

Oak Ridge Site Specific Advisory Board Monthly Meeting



Wednesday, October 14, 2015

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.

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distributed at or prior to meeting

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1. October
2. November (*draft*)

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1. September 9, 2015 draft meeting minutes
2. Recommendation on the Preferred Alternative for the Proposed Plan for Water Treatment at Outfall 200 at Y-12 National Security Complex
3. EM SSAB Chairs' Recommendation on Supplemental Environmental Projects

REPORTS & MEMOS

1. EM Project Update
2. Abbreviations/Acronyms for EM Projects Update
3. Travel Opportunities for FY 2016
4. Trip Report: Dave Hemelright – EM SSAB Fall Chairs' Meeting

AGENDA



**Oak Ridge Site Specific Advisory Board
Wednesday, October 14, 2015, 6:00 p.m.
DOE Information Center
1 Science.gov Way, Oak Ridge, Tenn.**

AGENDA

- I. Welcome and Announcements (B. Price) 6:00–6:05
 - A. Next Meeting: Wednesday, November 10, (*Location TBD*)
Presentation Topic: The Federal Oversight Model—Ensuring a Safe Work Environment
- II. Comments from the Deputy Designated Federal Officer, and EPA and TDEC Liaisons
(S. Cange, C. Jones, K. Czartoryski) 6:05–6:15
- III. Public Comment Period (Sophia Cui)..... 6:15–6:25
- IV. Presentation: Progress at the East Tennessee Technology Park (Wendy Cain)..... 6:25–6:50
Question and Answer Period 6:50–7:05
- V. Call for Additions/Approval of Agenda 7:05
- VI. Motions 7:05–7:10
 - A. September 9, 2015, Meeting Minutes (D. Hemelright)
 - B. Recommendation on the Preferred Alternative for the Proposed Plan for Water Treatment at
Outfall 200 at Y-12 National Security Complex (E. Trujillo)
 - C. SSAB Chairs Recommendation on Supplemental Environmental Projects (D. Hemelright)
 - D. Second Consecutive Absence—Burroughs, Kasten, Smalling, Staley, Zhou (D. Hemelright)
- VII. Responses to Recommendations & Comments (D. Adler)..... 7:10–7:15
- VIII. Committee Reports..... 7:15–7:20
 - A. EM/Stewardship (B. Hatcher, C. Staley)
 - B. Executive (B. Price)
 - 1. Best Practices for Informed Budget Recommendations (A. Cook)
- IX. Federal Coordinator’s Report (M. Noe) 7:20–7:25
- X. Additions to Agenda & Open Discussion..... 7:25–7:30
- XI. Adjourn 7:30

PRESENTATION MATERIALS

Presentation to be
distributed at or prior
to meeting

CALENDARS



Oak Ridge Site Specific Advisory Board

October 2015

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
				1	2	3
4	5	6	7 Executive Committee 6 p.m.	8	9	10
11	12 Columbus Day DOE/Staff Holiday	13	14 Monthly SSAB meeting 6 p.m.	15	16	17
18	19	20	21	22	23	24
					Tour of ETTP Day and time TBD	
25	26	27	28 Environmental Management & Stewardship Committee 6 p.m.	29	30	31

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 meetings on cable TV and YouTube	
Knoxville: Charter Channel 6, Comcast Channel 12	Sunday, October 25 and Nov. 1 at 8 p.m.
Lenoir City: Charter Cable Channel 3	Wednesdays, 4 p.m.
Oak Ridge: Channel 12	Monday, October 26, 7 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

November 2015

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
1	2	3	4 Executive Committee 6 p.m.	5	6	7
8	9	10 Monthly SSAB meeting 6 p.m. Chuy's Rest. 9235 Kingston Pike, Knoxville. <i>(board meeting moved from second Wednesday because of Veteran's Day Holiday)</i>	11 Veteran's Day DOE/Staff Holiday	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26 Thanksgiving DOE/Staff Holiday	27 ORSSAB office closed	28
29	30					

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

The EM & Stewardship Committee will not meet in November.

Board meetings on cable TV and YouTube	
Knoxville: Charter Channel 6, Comcast Channel 12	Sunday, November 22 and 29 at 8 p.m.
Lenoir City: Charter Cable Channel 3	Wednesdays, 4 p.m.
Oak Ridge: Channel 12	Monday, November 23, 7 p.m.
Oak Ridge: Channel 15	Monday, Wednesday, Friday, 8 a.m. & noon
YouTube	http://www.youtube.com/user/ORSSAB

BOARD MINUTES/ RECOMMENDATIONS



Many Voices Working for the Community

Oak Ridge Site Specific Advisory Board

Unapproved September 9, 2015 Meeting Minutes

The Oak Ridge Site Specific Advisory Board (ORSSAB) held its monthly meeting on Wednesday, September 9, 2015, 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

Leon Baker

Alfreda Cook

Martha Deaderick

Mike Ford

Bob Hatcher

David Hemelright, Chair

Jan Lyons, Vice Chair

Donald Mei

Greg Paulus

Belinda Price

Scott Stout

Ed Trujillo

Dennis Wilson

Members Absent

Richard Burroughs¹

Lisa Hagy, Secretary

Howard Holmes

Jennifer Kasten¹

Mary Smalling

Coralie Staley¹

Wangfang Zhou¹

¹Second consecutive absence.

Liaisons, Deputy Designated Federal Officer, and Federal Coordinator Present

Kristof Czartoryski, Tennessee Department of Environment and Conservation (TDEC)

Susan Cange, Manager for Oak Ridge Environmental Management (EM) and ORSSAB Deputy Designated Federal Officer

Melyssa Noe, ORSSAB Federal Coordinator, Department of Energy – Oak Ridge Office (DOE-ORO)

Connie Jones, Environmental Protection Agency (EPA) Region 4.

Others Present

Claude Buttram, CH2M Hill

Sophia Cui, Student Representative

Jason Darby, DOE

Alana Joldersma, Student Representative

Laura Wilkerson, DOE

Pete Osborne, ORSSAB Support Office

Nineteen members of the public were present.

Liaison Comments

Ms. Cange – The topic for the October 14 meeting will be an update of progress made at East Tennessee Technology Park (ETTP). Ms. Cange said DOE plans to issue a proposed plan for soil remediation in Zone 1 at ETTP and the presentation would be made during the public comment period on the proposed plan. ORSSAB will have an opportunity to issue a recommendation on the proposed plan. A tour will be arranged so members can see the area. Mr. Paulus asked when the tour would be. Ms. Cange and Ms. Noe said that at the annual meeting it was decided that when a presentation on a topic is given at board meetings a tour, when possible, would be given of the site in question after the board meeting. The EM & Stewardship Committee meetings will be moved to the last Wednesday of the month. So a tour of Zone 1 will be arranged sometime between the board meeting on October 14 and the committee meeting on October 28.

Transite paneling is being removed from the exterior of the K-27 Building at ETTP. The building should be demolition ready in January 2016. K-27 is the last of the five gaseous diffusion buildings at ETTP to be demolished.

Ms. Jones – Ms. Jones said a DOE technical project team is looking at ways to prevent a similar release of contamination from ETTP like the one that occurred a few months ago when some technetium-99 escaped from the K-25 demolition project and made its way to a city of Oak Ridge sewage treatment plant. The project team is evaluating the installation of wells in groundwater plumes to capture contamination releases.

EPA and DOE are working on some minor issues in the proposed plan for the new waste disposal facility, the EM Disposal Facility. When those issues are resolved the proposed plan will be issued for public comment.

Mr. Czartoryski – no comments.

Public Comment

None.

Presentation

Mr. Darby's presentation was on the Proposed Plan for the Outfall 200 Mercury Treatment Facility at Y-12 National Security Complex. The main points of his presentation are in Attachment 1.

In the 1950s and early 1960s large quantities of mercury were used at Y-12 for nuclear weapons research and development. About 24 million pounds of mercury were brought to Y-12, but about 2 million pounds of that was spilled, lost, or otherwise unaccounted for. It's estimated that about 700,000 pounds was lost to the environment. About 428,000 pounds are in or under process buildings and surrounding soils at Y-12. Almost 240,000 pounds was released into Upper East Fork Poplar Creek (UEFPC), which daylights at Outfall 200 inside the plant boundaries.

The purpose of the Mercury Treatment Facility is to capture mercury leaving the storm sewer system at Y-12 and getting into UEFPC, which leaves Y-12 at Station 17 near Scarboro Road, becoming East Fork Poplar Creek that runs through the city of Oak Ridge and eventually empties into the Clinch River near ETTP.

Mr. Darby said the development of the proposed plan with a preferred alternative was a collaborative effort involving much discussion and negotiation among DOE, EPA, and TDEC. The proposed plan is not final. It was released for public comment in mid-August. The public comment period will end in mid-October. Comments and recommendations coming from the public comment

period will be considered and a final decision for an alternative will be documented in a record of decision (ROD).

Mr. Darby explained that most of the mercury was lost in an area known as the West End Mercury Area (WEMA) around process buildings Alpha 4, Alpha 5, and Beta 4 (Attachment 1, page 3). A storm sewer under the area is the primary pathway for mercury to move to UEFPC. Secondary sources of mercury come from Alpha 2, a couple of pilot plants, the Mercury Dumping Shed, and the 81-10 area.

Mr. Darby showed a chronology of mercury actions taken at Y-12 (Attachment 1, page 5). He showed this to illustrate that the proposed Mercury Treatment Facility is another step in an overall strategy to mitigate mercury contamination at Y-12 and in UEFPC. He explained that the proposed plan for the Mercury Treatment Facility is an amendment to a 2002 ROD.

The chart on page 7 of Attachment 1 shows how previous actions have reduced the amount of mercury in UEFPC since 1988. However, mercury levels in water and fish tissue continue to exceed target levels. The spike in mercury levels between 2010 and 2014 was the result of some cleanup work in WEMA funded by the American Recovery and Reinvestment Act of 2009. While levels of mercury have gone back down, additional actions need to be taken to reach target levels. Mr. Darby said that future demolition of buildings with associated mercury will likely cause releases of mercury. The proposed Mercury Treatment Facility will be a backup system to capture mercury releases during demolition.

The alternatives considered in the proposed plan are listed on page 8 of Attachment 1. The preferred alternative is 2c:

- Treatment capacity of 3,000 gallons per minute and a 2 million gallon storm water storage,
- A mercury flux reduction goal of 84 percent,
- Construction cost of \$146 million.

Mr. Darby explained that a No Action alternative is required by the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) as a baseline to compare other alternatives. A no action would not help meet existing regulatory requirements for mercury.

Additional details on Alternative 2c are listed on page 9 of Attachment 1. The two-stage headworks will capture up to 3,000 gallons of water a minute. Anything over 3,000 gallons would go to the storm water storage tank.

Mr. Darby said the 3,000 gallons per minute is in the 95th percentile of UEFPC flow at Outfall 200, meaning that the facility will capture 100 percent of the water 95 percent of the time.

The 2 million gallon storm water storage tank is designed to capture storm water runoff in the first 60 minutes of a storm event and would capture mercury in this 'first flush' runoff.

The operation of the plant is designed to reduce mercury concentrations in UEFPC to a goal of 51 parts per trillion and reduce mercury flux at Outfall 200 by 84 percent.

The modular design of the facility will allow any needed modifications in the future to meet goals.

Operations and maintenance costs are estimated at \$3.1 million per year.

Mr. Darby showed a map of the location of the treatment facility (Attachment 1, page 10). At Outfall 200 will be the headworks where the 3,000 gallons of water per minutes will be captured and grit removed. Any storm water will be captured and stored there. From the headworks the water

will be pipelined to the treatment plant about 3,500 feet farther downstream.

Mr. Darby then explained the steps in the treatment process using a schematic on page 11 of Attachment 1.

Mr. Darby concluded his presentation by enumerating the benefits of the Mercury Treatment Facility:

- Immediate reduction in mercury releases to UEFPC and make progress toward regulatory compliance;
- Control potential increases in mercury releases resulting from future demolition of mercury-use buildings;
- Supplement other response actions underway or planned to achieve goal of eliminating fish advisories and use restrictions in East Fork Poplar Creek.

CH2M Hill is a subcontractor to UCOR, DOE's prime cleanup contractor in Oak Ridge. CH2M Hill is designing the headworks. Mr. Buttram presented a 3D illustration of the headworks showing different views of the facility (Attachment 2) and explained how water would move through the headworks and storm water storage tank.

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

Ms. Price – What is the chemical composition of the solids that are removed; how inert is it; what kind of volume are you expecting; where is it going to go? Mr. Darby – The hazardous constituent is mercury. There is some uranium in the water, but it is in very low concentrations. It will be disposed in a facility where it meets the waste acceptance criteria and is compliant with Resource Conservation Recovery Act land disposal restrictions. There is potential that the filter cake will bind with the mercury enough that it meets landfill restrictions and that it would not fail the toxicity characteristic leaching procedure (TCLP) tests. If it doesn't meet TCLP limits it will be treated so that it does. One waste disposal option is at the Chestnut Ridge landfill just south of Y-12. Another is the Environmental Management Waste Management Facility. If it can't go in either of those we'd be looking at off-site alternatives, possibly out west. As far as volume of material, we don't have a good handle on that at this time. During the first year of operation we'll be getting a handle on waste volumes and specific concentrations. Mr. Buttram – To begin we might produce 1 to 5 roll off bins a week; a roll off bin might have 20 cubic yards of waste. Regarding the form of the mercury, we're forming a mercury precipitant using an organosulfide polymer. The sulfur forms a very stable compound with mercury. In treatability tests it all passed TCLP tests.

Mr. Paulus – How confident are you of the \$146 million cost estimate without a final design? Ms. Wilkerson – Within DOE we have a process called the 413.3 process. It's a process we follow to get critical decisions for every step of a project. The first step is to establish a conceptual design and a cost range and that's where we are at this point. The cost range is \$120-240 million. Mr. Paulus – The presentation was a cost estimate of \$146 million, with a \$3.1 million operating cost. Is that a target number or maximum number or is that what you're hoping for? Ms. Wilkerson – That's a point estimate based on CERCLA cost estimating of related practices. Right now the range is about \$126 million, but there are risks because we are in an early stage of design. We have to account for those risks and place contingencies on them. When we get to final design we'll have a baseline with a point estimate that includes the contingencies, and then we will know more what the baseline for the project will be in terms of schedule and costs.

Mr. Hatcher – It's not clear what the state of the mercury is that comes in and is ultimately separated. From the density of mercury it appears much of it comes out as solid. Is there a significant portion of it in solution? Mr. Buttram – Over the years we've taken samples from the creek at Outfall 200 under dry weather and storm conditions. We did a series of treatability tests

and a number of characterization studies. There is a lot of mercury in the solids. It can be from 5 to 30 percent. We did treatability studies on the solids that had not been through the treatment process and those passed TCLP tests. The other 70 to 95 percent of the flow is dissolved mercury. In the treatability studies on that we got excellent removal efficiencies, more than 99 percent. Now that was in a lab; field conditions will be different. But we were pleased with the process development results.

Ms. Joldersma – What happens to the water in the big storage tank? Mr. Darby – It's stored because during a storm the flow is exceeding the capacity of the treatment plant. As the storm passes and the flow goes down and there is extra capacity at the plant, we gradually release water from the tank to the pipeline that goes to the treatment plant and it's treated there. We want to empty it as quickly as possible because sometimes there are back-to-back storms and we want to be ready to catch the next storm flow. Ms. Joldersma – At some point when the mercury levels diminish would the plant no longer be needed? Mr. Darby – The goal is that it doesn't operate forever. It costs more than \$3 million a year to operate it. It's needed now, but in time the sources that are releasing mercury will be eliminated. There should be a point where we don't need the treatment plant and it would be decommissioned and demolished like other buildings in that part of Y-12.

Mr. Trujillo – I was impressed with the adaptive management approach to make changes as needed. Will money be available to make any changes? Ms. Cange – Adaptive management is a component of the plan for overall cleanup at Y-12. The treatment system is to be built in a modular and treatable way. What we have agreed to with EPA and TDEC is that we will construct the treatment system, assuming the preferred alternative is selected, and operate it for up to two years to measure its performance to see if we can achieve the ambient water quality criteria of 51 parts per trillion. If we are not successful we have various options available to us. We could modify the system, for example add a polishing step to further reduce the effluent of the system. Or we could do other things at the site that may help reduce the concentration of the mercury in the water in addition to the system operating as it is. An example would be stabilization of the creek bank. So we will adapt as we learn more about the performance of the system and we learn more about the options we should be evaluating to determine what the next best approach is. We have an annual appropriation process where we build a budget two years in advance. We then go through a fairly lengthy process where we finally have an appropriation bill from Congress. We are careful to build in requests for funding, not only for what we have started, like this project, but also in our baseline for cleanup. As we complete cleanup of ETTP the funding at that location will be going down and we anticipate funding will go up for Y-12. We anticipate level funding overall for the program and our request would include funding for Y-12.

Mr. Trujillo – There was mention of some excavation of about 35 feet. How big of an area will that be? Mr. Buttram – It will be approximately a quarter acre, about 10,000 square feet. Work is being done to collect geotechnical information so we can design the foundation for the structure. Mr. Trujillo – My concern is what you may find when you excavate knowing the age of the plant and the things that have been built there. Will you do any exploratory work? Mr. Buttram – Absolutely. Mr. Darby is the project manager for the characterization work at the headworks and at the treatment plant site. We're going to get environmental characterization data on radioactive and chemical contamination in the area. We'll also get geotechnical data. We'll do a number of borings to help us design the foundation and understand what the subsurface conditions are like. Ms. Cange – The other part of that is each of the sites on the Oak Ridge Reservation has excavation and penetration permit processes that have to be done to make sure we're not hitting utility lines and things of that nature.

Mr. Wilson – You mentioned that 1.2 million pounds of mercury are unaccounted for. Will there be characterization of the different materials so you can get an estimate of what you're actually removing and narrow down the unaccounted for mercury? Mr. Darby – That material, whether filter

cake or solids from the grit chamber, will have to be sampled extensively to determine if it meets the waste acceptance criteria for disposal facilities. We'll have a handle on what's in the material and we'll have the volume that we're generating. We'll have an idea of the grams of mercury we're removing from the system. Mr. Buttram – As far as the treatment plant goes, over the past year we've developed a model after looking at data of the past 20 years of mercury flux in UEFPC. That's how we are able to estimate 80 to 85 percent mercury reduction. That's a combination of soluble mercury that will be taken out by the treatment process as well as mercury that might be in solids removed by the grit chamber.

Committee Reports

EM & Stewardship – Mr. Hatcher said the committee had a follow up discussion from the July ORSSAB meeting on the status of the Oak Ridge Research Reactor pool leak. He said the process of having a general board discussion and a follow up discussion at the committee meeting worked well and will be a good model for FY 2016.

He said the committee will have a follow up discussion on this evening's presentation on the preferred alternative for the proposed plan for a Mercury Treatment Facility at its September 16 meeting. The committee will discuss a draft recommendation on the proposed plan and preferred alternative.

Executive – Mr. Hemelright reported that Corkie Staley has been the ORSSAB representative on the advisory committee for the Center for Oak Ridge Oral History. She wishes to relinquish that position, so Mr. Hemelright asked if anyone was interested in taking that role should contact him or ORSSAB staff.

Mr. Hemelright said that at the annual meeting in August those in attendance agreed on having presentations at board meetings be general in nature and following questions should not be too technical. More detailed and technical discussions could take place at the EM & Stewardship Committee meetings. It was decided that when possible tours of areas discussed at board meetings should be set up between the board meeting and the EM & Stewardship Committee meeting. In order to accommodate tours, the EM & Stewardship Committee meetings will be moved to the fourth Wednesday of the month. The Executive Committee meetings will move to the first Wednesday of the month. Those changes will take effect in October.

The Executive Committee also discussed development of a work plan for FY 2016 that will incorporate topics suggested by DOE, EPA, and TDEC at the annual meeting. Those topics are being scheduled for monthly presentations.

Mr. Hemelright said the committee discussed two different agenda formats for FY 2016 and the committee decided on a 90-minute agenda with no mid-meeting break.

Mr. Hemelright reported on the EM SSAB Chairs' meeting that was held September 1-3 in Santa Fe, N.M. One of the things discussed was a white paper on engaging the public in the discussion of DOE EM budget request development. The white paper was drafted by Ms. Cook and was well received at the chairs' meeting.

There were updates on waste and waste disposition at the various sites. There was a report on the status of the Waste Isolation Pilot Plant, which is currently closed. Mr. Hemelright said he didn't expect the plant to reopen before fall of 2016.

Monica Regalbuto has been confirmed by the Senate as the new DOE Assistant Secretary for EM.

The chairs discussed a recommendation on Supplemental Environmental Projects (SEPs). SEPs are

ways for DOE to compensate for missed regulatory milestones by doing something that would benefit the environment or related communities instead of paying fines to regulators. The draft recommendation will come to ORSSAB for consideration. Mr. Czartoryski asked if funding for the SEPs would come from site budgets or if it would be money from DOE Headquarters. Mr. Hemelright said the money would come from site budgets. Mr. Czartoryski said the regulators work closely with DOE to avoid missing milestones.

ORSSAB will host the next chairs' meeting April 19-21, 2016 at the DoubleTree Hotel in Oak Ridge.

Announcements and Other Board Business

ORSSAB's next scheduled meeting will be Wednesday, October 14 at 6 p.m. at the DOE Information Center. The topic will be an update of progress made at ETTP.

Ms. Lyons was recognized for her service to the board.

The minutes of the June 10 meeting were approved.

Belinda Price, Alfreda Cook, and Dave Hemelright were elected chair, vice chair, and secretary respectively for FY 2016.

Federal Coordinator Report

Ms. Noe reiterated Mr. Hemelright's comments that topics for board presentations were being scheduled and put in a draft work plan that will be provided at the next Executive Committee. Ms. Noe said the draft will have to be reviewed by DOE Headquarters first.

Motions

9/9/15.1

Mr. Baker moved to approve the minutes of the June 10 meeting. Mr. Paulus seconded and motion passed **unanimously**.

9/9/15.2

Ms. Lyons presented the slate of candidates for board officers for FY 2016 submitted by the Nominating Committee at the board's annual meeting in August. The slate included Ms. Price, Ms. Smalling, and Mr. Hemelright for chair, vice chair, and secretary respectively. Ms. Lyons noted that Ms. Smalling had requested her name be removed from the slate. Ms. Lyons asked for nominations for vice chair from the floor. Mr. Paulus nominated Mr. Wilson. Mr. Baker nominated Ms. Cook. There were no other nominations and Ms. Price moved that nominations close. Mr. Baker seconded. The motion to close nominations was **approved** unanimously.

Ms. Lyons called for a vote on the nominations for vice chair. Ms. Cook received 6 votes. Mr. Wilson received 5 votes. Mr. Hemelright and Ms. Lyons abstained. Ms. Cook was elected to replace Ms. Smalling as candidate for vice chair.

Mr. Hatcher moved to accept the new slate of candidates for ORSSAB officers for FY 2016. Mr. Baker seconded. The motion was **approved** with 12 members voting 'yea' and 1 abstention (Mr. Hemelright).

Ms. Price will be chair, Ms. Cook vice chair, and Mr. Hemelright secretary for FY 2016.

Action items

None.

The meeting adjourned at 7:34 p.m.

Attachments (2) to these minutes are available on request from the ORSSAB support office.

I certify that these minutes are an accurate account of the September 9, 2015, meeting of the Oak Ridge Site Specific Advisory Board.

Dave Hemelright, Secretary

Belinda Price, Chair
Oak Ridge Site Specific Advisory Board
DH/rsg

DATE



Checklist

Recommendations and Comments Consideration for Board Approval

- I. **Title:** Recommendation on the Preferred Alternative for the Proposed Plan for Water Treatment at Outfall 200 at Y-12 National Security Complex.
- II. **In response to (why necessary):** At the request of DOE Oak Ridge Environmental Management to provide a recommendation on the Proposed Plan for a Mercury Treatment Facility at Y-12 to reduce the amount of mercury entering Upper East Fork Poplar Creek. Mercury lost from previous operations at Y-12 is in storm sewers and under buildings and makes its way to Outfall 200 and into the creek.
- III. **Committee:** Environmental Management & Stewardship
- IV. **Date submitted:** October 14, 2015
- V. **Date by which action is requested or required:** October 14, 2015
- VI. **Previous considerations:** None
- VII. **White Paper (if applicable):**
- VIII. **References (if applicable):**



Many Voices Working for the Community

Oak Ridge Site Specific Advisory Board

DATE

Susan Cange
Manager
Oak Ridge Office of Environmental Management
U.S. Department of Energy
P.O. Box 2001, EM-90
Oak Ridge, TN 37831

Dear Ms. Cange:

Recommendation: Recommendation on the Preferred Alternative for the Proposed Plan for Water Treatment at Outfall 200 at Y-12 National Security Complex

At our October 14, 2015, meeting, the Oak Ridge Site Specific Advisory Board approved the enclosed recommendation on the Preferred Alternative for the Proposed Plan for Water Treatment at Outfall 200 at Y-12 National Security Complex.

We appreciate your consideration of our recommendation and look forward to receiving your response by December 15, 2015.

Sincerely,

Belinda Price, Chair
BP/rsg

Enclosure

cc/enc:

Dave Adler, DOE-ORO
Dave Borak, DOE-HQ
Fred Butterfield, DOE-HQ
Kristof Czartoryski, TDEC
Connie Jones, EPA Region 4
Terry Frank, Anderson County Mayor
Melyssa Noe, DOE-ORO
John Owsley, TDEC
Mark Watson, Oak Ridge City Manager
Ron Woody, Roane County Executive
File Code 140



Oak Ridge Site Specific Advisory Board Recommendation on the Preferred Alternative for the Proposed Plan for Water Treatment at Outfall 200 at Y-12 National Security Complex

Background

Mercury contamination at the Y-12 National Security Complex (Y-12) is widespread and has been indentified in soil, sediment, surface water, groundwater, in and underneath buildings, drains, and sumps. Mercury continues to be released into Upper East Fork Poplar Creek (UEFPC) from several sources.

Mercury contamination at Y-12 is the result of operations that took place primarily in three buildings at the west end, namely, Alpha 4, Alpha 5, and Beta 4, and to a lesser extent in Alpha 2. These buildings are located in an area known as the West End Mercury Area (WEMA).

From the 1950s to 1963 large amounts of mercury were used in the three buildings where lithium isotopes were separated for weapons production. About 24 million pounds of mercury were used, of which about 2 million pounds were unaccounted for and of this, about 700,000 pounds are estimated to have escaped in the air, surface water, soils, and sediments.

The most urgent issue to address at Y-12 is the presence of mercury in surface water. Mercury moves through the storm sewer system in the WEMA to Outfall 200, where the headwaters of UEFPC emerge. Mercury in the creek flows through Y-12 to Station 17, where the creek exits the plant, becoming East Fork Poplar Creek, which eventually empties into the Clinch River to the west.

The objectives for mercury cleanup at Y-12 are to reduce mercury in surface water and stabilize and eliminate mercury in the soils. The Department of Energy Oak Ridge Office of Environmental Management (DOE EM) has been working with the Environmental Protection Agency and the Tennessee Department of Environment and Conservation to arrive at a solution for mercury remediation. A draft mercury strategy plan was submitted to the regulators in March 2013 followed by a workshop where discussions were held about mercury challenges and what can be done. The consensus of the participants was that the problem was complex and will require a number of solutions that are complementary with an adaptive management plan.

One of those solutions is to reduce mercury leaving the Y-12 Plant via surface water. Remedial alternatives have been developed for construction of a new water treatment facility to treat discharges from the WEMA storm sewer system at Outfall 200. Water emerging at Outfall 200 would be treated at that point with a mercury treatment plant.

In July 2015 DOE EM issued a Proposed Plan for Water Treatment at Outfall 200 Under the Record of Decision for Phase I Interim Source Control Actions in the Upper East Fork Poplar Creek Characterization Area (DOE/OR/01-2661&D2). The proposed plan describes several alternatives for constructing a water treatment plant and proposed a preferred alternative.

Discussion

The proposed plan offers two basic alternatives and several modifications under Alternative 2. Alternative 1 is a No Action Alternative that is required under the Comprehensive Environmental Response, Compensation, and Liability Act to provide a comparative baseline against which other alternatives can be evaluated.

Alternative 2 is to build a water treatment plant at Outfall 200. Alternative 2 includes several proposed modifications:

- Alternative 2a: Water Treatment at Outfall 200 with 1500 gallons per minute (gpm) Treatment Capacity and No Stormwater Storage;
- Alternative 2b: Water Treatment at Outfall 200 with 3000 gpm Treatment Capacity and No Stormwater Storage;
- Alternative 2c: Water Treatment at Outfall 200 with 3000 gpm Treatment Capacity and 2 Million Gallons of Stormwater Storage;
- Alternative 2d: Water Treatment at Outfall 200 with 3000 gpm and 10 Million Gallons of Stormwater Storage.

Details of all of these alternatives are found in the proposed plan (DOE/OR/01-2661&D2).

DOE's preferred alternative is Alternative 2c. Members of the Oak Ridge Site Specific Advisory Board Environmental Management & Stewardship Committee reviewed the proposed plan and discussed the preferred alternative at its September 16, 2015, meeting and endorsed DOE's preferred Alternative 2c.

Recommendation

The Oak Ridge Site Specific Advisory Board recommends Alternative 2c in the Proposed Plan for Water Treatment at Outfall 200: the construction of a new water treatment facility near Outfall 200 to manage UEFPC stream flow of 40,000 gpm. The system would provide treatment capacity for 3000 gpm of influent surface water plus 1000 gpm of recycle flows (e.g., backwash water and filter press filtrate) and stored stormwater. The stormwater storage capacity will be 2 million gallons.

The Adaptive Management strategy is reasonable and with modularization being part of the design, construction and operational process, revisions and/or additions to the treatment system may be necessary.

ENVIRONMENTAL MANAGEMENT SITE-SPECIFIC ADVISORY BOARD

Hanford
Oak Ridge

Idaho
Paducah

Nevada
Portsmouth

Northern New Mexico
Savannah River

Dr. Monica Regalbuto
Assistant Secretary for Environmental Management
U.S. Department of Energy, EM-1
1000 Independence Avenue, SW
Washington, DC 20585

Dear Dr. Regalbuto:

Background

The Department of Energy (DOE) Environmental Management (EM) sites with legacy waste awaiting permanent off-site disposal have been, or could be, subject to large fines from their respective regulatory agencies for failure to meet legally mandated deadlines for permanent disposal of legacy waste. For example, the New Mexico Environment Department recently fined Los Alamos National Laboratory (LANL) and the DOE Waste Isolation Pilot Plant (WIPP) \$54 million for failures connected to a radiation leak when a drum of waste processed at LANL breached a year ago at WIPP, shutting down the nation's nuclear waste repository. LANL has also acknowledged it will miss deadlines set for later this year for long-term waste cleanup at LANL set in a binding consent decree.

Payment of real or potential multi-million dollar fines has the effect to further reduce the ability of these EM Sites to successfully meet mandated and legally binding cleanup goals. In most cases states have the option to use the funds collected on fines for work unrelated to the issues that led to the fine or for the direct benefit of residents of the affected area. A more effective use of funds would be to use the money collected from fines to fund supplementary environmental projects, given that EM funding allocated to DOE and/or the National Nuclear Security Administration for EM work should be used to protect and/or improve the health and environment of the citizens of the geographic area and population affected by the previous disposal of legacy wastes at the DOE sites.

Comments and Observations

In lieu of fines and penalties that could be required and instituted at the respective facilities, the EM Site-Specific Advisory Board (SSAB) recommends that DOE-EM consider Supplemental Environmental Projects (SEPs) as a beneficial and amenable means to help accomplish the legally mandated cleanup goals at DOE facilities.

An SEP is defined as an environmentally beneficial project which a violator voluntarily agrees to undertake in settlement of an enforcement action but which is not legally required by law. In

addition, the U.S. Environmental Protection Agency (EPA), and most state regulatory agencies, allow for the implementation of SEPs in lieu of a portion of civil penalties calculated under the Civil Penalty Policy, when such payment of fines and penalties are imposed;

There are seven common categories of projects that can be acceptable SEPs:

- Public Health
- Pollution Prevention
- Environmental Protection
- Environmental Restoration
- Environmental Assessments and Audits
- Environmental Compliance
- Renewable Energy

Recommendation:

The EM SSAB recommends that DOE-EM;

1. Pursues SEPs in lieu of fines and penalties issued by regulators.
2. Pursues SEPs, in lieu of new fines and penalties imposed by a new compliance order issued by regulators for violations.
3. Proposes SEPs in settlement of enforcement actions by regulators that meet the following restrictions:
 - Are consistent with the EPA SEP policy and Region implementing guidance
 - Are consistent with or advances the Resource Conservation and Recovery Act
 - Have adequate nexus to the violation as determined by the relevant regulators sole discretion, with site stakeholder and public engagement.
 - Involve the management or administration of the project or funds by the relevant regulator; (state and/or EPA) and benefits the community and/or environment near the impacted site by the violation while providing educational opportunities with contractors and public institutions of higher education.
4. Uses SEPs to primarily benefit the community that is directly impacted by the violation.

In Summary:

It is the intent of the EM SSAB to ensure that DOE-EM funds programmed and allocated for the cleanup and mitigation of legacy waste disposal at sites are used for those purposes and for the benefit of the citizens of the affected areas, where the basis of the violations cited by the relevant regulator occurred.

References:

1. EPA Guidelines for Supplemental Environmental Projects
2. State Supplemental Environmental Project Policy Act/Regulations

Steve Hudson, Chair
Hanford Advisory Board

Herbert Bohrer, Chair
Idaho National Laboratory
Site EM Citizens Advisory
Board

Donna Hruska, Chair
Nevada SSAB

Doug Sayre, Chair
Northern New Mexico
Citizens' Advisory Board

David Hemelright, Chair
Oak Ridge SSAB

Ben Peterson, Chair
Paducah Citizens
Advisory Board

William E. Henderson II, Chair
Portsmouth SSAB

Harold Simon, Chair
Savannah River Site
Citizens Advisory Board

REPORTS & MEMOS

EM Project Update

ETTP	August	September
Zone 1 ROD	A comment resolution meeting on the D3 Proposed Plan was conducted with the regulators. Preparation of the D4 Proposed Plan was initiated.	Additional TDEC comments received. Draft responses to comments and Proposed Plan changes transmitted to regulators for review.
Zone 2 ROD	K-903 pad debris hauling is 50 percent complete and the truck alley drain installation is 75 percent complete.	K-903 pad demolition and debris hauling was completed and the truck alley drain installation was also completed.
		The D0 PCCR was completed documenting characterization of EU Z2-06, the site of Building K-31.
		The characterization of EUs Z2-20, 21, and 22 (Building K-25 footprint) was completed.
K-25/K-27 D&D	K-27 deactivation is 91.5 percent complete. Foaming of the process gas piping and equipment is 99 percent complete.	Foaming of the process gas piping and equipment is complete.
	Process Gas Equipment removal in Building Units 402-8 and 402-9 are 95 percent complete.	Process Gas Equipment removal in Building Units 402-8 and 402-9 are complete.
	The K-27 pipe removal activities are 99 percent complete.	The K-27 pipe removal activities are 99.5 percent complete.
	The K-27 project also initiated transite panel removal.	The K-27 project transite panel removal is 27 percent complete.
	The K-27 FY 2014 PCCR was approved by the regulators.	
K-31 Demolition	K-31 topsoil, hydro seeding, and Storm Water Pollution Prevention Plan berm removal activities have been completed.	K-31 demobilization activity decontamination of trucks was completed and removal of trailers was also completed.
		The PCCR documenting demolition of Building K-31 was completed.
		Approvals have been received from TDEC and EPA for the transfer of K-31 and K-33 Areas (approx. 197 acres). Transmittal of the final transfer package is pending completion of the independent verification of the environmental condition of the property.
ORNL	August	September
U-233 Disposition	The contract negotiations with Isotek Systems, LLC were completed on Contract Change Proposal 27 for the incurred costs associated with the increases in Safeguards and Security staffing.	Completed installation of the new concrete pad for the replacement back-up generator 3123. Also began the field work associated with the replacement of two back-up diesel generators.
	The Safety Design Strategy for the Processing Campaign was approved.	Work began on the Building 3019 roof replacement. Also technical and price proposals for the replacement of High Efficiency Particulate Filters associated with the Cell Off-Gas and Lab Off-Gas systems were submitted.
OR Research Reactor Pool Seep	Completed removal of irradiated components from the ORRR pool, loaded them into the shipping cask, and shipped the cask.	Survey of the pool with remaining contents was completed. Planning and preparation for removal of interferences over and around the pool is ongoing.

EM Project Update

Y-12 Site	August	September
Outfall 200 Mercury Treatment Facility (MTF)	The Proposed Plan was approved by the regulators and a public meeting scheduled for September 2nd.	A public information session was held to gather public comment and discuss the Proposed Plan. The public comment period for the document closes on October 18th.
	Preliminary design of the OF 200 MTF is proceeding. Site survey is complete and site geotechnical and environmental characterization is in progress.	
Off-Site Cleanup/Waste Management	August	September
Environmental Management Disposal Facility (EMDF)	A variety of local dignitaries and members of the Oak Ridge City Council were provided tours of the EMWMF and proposed EMDF. Comments were received from EPA and TDEC on the RI/FS. Comment resolution meetings have started.	Members of the Oak Ridge City Council continue to be provided tours of the EMWMF and proposed EMDF. DOE is working with EPA and TDEC to resolve their comments on the RI/FS.
TRU Waste Processing Center		Repairs and functional testing of the manipulator were completed and waste processing resumed in the Hot Cell.
		The Documented Safety Analysis revision to address the processing of high neutron waste was submitted.
ORR Groundwater Strategy	The second round of sampling of wells and springs located west of Oak Ridge Reservation is underway. There are 32 wells and 16 springs being sampled.	The second round of sampling of wells and springs located west of Oak Ridge Reservation is complete. A total of 34 wells and 15 springs were sampled.
	An Oak Ridge Reservation regional groundwater modeling effort is ongoing.	OREM's Technical Advisory Group for the groundwater modeling effort met to review model progress, including tests completed on the smaller scale Test Case model and initial buildout of the regional scale flow model. Plans for FY 2016 were also discussed.
Water Resources Restoration Program	A meeting was held with the regulators to review responses to comments on the D1 2015 Remediation Effectiveness Report. A D2 version is being prepared.	The D2 2015 Remediation Effectiveness Report was submitted to the regulators.
Reindustrialization	OREM hosted a public information session about the recently released draft Environmental Assessment for proposed property transfer. The draft document evaluates the potential impacts of transferring approx. 170 acres of DOE property located at ETTP to the Knoxville Metro Airport Authority for constructing and operating a general aviation airport. The meeting attracted more than 60 area residents.	

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

EMDF – Environmental Management Disposal Facility

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

FFS – Focused Feasibility Study

FPD – federal project director

FY – fiscal year

GIS – geographical information system

GW – groundwater

GWTS –groundwater treatability study

IROD – Interim Record of Decision

LEFPC – Lower East Fork Poplar Creek

LLW – low-level waste

MLLW – mixed low-level waste

MSRE – Molten Salt Reactor Experiment

MTF – Mercury Treatment Facility

MV – Melton Valley

NaF – sodium fluoride

NDA – non-destructive assay

NEPA – National Environmental Policy Act

NPL – National Priorities List

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

NTS – Nevada Test Site

OR – Oak Ridge

OREM – Oak Ridge Office of Environmental Management

ORNL – Oak Ridge National Laboratory

ORO – Oak Ridge Office

ORR – Oak Ridge Reservation

ORRR – Oak Ridge Research Reactor

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

PP – Proposed Plan

PPE – Personal Protective Equipment

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

RDWP – Remedial Design Work Plan

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

TSCA – Toxic Substances Control Act

TWPC – Transuranic Waste Processing Center

U – uranium

UEFPC – Upper East Fork Poplar Creek

UPF – Uranium Processing Facility

URS/CH2M – (UCOR) DOE's prime cleanup contractor

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

Travel Opportunities

Meeting/Event	Dates	Location	Reg. Cost	Website	Conference Lock Date; # Allocated Attendees	Deadline to Submit Requests
FY 2015						
Intergovernmental Meeting with DOE (Pending requests: ___)	November 18-20, 2015	New Orleans	none	http://www.cvent.com/d/hrq66w	TBD	TBD
Waste Management Symposium (Pending requests: Hemelright, Price, Cook, Paulus, Truillo)	March 6-10, 2016	Phoenix	\$995 (est.)	www.wmsym.org	11/1/2015	9/23/15
National Environmental Justice Conference & Training (Pending requests: ___)		Washington, D.C.	none	http://thenejc.org	N/A	
Fall Chairs Meeting (Pending requests: ___)		TBD	none		N/A	
Ohio EPA National Brownfields Conference (Pending requests: ___)		Columbus, Ohio	\$125	http://www.brownfieldsconference.org/en/home		
RadWaste Summit (Pending requests: ___)		Summerlin, Nevada	\$625	http://radwastesummit.com/		
Western Waste Site Tour (Pending requests: _____)	Postponed pending resolution of issues at WIPP	Waste Isolation Pilot Plant, Nevada Nat'l Security Site	none	none		

Shading indicates closed trips



Oak Ridge Site Specific Advisory Board

TRIP REPORT

- I. Name of Traveler:** David Hemelright
- II. Date(s) of Travel:** 31 August -4 September 2015
- III. Location of Meeting:** LaFonda Hotel, Santa Fe, NM
- IV. Name of Meeting:** Semi-Annual Advisory Board Chairs' Meeting
- V. Purpose of Travel:**

To attend meeting, representing the Oak Ridge Site Specific Advisory Board and interact with the other seven (7) board chairs and DOE EM headquarters personnel and presenters. Toured local site, Los Alamos. Visited Bradbury Science Museum, TRU waste holding area (TA 54, Area G), Chromium plume pump and treat operation in Mortandad Canyon, Overview of offsite ground water control weirs, et al leading to Rio Grande River basin east of site, and toured ancient site (pre-Columbian) at Tsirege Pueblo. Prior to entering the sacred Native American Site we were hosted by the local mayor and heard a prayer conducted in native language by a Pueblo Elder. After an ice cream social and a bus ride we all returned to our host hotel ready for the next two (2) days' activities.

VI. Discussion of Meeting:

The meeting is a semi-annual event where all the chairs and vice-chairs of the eight (8) advisory boards gather to discuss common and sometimes unique problems that the sites are facing, and see to if there are 'things' that other sites are doing that may benefit one's own site. It is an excellent opportunity to see first-hand what the conditions, problems, etcetera at each individual site are, and how DOE EM is funding, and why. The first day is a tour of the local site, in this case, Los Alamos Site. There is a formal agenda established in which talks and presentations are given, with some always being the same, such as the Chairs' Round Robin where each site speaks of an event or, hopefully, an accomplishment that is unique to the site, but from which other sites may benefit. It is an opportunity to 'brag' of work being done at the specific sites and an opportunity to show that the dollars invested in the DOE EM clean-up program do have positive results. From these talking points it is hoped that increased funding will become available to complete the clean-up of the old waste disposed at the sites in a timely manner.

After welcome talks from the Mayor of Santa Fe, Javier Gonzales and the acting Site Manager, Christine Gelles, Doug Sayer Chair of the Northern New Mexico Citizen's Advisory

Board gave us all a hearty welcome to his world. The morning (9/2) started with Frank Marcinowski, Deputy Assistant Secretary for Waste Management, giving an update on the status of waste management, sans WIPP. Each Chair then presented their most recent accomplishment since the Spring Chairs' Meeting in Savannah River. In keeping up with learning more about how DOE-EM operates Chris Honkomp, Acting Associate Deputy Assistant Secretary for Acquisition, shared with the assembled group how DOE-EM is streamlining and making more accountable their contracting process for site clean-up; contracting strategies. Tania Smith, Acting Associate Deputy Assistant Secretary for Site Restoration gave an update of site restoration projects underway across the EM complex.

The first day ended with a discussion on the proposed Board recommendation of utilizing Supplementary Environmental Projects (SEPs) in lieu of regulator fines for missed milestones. The SEP recommendation was brought up by the NM CAB because of the missed milestones caused by WIPP shut down. This also gravely affects milestones in Idaho, too.

Continuing with the budget work that Steve Hudson and Alfreda Cook worked on between the Chairs' Meeting, Alfreda's paper on "Best Practices for Informed Budget Recommendations" was presented and discussed at length.

Both projects were discussed at length and sent back to be reviewed and "wordsmithed" overnight. Grammatical considerations were to be evaluated, also.

Once again Eric Roberts was able to effectively "herd the cats" in the same directions, and keep the meeting on track headed in the right direction. I did notice that the chairs work exceedingly well together with no signs of animosity, or jealousy that one site should dominates over the other.

Day Two (9/3) commenced with an update from DOE-EM HQ by the DFO, David Borak. Monica Regalbutto has been confirmed as EM-1. Mark Whitney is now firmly entrenched as EM-2. They complement each other. Frank Marcinowski gave an update on WIPP clean up and investigations. It appears as if WIPP will announce the potential date for resumption of shipments in the fall of 2016, about a year from now. New systems and equipment are being tested and installed. Following Frank, Kristen Ellis, Director, Office of Intergovernmental & Community Activities, spoke on communicating with and engaging the public on issues important to the local denizens.

The revised and re-worded SEP Recommendation and the White Paper on "Best Practices for Informed Budget Recommendations" passed muster with all the Chairs. Both will be presented to each local board at appropriate times.

VII. Significance to ORSSAB:

Opportunity to see and hear what other site advisory boards are doing and how they handle their unique situations.

VIII. Names & Telephone Numbers of Significant Contacts:

Contact information for all participants is also available through DOE EM, Washington, if so desired.

IX. Action Items:

Approve SEP Recommendation at SSAB meeting

X. Traveler's Signature & Date:

Signature: *Dave Hemelright*

Date: 8 September 2015