cultural, and historical resources; and involve and inform the public. For Comprehensive Environmental Response, Compensation, and Liability Act sites, the LTS&M Plan will meet the requirements of the Operations and Maintenance Plan and include the enforceable activities to be administered under a post-closure agreement. LM will require support from EM but will lead the development of the LTS&M Plan.

Communication and Outreach

Communication with the site's stakeholders and regulatory agencies builds on existing communication and outreach efforts. One goal of the transition process is to ensure stakeholders and regulators are aware of the plan to transition, and participate in the development of the LTS&M Plan.

Budget and Authority Documentation

EM and LM will work together to ensure appropriate cost estimates are developed for the post-closure management of the site. This will require cost estimates for LTS&M, contractor pensions and benefits, and other costs that are needed for post-closure management. It is important that both organizations understand the post-closure cost estimates as those estimates define the planned target transfer from EM to LM.

Prior to the expected transfer of the site, DOE will prepare a Program Budget Decision (PBD) document. The PBD is signed coincident with the preparation of the President's Request for the fiscal year LM is expected to receive the site. The document is the official notification that the Department intends to transfer budget and scope from EM to LM.

Verification of Readiness

The Critical Decision 4 (CD-4) package is a formal determination that addresses commitments to be met before a project is allowed to be designated as completed in accordance with DOE O. 413.1A. The CD-4 package documents the completion of the EM mission at the site and validates the successful execution of the transition plan. Thus, the CD-4 package includes a final assessment of the site readiness to transfer. The CD-4 package represents agreement between EM and LM on the conditions of the site and associated activities at the time of transfer. The CD-4 package is signed by the Under Secretary for Energy, Science and Environment.

Transfer

Once the budget request has been approved by Congress and the CD-4 package is signed, the site is officially transferred from EM to LM. It should be noted that even though the site has been transferred, there may be some remaining activities that remain for EM to complete. These activities will be documented in the approved CD-4 package.

Site Transition Framework Establishes Conditions for 10 Areas

1. Authorities and accountabilities are assigned and documented.
2. Site conditions are accurately and comprehensively documented.
3. Engineered controls, operation and maintenance requirements, and emergency/contingency planning are documented.
4. Institutional controls and enforcement authorities are identified.
5. Regulatory requirements and authorities are identified.
6. Long-term surveillance and maintenance budget, funding, and personnel requirements are identified.
7. Information and records management requirements are satisfied.
8. Public education, outreach, information and notice requirements are documented.
9. Natural, cultural, and historical resource management requirements are satisfied.
10. Business functions including contractor benefits are addressed.

Attachment 2

UNITED STATES DEPARTMENT OF
ENERGY

Site Transition Summary: Cleanup Completion to Long-Term Stewardship at Department of Energy On-going Mission Sites

February 2012

Introduction

Long-term stewardship (LTS) includes the physical controls, institutions, information, and other mechanisms needed to ensure protection of people and the environment at sites where the U.S. Department of Energy (DOE) has completed or plans to complete cleanup (e.g., landfill closures, remedial actions, removal actions, and facility stabilization). This concept includes land-use controls, information management, monitoring and maintenance.

DOE has ongoing mission areas related to advancing energy and nuclear security, promoting scientific discovery and innovation, and ensuring environmental responsibility and management. Programs in these mission areas are sponsored by several Program Secretarial Offices (PSOs), and most DOE sites have multiple programs operating in parallel at a site. DOE assigns a lead PSO responsibility for proper stewardship of real property assets at its sites, including maintaining the condition of infrastructure to support primary mission and "tenant" activities. Typical landlord activities include maintaining safeguards and security access, utilities, safety and health, general environmental monitoring, and facilities management and maintenance. DOE landlord programs include the National Nuclear Security Administration (NNSA), Office of Science (SC), Office of Nuclear Energy (NE), Office of Environmental Management (EM), and others. After EM completes environmental cleanup of a site where there is a continuing DOE mission, EM transfers responsibility for any associated LTS requirements, such as maintaining caps on disposal cells, monitoring contaminant levels in environmental media, operation of ground water pump and treat system(s), etc., to the appropriate DOE receiving site landlord program(s). The receiving DOE landlord program budgets for and conducts LTS requirements in parallel with similar mission-related environmental activities such as radiological and non-radiological dose assessment; air surveillance; groundwater, surface water, and sediment monitoring and analysis; soil monitoring; and foodstuffs and biota monitoring. The landlord program usually reports the results of such monitoring in its Annual Site Environmental Reports. LTS requirements remain with the responsible site landlord until such time as there is a determination to start final closure of a site, i.e., all active DOE missions cease. For DOE sites that have no ongoing mission, any LTS scope, including management of all

government-owned records, is transferred to the DOE Office of Legacy Management (LM) for continued post-closure LTS and associated long-term surveillance and maintenance (LTSM).

On a site-specific basis, where residual hazards (e.g., capped disposal cells, ground water contamination) remain after cleanup activities, management of any associated LTS is conducted in accordance with DOE Orders and guidance; Federal, State and local environmental and resource protection (e.g., natural and cultural resources) laws; and site-specific agreements between DOE and State and Federal environmental regulators. DOE Policy 454.1 *Use of Institutional Controls* requires DOE to maintain responsibility for protection of the public and the environment as long as the hazards are present. https://www.directives.doe.gov/directives/0454.1-APolicy/view

.
The site transition process at ongoing mission sites is consistent with Terms and Conditions (T&C) agreements executed by EM and NNSA, and by EM and SC. Both T&C agreements were modeled after an earlier T&C agreement between EM and LM for the non-mission closure sites. All three T&C agreements include a framework for conducting site transition planning activities across the following ten functional areas:

1. *Authorities and Accountabilities*
2. *Site Conditions*
3. *Engineering Controls, Emergency/Contingency Planning*
4. *Institutional Controls, Property management*
5. *Regulatory Requirements*
6. *Budget, Funding, and Personnel*
7. *Information and Records management*
8. *Public Outreach and Information*
9. *Natural, Cultural, and Historic Resources*
10. *Business and Contract Closeout*

All three T&C agreements are available:

EM and NNSA T&C, dated 09/05/2006
www.em.doe.gov/pdfs/lts/EM-NNSA-Terms-and-Conditions-for-Site-Transition.pdf

EM and SC T&C, dated 02/09/2006
www.em.doe.gov/pdfs/lts/EM-SC-TermsConditions-for-Site-Transition.pdf

EM and LM T&C, dated 02/15/2005
www.lm.doe.gov/LTSM/Site_Transition_Documents.aspx

For sites where no agreement exists with EM (e.g., Nuclear Energy landlord program sites), EM and the landlord program will take a tailored approach to site (or a portion of a site) transition planning, building upon the most applicable T&C requirements from any/all of the three T&C agreements published to date.

Transition Process Summary

Primary DOE Orders and guidance for the site transition process include:

DOE Order 430.1B *Real Property Asset Management*. This order specifies the requirements for management of real property assets, including their disposition and transition. www.directives.doe.gov/directives/current-directives/430.1-BOrder-bc2/view?searchterm=430.1b

DOE Order 413.3B. *Program and Project Management for the Acquisition of Capital Assets.* This order specifies a disciplined process for project management using the DOE-internal Critical Decision (CD) process throughout all stages of the project lifecycle. In particular, CD 4 (Approve Project Completion) occurs upon EM's completion of physical work and the successful transfer of LTS activities to the DOE landlord program. www.directives.doe.gov/directives/archive-directives/413.3-BOrder-ac1/view

The transition process from EM cleanup to another DOE program office for LTS is the passage from the phase during which engineered and administrative near-term actions are taken to mitigate environmental and human health risks, to the next phase, in which residual risks are managed along with long-term response actions (LTRA) in a sustainable, safe condition. This latter phase may include new use of lands or buildings. The following two Assistant Secretary for Environmental Management (EM-1) memoranda provide additional information on this subject:

Definition of Environmental Management Completion, dated 02/12/2003
www.em.doe.gov/pdfs/lts/Definition-of-EM-Completion-EM1-memo-dtd-2-12-03.pdf

Transition of Long-Term Response Action Management Requirements, dated 06/10/2003
www.em.doe.gov/pdfs/lts/TransitionofLTRAManagementReqs2003.pdf

One of the first steps in the transition process is the formation of an EM/DOE landlord site transition team, usually initiated three years before the planned transfer date. The team is responsible for defining actions required to accomplish a smooth transition of responsibilities from EM cleanup to site landlord program LTS.

Site Transition Plan

The site transition team develops a Site Transition Plan (STP), or a Project Closeout and Transition Plan (PCTP), in accordance with the applicable T&C agreement. The STP/PCTP includes ten functional areas that apply to all DOE site transitions, including ongoing mission sites and non-mission closure sites. The analysis of each functional area includes a description of site conditions, documentation and LTSM requirements, as well as roles and responsibilities for EM and the landlord program office. EM, LM and SC follow the *Site Transition Framework (STF) for Long-Term Surveillance and Maintenance,* which establishes requirements for the format and content of the STP. EM and NNSA follow the *Project Closeout and Transition Plan Guidance for*

Environmental Projects at NNSA Sites, which defines similar requirements for the format and content of the PCTP. The above guidance is included in the aforementioned EM/LM and EM/NNSA T&C agreements. EM leads the development of the initial draft STP or PCTP. Development of the STP/PCTP facilitates discussions between EM and the landlord program office on LTS budget requirements for post-closure care as well as roles and responsibilities for EM and the landlord program office leading up to the date of site transition.

Budget Documentation

To pay for the LTS activities, EM and the landlord program develop cost estimates for the first five years of LTRA activities after the transfer, and request that the budget authority for these funds be transferred from EM to the landlord program. In order to accommodate the standard federal budget cycle, a *Program Decision Memorandum* is signed by the Deputy Secretary of Energy two years before the planned transfer date. Also, funding liabilities associated with LTS for the next 75 years are updated and reported annually in the DOE's formal financial accountability statements.

Transfer

Once the Deputy Secretary of Energy signs the *Program Decision Memorandum*, the budget request is submitted to Congress for approval, and once the necessary funds are received, the responsibility for LTS activities transfers to the landlord program office. In some cases, EM maintains responsibility for certain activities at a site (such as obtaining regulator-approval of a final cleanup record of decision, even though the landlord program office has received funding and has begun performing LTS activities.

Additional Guidance

Visit DOE's LTS Information Resource Center at:
http://www.em.doe.gov/ltstewardship/ltstewardship.aspx

Many Voices Working for the Community

Oak Ridge Site Specific Advisory Board

Date

Susan Cange
Deputy Manager for Environmental Management
DOE-Oak Ridge Office
P.O. Box 2001, EM-90
Oak Ridge, TN 37831

Dear Ms. Cange:

Recommendation #: Recommendation on Stewardship Point of Contact for the Oak Ridge Reservation

The Oak Ridge Site Specific Advisory Board (ORSSAB) Stewardship Committee believes it is important for the Department of Energy Oak Ridge Environmental Management (EM) Program to have a dedicated point of contact that the committee and the full board can go to for stewardship related issues on the Oak Ridge Reservation.

Dave Adler, DOE's liaison to ORSSAB, attended the February 19, 2013 Stewardship Committee meeting, and addressed a number of stewardship issues that were of concern to the committee. One of those issues is a point of contact for stewardship.

Mr. Adler agreed to act as the point of contact. The committee whole heartedly supports his willingness to act in that capacity, and we hope DOE Oak Ridge EM management supports him as well. Mr. Adler has the institutional knowledge and the experience that makes him an ideal choice for an Oak Ridge point of contact.

However, stewardship is a long-term endeavor and things change over time such as re-organizations, personnel changes, and re-assignments. It's important that there always be someone ORSSAB and its Stewardship Committee can interface with on matters of stewardship.

Recommendation
The ORSSAB recommends that Dave Adler act as the DOE Oak Ridge EM point of contact for stewardship for an indefinite period. In the case that Mr. Adler is no longer available to act in this capacity, the ORSSAB recommends that another qualified contact be named by DOE Oak Ridge EM to succeed him in this assignment, and that in the future, there constantly be someone who will be assigned to fill this role.

Sincerely,

David Martin, ORSSAB Chair
Corkie Staley, Chair ORSSAB Stewardship Committee
DM/CS/rsg

Recommendation on Stewardship Point of Contact for the Oak Ridge Reservation

cc/enc:
Dave Adler, DOE-ORO
Cate Alexander, DOE-HQ
Fred Butterfield, DOE-HQ
Terry Frank, Anderson County Mayor
Connie Jones, EPA Region 4
Melissa Nielson, DOE-HQ
Melyssa Noe, DOE-ORO
John Owsley, TDEC
Mark Watson, Oak Ridge City Manager
Ron Woody, Roane County Executive
File Code 140

Recommendation Response Tracking Chart
for FY 2013

	Date	To	Recommendation	Originating Committee	Response Date	Response Status	Committee Review of Response
1.	10/10/12	Susan Cange, DOE Oak Ridge Deputy Manager for EM	211: Recommendation on Availability of DOE Environmental Management Documents	EM	1/8/13	**Complete:** DOE is working with information technology to improve search capabilities. The 'search tip' function has been reactivated. On request, training can be provided to access information. DOE Information Center staff is always available to provide documents. DOE is working to ensure documents are available at the information center no later than the date when availability is announced.	**Complete:** EM Committee accepted recommendation response at its January 2013. It asks that DOE notify the board when upgrades to the system are complete.
2.	5/8/13	Susan Cange, DOE Oak Ridge Deputy Manager for EM	215: Recommendation on Remaining Legacy Materials on the Oak Ridge Reservation	EM			
3.	5/8/13	Mark Whitney, DOE Oak Ridge Manager for EM	216: Recommendations on the Fiscal Year 2015 DOE Oak Ridge Environmental Budget Request	Board Finance & Process	5/22	**Complete:** DOE responded that it is sending the recommendation to DOE EM Headquarters along with its FY 2015 budget request.	

EM Project Update

ETTP	April	May
Zone 1 Final ROD	Comments raised by the regulators review of the D2 RI/FS cannot be resolved by the project team and have been elevated to the Supervisory Management Team for resolution.	Agreement reached by the Supervisory Management Team to move forward on a final Zone 1 soil decision and to defer the final Zone 1 surface water and groundwater final decisions to the future.
Zone 2 ROD	Initiated work on the EU Z2-35 (CNF) PCCR for the No Further Action decisions on sumps.	Continued work on the EU Z2-35 (CNF) PCCR for the No Further Action decisions on sumps.
Chromium Reduction Removal Action	The RmAR for Hexavalent Chromium Releases into Mitchell Branch was approved by the regulators.	
Groundwater Strategy	Held the third groundwater strategy workshop. The completion of this workshop finishes the watershed specific reviews.	The fifth groundwater strategy workshop was postponed, TDEC and EPA management need to discuss the selected project before proceeding. Direction from upper management is needed before rescheduling the workshop. The objective was to discuss the annotated outline of the Groundwater Strategy document and discuss the final selected project.
K-25/K-27 D&D	Cleanout of the K-25 East Pad air plenums and debris disposal was completed, as well as the filling of the trenches with gravel and capping with concrete.	The radiation surveys of the K-25 East Pad were completed and sampling is 25 percent complete.
	Mining of the first large diameter surge tank at K-25 was completed, with the second of these tanks 50 percent completed. The overall surge tank disposition (eight tanks) is 66 percent complete.	Mining of the second and third large diameter surge tanks at K-25 was completed and the fourth is being prepared for mining.
	Foaming of process pipe is 59 percent complete in the five remaining K-25 units requiring foaming.	Foaming of process pipe is 72 percent complete in the five remaining K-25 units requiring foaming.
	Disposal of debris from the last unit of the K-25 North Tower is 57 percent complete, and total disposal is 84 percent complete.	Disposal of debris from the last unit of the K-25 North Tower is complete, and removal of plenum debris, filling, and sealing is complete.
	Demolition of the K-25 North Tower retaining wall is 65 percent complete. Cleaning of the East Pad to allow surveying and sampling is now halfway complete.	The necessary evaluations for the high uranium mass process gas valve are being performed in order to allow transfer from the Uranium Neutron Counting System to the Segmentation Shop.
	All vent and purge activities on the K-27 cell floor are completed. Additionally, issues associated with the technical safety requirements for foaming activities in the facility were resolved.	Began removal of transite panels from the exterior of the K-27 Building. This will increase ventilation and visibility, and minimize heat stress for workers performing duct cutting and other deactivation activities.
Remaining Facilities	The K-33 Tie Line removal project completed demolition of the first 200 out of a total of 800 feet of piping and support structure.	The K-33 Tie Line removal project completed removal of approximately 400 feet of the remaining 600 feet section of the project. Project is currently downsizing the material to meet disposal requirements.

EM Project Update

ORNL	April	May
ORNL Central Campus Cleanout and Stabilization	Completed removal of legacy material and stabilization of the 4501-D hot cell. This work enabled ORNL to utilize a hot cell in the 4501 facility that had previously been unavailable due to legacy material that remained in the cell. All work was performed safely and material removed was packaged for shipment of the waste disposal facility.	Completed shipment and disposal of five of the six Radioisotope Thermoelectric Generators located in the central campus area.
ORNL Small Facilities D&D		The PCCR for Bldg. 3038 Material Removal/Stabilization was submitted to the regulators for review.
U-233 Project	A project overview was provided to Nevada Congresswoman Dina Titus. The briefing provided her with a better understanding of the project transportation and disposal strategies for the Consolidated Edison Uranium Solidification Program material.	
Y-12	April	May
UEFPC ROD, Ph. 1	Kelly Perry with Senator Lamar Alexander's office was given a briefing and tour of the mercury cleanup work at the Y-12 Site. She was briefed on the historical process that utilized mercury, the release of mercury into the environment, and the cleanup activities that have been ongoing since the mid 1980s.	
Off-Site Cleanup/Waste Management	April	May
EMWMF		Since opening on May 28, 2002, this facility marked 4,000 days without a lost work day accident. This achievement totals 11 years of safe operation.
Central Neutralization Facility		Decommissioning activities continue to progress. Neutralization of remaining caustic and final rinsing of the process tanks is underway.
Environmental Baseline Survey	EPA approved the recommendation of No Further Investigation (NFI) for approximately 4,600 acres surrounding ETTP. The approval is the culmination of an effort that began more than 5 years ago to complete the determinations.	Both EPA and TDEC approved the Environmental Baseline Summary (previously mentioned NFI) for the West Black Oak Ridge, East Black Oak Ridge, McKinney Ridge, West Pine Ridge, and Parcel 21D in the Vicinity of ETTP.
TRU Waste Processing Center	Both the Vulnerability Assessment and the Security Plan for the Solid Waste Storage Area (SWSA) 5 were signed. The Safety Design Strategy for the Sludge Buildout project was completed.	The first double shipment of waste from Nuclear Fuel Services-Knolls Atomic Power Laboratory (72 drums) arrived.
		To date, approximately 84 out of 127 drums of super compacted Nuclear Fuel Services waste have been processed.
Oak Ridge Reservation		The FY 2013 Public Involvement Plan was submitted to the regulators.

Abbreviations/Acronyms List for Environmental Management Project Update

AM – action memorandum

ARRA – American Recovery and Reinvestment Act

BCV – Bear Creek Valley

BG – burial grounds

BV- Bethel Valley

CARAR – Capacity Assurance Remedial Action Report

CBFO – Carlsbad Field Office

CERCLA – Comprehensive Environmental Response, Compensation and Liability Act

CEUSP – Consolidated Edison Uranium Solidification Project

CD – critical decision

CH – contact handled

CNF – Central Neutralization Facility

CS – construction start

CY – calendar year

D&D – decontamination and decommissioning

DOE – Department of Energy

DSA – documented safety analysis

DQO – data quality objective

EE/CA – engineering evaluation/cost analysis

EM – environmental management

EMWMF – Environmental Management Waste Management Facility

EPA – Environmental Protection Agency

ETTP – East Tennessee Technology Park

EU – exposure unit

EV – earned value

FFA – Federal Facility Agreement

FPD – federal project director

FY – fiscal year

GIS – geographical information system

GW – groundwater

GWTS –groundwater treatability study

IROD – Interim Record of Decision

LLW – low-level waste

MLLW – mixed low-level waste

MSRE – Molten Salt Reactor Experiment

MV – Melton Valley

NaF – sodium fluoride

NEPA – National Environmental Policy Act

NPL – National Priorities List

NNSS – Nevada National Security Site (new name of Nevada Test Site)

NTS – Nevada Test Site

ORNL – Oak Ridge National Laboratory

ORO – Oak Ridge Office

ORR – Oak Ridge Reservation

ORRS – operational readiness reviews

PaR – trade name of remote manipulator at the Transuranic Waste Processing Center

PCB - polychlorinated biphenyls

PCCR – Phased Construction Completion Report

PM – project manager

QAPP – Quality Assurance Project Plan

RA – remedial action

RAR – Remedial Action Report

RAWP – Remedial Action Work Plan

RCRA – Resource Conservation Recovery Act

RDR – Remedial Design Report

RER – Remediation Effectiveness Report

RH – remote handled

RI/FS – Remedial Investigation/Feasibility Study

RIWP – Remedial Investigation Work Plan

RmAR – Removal Action Report

RmAWP – Removal Action Work Plan

ROD – Record of Decision

RUBB – trade name of a temporary, fabric covered enclosure

S&M – surveillance and maintenance

SAP – sampling analysis plan

SEC – Safety and Ecology Corp.

SEP – supplemental environmental project

STP – site treatment plan

SW – surface water

SWSA – solid waste storage area

Tc – technetium

TC – time critical

TDEC – Tennessee Department of Environment and Conservation

TRU – transuranic waste

TSCA – Toxic Substances Control Act

TWPC – Transuranic Waste Processing Center

U – uranium

UEFPC – Upper East Fork Poplar Creek

VOC – volatile organic compound

WAC – waste acceptance criteria

WEMA – West End Mercury Area (at Y-12)

WHP – Waste Handling Plan

WIPP – Waste Isolation Pilot Plant

WRRP – Water Resources Restoration Program

WWSY – White Wing Scrap Yard

Y-12 – Y-12 National Security Complex

FY 2013 Travel Opportunities

Meeting/Event	Dates	Location	Reg. Cost	Website	Deadline to Submit Requests
Fall Chairs Meeting (Attendees: Hemelright, D. Martin, Paulus)	Oct. 2-3, 2012	Washington, D.C.	none	http://emssabchairsmeetingoctober2012.eventbrite.com/	Aug. 23, 2012
Perma-Fix Mixed Nuclear Waste Management Forum (Attendees: Hemelright, Holmes, Kasten)	Dec. 10-13, 2012	Nashville	$500	none	Oct. 25, 2012
Intergovernmental Meeting with DOE (Attendees: None)	Dec. 12-14, 2012	New Orleans			Oct. 25, 2012
Waste Management Symposium (Attendees: Hemelright, F. Martin)	Feb. 24-28, 2013	Phoenix	$995	www.wmsym.org	Closed Nov. 15, 2012
Spring Chairs Meeting (Attendees: Hatcher, Hemelright, D. Martin, Staley)	April 23-25, 2013	Richland, WA	none	none	Jan. 24, 2013
15th National Brownfields Conference (Attendees: None)	May 15-17, 2013	Atlanta	$125	www.brownfieldsconference.org/en/home	Jan. 24, 2013
National Environmental Justice Conference & Training	April 3-5, 2013	Washington, D.C.	none	http://thenejc.org/?conference=national-environmental-justice-conference-and-training-program	March 5, 2013
2013 EPA Community Involvement Training Conference Attendees: Staley)	July 30-Aug.1, 2013	Boston	none	www.epa.gov/ciconference/index.htm	June 26, 2013
RadWaste Summit (Tentative requests: Cook)	Sept. 3-6, 2013 (tentative)	Las Vegas	?	?	?
Western Waste Site Tour (Tentative requests: Cook, Hatcher, Staley)	Fall 2013	Waste Isolation Pilot Plant, Nevada Nat'l Security Site	none	none	
Fall Chairs Meeting (Tentative requests: Cook, Hemelright)	?	Portsmouth, OH	none	none	