

Oak Ridge Site Specific Advisory Board Monthly Meeting



Wednesday, January 9, 2013

6 p.m., DOE Information Center
1 Science.gov Way
Oak Ridge, Tennessee

The mission of the Environmental Management (EM) Site Specific Advisory Board (the Board) at Oak Ridge, Tennessee is to provide meaningful opportunities for collaborative dialogue among the diverse multicultural communities surrounding the Oak Ridge Reservation, EM, and the U.S. Department of Energy (DOE) Oak Ridge Office (ORO). The Board is chartered under the EM Site Specific Advisory Board Charter. At the request of the Assistant Secretary, the ORO Manager, or the ORO EM Manager, the Board may provide informed advice and recommendations concerning the following EM site-specific issues: cleanup standards and environmental restoration, waste management and disposition, stabilization and disposition of non-stockpile nuclear materials, excess facilities, future land use and long-term stewardship, risk assessment and management, and cleanup science and technology activities. The Board may also be asked to provide advice and recommendations on any other EM project or issue. The Board ensures early, ongoing community access to information (and its interpretation and implications) and dialogue that improves the quality of the decision-making process of EM and ORO.

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AGENDA

PRESENTATION MATERIALS –Status of Cleanup at East Tennessee Technology Park
(to be distributed at meeting)

CALENDARS

1. January
2. February *(draft)*

BOARD MINUTES/RECOMMENDATIONS & MOTIONS

1. November 14, 2012 draft meeting minutes

REPORTS & MEMOS

1. Recommendation Tracking Chart
2. EM Project Update November/December
3. Abbreviation/Acronym List for EM Project Update
4. Trip Report: Dave Hemelright, PermaFix Nuclear Waste Management Forum
5. FY 2013 Travel Opportunities



Oak Ridge Site Specific Advisory Board
Wednesday, January 9, 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. Next Meeting: Wednesday, February 13, 6:00 p.m., DOE Information Center
Presentation Topic: FY 2015 Oak Ridge EM Budget and Prioritization
- 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 (S. Yahr) 6:20–6:30
- IV. Presentation: East Tennessee Technology Park Cleanup Status (J. Kopotic) 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. November 14, 2012, Meeting Minutes (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)
 - B. Environmental Management (B. Hatcher)
 - C. Public Outreach (S. McKinney)
 - 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

January 2013

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
	Dec. 31 ORSSAB office Closed	1 New Year's Day DOE/staff holiday	2	3	4	5
6	7	8	9 Monthly SSAB Meeting 6 p.m.	10	11	12
13	14	15 Stewardship Committee 5:30 p.m.	16 EM Committee 5:30 p.m.	17	18	19
20	21 Martin Luther King, Jr. birthday DOE/Staff holiday	22 Public Outreach Committee 5:30 p.m. teleconference	23	24 Board Finance & Process Committee 5 p.m. Executive Committee 5:30 p.m.	25	26
27	28	29	30	31		

All Meetings will be held at the Office of Science and Technical Information, 1 Science.gov Way, Oak Ridge unless noted otherwise.
ORSSAB Support Office: (865) 241-4583 or 241-4584 **DOE Information Center:** (865) 241-4780

Board meetings on cable TV and YouTube	
Knoxville: Charter Channel 6, Comcast Channel 12	Sunday, January 13 and 20 at 4 p.m.
Lenoir City: Charter Cable Channel 3	Wednesdays, 4 p.m.
Oak Ridge: Channel 12	Thursday, January 17, 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

February 2013

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
					1	2
3	4	5	6	7	8	9
10	11	12	13 Monthly SSAB Meeting 6 p.m.	14	15	16
17	18 Presidents' Day DOE/Staff holiday	19 Stewardship Committee 5:30 p.m.	20 EM Committee 5:30 p.m.	21	22	23
24	25	26 Public Outreach Committee 5:30 p.m. teleconference	27	28 Board Finance & Process Committee 5 p.m. Executive Committee 5:30 p.m.		

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DRAFT

Many Voices Working for the Community



Oak Ridge Site Specific Advisory Board

Unapproved November 14, 2012 Meeting Minutes

The Oak Ridge Site Specific Advisory Board (ORSSAB) held its monthly meeting on Wednesday, November 14, 2012, 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
Alfreda Cook
Lisa Hagy
Janet Hart
Bob Hatcher
David Hemelright, Vice
Chair

Bruce Hicks
Jennifer Kasten
Ross Landenberger¹
Jan Lyons
David Martin, Chair
Fay Martin
Donald Mei

Greg Paulus
Coralie Staley
Robert Stansfield
Thomas Valunas
Sam Yahr¹

Members Absent

Howard Holmes
Chuck Jensen, Secretary
Scott McKinney
Scott Stout

¹Student Representative

Liaisons, DDFO, and Federal Coordinator Present

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

Others Present

Spencer Gross, ORSSAB Support Office
Norman Mulvenon
Pete Osborne, ORSSAB Support Office
Joy Sager, DOE-ORO

Four members of the public were present.

Liaison Comments

Chair David Martin requested that Ms. Cange, Mr. Adler, Mr. Petrie, Ms. Jones, and Ms. Noe explain their roles with ORSSAB and their other duties with their respective agencies.

Ms. Cange - In addition to being the DDFO for the board Ms. Cange is the Deputy Manager of EM for DOE-ORO. Most of her work is management and oversight of cleanup work that is underway across the Oak Ridge Reservation (ORR). She is responsible for cleanup at Y-12 National Security Complex, Oak Ridge National Lab (ORNL), and East Tennessee Technology Park (ETTP). She oversees a management team of 10 people who in turn oversee the remainder of the approximately 75 DOE EM employees.

As DDFO Ms. Cange spends approximately 10 percent of her time related to ORSSAB activities. She relies on Mr. Adler and Ms. Noe to handle most of the work related to ORSSAB.

Ms. Cange reported that the federal government is operating under a continuing resolution, meaning that an operating budget for FY 2013 has not been approved yet by Congress. DOE is operating under the budget allocations for FY 2012 until a 2013 budget is passed. DOE continues cleanup work on the reservation although not at the pace under an anticipated 2013 budget allocation.

Demolition has begun on the North Tower of the K-25 Building at ETTP and plans are being made for the shipment of Consolidated Edison Uranium Solidification Program material from the Uranium-233 Project. Ms. Cange said DOE-ORO is completing most of its Recovery Act funded projects at Y-12 and ORNL. All of that work is scheduled for completion in 2013.

Mr. Adler – Mr. Adler explained that he has been with DOE EM for about 20 years, working at all three sites on the ORR and several sites across the nation. Mr. Adler is the DOE Liaison to board providing information and help where needed with board activities. He is also the alternate DDFO and can act in Ms. Cange's absence. He noted that ORSSAB cannot meet unless the DDFO or alternate is present. Mr. Adler spends 20-25 percent of his time related to board activities. His DOE responsibilities are related to regulatory affairs, working closely with EPA and TDEC.

Mr. Adler reported that DOE, EPA, and TDEC are involved in an informal dispute related to milestones and how milestones are created. Because of funding constraints under the continuing resolution DOE cannot maintain the pace of cleanup activity that had been planned. As a result the pace of some projects is slowed and milestones must be renegotiated with EPA and TDEC. A letter was sent on November 9 proposing to extend milestones associated with the K-25/K-27 project and to add milestones associated with cleanup around the industrial area of ETTP (Zone 2). EPA and TDEC will review those requests and provide comments to DOE.

Mr. Adler reported on the status of Recommendation 211: Recommendation on Availability of DOE Environmental Management Documents. DOE is looking into the possibilities of improving the online search function for documents at the DOE Information Center. He said the cost of upgrading the utility is also being considered. An analysis of the system is expected to be complete by the next meeting in January 2013. In the meantime, he encouraged users to take advantage of the staff at the information center which is available to help people find documents they are looking for.

Ms. Jones – As EPA liaison, Ms. Jones coordinates issues and activities the board may have with EPA. She is also the remedial project manager for the K-25/K-27 projects. She said an informal dispute may begin with EPA but is resolved between TDEC and DOE. Ms. Jones has been board liaison since 1998 and her job is to ensure any information requested by the board is provided and to help the board understand the role of EPA.

Mr. Petrie – Mr. Petrie was sitting in for John Owsley, the TDEC liaison to the board. Mr. Petrie is the TDEC Federal Facility Agreement project manager. His job is to work with Mr. Adler regarding milestones and schedules for cleanup. He said Mr. Owsley is the TDEC deputy director of remediation and the director of the DOE Oversight Office in Oak Ridge.

Mr. Petrie said the informal dispute is related to procedural issues and more specifically what will be milestone. Most of the milestones being discussed are related to the K-25/K-27 projects. He said the hope is Congress will agree on a budget for 2013 that will resolve many of the issues being discussed among EPA, TDEC, and DOE.

Public Comment

Mr. Mulvenon encouraged the board to approve the four EM SSAB Chairs' recommendations to be considered at this meeting.

Presentation

Ms. Sager's presentation was on Legacy Waste & Material Disposition Activity. The main points of her presentation are in Attachment 1.

She began by explaining that there is a diverse collection of legacy materials on the ORR. Some of it is waste that will be disposed, and some of it is considered non-waste that may have potential for re-use. Since the early 1990s a large amount of legacy waste and materials has been shipped off the ORR for disposal or re-use. Any remaining waste in storage is regulated by several TDEC and EPA negotiated disposition schedules (Attachment 1, page 2).

Newly generated waste from ongoing operations on the ORR are disposed directly by the generators, with the exception of transuranic (TRU) waste, which is currently being processed and stored for later disposal. Ms. Sager said there is no new 'bow wave' of waste being placed in storage. At one time waste was being generated and stored prior to disposal. That legacy waste disposal was completed in 2005.

The legacy waste was mixed waste that had both radiological and hazardous components. Twenty-two thousand containers of low-level and 4,000 containers of mixed low-level waste were disposed, about 1, 259,000 cubic feet of legacy waste (Attachment 1, page 3). Ms. Sager said it took about 10 years to complete the project. The chart on page 4 of Attachment 1 shows how the waste was worked off from 1994 to 2005.

Another example of legacy waste disposition was the shipment of more than 7,000 uranium hexafluoride cylinders from ETTP (Attachment 1, page 5).

Remaining waste is stored in several buildings at ETTP (Attachment 1, page 6). It includes about 40 large transformers containing PCB material, some remaining mixed low-level waste, several hundred containers of low-level waste, and several tons of nickel that has been stored for possible re-use. The buildings in the K-1065 storage area are permitted under the Resource Conservation Recovery Act and are maintained to high standards.

Ms. Sager gave an example of some material in storage not considered waste. Sodium shields stored in K-1313-F were used originally at ORNL and later moved to ETTP in 2003 to have the sodium extracted. The work was not successful and the project was terminated in 2004. The shields have been stored and are under surveillance and maintenance until a final decision is made on them.

She discussed the current storage of TRU waste on the ORR. It is the largest amount of waste in storage. About a thousand containers are stored in several facilities near the TRU Waste Processing

Facility (Attachment 1, page 9). The waste is processed through the center for shipment to the Waste Isolation Pilot Plant in New Mexico (processed TRU is not currently being shipped; shipments are scheduled to resume in 2014).

One of the more challenging waste disposal projects is the Shielded Transfer Tanks (Attachment 1, page 10). They are shipping casks that were used to transport radioactive material from Idaho National Lab and Hanford to Oak Ridge between 1967 and 1971. They were taken out of service in 1971 and since have been stored under a shed in Melton Valley. They remain under safety documentation and routine inspections until a decision is made on how to dispose them.

The 7822-K Pad is another storage facility at ORNL (Attachment 1, page 11). The waste material stored at this location presents challenges as well, because the waste stored in the containers will have to be repackaged for transportation and disposal. The vaults were originally prepared for onsite disposal at ORNL, but the disposal facility at the lab was closed before the 26 vaults could be disposed. They currently do not meet Department of Transportation requirements for off-site shipment.

Several cesium casks that were discovered during cleanup of the K-770 area at ETTP have been repackaged and stored on the 7822-K Pad. Most of the waste stored on the pad will have to be placed in a hot cell for repackaging for shipment and disposal off site. Until a decision is made on how to repackage the material it will remain on the pad and undergo routine inspections.

Some material not considered waste is stored at an area called the Well Drillers Steam Cleaning Facility (Attachment 1, page 12). Two containers store sodium and lithium shields and a beryllium reflector. The containers are inspected regularly until a decision is made on what to do with them.

Ms. Sager completed her presentation with these summary points:

- Remaining legacy waste and material disposition needs represent a significant future scope of work, particularly for materials dependent upon offsite disposal
- In the interim, legacy waste and materials are being safely stored and monitored
- Some materials present significant disposal or transportation challenges
- Disposition efforts compete for funding with other building demolition and environmental remediation efforts
- Disposition priorities will be based on risk and opportunity considerations

After Ms. Sager's presentation a number of questions were asked. Following are abridged questions and answers.

Mr. Hatcher – What are the vaults on the K-7822 Pad composed of? Ms. Sager – They are made of concrete. Mr. Hatcher – What does it mean on page 12 of Attachment 1 that 'small amounts of radioactivity are present in form of activation products'? Ms. Sager – My understanding is that when these shields were used in reactors the components become activated in the shields.

Mr. Bell – Are all of the uranium hexafluoride cylinders gone and where are they? Ms. Cange – They are all gone and most of them have been stored at Paducah and Portsmouth. Processing facilities have been constructed at both sites and the cylinders are being processed through those facilities.

Mr. Bell – What is the plan for the PCBs? Ms. Sager – The only wastes we have remaining under the PCB Federal Facility Compliance Agreement are the large transformers in K-1065 at ETTP and they will be flushed and disposed. They may have already been flushed. I'll have to find that out. Mr. Bell – What happens to the PCBs? Ms. Sager – I assume they are incinerated.

Mr. Bell – What kind of activity is associated with the sodium shields? Mr. Adler – The radioactivity associated with the sodium shields is pretty low. The principle hazard is the sodium itself, which is reactive. Mr. Bell – What is the explanation for the failure of taking the sodium out? Mr. Adler – When they attempted to mine the sodium from the shields there was an uncontrolled exothermic reaction, what sodium does when it mixes with water and air. A lot of smoke was produced, an area of the plant was shut down, and material was put back into safe storage. The contractor was taken off the job. There are ways to safely manage that material. It just costs money. It's a decision of do we take on this material that we believe is safely stored or do we take on some other project. When we have materials in the ground or in buildings that are deteriorating rapidly these projects have not been as a high a priority. It ultimately needs to be done, but to do that runs in the tens of millions of dollars. Mr. Bell – I would think the hazard level associated with the sodium exceeds most of these other hazardous wastes. Mr. Adler – If it's safely stored, the hazard level can be very low. A lot of our other facilities are old and deteriorating like K-25 and K-27.

Mr. Bell – Where is the TRU waste storage facility at ORNL? Ms. Sager – They are in Melton Valley between the High Flux Isotope Reactor and Highway 95 just north of the TRU Waste Processing Center. There is an area there called Solid Waste Storage Area 5. They are primarily located in that area.

Ms. Cook – Of the material considered waste and the fact that they are not CERCLA (Comprehensive Environmental Response, Compensation and Liability Act) waste, if we have an onsite cell, which is designated for CERCLA waste only, would there ever be the potential of putting non-CERCLA waste in that cell instead of having this material sitting around and waiting for some place offsite to take them? Mr. Adler – When that facility was built an agreement was made that it be used exclusively for CERCLA material and generally for material generated on the ORR. Some exceptions were made to allow some wastes around the Oak Ridge area to be brought in. Specifically excluded from the allowable waste streams were non-CERCLA wastes. When you talk about what is CERCLA waste and what isn't there are some gray areas, and some of the gray area material has been brought in with the agreement of TDEC and EPA. In order to bring some of that material into the facility, we'd have to structure some new agreements, but it could save large amounts of money. Another opportunity for exploring on-site disposal could be on the next cell. We haven't structured yet what it can and cannot take. It's probably worth exploring because of the potential cost savings but it would have to be coordinated with EPA and TDEC.

Mr. Paulus – Do you have target date for when this material will be disposed or is that kind of a floating date because we don't know what the money will be? Ms. Cange – I would say it's more of the latter. We receive our appropriations on an annual basis. We are currently receiving about \$420 million a year, but that is down from what was our average of about \$520 million prior to the Recovery Act. And it goes back to the fact that these materials are in safe storage and it's a matter prioritization.

Mr. Hicks – I'm particularly interested in recycling. How do you go about determining if something is worth recycling? Ms. Cange – There is a process of evaluating the value of materials and determining if the most cost effective way to address them is either dispose of them as waste material or be able to recycle them for re-use some time in the future. There are certain moratoriums and suspensions that are in place that prevent the department today from being able to recycle and reuse any materials that came from a radiologically contaminated area. The nickel in storage at ETTP unfortunately falls within that category. The nickel came from three process buildings at ETTP, is in radiologically controlled areas, and is not currently eligible for recycling or reuse. However, we're storing the material because it has a high value. There is the hope that someday that the moratoriums and suspensions will be reevaluated and perhaps lifted so we can recycle and reuse the materials rather than burying them.

Mr. Martin – Considering money and considering we have items that don't have a waste disposition path, is it expensive to develop waste disposition paths and is better and cheaper in the long run to develop those paths now than to put them off? Ms. Cange – What you suggest is a smart and prudent thing to do. The time needed to develop disposition paths is directly related to the type of material that you're trying to dispose. Some people here may be aware of the amount of time and money the department has dedicated over the past several decades to identify a disposal facility and/or disposition pathways that have been acceptable. We know the Waste Isolation Pilot Plant is a success story where our TRU waste is being shipped and disposed, and we've probably all heard about Yucca Mountain, which was another proposed disposal facility and was not a success story. Typically it is a lengthy process that is costly, so it's prudent to do things in the process as early as we possibly can. Now that's only for specific types of materials. There are many other materials that we are dispositioning today. CERCLA waste is going to the onsite disposal cell. We have series of sanitary landfills at Y-12 where we dispose of a lot of other materials. It depends on the type of waste you're talking about in terms of the difficulty of identifying a pathway and the time it takes to put that pathway in place. Mr. Adler – For most of these waste streams there are solutions available. The issue for many of them isn't the absence of a disposal facility; it's the absence of a conveyance method to get them to the facility. And it makes sense that a lot of attention be paid to transporting them safely. In some cases you have to take the casks and disaggregate them, put them in hot cells and cut them up, and find a suitable transportation system. Although planning ahead in most cases is the sensible thing to do, in an environment where the regulations associated with transportation shifts, if we're not going to do the work for 15 to 20 years sometimes you can over plan and by the time you're ready to do the work the rules have changed and that plan no longer is acceptable.

Mr. Bell – Are the Shielded Transfer Tanks empty? Ms. Sager – They have an ion exchange resin in them. They went out to Hanford and they processed material through an ion exchange resin, got the cesium, brought it to Oak Ridge, and eluted the cesium, but the resin is still in there and some small percentage of the cesium is still in there because it can't all be eluted. So there is still the radioactivity in there to deal with.

Mr. Bell – The concrete vaults on the 7822-K pad are not ready for shipment? Ms. Sager – No, they were packaged for disposal. Mr. Bell – But to open them inside a hot cell, take out the material and work on it, you still have to dispose of the cask. Mr. Adler – Those vaults represent a pretty big cost liability if the solution is opening, disaggregating, repacking, and shipping. But they are not CERCLA waste. That's one we're going to have to think about and see what our options are. Another complication of disaggregating the material is that it was grouted in place in the casks.

Mr. Bell – Are the cesium casks empty? Ms. Sager – I'm not sure we know at this point. Mr. Bell – Where did they come from? Mr. Adler – They was discovered when they cleaned up the scrap yard at ETTP. Ms. Jones – ETTP basically had no mission so it was easy to place things there. There was a lot of material stored at the scrap yard and we don't when they got there. We recovered three to five casks. By not being able to dispose of them they couldn't complete the project, because the completion documents say everything has been disposed. In order to complete the project at the scrap yard DOE sent them to ORNL. Ms. Sager – They were packaged in a way to be protective, but they will have to better characterized. Mr. Bell – It's never been determined where they came from? Mr. Adler – I'll have to find out if we know where they came from. We know that they have fairly intense field on contact. From a spectrographic analysis we know what's in them and we can estimate about how much is in them. They have been placed in concrete vaults that look similar to the vaults on the 7822-K Pad. They are not that large. There are a lot of curies in a small space; the type of thing we do look for western disposal. But before we can do that job we'll have to do some assay work and packaging.

Mr. Hatcher – Do you have an inventory of each of the vaults on the 7822-K Pad? Ms. Cook –

There is inventory data there. I remember having a file from years back. Ms. Sager – I've seen general descriptions of the material in them, but not very detailed. Mr. Adler – Those vaults were part of the earlier big legacy waste work off. They were part of that scope, but as we neared working with them we realized they were bigger and more expensive than we thought so we set them aside and did what we could do. My recollection is we had forms that listed the items that were placed in the boxes. The lab's waste management practices have gotten more eloquent than they were in the 1940s and 50s. They did keep good records of what went into what vault and what vault went where. There's not a lot of uncertainty about what's in there. But it is a challenge because it's all grouted up and expensive to deal with.

Ms. Cook – Could you tell me more about the Disposal Area Remedial Action Soils (noted on the graph on page of Attachment 1)? Were these soils at a previous disposal area, are they in situ, were they dug and put somewhere else? Ms. Sager – They were dug up out of an area at Y-12. They are in a bathtub like structure in Bear Creek valley with a building over it. They are basically in a pile in a covered building. Mr. Adler – It's a significant volume of soil, something that might fill up this meeting room. When the soil was put there it was loaded with oils because it was cleanup of a mess that had developed at the base of a hill. It's been sitting in this dry environment for a long time and a lot of soil is not as bad as it was initially. This is one where we're doing some proactive planning. There is an effort underway with TDEC and EPA of possibly taking some of that soil and disposing some of it on site. By doing that we could save a lot of money that could be used elsewhere in the cleanup baseline. There have been meetings to plot out some of the characterization of the soils to be done to see if there is a relatively low cost for its management. Ms. Cook – I assume management is looking at disposing it in the existing cell? Mr. Adler – Yes. There is a possibility these soils would be suitable for disposal in the onsite cell.

Committee Reports

Board Finance & Process – Mr. Martin reported that the committee considered the board's FY 2015 budget request and decided to request additional funding for the board's annual meeting and for travel.

The committee will meet again on November 29.

EM – Mr. Hatcher reported that the committee received an update on the siting of a second CERCLA waste disposal facility on the ORR. The committee determined no recommendation on the siting of a second facility is needed at this point until comments from the regulators on the suggested site are received.

Because the normal meeting day falls on the evening before Thanksgiving, the committee decided to move the meeting to November 28. The committee will hear a report on groundwater strategy development workshops.

Public Outreach – Ms. Hart reported that committee chair Scott McKinney had distributed a survey to committee members to gauge their interests and how they might best serve the committee.

The committee discussed Public Outreach presentation material. She said Mr. McKinney would like to have feedback from the committee members on the material prior to the November 27 meeting.

The committee discussed the exhibit at the American Museum of Science and Energy and inviting certain VIPs to the board meetings. However, Ms. Hart said Mr. McKinney has requested from DOE a list of presentation topics for the next several months so that list can be shared with invitees who can determine topics in which they may have an interest.

Mr. Martin will write the next commentary for the board to be distributed to local newspapers.

The November 27 meeting will be a teleconference among members. The committee will not meet in December.

Stewardship – At the October meeting, Ms. Staley reported the committee heard a follow up presentation on the Land Use Manager, which will be used to record stewardship information instead of filling out paper reports. Sally Brown of UCOR demonstrated online how information will be provided to users interested in learning about engineering and institutional controls and other information about remediated areas on the ORR.

Lynn Sims also with UCOR explained that the 2011 Five-year Review was published later than usual because extensive comments by the regulators were addressed before the final version was issued to the public. The report indicated that all 27 sites on the reservation, except two, were determined to be protective. One of the two received a designation of protectiveness deferred, which will be addressed in an addendum to the Five-year Review.

At the November 20 meeting, committee members will develop questions and comments on the Site Transition Summary and related guidance documents. Those questions and comments will be used during a conference call in December with headquarters personnel who developed the material.

Executive – Mr. Martin reported that the committee discussed how questions should be handled during the presentation portion of board meetings. It was determined that it would be best to allow presenters to go through their presentations and take questions at the end. It was suggested that members ask one question and a follow up and then yield the floor to other members who would like to ask questions. Members could ask additional questions after all members have had a chance to participate.

Mr. Martin has drafted a vision statement for the board. Since there were only a few committee members at the meeting, discussion of the statement was tabled and the statement was sent via email to all committee members to review and be prepared to discuss at the November meeting.

The committee approved three requests for travel.

The committee will meet again on November 29.

Center for Oak Ridge Oral History – Ms. Staley is the board's representative on the center's advisory board. She explained that the center has gathered about 200 oral histories from a wide range of people who worked in Oak Ridge over the years since the Manhattan Project. The oral histories are available online and also at the Oak Ridge Public Library where the histories are stored. Ms. Staley met with the center's Jordan Holloway and discussed how the histories might be used, especially in schools.

Ms. Staley said many people are waiting to be interviewed, but the center has only two people available to do the interviews and make the recordings.

Announcements and Other Board Business

ORSSAB will have its next meeting on Wednesday, January 9 at 6 p.m. at the DOE Information Center. The board will not meet in December.

The minutes of the October 10, 2012, meeting were approved.

The EM SSAB Chairs' recommendations (Attachments 2-5) were approved.

Federal Coordinator Report

Ms. Noe explained her role as Federal Coordinator and her DOE responsibilities. She has been the Federal Coordinator for 13 months. Her primary responsibility is to make sure Ms. Cange and Mr. Adler have the information they need to assist the board and answer questions. She ensures that recommendations passed by the board are responded to in a timely fashion and that any actions noted at board and committee meetings are addressed. She works with staff to get membership packages to headquarters for approval. Ms. Noe works with the other DOE committee liaisons to address any issues that come out of committee meetings. She works closely with DOE headquarters on membership and helps coordinate travel for board members. She is also the contracting officer's representative for the ORSSAB contracting support staff. She spends 30 to 35 percent of her time on ORSSAB business.

Her DOE duties include being the program manager for enforcement, which includes nuclear safety issues and worker safety and health non-compliances. She is also the program manager for the emergency management program for DOE-ORO EM. Ms. Noe is responsible for directives management to make sure any directives issued from DOE Headquarters are evaluated and, if applicable, the directives are placed in the contracts.

Ms. Noe reported that two candidates have been submitted to headquarters for interim appointment to the board and could be approved by the January meeting.

Additions to the Agenda

None.

Motions

11/14/12.1

Mr. Martin moved to approve the minutes of the October 10, 2012, meeting. Mr. Hemelright seconded and the motion passed **unanimously**.

11/14/12.2

Mr. Hemelright moved to approve the EM SSAB Chairs' Recommendation on the Waste Isolation Pilot Plant (Attachment 2). Ms. Cook seconded and the motion passed **unanimously**.

11/14/12.3

Mr. Hemelright moved to approve the EM SSAB Chairs' Recommendation on DOE High-Level Waste (Attachment 3). Mr. Hatcher seconded and the motion passed **unanimously**.

11/14/12.4

Mr. Paulson moved to approve the EM SSAB Chairs' Recommendation on Funding for Technology Research and Development (Attachment 4). Mr. Hemelright seconded and the motion passed **unanimously**.

11/14/12.5

Mr. Hemelright moved to approve the EM SSAB Chairs' Recommendation on Recycling (Attachment 5). Ms. Martin seconded and the motion passed **unanimously**.

The meeting adjourned at 8:03 p.m.

Action Items

Open

1. Ms. Sager will determine if the transformers in the K-1065 Building at ETTP have been flushed of PCBs.

2. Mr. Adler will try to determine where cesium casks found in the K-770 Scrap Yard at ETPP came from.

Closed

1. Staff will forward the email link to TDEC's annual status report to board members. **Complete.** Link forwarded to board members on October 11.
2. Staff will forward recommendations from the Fall Chairs' meeting to board members for review. **Complete.** Sent via email to board members on October 15 and provided in November meeting packets.

Attachments (5) to these minutes are available on request from the ORSSAB support office.

I certify that these minutes are an accurate account of the November 14, 2012, meeting of the Oak Ridge Site Specific Advisory Board.

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

DATE

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	211: Recommendation on Availability of DOE Environmental Management Documents	EM		Open	

EM Project Update

ETTP	November	December
Zone 1 Final ROD	Responses to regulator comments on the D1 Zone 1 Final RI/FS were prepared and preparation of the D2 RI/FS continued.	Preparation of the D2 Final Zone 1 RI/FS continued.
Zone 2 ROD		The draft PCCR Addendum for EU-44 was sent to the regulators for review. EU-44 includes the TSCA Incinerator, and this PCCR Addendum documents completion of characterization and remediation.
Chromium Reduction Removal Action	The RmAR for Hexavalent Chromium Releases into Mitchell Branch was submitted to the regulators for review.	
K-25/K-27 D&D	Demolition of the North End of the K-25 Building is underway. The North tower unit K-303-8 (first of three) is approximately 90 percent complete. Initiated foaming of process equipment in the Tc-99 units.	Demolition of the North Tower continued and began on K-303-9, the second of three units. It is approximately 50 percent complete. Downsizing of the debris is underway and disposal of converters from K-303-8 was completed.
	The five NaF traps were safely removed from the East Wing of the K-25 Building and are now in safe storage.	Offsite shipment of the nine remaining East Wing converters was performed. Foaming of the converters in the Tc-99 area continued with all of the converters in K-310-1 completed. Foaming of the piping in K-310-1 is 10 percent complete.
		Insulation removal of the NaF traps and its adjacent piping was completed, and the inner heat shield removal from the traps was completed.
ORNL	November	December
BV Non-Reactor Facilities D&D	The 3026 Hot Cell Project has fully implemented the revised 3026-D Facility Documented Safety Analysis and Technical Safety Requirements. Began pumping existing liquid from 3026-D Cell B which will be followed by decontamination via the cell wash-down.	Window removal was initiated in the 3026-D Cell B at the 3026 Hot Cell Project to allow personnel access to the cell interior to continue decommissioning activities.
	The Legacy Material Removal Project has completed shipment and disposal for five of the six Radioisotope Thermoelectric Generators located in the central campus area of ORNL.	
U-233 Project	Continued work on security upgrades in preparation for the Consolidated Edison Uranium Solidification (CEUS) project material shipment planned for early next year.	A senior policy advisor to Congressman Fleischmann visited Building 3019 for an update on the U-233 Project. The visit provided good discussion of project challenges for both the CEUS project material as well as the approach to be used for the future downblending operations in Building 2026.
		A major goal was accomplished with the approval of the waste profile for the CEUS project material by the Nevada National Security Site.
		The U-233 Project celebrated 2,000,000 man-hours without an OSHA recordable accident.

EM Project Update

Y-12	November	December
Y-12 D&D S&M	The Free Mercury Recovery project continued with seven of the nine mercury trap installations completed. These traps will allow for removal of collected mercury without entering the storm sewer.	Mercury from two traps was removed for the first time. The process went smoothly, and approximately 2 pounds of mercury was collected.
	The five tanks that are assumed surplus material from Alpha 4 and Beta 4 were shipped from the original site. Two were disposed of in the Y-12 sanitary landfills. The remaining three, containing mercury waste, will be treated before being shipped out west.	
	Work continues on the Secondary Pathways subproject with the completion of the grading of the north side of Alpha 5, installation of the final concrete pad on the northeast inset of Alpha 5, and the installation of gutters on the north side canopies.	
Off-Site Cleanup/Waste Management	November	December
TRU Waste Processing Center	A new method of inspecting the cask overpacks was developed and implemented to address clean rainwater or condensation dripping from the casks.	A bulk macro encapsulated cargo container of mixed, low-level waste and six radioactively contaminated concrete casks were sent to the Nevada National Security Site for disposal. In addition, a shipment of 90 mixed low-level waste drums were sent for macro encapsulation.
	Waste operations began treatment of sealed containers of perchloric acid in the Hot Cell. Treatment process-specific procedures were developed and approved for this activity. The removal of this potential hazard was a significant accomplishment and reduced overall risk at the facility.	
TSCA	Filling of all sumps and container areas planned at the incinerator were completed, as well as surveying and downposting of contamination areas to minimize the remaining contaminated footprint.	
ORR Integrated Footprint Reduction		The final Environmental Baseline Survey Report for verification of assumed uncontaminated areas surrounding ETPP was submitted to the regulators for review.
EMWMF	EMWMF realized a 40 percent cost reduction in civil surveying support in FY 2012. The savings are attributable to improved upfront planning with Engineering and Field Services, improving organization, and initiating use of a 3-D scanner for the quarterly surveys.	Held several meetings with the regulators to review their comments on the D3 RAWP and the D3 RDR.

EM Project Update

Water Quality Program		The FY 2012 Remediation Effectiveness Report was approved by the regulators.
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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

CD – critical decision

CH – contact handled

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

ZPR – Zero Power Reactor

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	none	none	Oct. 25, 2012
Intergovernmental Meeting with DOE	Dec. 12-14, 2012	New Orleans	?	?	Oct. 25, 2012
Waste Management Symposium Attendees: Hemelright, Kasten, F. Martin)	Feb. 24-28, 2013	Phoenix	\$995	www.wmsym.org	Closed Nov. 15, 2012
Spring Chairs Meeting (Tentative requests: Hatcher, Hemelright, Staley)	April 23-25, 2013	Richland, WA	none	none	January 24, 2013*
15th National Brownfields Conference	May 15-17, 2013	Atlanta	\$125	www.brownfieldsconference.org/en/home	January 24, 2013*
Western Waste Site Tour (Tentative requests: Cook, Hatcher, Staley)	?	Waste Isolation Pilot Plant, Nevada Nat'l Security Site	none	none	
National Environmental Justice Conference & Training (Tentative requests: Cook)	?	Washington, D.C.	none	?	
Health Physics Society Annual Mtg	?	?	?	?	
RadWaste Summit (Tentative requests: Cook, Hemelright)	?	Las Vegas	?	?	
Fall Chairs Meeting (Tentative requests: Cook, Hemelright)	?	Portsmouth, OH	none	none	

*HQ must be notified of attendees by 2/16/13



Oak Ridge Site Specific Advisory Board

TRIP REPORT

- I. Name of Traveler:** David Hemelright
- II. Date(s) of Travel:** December 11th & 12th
- III. Location of Meeting:** Nashville, TN
- IV. Name of Meeting:** PermaFix Nuclear Waste Management Forum
- V. Purpose of Travel:** To observe and learn what is occurring at other Nuclear Sites

VI. Discussion of Meeting: Meeting commenced with overview of PermaFix activities since founding in 1991, and the expansion into the international market place in all things nuclear as a ‘go to’ problem solver. Day One keynote speaker was Christine Gelles for DOE EM in Washington who spoke on clean up priorities and innovations. Day One continued with talks from folks on the Oak Ridge mercury clean-up, Hanford vision for the future in austere budget climate, Nevada’s role in footprint reduction at EM sites, and removal of transuranic waste at Los Alamos National Lab. The afternoon sessions were concerned with international opportunities, focusing primarily on Japan’s Fukushima Daiichi disaster. The session continued with a strategic outlook at nuclear waste management, nuclear power plant accident recovery, and natural gas fracking and management in the Marcellus shale.

Day Two was focused on contractor progress and innovations in clean-up, hearing from UCOR on K-25 success, challenges and how they were overcome at Argonne National Lab, and Los Alamos National Lab, disposal innovations at Savannah River site, and the problems facing the mercury remediation at Alpha 5 at Y-12. Continuing, discussions were held on the Paducah cleanup, legacy mercury clean up by UCOR at ORR, PermaFix mercury treatment technologies, and NNSA weapons dismantlement programs. Also on the docket was organic destruction technologies from Great Britain, contaminated soil disposition, ‘modeling’ tools for decontamination & decommissioning (D&D), PermaFix’s capabilities for managing classified waste, and the innovative D&D of ORNL hot cell project.

Day Three were facility tours in central Tennessee.

VII. Significance to ORSSAB: Attendance at the meeting allowed for networking among professionals in the nuclear clean-up industry, to learn what is happening at other EM sites in the US, and to be a more “informed” SSAB member.

VIII. Names & Telephone Numbers of Significant Contacts:

Steve Fielden, CTI, Helenwood, TN 423-569-2800
Mike Fielden, CTI, Helenwood, TN 423-569-2800
J. D. Dowel, DOE, Richland, WA 509-376-9971
Greg Geisinger, NNSS, Las Vegas, NV 702-295-5196
Brian Moran, NNSS, Las Vegas, NV 702-295-6583
Neal Quesnel, Newport News, VA 757-688-9720
John Wrapp, UCOR, Oak Ridge, TN 865-576-1733
Laura Wilkerson, DOE, Oak Ridge, TN 865-576-9900
Cathy Hickey, CH2M Hill, Knoxville, TN 865-621-8494
Ken Beyma, CPC, Wilmington, NC 910-392-6100
Jeff Binder, ORNL, Oak Ridge, TN 865-241-7600

IX. Action Items: Share the UCOR Land Use Manager Program with other EM sites.

X. Traveler's Signature & Date:

David Hemelright

12/14/2012