Oak Ridge Site Specific Advisory Board Monthly Meeting



Wednesday, June 10, 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.

CONTENTS

AGENDA

PRESENTATION MATERIALS – Oak Ridge Reservation Groundwater Strategy Status – to be distributed at meeting

CALENDARS

- 1. June
- 2. July (*draft*)

BOARD MINUTES/RECOMMENDATIONS & MOTIONS

- 1. February 11, 2015, draft meeting minutes
- 2. March 11, 2015 draft meeting minutes
- 3. May 13, 2015 draft meeting minutes
- 4. Recommendations on the FY 2017 DOE Oak Ridge Environmental Management Budget Request
- 5. EM SSAB Chairs' Recommendation on Waste Isolation Pilot Plant

REPORTS & MEMOS

- 1. EM Projects Update
- 2. Abbreviations/Acronyms for EM Projects Update
- 3. Travel Opportunities
- 4. Trip Report: Jennifer Kasten on 2015 Environmental Justice Conference
- 5. Trip Report: Fay Martin on 2015 Environmental Justice Conference
- 6. Trip Report: Belinda Price on Waste Management Symposium
- 7. Trip Report: Alfreda Cook on EM SSAB Chairs' Meeting
- 8. Trip Report: Dave Hemelright on EM SSAB Chairs' Meeting
- 9. Trip Report: Pete Osborne on EM SSAB Chairs' Meeting



Oak Ridge Site Specific Advisory Board Wednesday, June 10, 2015, 6:00 p.m. DOE Information Center 1 Science.gov Way, Oak Ridge, Tenn.

AGENDA

I.	Welcome and Announcements (D. Hemelright)	. 6:00–6:05
	Tremont Lodge, Townsend, Tenn. B. Presentation of Service Awards to Outgoing Members (S. Cange)	
	C. Introduction of New Student Representatives (S. Cange)	
II.	Comments from the Deputy Designated Federal Officer, and the DOE, EPA, and TDEC	
11.	Liaisons (S. Cange, D. Adler, C. Jones, K. Czartoryski)	. 6:05–6:20
III.	Public Comment Period (L. Hagy)	. 6:20–6:30
IV.	Presentation: Oak Ridge Reservation Groundwater Strategic Plan (Bill McMillan)	. 6:30–7:05
	Question and Answer Period	
BRI	EAK	. 7:20–7:30
V.	Call for Additions/Approval of Agenda	7:30
VI.	Motions	. 7:30–7:35
	A. February 11, 2015, Meeting Minutes (L. Hagy)	
	B. March 11, 2015, Meeting Minutes (L. Hagy)	
	C. May 13, 2015, Meeting Minutes (L. Hagy)D. Recommendations on the FY 2017 DOE Oak Ridge Environmental Management	
	Budget Request (D. Hemelright)	
	E. SSAB Chairs Recommendation: Creation of a Plan and Timetable to Restore the Wo	aste
	Isolation Pilot Plant to Safe Operations, and Evaluation of Safe Alternatives to Reta	
	Waste at its Point of Generation Until WIPP is Restored to Full Operation (D. Heme	elright)
	F. Election of Nominating Committee (D. Hemelright)	
	G. Second Consecutive Absence—Kasten, Stout, Zhou (L. Hagy)	
VII.	Responses to Recommendations & Comments (D. Adler)	. 7:35–7:40
VII	I. Committee Reports	. 7:40–7:45
	A. EM/Stewardship (B. Hatcher, C. Staley)	
	B. Executive (D. Hemelright)	
	 Public Outreach—Earth Day Festival (M. Smalling) Center for Oak Ridge Oral History (C. Staley) 	
IX.	Federal Coordinator's Report (M. Noe)	. 7:45–7:50
X.	Additions to Agenda & Open Discussion	. 7:50–8:00
XI.	Adjourn	8:00



Oak Ridge Site Specific Advisory Board June 2015

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

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

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

Board meetings on cable TV and YouTube	
Knoxville: Charter Channel 6, Comcast Channel 12	Sunday, June 21 and 28 at 1 p.m.
Lenoir City: Charter Cable Channel 3	Wednesdays, 4 p.m.
Oak Ridge: Channel 12	Monday, June 22, 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

July 2015

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Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
			1	2	Independence Day Holiday DOE and/Staff Holiday	4
5	6	7	No ORSSAB meeting this month. New member training.	9	10	11
12	13	14	15 Environmental Management & Stewardship Committee 6 p.m.	16	17	18
19	20	21	22	23	24	25
26	27	28	29 Budget Process Committee 5:30 p.m. Executive Committee 6 p.m.	30	31	

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YouTube	http://www.youtube.com/user/ORSSAB

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Many Voices Working for the Community

Oak Ridge Site Specific Advisory Board

Unapproved February 11, 2015, Meeting Minutes

The Oak Ridge Site Specific Advisory Board (ORSSAB) held its monthly meeting on Wednesday, February 11, 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 Jimmy Bell Richard Burroughs Alfreda Cook Lisa Hagy, Secretary Bob Hatcher David Hemelright, Chair Jennifer Kasten Terri Likens Jan Lyons, Vice Chair Fay Martin Donald Mei Greg Paulus Belinda Price Mary Smalling Scott Stout Ed Trujillo

Members Absent

Noel Berry¹ Howard Holmes Coralie Staley Wanfang Zhou

Liaisons, Deputy Designated Federal Officer, and Federal Coordinator Present

Dave Adler, Department of Energy-Oak Ridge Office (DOE-ORO), Alternate Deputy Designated Federal Officer (DDFO)

Susan Cange, DDFO, DOE-ORO Manager of Environmental Management (EM)

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

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

Melyssa Noe, ORSSAB Federal Coordinator, DOE-ORO

Others Present

Rhonda Bogard, Environmental Quality Advisory Board Susan DePaoli, Pro2Serve Spencer Gross, ORSSAB Support Office John Huotari, Oak Ridge Today Claire Rowcliffe, Student Representative Pete Osborne, ORSSAB Support Office Laura Wilkerson, DOE

Eleven members of the public were present.

¹Second consecutive absence

Liaison Comments

Ms. Cange – Ms. Cange said she was honored to have been named recently as the DOE Oak Ridge Manager for EM. She said she would continue to work closely with the board.

Demolition of the K-31 Building at East Tennessee Technology Park (ETTP) is about 50 percent complete and is expected to be finished by summer 2015. She said demolition of the remaining K-27 Building is expected to begin in about a year. Ms. Cange said with the demolition of K-27 Oak Ridge will be the first site in the world to complete demolition of all of its gaseous diffusion process buildings. So far K-25, K-29, and K-33 have all been demolished.

A Gaseous Diffusion Plant Workshop was completed on this date. Representatives from the three sites in Oak Ridge, Paducah, Ky., and Portsmouth, Ohio, as well as DOE headquarters representatives met for two days in Oak Ridge. About 70 participants looked for opportunities for integration and efficiency improvement in cleaning up those sites.

Mr. Adler – no comments.

Ms. Jones – Ms. Jones said EPA doesn't usually offer comments at these meetings because Ms. Cange and Mr. Adler do a good job of sharing information of what is underway at Oak Ridge and at DOE Headquarters. As such, she said unless there is something EPA feels needs to be emphasized, she prefers to preserve time for board members to ask questions for clarification. She had no other comments.

Mr. Czartoryski – Mr. Czartoryski agreed with Ms. Jones remarks about allowing time for board members to ask questions and had no other comments.

Public Comment

None.

Presentation

Ms. Wilkerson's presentation was an update on the waste disposal capacity for the Oak Ridge Reservation (ORR). The main points of her presentation are in Attachment 1. She began by saying the primary low-level waste disposal location is at the EM Waste Management Facility (EMWMF), which is located just west of the Y-12 National Security Complex. She showed a schematic of how EMWMF is designed (Attachment 1 page 3). EMWMF is primarily above grade with a geologic buffer underneath that is 10 feet thick. Just above the buffer is a liner that includes a leachate collection system that isolates waste from the geologic buffer. From the bottom of the waste to the top is about 75 feet. A final cover is placed over the waste to protect against water intrusion.

The capacity of EMWMF is 2.1 million cubic yards and when finished will cover about 43 acres. It is composed of six cells. The first two are full. Cells 3, 4, and 5 are active and cell 6 will become active as the other cells are filled.

Ms. Wilkerson said additional waste disposal capacity will be needed in order to complete anticipated cleanup of contaminated and unneeded facilities at Y-12 and Oak Ridge National Lab (ORNL).

Ms. Wilkerson said the ability of dispose of cleanup waste on-site is key to the success of the Oak Ridge EM program. About 86 percent of the waste generated by the demolition of the K-25 and K-33 Buildings went to the EMWMF. She said it is the most cost effective way of disposing of the waste. It was estimated that about \$300 million would be saved over the life of EMWMF. But to date about a half a billion has been saved. Disposing waste on site eliminates about 130,000 miles

driving to transport waste off-site, reduces greenhouse gas emissions, and reduces waste handling requirements and worker exposure.

Ms. Wilkerson said projections indicate the EMWMF will be filled to capacity by 2024 (Attachment 1, page 7). A second facility needs to be ready for operation about 18 months before EMWMF is filled. From now until about 2019 a number of steps have to be completed before construction can begin on a new facility.

The process to develop a new waste disposal facility began with a remedial investigation/feasibility study (RIFS), which evaluated three alternatives (Attachment 1, page 8). One alternative is no action, where there would be no coordinated ORR-wide disposal strategy and waste would be handled on a project-by-project basis. The second alternative is on-site disposal and the third is off-site disposal.

The benefits of on-site disposal are noted on page 9 of Attachment 1. Cost savings are estimated to be more than a \$1 billion, cleanup would be accelerated, and there would be a reduction in public and program risk. The chart on page 9 shows the differences in transportation risk of on-site to off-site disposal.

A number of sites were evaluated across the ORR for siting a new facility, to be known as the EM Disposal Facility (EMDF) (Attachment 1, page 10). The conclusion was that the best site for the EMDF would be in the same area as EMWMF (Attachment 1, page 11), because it is historically a waste management area, is isolated from the public, access is restricted, and is consistent with stakeholder input during the siting of EMWMF. In addition, infrastructure for the EMWMF is already in place that can be used to operate the EMDF. The proposed EMDF site is just east of EMWMF.

Page 12 of Attachment 1 shows a diagram of the EMDF and its relation to EMWMF. EMDF would have up to six cells, and would be built as needed.

The schedule for completing all the actions necessary to begin construction of EMDF is noted on page 15 of Attachment 1. The second draft of the RIFS is to be completed in March with a Proposed Plan due in September. A Record of Decision should be signed in May 2016. The public will have an opportunity to comment on both RIFS and the Proposed Plan.

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

<u>Mr. Bell</u> – What is the difference between the EMWMF and the EMDF that requires a year and a half of design changes? <u>Ms. Wilkerson</u> – The main difference is a stream that runs through the EMDF site and it has to be engineered around that stream.

Mr. Bell – You mentioned the Waste Isolation Pilot Plant and that facility being shutdown. I was under the impression it was a plutonium-based facility. Ms. Wilkerson – I was using that as an example of a facility we have no control over and how that can impact what we are able to do or not do at any given time.

<u>Mr. Bell</u> – In the cleanup of K-25 what happened to the nickel barriers? <u>Ms. Cange</u> – That material is currently stored at ETTP in a facility that is targeted to be transferred to the Community Reuse Organization of East Tennessee. We are evaluating options for that nickel that will range from potential reuse to potential disposal. So we will have to execute some plan for that nickel if we want to transfer that facility to the reuse organization.

Ms. Kasten – Do you have a definition for the lower activity waste? Is there a cutoff or criteria? Mr. Adler - There is a legal definition for low-level waste and there will be no non low-level waste going in the EMDF. It will accept waste compared to a waste acceptance criteria. We have numeric values by radionuclides, which we can go up to on average. So it's specified radionuclide by radionuclide and those tables are available. Ms. Kasten - Do you survey it or use process knowledge? Mr. Adler - Both. A lot of money and a lot sampling are dedicated to make sure we know the precise makeup of the waste streams we receive. So there is a strict accounting for the types of wastes and the concentrations of the various constituents that are tracked. Ms. Kasten – Do you have a maximum amount of activity that you expect in that burial site when it's full? Mr. Adler - Theoretically there is. If you take the maximum allowable concentration of each radionuclide and multiplied that by the maximum volume that it's set up to receive that would give you the total curries. Ms. Kasten – The maximum concentration, you're determining that from the legal standard to come up with that number? Mr. Adler – It is derived from regulations, but it's really tied to risk. The facility is not allowed to have any significant impact on groundwater or potential uses of groundwater. So we back calculate from this performance objective to allowable concentrations in the waste streams that come to the site. Ms. Kasten - You don't come up with a maximum design accident scenario? Is that defined for this facility or is that not done for burial grounds? Mr. Adler – For burial grounds of this type we don't do accident failure analyses like are done for a nuclear power plant or facilities that manage more highly radioactive materials. We deal with those types of considerations through the geotechnical features established for the facility and then if there was an earthquake, for example, that damaged the facility, we have to come back in and repair it. The facility does have very thick layers of clay material positioned to deal with time and nature.

<u>Mr. Paulus</u> – The EMDF is 2.4 million cubic yards capacity. Is that going to be big enough? <u>Ms. Wilkerson</u> – Based on our projections we believe it is. We have built in a 25 percent contingency to our projections. It could be 25 percent less if we are right on our projections. And we have the cushion of being able to do 25 percent more. <u>Mr. Paulus</u> – How much will it cost? <u>Ms. DePaoli</u> – The lifecycle cost reported in the D2 RIFS, start to finish was \$817 million, including the contingency factor. We're working on the D3 RIFS and there are some changes that increased to around \$1 billion start to finish and 23 years of operation.

<u>Ms. Cook</u> – How are you going to engineer around the stream? <u>Ms. Wilkerson</u> – It's an underdrain system that would divert water from the waste. <u>Ms. DePaoli</u> – An underdrain will go under the hydrogeologic buffer. The stream itself is trenched. There will be a 10-foot trench and it's filled with material that drains the water and there is also a blanket drain. It would actually drop the water table under the landfill.

Ms. Cook – Was the original waste forecast that drove the capacity of EMWMF too low? Ms. Wilkerson – When the EMWMF was originally developed Y-12 and ORNL had not declared facilities excess to their missions. The primary area of cleanup was at ETTP with just a handful of buildings at Y-12 and ORNL. When Y-12 and ORNL determined they had excess facilities the projections of waste went up. We are now in a position where we have to site a new facility. Ms. Cook – Is there a possibility something else could be added to the baseline and the EMDF would not be large enough to handle the additional inventory? Ms. Wilkerson – We have a comprehensive plan with a lot of data showing what is excess for ORNL and Y-12, so I think we're pretty well covered. But that doesn't mean that 40 years from now Y-12 and ORNL may decide there are other buildings they don't need. The bulk of the really old legacy facilities that supported the Manhattan Project and other development activities have been accounted for.

<u>Mr. Hatcher</u> – Going back to the transportation risks versus on-site disposal. How were the probabilities arrived at, and second don't the probabilities change with the distance to the disposal site? <u>Ms. DePaoli</u> – The transportation risk is calculated on the number of miles. We look at the

routes traveled, cities that are passed through, populations, and we look at accident risks in those areas. Ms. Wilkerson – We made assumptions based on currently available disposal facilities to come up with those estimates.

<u>Mr. Trujillo</u> – The characterization data you're trying to obtain, is that from the hydrogeology? <u>Ms. Wilkerson</u> – It's basically groundwater, elevation, and soil data. <u>Mr. Trujillo</u> – Did you use information from the existing facility? Was the hydrogeology pretty similar? <u>Ms. Wilkerson</u> – There is a wealth of information that was developed for the EMWMF and some that is collected periodically. We use all of that for document preparation. <u>Mr. Czartoryski</u> – The state of Tennessee is also collecting hydrogeological data from wells close to EMWMF. So we're collecting additional data to share with DOE and EPA.

Ms. Bogard – I have a question about the siting. Everything sounded good until we got to the part about the stream. You mentioned there many other locations on the reservation that were considered. What agencies and organizations have been involved with the site selection? It sounds like the comment period will be about this one possible site, and we won't be considering any of the other possible sites. Ms. Wilkerson – The RIFS contains all the information about the sites that were evaluated and what supported the conclusion on the proposed site. When that document is issued to the public that will be an opportunity to provide comments on the site. Ms. Bogard – So that will be the first opportunity for all the other agencies involved? Ms. Wilkerson – No, this will be the third draft version that we will submit to EPA and TDEC. The regulators have been working with us and providing comments on issues to be addressed on the entire process since the original draft.

Mr. Huotari – I recall the City of Oak Ridge was going to have a public comment on this. Is something like that being done? Ms. Wilkerson – The city has hired a consulting group to do an assessment of the impacts of this new cell on the city and the environment and so on. They should be getting a draft version of that document soon. From there I don't know what the process will be on obtaining public input on the assessment. We have provided tours and supporting information to the consulting group that is doing the assessment.

Committee Reports

<u>EM & Stewardship</u> – Mr. Hatcher reported the committee met on January 21 to discuss a possible recommendation on the ETTP Zone 1 Soils Proposed Plan. A drafting committee continues to work on the wording of the recommendation and will be discussed further at the February 18 meeting.

<u>Executive</u> – Mr. Hemelright said he provided a presentation about the board to the Lenoir City Civitan Club on January 20. He said several members of the Civitan had parents who worked on the ORR during the Manhattan Project and the Cold War and they were impressed with the amount of cleanup work that has been done.

The committee discussed a poll conducted by staff asking board members about extending terms of service. The majority of members were in favor of being able to extend terms. The advantage of longer terms would be having experienced members continue to serve if there are difficulties in recruiting new members. Board member Corkie Staley is drafting a recommendation about extending terms of service. Her draft will be reviewed at the committee's February 25 meeting.

The committee discussed asking representatives of the City of Oak Ridge to become more involved with board activities and make a presentation to the board about any concerns they may have regarding the DOE EM program. Mr. Adler said he has spoken with Amy Fitzgerald of the City of Oak Ridge to work with the board as a partner in the progress of the EM program.

Ms. Smalling asked if the board will still be involved in Earth Day. Mr. Hemelright said even though the Public Outreach Committee has been dissolved, the board will still participate in Earth Day and the Secret City Festival if there are enough volunteers to staff an exhibit.

Ms. Cook asked how projects that the Public Outreach Committee was responsible for are now being handled. Mr. Hemelright said most of those projects were handled by staff and will continue to be handled by staff. Ms. Lyons said the Executive Committee will oversee those projects. She said while staff is responsible for publications, news releases, and meeting videos, any board member is welcome to be involved in those projects.

Mr. Paulus said the committee discussed having board meetings at locations other than the DOEIC. He asked if any progress had been made on that discussion. Mr. Hemelright said it's still being considered.

Announcements and Other Board Business

ORSSAB's next scheduled meeting will be Wednesday, March 11, 2015, at the DOE Information Center. The topic will be the status of the Oak Ridge EM Program and the FY 2016 EM budget.

Mr. Hemelright said a reception for Ms. Cange will be held at Pollard Auditorium at Oak Ridge Associated Universities on Thursday, February 19 from 5 to 7 p.m. in recognition of Ms. Cange being named the DOE Oak Ridge manager for EM. Mr. Hemelright said all board members are invited to attend.

Ms. Cange introduced Messrs. Baker, Burroughs, and Trujillo, and Ms. Likens as new members of the board.

The minutes of the January 14 meeting were approved.

The board approved on the second reading a proposed amendment to the ORSSAB bylaws to change the procedure for voting on recommendations (Attachment 2).

The board approved on a second reading a proposed amendment to the ORSSAB bylaws to change the procedure for amending the bylaws (Attachment 3).

Mr. Paulus said several members of the board toured the site of the proposed EMDF on February 5 and in January several members toured ETTP regarding the Zone 1 Soils Proposed Plan. He said it's very helpful to be able to see in person the areas that are discussed at board meetings.

Ms. Cange said the idea of tours or field trips came out of discussions at the November board meeting. She said it is the plan to continue offer tours and field trips to areas where cleanup decisions are to be made.

Federal Coordinator Report

Ms. Noe had no comments.

Additions to the Agenda

None.

Motions

2/11/15.1

Mr. Paulus moved to approve the minutes of the January 14 meeting. Mr. Bell seconded and the motion passed **unanimously.**

2/11/15.2

Mr. Hatcher moved to approve an amendment to the ORSSAB bylaws to change the procedure for voting on recommendations (Attachment 2). Ms. Cook seconded and the motion passed **unanimously.**

2/11/15.3

Ms. Martin moved to approve an amendment to the ORSSAB bylaws to change the procedure for amending the bylaws (Attachment 3). Ms. Hagy seconded and the motion passed **unanimously.**

The meeting adjourned at 7:40 p.m.

Action items

1. Mr. Adler will determine where ED 15 is in Zone 1. **Closed.** A map showing the location of ED 15 in Zone 1 at ETTP was provided to board members on February 10 (Attachment 4)

Attachments (4) to these minutes are available on request from the ORSSAB support office.

I certify that these minutes are an accurate account of the February 11, 2015, meeting of the Oak Ridge Site Specific Advisory Board.

Dave Hemelright, Chair Oak Ridge Site Specific Advisory Board DH/rsg **DATE**



Many Voices Working for the Community

Oak Ridge Site Specific Advisory Board

Unapproved March 11, 2015, Meeting Minutes

The Oak Ridge Site Specific Advisory Board (ORSSAB) held its monthly meeting on Wednesday, March 11, 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 Terri Likens Ed Trujillo Richard Burroughs Jan Lyons, Vice Chair

Alfreda Cook Donald Mei David Hemelright, Chair Belinda Price

Members Absent

Jimmy Bell
Lisa Hagy, Secretary
Bob Hatcher
Howard Holmes¹
Jennifer Kasten
Fay Martin
Greg Paulus
Mary Smalling
Coralie Staley¹
Scott Stout
Wanfang Zhou¹

Liaisons, Deputy Designated Federal Officer, and Federal Coordinator Present

Dave Adler, Department of Energy-Oak Ridge Office (DOE-ORO), Alternate Deputy Designated Federal Officer (DDFO)

Connie Jones, Liaison, Environmental Protection Agency (EPA) Region 4 Melyssa Noe, ORSSAB Federal Coordinator, DOE-ORO

Others Present

Aditya Chourey, Student Representative Susan Gawarecki Spencer Gross, ORSSAB Support Office Claire Rowcliffe, Student Representative Pete Osborne, ORSSAB Support Office

¹Second consecutive absence

Eight members of the public were present.

Liaison Comments

Mr. Adler – Mr. Adler said the recent inclement weather slowed down some of the work being done on the Oak Ridge Reservation (ORR), but there were no major impacts.

Demolition of the K-31 Building at East Tennessee Technology Park is more than half finished.

The next Five-year Review of the effectiveness of cleanup remedies that have been completed on the ORR will be conducted in the next few months for release in 2016. The Five-year Review includes on-site visits to see how remedies are holding up and if they are still performing as intended. Members of the public are allowed to go on those visits. Mr. Adler said DOE-ORO would like for a couple of ORSSAB members to participate. He asked that anyone interested in going on the site visits to contact ORSSAB staff.

Ms. Jones – Ms. Jones also commented on the Five-year Review process saying DOE, EPA, and the Tennessee Department of Environment and Conservation (TDEC) have had planning meetings for conducting site visits and reviewing relevant data. She also encouraged ORSSAB members to go on the site visits.

Public Comment

None.

Presentation

Mr. Adler provided information on the FY 2017 DOE-Oak Ridge EM Program Budget and Prioritization. The main points of the presentation are in Attachment 1. Mr. Adler said the presentation is a preview of a public meeting on the FY 2017 budget that DOE plans to hold April 29 at Pollard Auditorium on the campus of Oak Ridge Associated Universities.

Mr. Adler began by saying at any time DOE-ORO is working on three budgets: the FY 2015 budget that has been appropriated, the President's FY 2016 budget request to Congress, and the FY 2017 planned budget (Attachment 1, page 2).

Mr. Adler showed a chart of the President's FY 2015 budget request to Congress on various EM projects in Oak Ridge and what Congress appropriated (Attachment 1, page 3). It also has a column of the President's FY 2016 budget request, which Congress has not enacted. For FY 2015, the President requested \$385 million for cleanup work in Oak Ridge. Congress appropriated \$431.2 million. Congress appropriated more for transuranic (TRU) waste disposal operations and decontamination and decommissioning (D&D) work. While the President requested \$3 million for technology development, Congress zeroed that request. In all other categories, the President requested and Congress approved the DOE-ORO EM budget for FY 2015.

For FY 2016 the President's request for Oak Ridge is \$365.7 million, which is the figure DOE-ORO EM is planning for.

Attachment 1, page 4 is a chart comparing the Oak Ridge EM budget to other sites around the country. Most of the national EM budget dollars go to the Hanford Site in Washington and the Savannah River Site in South Carolina. The Hanford budget, which combines two separate budgets, is more than \$2.2 billion. The Savannah River budget is about \$1.26 billion. Mr. Adler said that indicates the priorities are to get rid of high-level waste stored in tanks at Hanford and dispose of excess plutonium at Savannah River.

The chart also shows that more money is being spent to get the Waste Isolation Pilot Plant in Carlsbad, N.M., operational again to receive TRU waste. The plant has been shut down since February 2014 after a couple of incidents.

In developing a budget request to DOE Headquarters, Mr. Adler said there are three principles for project prioritization:

- Protect human health and environment
- Comply with regulatory requirements
- Support ongoing DOE missions on the ORR.

DOE-ORO EM's near-term priorities (FY 2015-2017) in developing its FY 2017 budget are noted on page 6 of Attachment 1.

Priorities for FY 2018-2021 are noted on page 7 of Attachment 1, and post 2012 activities are on page 8 of Attachment 1.

The steps for developing the FY 2017 budget request to DOE Headquarters are noted on page 9 of Attachment 1. DOE Headquarters will provide guidance to the field offices with projected figures to use in developing budget requests.

DOE-ORO EM will host the public workshop in April to get input on the budget from members of the public, EPA, TDEC, and ORSSAB. Mr. Adler said DOE would like to get a formal recommendation from ORSSAB on the budget request and prioritization.

The budget request will be submitted to Headquarters and then budget deliberations become embargoed. Nothing is shared with the field offices or the public until the President submits his budget request to Congress in February. Mr. Adler said the budget talks are embargoed so the President and his staff can formulate a budget request to Congress without outside influences.

He said DOE-ORO EM is currently running scenarios to determine the impacts on milestones that a \$365 million dollar budget would have on milestones that are premised on about \$420 million a year. The computer models will determine how much longer it would be to finish cleanup of the ORR based on various appropriations. With reduced appropriations some milestones will have to be renegotiated with EPA and TDEC.

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

<u>Ms. Cook</u> – A while back we asked for a list of smaller projects that are included in the budget so we can see what was included previously and what may have been eliminated. Will we still be able to see that? <u>Mr. Adler</u> – When the project directors speak at the budget workshop they will talk in more detail about the different steps to achieve cleanup in their projects. They will be able to speak to the general dollar figures associated with the projects.

Ms. Jones – I know you have your guidance from Headquarters, but from EPA's standpoint can the process be more transparent? EPA's position is 'if you don't ask for the money you won't get the money,' which will impact the out-years if you don't get the money. Mr. Adler – Under an executive order we are required to ask for enough money to meet all of our commitments. So we submit a budget that says this is how much we need to honor all of our commitments. But in addition to that request we are required to develop a budget based on the President's guidelines. Ms. Jones – The request for funding to meet current obligations, does that include Appendix E and Appendix J milestones (in the Federal Facility Agreement)? Mr. Adler – We have three years of

enforceable milestones in Appendix E to meet milestones for FY 15, 16, and 17. We must ask for enough money to meet those milestones. Beyond the three-year window we have planning milestones. They are not enforceable, but they matter. They are expectations with dates that have been negotiated with the regulators (EPA and TDEC), and we need to try to meet them. So as a general practice we ask for enough money for both the enforceable milestones and the planning milestones.

Mr. Trujillo – Will ORSSAB look at the priorities you have pre-planned for FY 2017? Mr. Adler – There is not a lot of time to deliberate priorities. I think a useful perspective is this isn't the first discussion we've had about priorities. For several years we've had conversations about what we really have as priorities. I would say those general priorities are largely shared by EPA, TDEC, and DOE. There are some disagreements, but because there is more agreement than disagreement I don't think it is likely that we will make significant changes this year. The list of priorities we came up with a few years ago was the result of a lot of work among DOE, EPA, and TDEC. That list of priorities will take years to work off. Just to accomplish the top five or six things will take 10 years to complete from when we began them. So there is not a need to rethink it every year. Mr. Trujillo – I was thinking about the value-added effort to comment on these priorities. Mr. Adler – It's always helpful to have a reaffirmation of the priorities if that's what the board thinks. But it's OK to question if a priority is still important.

Ms. Gawarecki - There are two parts to this: what Congress is willing to appropriate and what Headquarters will willing to allocate. DOE Headquarters has prioritized tanks at Hanford as the highest risk. And they have prioritized D&D at the bottom. We are automatically at a disadvantage when it comes to funding, which is allocated based on perceived risk at Headquarters. But you should be concerned about issues that are not being discussed before the FY 2020s. Things like the Alpha Buildings at Y-12, which are structures that are deteriorating and are full of radionuclides and mercury. They are right next to one of the country's most important missions of refurbishing nuclear weapons and storing highly-enriched uranium. If one of those buildings collapses there will be releases in this area. It will affect workers and affect the Woodland and Scarboro communities. It's going affect industry in Union Valley and be a huge problem. Some of you may not be aware that in the early 1990s there was a tornado that touched down in Y-12 that did some damage. When we went on the field trip to see the proposed site for the new EM waste disposal facility we saw about 100 acres of blowdown of forest surrounding that area from winds estimated to be 70 to 100 miles per hour. It's only a matter of time before this site has a major emergency whether it's at Y-12 or Oak Ridge National Lab. Our priorities should be raised much higher at Headquarters because we have population densities that other sites don't have, and we missions next to these contaminated and deteriorating facilities. You as individuals, if not a group, should let your elected representatives know about these concerns. We need to get our budgets up so we can address these major D&D projects sooner.

Mr. Adler – It is correct that DOE puts sites other facilities at a higher priority. D&D in Oak Ridge is not as big a priority as taking care of the plutonium and the tanks. Those projects cost a lot of money, and if they get stretched out they cost a lot more money. DOE is trying to get some big expensive projects done quickly. So Headquarters has a tough budgeting process.

Committee Reports

<u>EM & Stewardship</u> – no report. The committee did not meet in February because of inclement weather.

<u>Executive</u> – Mr. Hemelright reported that ORSSAB will be hosting the Spring 2016 EM SSAB Chairs' meeting. The Garden Plaza Hotel in Oak Ridge has been booked as the meeting location.

In the committee meeting Board member Corkie Staley asked if Mr. Hemelright had asked other boards about making a recommendation about extending member terms beyond the three-term limit. Mr. Hemelright has not had a chance to talk to the other boards, but he said Mr. Adler had spoken with Ms. Noe and Susan Cange, the board's Deputy Designated Federal Officer. He said Ms. Cange would talk with DOE Headquarters about term extensions. Mr. Hemelright said extensions were used to fill specific demographics on boards, but any member who requests an extension would be considered.

Mr. Hemelright said that Ms. Cange looked at the board's meeting schedule and felt some of the presentations were unnecessary given changes that have taken place with EM projects. For instance, the mercury cleanup presentation scheduled for April will not be appropriate at that time and could be scheduled later in the year. In another instance, DOE and the regulators have decided to postpone a decision on Trench 13 until next year, so that would preclude a May presentation on the topic.

With those changes the April has been cancelled and members are asked to attend the April 29 workshop on the FY 2017 Oak Ridge EM budget and prioritization.

Ms. Staley asked if a proposed tour of the mercury sites at Y-12 would still be scheduled. Mr. Adler proposed going forward with that plan even though the presentation has been postponed.

For May, Ms. Cange proposed a dinner meeting with Oak Ridge city officials and for them to discuss EM-related issues with the board. Oak Ridge City Manager Mark Watson has indicated his intention to attend that meeting.

Regarding public outreach, staff will handle most of those projects, like the board's newsletter, but will involve board members who wish to participate in public outreach activities. Ms. Cook will continue to work with staff on updating the board's exhibit at the American Museum of Science and Energy. Mary Smalling will serve as the contact for Earth Day and Secret City festivals. Ms. Lyons will be the contact for the board's public environmental survey and historical features for the newsletter. Mr. Hemelright will be the lead for outreach presentations. Ms. Lyons will be the overall contact for public outreach activities.

Earth Day will be Saturday, April 25 at Bissell Park in Oak Ridge. Mr. Hemelright asked for volunteers to staff the ORSSAB booth.

Mr. Hemelright asked for suggestions of issues or accomplishments to take to the EM SSAB Chairs' meeting. There were no suggestions, but Mr. Hemelright said the topic is an agenda item for the March 18 EM & Stewardship Committee meeting.

Announcements and Other Board Business

The board will not meet in April.

ORSSAB's next scheduled meeting will be Wednesday, May 13, 2015 at a site to be determined. The topic will be Priorities, Concerns, and Operations of the City of Oak Ridge Related to DOE EM Activities.

Aditya Chourey and Claire Rowcliffe were recognized for their service on the board as student representatives for FY 2014-15.

Federal Coordinator Report

Ms. Noe said an appointment packet for three additional members is being prepared to send to Headquarters for review. She thought new members would be approved by the end of June.

Noel Berry has resigned from the board.

Additions to the Agenda/Open Discussion

Although there was not a quorum to vote on recommendations, Mr. Hemelright asked Ms. Cook to discuss the proposed recommendation on the Final Proposed Plan for Soils in Zone 1 at East Tennessee Technology Park for the benefit of those present.

Ms. Cook reviewed the draft recommendation (Attachment 2). After reviewing the draft Ms. Cook asked if any board members had comments or concerns about the recommendation.

Ms. Lyons was concerned about the proximity of the river. She wondered about flooding, rivers changing course and undercutting the bank, erosion, and so on. Ms. Cook said the area Ms. Lyons referenced is where old storage tanks containing asbestos had been located. The asbestos was removed and buried anywhere between 2 and 6 feet. Ms. Lyons asked if excavation was restricted between 2 and 6 feet or down to 10 feet. Ms. Cook said this is where the proposal is to bring in another 2 feet of soil to cover the area. Ms. Lyons said even if the area is capped with additional soil it is next to a moving water source than can flood or change course or undercut the stream bank regardless of how much soil has been brought in.

Mr. Adler said it is an area that had above grade fuel tanks wrapped in asbestos insulation. The tanks and attached asbestos were removed, but some of the asbestos came loose and fell on the ground leaving traces of asbestos in the soil. Ms. Jones said some soil was removed but the deeper the soil was removed more asbestos contamination was found. Since it is mixed with the soil there is no area that is primarily asbestos.

Ms. Lyons asked if there was any residual contamination remaining in the soils from the demolition of the old S-50 Plant. Mr. Adler said in the area of S-50 everything was dug up and removed that exceeded regulatory levels. In the tanks area there was discussion of whether to remove soil. He said the risk in the soil in that area is only a concern if the asbestos becomes airborne. He went on to say if digging goes very deep it goes into the river because of the elevated water table. Because of those factors DOE prefers to manage the soil in place and make sure the asbestos does not become airborne. But he said that topic is open for comment. Ms. Lyons said the soil could still erode and wash downstream on the river bank and become airborne. Mr. Adler said at that point it would be wet asbestos in concentrations so low as to not be a hazard. Mr. Hemelright agreed that asbestos must be airborne to be a health hazard.

Ms. Cook said the focus of the recommendation was that any area that had contamination less than 10 below the surface would have restrictions to prevent use, either industrial or recreational. Mr. Adler explained that much work was done around Zone 1 to ensure that the top 10 feet of soil was free of contamination in most areas. There are some areas where there are restrictions about digging below 2 feet.

Mr. Adler said his understanding of the recommendation was there would be prohibition of any use of land with contamination above 10 feet, while DOE proposes such as areas could be used with restrictions. Ms. Cook agreed with that view. She said there were parts of the draft proposed plan that had areas designated for recreational use with contamination below 2 feet. She said the concern was eventual erosion of soil that could result in a health hazard. She said if the area can't be used safely then DOE should make sure people cannot access the area.

Mr. Adler said what DOE wants to do is take institutional and engineered measures that ensure a safe end state for the area, but not overly engineer the area to preclude end state land uses. He said DOE proposes to manage a fly ash pile in place with restrictions. He said some future owner might want to dig up the fly ash, replace it with clean dirt, and build something on the site. Prior to excavation DOE requires a tenant to go through an excavation permitting process that would ensure a safe disposition of the fly ash. He said that is different from complete prohibition of use as the stated in the draft recommendation. He said land use control implementation plans would have more detail on how lands could be used.

Ms. Cook asked if the implementation plans would be part of the proposed plan. Mr. Adler said a summary would be included, and they would be part of the binding regulatory agreements.

Mr. Trujillo said he was concerned about the last bullet point in the discussion section of the recommendation. He asked if groundwater was a significant issue. For the most part groundwater does not appear to be an issue, said Mr. Adler. He said that is not true for the entire site and there are some areas outside of Zone 1 where contaminated groundwater could migrate. For those reasons DOE has prohibited any groundwater use. Ms. Cook asked what happens with groundwater when previously remediated areas are disturbed. Mr. Adler said soil cleanup guidelines ensure surface users would be safe and also the soil column above 10 feet did not represent a threat to groundwater. If there was soil contamination that would be a threat to groundwater the soil would have to be removed.

Ms. Gawarecki commented that ETTP has been promised to the community as an industrial site. It concerns her that portions of the site have a 2 foot excavation restriction. She said those restrictions break up mega-sites, which would be attractive to major manufacturers. She said DOE doesn't have the money to clean the entire site to a 10-foot excavation limit. She said the 2-foot limit in some places commits DOE to indefinite long-term stewardship, which she believes is more expensive over the long-term than cleanup to 10-foot depths. She believes the process of Zone 1 soil remediation is progressing without adequate input from the City of Oak Ridge and Roane County.

Motions

Lacking a quorum there were no motions.

The meeting adjourned at 8:02 p.m.

Action items

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 March 11, 2015, meeting of the Oak Ridge Site Specific Advisory Board.

Dave Hemelright, Chair Oak Ridge Site Specific Advisory Board DH/rsg **DATE**



Many Voices Working for the Community

Oak Ridge Site Specific Advisory Board

Unapproved May 13, 2015 Meeting Minutes

The Oak Ridge Site Specific Advisory Board (ORSSAB) held a work session on Wednesday, May 13, at Shoney's Restaurant, 204 South Illinois Ave., Oak Ridge, Tenn., beginning at 6 p.m.

Members Present

Leon Baker Howard Holmes Greg Paulus
Alfreda Cook Terri Likens Belinda Price
Lisa Hagy, Secretary Jan Lyons, Vice Chair Coralie Staley
Bob Hatcher Fay Martin Ed Trujillo
David Hemelright, Chair Donald Mei

Members Absent

Jimmy Bell¹
Jennifer Kasten¹
Mary Smalling¹
Scott Stout¹
Wanfang Zhou¹

Liaisons, Deputy Designated Federal Officer, and Federal Coordinator Present

Dave Adler, ORSSAB Alternate Deputy Designated Federal Officer

Susan Cange, Manager for 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

Robert Benefield, Tennessee Department of Environment and Conservation (TDEC)

Mike Ford

David Foster, TDEC

Spencer Gross, ORSSAB Support Office

Alana Joldersma, Oak Ridge High School

Harry McNabb

Pete Osborne, ORSSAB Support Office

Ellen Smith, Oak Ridge City Council

Mark Watson, Oak Ridge City Manager

Dennis Wilson

Ray Wymer

¹Second consecutive absence

City of Oak Ridge Perspectives on the Oak Ridge EM Program

ORSSAB invited Oak Ridge City Manager Mark Watson to talk to the board about the city's perspectives on the DOE Oak Ridge EM program. He said the city had concerns about some issues, but there were positive aspects and things to consider.

He has had discussions with Ms. Cange and Mr. Adler about the proposed additional low-level waste disposal facility. There have been discussions about a new national park commemorating the Manhattan Project at three sites across the country including Oak Ridge.

Mr. Watson said there is not a lot of city money available to have the kind of community citizens are accustomed if DOE no longer operated Clark Center Park or the American Museum of Science and Energy. Development of City Center (former Oak Ridge Mall) will help generate additional income, but perhaps not enough. He said Oak Ridge City Schools is trying to make ends meet and Roane County has budget problems as well (part of Oak Ridge is in Roane County).

Values of homes in Anderson County have declined about 2 percent, and Mr. Watson said the city can't raise additional money without raising taxes. Oak Ridge has about 5,000 older homes that date to the Manhattan Project. There are huge fluctuations of property values depending on the condition of those structures. Elimination of the Hall Income Tax on investments will cost the city about \$600,000 annually.

Mr. Watson discussed the proposed second waste disposal facility on the Oak Ridge Reservation (ORR). DOE proposes to build a second facility, known as the EM Disposal Facility (EMDF), adjacent to the current EM Waste Management Facility in Bear Creek Valley near Y-12 National Security Complex.

The city is interested in a number of issues related to EMDF:

- What will be the impact on the community especially nearby residential areas?
- What are the long-term costs?
- What are the long-term benefits, such as employees to monitor the site for decades?
- What are the cost comparisons of on-site disposal opposed to shipping waste off-site?

Mr. Watson said in looking at community impact the city wants to make sure it wasn't focusing solely on DOE's needs but the community interest as well. An independent study was done that posed some questions about the geology of the site, the effects on nearby residents, and property values. "How do we address this so it's a win-win for everyone and not a detriment to the community," he said. "People outside of Oak Ridge don't understand the kind and amounts of contamination."

Mr. Watson said there is a fear that if DOE work stops, jobs would go elsewhere. The city wants DOE missions to continue and it also wants people to live in the community and spend time here. A study has shown that about 70 percent of workers commute into Oak Ridge.

He said the city needs a lot of information about the landfill and Ms. Cange and Mr. Adler have provided a lot of information. He noted that the ORR is a Superfund site that has regulations spelled out in the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). If the ORR were a Nuclear Regulatory Commission site it would have different regulations. The city is comparing those differences. Mr. Watson said CERCLA tends to focus more on environmental impacts than community impacts.

Mr. Watson said he experienced a similar issue where the Dallas-Fort Worth Airport needed land for runways. A determination had to be made whether concerns were real or perceived.

He concluded his remarks saying city council has a number of questions to be answered and it will make comments to DOE on the landfill. He said now is the time for prudent decisions.

Ms. Likens asked for additional information about the older homes. Mr. Watson said many of them have deteriorated and it's difficult to sustain value. While some have been improved, others continue to depreciate. He said each year a house sits without improvement it loses about \$1,000 in value. With about 5,000 of such homes in the city that trend must be reversed. Mr. Watson said when those house values go down, the tax base must be shifted to new or more expensive homes, and there were only a handful of new housing starts in Oak Ridge last year.

Ms. Likens asked about the company CVMR moving to Oak Ridge. Mr. Watson said that will help the tax base. While CVMR management will live in Oak Ridge, there is no guarantee that most of its workers will.

Ms. Cook asked about the redevelopment of the Oak Ridge Mall. Mr. Watson said there would be two sources of income from sales and property taxes. The City Center Main Street project is about an \$80 million investment that includes 200,000 square feet of retail space, a 200-unit apartment complex (that he said might be attractive to ORR or CVMR employees), and a 140-room hotel. Gross sales are estimated to be about \$100,000 million annually yielding about \$250,000 in tax revenues. The Oak Ridge Mall, with the exception of Penney's and Belk, will be demolished beginning about the end of June. The area is about 65 acres.

Ms. Staley asked about plans for the older homes. Mr. Watson said there will be no government money available to acquire them. For homes that are not being maintained the city will declare them substandard. Many of them are rented and about 3 percent are in the federal voucher program that allows low-income families to live in Oak Ridge and send children to Oak Ridge schools.

Ms. Staley asked if the goal is to get them in good condition or eliminate them. Mr. Watson said the goal is get them in good condition, but many are smaller than what is desired. About 20 houses have been bought for less than \$20,000 for renovation.

Regarding the landfill, Mr. Hatcher asked why concerns are more than just a perceived issue. Mr. Watson said protections need to be looked at. Mr. Hatcher asked why it is any different than the existing facility. With the existing facility, Mr. Watson said a stream had to be rerouted and there is a stream at the proposed site that needs rerouting. He said there is a responsibility that everything is done to make sure protections are addressed. He noted that the nearest population is .8 of a mile away. Mr. Hatcher said there is no scientific evidence of any real concern and he'd like to see the independent report that was done.

Ms. Cook said she thinks it's reasonable to expand the disposal capacity and continue to clean up areas that will be attractive for businesses. She said the proposed site is next to the existing site that has worked well over the years and she doesn't see it as a problem.

Ms. Cook asked if the city had an alternate idea for what to do with cleanup waste. Mr. Watson said when the existing facility was built studies identified several potential locations. He wants to see if those locations would pose any impact on nearby communities. He said he didn't have an answer for that at this time.

Ms. Staley said she would rather have a new facility in an area that is already being monitored and safety precautions are in place such as near the existing facility.

Mr. Trujillo asked if a final report had been made to the city. Mr. Watson said it had not received a final report. Mr. Trujillo said he thought the only drawback was perceived stigma to the city. Mr. Watson said the Ferguson Group doing the report looked at long-term impacts, reviewed the DOE remedial investigation/feasibility study, looked lifecycle costs and opportunity costs, and if the public would accept another landfill. He said there is also the potential for rock fracturing in the area. Mr. Hatcher said rock fracturing is present in every rock formation in the world.

Ms. Cange reminded the group that the process is still in the remedial investigation/feasibility study phase. Alternatives are being evaluated for both on-site and off-site disposal. She said DOE is working with EPA and TDEC to come to an agreement before finalizing the RIFS. When that is done a proposed plan that recommends a preferred alternative will be submitted for public comments. The proposed plan is expected to be issued later this year. DOE will ask for community input as well as input from ORSSAB. Ms. Cange said community acceptance is one of nine criteria that must be considered before making a final decision. She said the study the city commissioned could be useful in helping DOE evaluate community acceptance.

Mr. Mei asked what the city was building on Emory Valley Road (a large holding tank). Mr. Watson said it was an equalization tank that prevents the city from having to rebuild a sewer system. During times of heavy storm water runoff, the storm water is captured in the tank and stored until conditions allow it to be discharged. It keeps storm water from overwhelming the sewer system during times of heavy rainfall. Two other similar tanks are being built in different parts of the city.

Mr. Hatcher asked if neighborhoods were consulted about building the tanks and if not why. Mr. Watson said neighborhoods had not been consulted on the assumption that there was a problem in those communities that needed addressing. Ms. Smith said the city did hear from citizens who had sewage in their yards after storm events.

Ms. Smith thanked the board for allowing Mr. Watson to discuss the unique challenges facing the city. She said the industrial and commercial tax base is smaller than some of the surrounding areas. She Oak Ridge has a bit of an image problem with laboratories and Y-12 and there is negative publicity associated with radioactive waste.

Mr. Hatcher said he has lived in several communities and Oak Ridge provides the best services of all the places he has resided.

Public Comment

None.

Announcements and Other Board Business

ORSSAB's next scheduled meeting will be Wednesday, June 10, 2015, at the DOE Information Center, 1 Science.gov Way, Oak Ridge, Tenn. Oak Ridge Reservation Groundwater Strategic Plan will be the main topic of discussion.

Additions to the Agenda

Mr. Paulus asked when the board needed to provide a recommendation to DOE on its FY 2017 EM budget request. Mr. Adler said board members were asked to rank a list of projects that DOE Oak Ridge would like to accomplish for FY 2017. That ranking (Attachment 1) was provided by Mr. Hemelright at the April 29 public workshop on the DOE EM budget. Mr. Adler sent that ranking to EM Headquarters as a precursor to a more formal recommendation from the board. The EM & Stewardship Committee and Budget & Process Committee will have a combined meeting on May 20 to discuss a formal recommendation on the budget.

The meeting adjourned at 7:30 p.m.

Action items

None.

I certify that these minutes are an accurate account of the May 13, 2015, meeting of the Oak Ridge Site Specific Advisory Board.

Dave Hemelright, Chair Oak Ridge Site Specific Advisory Board DH/rsg

DATE



Checklist

Recommendations and Comments Consideration for Board Approval

- I. Title: Recommendations on the FY 2017 DOE Oak Ridge Environmental Management Budget Request
- II. In response to (why necessary): At the request of DOE Oak Ridge Environmental Management to provide a recommendation on the FY 2017 budget request
- III. Committees: Environmental Management & Stewardship and Budget & Process
- IV. Date submitted: June 10, 2015
- V. Date by which action is requested or required: June 10, 2015
- VI. Previous considerations: None
- VII. White Paper (if applicable):
- VIII. References (if applicable):



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 Fiscal Year 2017 DOE Oak Ridge Environmental Management Budget Request

At our June 10, 2015, meeting, the Oak Ridge Site Specific Advisory Board approved the enclosed recommendations regarding the FY 2017 DOE Oak Ridge Environmental Management Program budget request.

We appreciate your consideration of our recommendation and look forward to receiving your response by September 10, 2015.

Sincerely, Dave Hemelright, Chair DH/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: Recommendations on the FY 2017 DOE Oak Ridge Environmental Management Budget Request

Background

Each year the U.S. Department of Energy (DOE) Environmental Management (EM) Program develops its budget request for the fiscal year two years beyond the current fiscal year, incorporating budget requests from DOE field offices to develop the EM Program budget request to the President.

DOE EM Headquarters typically issues guidelines to the field offices advising them how much budget they should reasonably expect when developing their fiscal year +2 budget requests. The field offices then brief the public, the regulatory agencies, and the respective site specific advisory boards and seek input from them regarding budget requests.

Discussion

In March 2015, DOE briefed the Oak Ridge Site Specific Advisory Board (ORSSAB) on the current budget picture and described near-term and long-term priorities. Near-term priorities (2015–2017) are:

- Demolish Building K-25 at East Tennessee Technology Park (ETTP)
- Complete deactivation and initiate demolition of the K-27 Building at ETTP
- Continue direct disposition of uranium-233 from Oak Ridge
- Process transuranic debris waste
- Award contract for sludge processing facility and construct mock test facility at the Transuranic Waste Processing Center
- Initiate and complete Y-12 Outfall 200 Mercury Treatment System design
- Complete design for additional waste disposal facility to be known as the Environmental Management Disposal Facility (EMDF)

Long-term (2018–2021) priorities include:

- Complete U-233 direct disposition campaign
- Continue transuranic debris processing and shipments
- Complete ETTP cleanup except for Centrifuge Buildings
- Construct Outfall 200 Mercury Treatment Facility
- Address critical infrastructure.

Post FY 2021 Activities

- Complete Processing of Remaining U-233 Material
- Demolish Centrifuge Buildings and Complete Closure of ETTP
- Construct Follow On Disposal Facility (EMDF)
- Construct Sludge Processing Facility
- Complete Y-12 and ORNL Cleanup

After the March meeting, David Adler, ORSSAB's Alternate Deputy Designated Federal Officer asked board members to rank a list of near-term projects:

- Complete demolition of the Gaseous Diffusion Buildings and support facilities at the East Tennessee Technology Park.
- Complete direct disposition of the Uranium-233 material and initiate processing campaign.
- Complete contact and remote handled transuranic (TRU) debris processing.

- Construct and operate the TRU sludge mock test facility.
- Begin construction of the Outfall 200 Mercury Treatment Facility at Y-12.
- Complete design of the new Environmental Management Disposal Facility.

A majority of board members ranked the projects and the ranking was provided at a public meeting DOE held on April 29 to discuss its priorities and receive input from other stakeholders.

Here is how ORSSAB ranked the projects:

Projects	Average Score [*]	Rank
Complete demolition of the Gaseous Diffusion Buildings and Support Facilities at East Tennessee Technology Park	2.36	1
Complete the direct disposition of the Uranium-233 material and initiate processing campaign	2.84	2
Complete design of the new Environmental Management Disposal Facility	3.6	3
Begin construction of the Outfall 200 Mercury Treatment Facility at Y-12	3.73	4
Complete contact and remote handled transuranic (TRU) debris processing	3.73	5
Construct and operate the TRU sludge mock test facility	4.87	6

^{*} Respondents were asked to rank each project 1-6 with 1 being the most important. Each project's scoring was averaged to obtain an average score. For instance, if all respondents ranked demolition of the Gaseous Diffusion Buildings at ETTP as number 1, the average score would be 1.

Additional suggestions for number one priority:

- Long-term groundwater and off-site contaminant migration.
- Ensure groundwater modeling work continues and continued funding for groundwater strategy.

Additional projects suggested for consideration:

- Other EM facilities (especially Alpha 5 at Y-12 National Security Complex) that are viewed as deteriorating and a continuing source contamination.
- Focus on completing some projects prior to starting any new ones.

Although not considered a formal recommendation, the ranked list was sent to DOE EM Headquarters by Mr. Adler as an indication of how the board stood on the six projects.

At the April 29 public meeting other governmental agencies made suggestions for DOE to consider when developing its budget. Suggestions were made by the City of Oak Ridge, Anderson County, the Oak Ridge Reservation Communities Alliance (presented by the mayor of Roane County), and the Oak Ridge Partnership.

Following is a list of suggestions from those entities beyond what is noted above:

- Demolish tall structures such as the centrifuge buildings at East Tennessee Technology Park to allow the building of a general aviation airport.
- Stabilize and transition utility and roadway infrastructure to appropriate public entities.
- Ensure cleanup of Poplar Creek where contaminated and dilapidated facilities remain.

- Work toward cleanup of excess facilities not currently in the EM scope.
- Strengthen the local subcontracting supply chain.
- Historic preservation, specifically accelerate renovation of ETTP fire station for the K-25 History Museum.

Recommendation

The Oak Ridge Site Specific Advisory Board respectfully requests that DOE consider prioritizing the six projects provided for consideration in the order in which ORSSAB ranked them, but also place a high priority on long-term groundwater problems, including off-site contaminant migration, and provide sufficient funding required to accomplish these objectives.

ORSSAB also believes that input provided by the City of Oak Ridge, Anderson and Roane Counties, the Oak Ridge Reservation Communities Alliance, and the Oak Ridge Partnership is worthy of consideration.

ENVIRONMENTAL MANAGEMENT SITE-SPECIFIC ADVISORY BOARD

HanfordIdahoNevadaNorthern New MexicoOak RidgePaducahPortsmouthSavannah River

Mr. Mark Whitney
Acting Assistant Secretary for Environmental Management
U.S. Department of Energy, EM-1
1000 Independence Avenue, SW
Washington, DC 20585

Dear Mr. Whitney:

Background

The Waste Isolation Pilot Plant (WIPP) was created to safely and reliably dispose of this waste, and did so from 1999 to February 2014. The Waste Isolation Pilot Plant (WIPP) has been operating since 1999 as the only underground repository for transuranic (TRU) waste disposal. Having the WIPP facility available for TRU waste disposal has been shown to be extremely important to the Department of Energy (DOE) as well as sites across the United States needing to safely and reliably dispose of TRU waste. WIPP operations on a continuing basis are critical to the success of the DOE Office of Environmental Management's (EM) waste disposal mission.

Observations and Comments

With the recent shutdown of WIPP, DOE efforts to complete programs for the shipment of TRU waste from sites needing this method of waste disposal have been jeopardized. The shutdown of WIPP has rendered these sites unable to complete commitments due to respective state consent orders or regulatory requirements. Planning for future shipments to WIPP is also now on hold with no effective time table of when shipments may be able to resume.

Exploring opportunities for additional TRU waste storage facilities at the various generator sites with limited lifetime expectancies is neither efficient nor cost effective. And while it does appear unwise to duplicate the permitting process at multiple sites, it is equally unwise to concentrate on just the one site that can truly facilitate permanent long-term disposal of TRU waste.

Intent

It is the intent of the EMSSAB to be assured that DOE accelerates and makes more transparent any activities in motion or planned that will resume the safe disposal of transuranic waste at WIPP and concurrently identify temporary safe storage locations for TRU waste.

Recommendation

To restore public confidence in its ability to safely manage TRU waste, meet its commitments to its state regulators, and minimize the risk to the public from the massive amounts of waste it currently has on hand, the EMSSAB recommends that DOE:

- 1. Create and make available to the EMSSAB and the public a realistic plan and timetable to restore WIPP to full operation. Resumption of safe WIPP operations should be the highest priority.
- 2. Given the possibility of another event, identify and evaluate safe alternatives to retaining waste at its point of generation until WIPP is restored to full operation.
- 3. Put the best of these alternatives into operation to deal with the current situation, and to be prepared in the event a similar situation arises in the future. Identification of the alternatives should include a quantitative evaluation of the financial and risk benefits and costs of the alternatives.

Summation

These actions need to be taken as soon as possible. To delay is to make a choice for distributing the risks associated with the temporary storage of nuclear waste at the generator sites around the nation, rather than being contained at a small number of sites such as Carlsbad, NM, Andrews, TX or other alternative sites.

Due to the difficulties that the shutdown of the WIPP has caused the various DOE facilities that must ship TRU waste, the Environmental Management Site-Specific Advisory Board recommends that DOE-EM Headquarters identify and evaluate potential above-ground temporary waste storage installation sites and conduct required environmental impact studies in an effort to prevent similar problems in the future

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 Harold Simon, Chair Portsmouth SSAB

Savannah River Site Citizens Advisory Board

Kristen Ellis, EM-3.2 cc: David Borak, EM-3.2

EM Project Update

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			outstanding issues. Agreements were reached on the configuration,
and FFS. sizing, and performance expectations for the proposed facility.			

Page 1 of 2 June 4, 2015

EM Project Update

Y-12 Site	April	May
Uranium Process	The Waste Handling Plan for the UPF Soil and Debris was	
Facility	submitted to the regulators for review.	
Off-Site	April	May
Cleanup/Waste		
Management		
TRU Waste	The project surpassed the contact-handled TRU waste processing	Accomplished final WIPP certification of 50 percent of the remaining
Processing Center	goal for the business month and processed 51 percent of the RH	Contact Handled TRU waste inventory and also of 50 percent of the
(TWPC)	goal.	remaining Remote Handled TRU waste inventory.
		Completed physical preparation of the remaining inventory of the
		original 284 cubic meters of Contact Handled debris.
Environmental	A series of regulatory meetings were held with EPA and TDEC to	Regulatory review continued for the Integrated Water Management
Management	discuss the Integrated Water Management FFS and RI/FS reports	FFS and RI/FS reports for the proposed EMDF.
Disposal Facility	for the proposed EMDF.	
(EMDF)		
ORR Groundwater	OREM's Technical Advisory Group for the groundwater modeling	Construction of the regional conceptual site model is complete. Data
Strategy	effort met to review the approach and assumptions for construction	from the model provides the geologic framework that will be used to
	of a conceptual site model. This model will be used in the	build out the regional groundwater flow model.
	development and maintenance of an ORR Groundwater Flow model.	

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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

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

OREM – Oak Ridge Office of Environmental Management

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

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 FY 2015	Reg. Cost	Website	Conference Lock Date; # Allocated Attendees	Deadline to Submit Requests
Waste Management Symposium (Attendees: Price)	March 15-19, 2015	Phoenix	\$1,035	www.wmsym.org	11/1/14 (# attendees 1)	10/22/14
National Environmental Justice Conference & Training Attendees: Kasten, Martin)	March 11-13, 2015	Washington, D.C.	none	http://thenejc.org	N/A	1/28/15
Spring Chairs Meeting Attendees: Cook, Hatcher, Hemelright)	April 21-23, 2015	Augusta, GA	none		N/A	2/25/15
2015 U.S. EPA Community Involvement Training Conference (Approved requests: Lyons, Cook)	August 4-6, 2015	Atlanta, GA	none	www.epa.gov/ciconference	N/A	6/24/15
Fall Chairs Meeting (Approved requests: Hemelright, Lyons, Staley, Trujillo)	September 1-3, 2015	Santa Fe, NM	none		N/A	7/29/15
Ohio EPA National Brownfields Conference (Pending requests:)	September 2-4, 2015	Columbus, Ohio	\$125	http://www.brownfieldscon ference.org/en/home		7/29/15
RadWaste Summit (Pending requests: Staley)	September 8-11, 2015	Summerlin, Nevada	\$625	http://radwastesummit.co m/		7/29/15
Intergovernmental Meeting with DOE (Pending requests:)	Fall 2015 (probably October or November)	TBD	none			
Western Waste Site Tour (Tentative requests: Hagy, Hatcher, Lyons, Mei, Paulus, Price, Smalling)	Postponed pending resolution of issues at WIPP	Waste Isolation Pilot Plant, Nevada Nat'l Security Site	none	none		
Perma-Fix Nuclear Waste Management Forum (Pending requests:)	Transitioned to a bi- annual event. Next meeting is slated for FY 2016 (December 2015)	Nashville	\$500			



TRIP REPORT

I. Name of Traveler: Jennifer Kasten

II. Date(s) of Travel: March 11-13, 2015

III. Location of Meeting: Washington, D.C.

IV. Name of Meeting: 2015 National Environmental Justice Conference and Training

Program: Civil Rights The Past 50 Years – Now Climate

Change/Climate Justice

V. Purpose of Travel: To participate in a national gathering of individuals to address environmental issues, environmental protection, health disparities,

economic development, and climate change

VI. Discussion of Meeting:

The Federal Interagency Working Group on Environmental Justice was established in 1994 to guide, support, and enhance federal environmental justice and community-based activities. It is composed of 17 federal agencies and White House offices. This conference is an opportunity to participate in a national gathering of individuals to address environmental issues, environmental protection, health disparities, economic development, and climate change. Conference panels and featured speakers included an overview of climate change (as supported by research data) and how the federal government is responding as well as showcasing solutions and opportunities to reduce the pollution that causes climate change, and actions to take to protect communities from the impacts of climate change.

In addition, the conference also included the Youth/Emerging Leaders Summit. As part of the Support Leaders of Tomorrow initiative, students addressed opportunities to transform urban environments into green environments by planting tress/shrubs for urban parks. The students also participated in hiking and camping activities in national parks/forests.

Stormwater management was a common problem for urban areas. Specific cases included the Great Lakes restoration initiatives and the south side of Chicago stormwater overflow initiative, and initiatives of the nonprofit organization Keep Indianapolis Beautiful, Inc. These efforts involved green solutions for stormwater overflow by creating green

infrastructures by planting trees and establishing stormdrain planters and the maintenance required to keep the plants/trees healthy.

There were several presentations addressing the local residents' response to pollution in their communities and their efforts to organize support to address environmental concerns. There were cases where residents teamed with professors from universities to address environmental pollution. Efforts by communities in California resulted in legislation to ensure that resources go to the communities most impacted by environmental pollution and climate change.

One presentation addressed how Pennsylvania is the only state whose constitution has the legal means to provide the right to clean air, clean water, and healthy communities. The presenter is interested in helping all states change their constitutions to ensure environmental rights.

A research scientist from Taiwan addressed environmental pollution associated with a petrochemical plant. His data did not support any evidence that the plant was contributing to environmental pollution and adverse health effect in the community; however, the construction of a second petrochemical plant was stopped due to perceived adverse environmental and health effects. His presentation illustrates the importance of a balance between industrial pollution and environmental protection.

The 2016 Environmental Justice conference will address health disparities. This is an opportunity for industry to be involved and address industrial solutions where the environmental and public health are not negatively impacted as opposed to unhealthy communities severely impacted by environmental pollution.

VII. Significance to ORSSAB:

Provided an opportunity to learn more about how pollution and climate change affects communities.

VIII.	Names &	& Tel	ephone	Numbers	of Sig	nificant	Contacts :

IX.	Action Items:	
Х.	Traveler's Signature & Date:	
Signa	ature: Jennifer Kasten	Date: March 23, 2015

TRIP REPORT

I. Name of Traveler: Fay M. Martin

II. Date(s) of Travel: March 10-14, 2015

III. Location of Meeting: Washington, DC

IV. Name of Meeting: National Environmental Justice Conference & Training Program

V. Purpose of Travel: To represent ORSSAB and learn about environmental justice issues relevant to DOE.

VI. Discussion of Meeting:

Mustafa Santiago Ali, the U.S. Environmental Protection Agency's Senior Advisor on Environmental Justice said that the spotlight of the conference was on "Climate Justice" and the federal family's commitment to address the goals of President Obama's Climate Action Plan, The plan outlines commonsense steps to cut carbon pollution from power plants, to modernize water systems and to help communities to adapt to extreme weather events. It was pointed out that certain segments of the population, such as children, the elderly, the poor tribes and indigenous people and small rural communities were especially vulnerable to impacts of climate change. Melinda Downing, the Department of Energy's Environmental Justice Program Manager mentioned that there is a direct correlation between the environment, environmental protection, health disparities, economic development, climate change and Environmental Justice.

The first day of the conference was devoted to the Youth/Emerging Leaders Summit. The Youth Farmers Leadership Program from Cleveland, Ohio, spoke on Nutrition, Education and Leadership Training and gave an example of gardens in the Salaam Community. The S. H. A. R. P. (Sisters Honoring African Rites of Passage) from Aiken, SC talked about the Savannah River Site and legacy waste there. Samantha Parker from the Black Youth Leadership Development Institute, Savannah, Georgia, spoke on lead testing in children in the community and the incidence of diabetes, heart failure and cancer in the population.

The "Latino Legacy" was represented by the Green Ambassadors from the Green Institute in Houston, Texas. Their topic was 'Transforming Houston's Urban Food Deserts into Sustainable Food Forests - in Partnership with the USDA Forest Service". These young students were inspiring. They wanted to fight climate change, find an affordable option for the obese population, and restore the environment. The Project Learning Tree stressed not to "Mess with

the Pollinator". They recommended planting fruit trees and having community gardens, since a lot of stores in poor neighborhoods did not have fresh fruit and vegetables.

Native American students, Maria Perez and Tecpah Kuauhtzin, from Anahuacalmecac International University Preparatory High School in Los Angeles, CA, in describing the "Power of Yosemite", mentioned "the powerful feeling ..., pierced my heart, honor the sacred rites.....connect with Mother Earth."

The Evening Session took place at Howard University School of Law. We were transported there by buses. Cynthia Giles, Assistant Administrator for the Office of Environment and Compliance Assurance, EPA, gave the introductory remarks. This portion of the conference took on an international flavor. Susanne Börner, a Ph.D student from Goethe University, Frankfurt am Main, Germany, spoke on "Strengthening Coping-Capacities through Community Interventions: the Importance of Self-Efficacy and Resources". Börner described a case study in the Dortmund harbor district where PCB's were released into the environment.

Shizuka Hsieh from Trinity University in Washington,, DC described conditions in Ivy City, a traditionally African- American neighborhood. There was a planned bus depot site which it was feared would lead to air pollution. She described the campaign carried out for job training and mentioned the money given to build a Community Center in Ivy City.

Australia was represented by Huey-Shian Chung, a Ph. D candidate from the Australian National Centre for Ocean Resources and Security, University of Wollongong, New South Wales, Australia. He spoke on the "Need to Incorporate Environmental Justice into Marine Protected Area Management". He emphasized that they should construct effective and just conservation as well as develop and legalize "rights to sustainable development".

Chi Pang Wen, M.D., Dr P. H. came all the way from Taiwan for this meeting. He works with the Division of Preventive Medicine and Health Services Research, Institute of Population Health Sciences. He spoke on health issues in Taiwan, including effects of smoking and betel nut chewing.

On Thursday, the keynote speaker was The Honorable Gina McCarthy, Administrator, EPA. She said that an Environmentalist means "We care about people." Environmentalists also care about Civil Rights concerning Environmental Justice and Climate Change. She said that we were not there yet, and that "We should all join our voices and speak as loudly as we can or we'll all be left behind. "She spoke of asthma cases and EPA's efforts to reduce fumes from cars. She stressed that it was not about genetics, but about environment. She covered a number of topics including Superfund cleanup, needs in rural areas without drinking water, Carbon Pollution Standards, ozone and sulphur dioxide pollution reduction, and protection for vulnerable communities. She mentioned some homes built by Habitat for Humanity, that are air-tight against carbon pollution and that have solar panels to make them energy efficient.

Estelle Bowman (Navajo), Assistant Director, Office of Tribal Relations, USDA Forest Service spoke on "Indigenous Perspectives Empowered: Forest Service Tools for Tribal Engagement" while Sandra Talley from the Office of Nuclear Material Safety and Safeguards, US Nuclear Regulatory Commission spoke on "Tribal Protocols and Related Outreach Activities".

There was an impressive presentation by Dr Jonathon Pershing, Principal Deputy Director, Office of Energy Policy and Systems Analysis, DOE. He stressed that climate change is real and will have significant impacts. It affects poor and minority communities - that is the Environmental Justice implication. He talked about the contribution of transport and industry to the problem, impacts of sea level rise, increasing storms, flooding, the need to cut emissions and to build a 21st century Transportation Policy He quoted from one of President Obama's speeches: "Will we have courage to act before it's too late? How we answer will have a profound impact on the world that we leave behind to our children and grandchildren."

The panel on "Achieving Indoor Environmental Justice through Weatherization and Healthy Home Initiatives" featured Erin Rose, Bruce Tonn and Beth Hawkins from the National Evaluations of DOE's Weatherization Assistance Program, Oak Ridge National Laboratory. They presented data on asthma cases, carbon monoxide poisonings, and home fires. They mentioned that deaths due to thermal stress could be prevented through weatherization.

On the last day of the Conference the presentations addressed solutions and opportunities to reduce the pollution that causes climate change. Suggestions were made that should be taken to protect communities.. One interesting presentation was by Dr John Balbus, Senior Advisor for Public Health to the Director of the National Institute of Environmental Health Sciences, entitled "Overview of Climate Change and How the Federal Government is Responding to It." He mentioned mortality rates in New York City linked to lack of air conditioning, heat-related illness and death, cardiovascular failure, stress from heat in indoor workers, such as in the drycleaning industry, and heat effects on outdoor workers

We will end with some quotes. The Honorable Donna Christensen, MD, US Virgin Islands, quoted Rev. Jesse Jackson, "Poverty is a weapon of Mass Destruction". Dr. Britt Rios-Ellis, California State University Monterey Bay, quoted, "Zip code, not genetics, predicts a longer life span of up to 20-30 year," (Mikula, Cassidy and Pfert, 2013), and Jeanette Jordan, Registered Dietician, J and J Health Consultants quoted, 'He who has health has hope. He who has hope has everything".

VII. Significance to ORSSAB:

Attendance at this meeting was invaluable for networking with a variety of people in the Environmental Justice field and seeing their enthusiasm for what they were doing. It inspires one to be a more informed SSAB member.

VIII. Names & Telephone Numbers of Significant Contacts:

1) Pallavi Phartiyal, PhD., Center for Science and Democracy

2) Chi-Pang Wen, MD, PhD, Institute of Population Health Sciences, Taiwan

3) Beth Mort, Dept. Of Ecology, Spokane, WA

4) Susanne Börner "Sustainable Development" Germany

5) Todd Larson, USAID, Washington, DC

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IX. Action Items: None

Traveler's Signature & Date: X.

Signature: Fay M. Martin
Date: March 16, 2015



TRIP REPORT

I. Name of Traveler: Belinda Price

II. Date(s) of Travel: March 15, - March 19 2015

III. Location of Meeting: Phoenix, Arizona

IV. Name of Meeting: Waste Management

V. Purpose of Travel: Attend meeting

VI. Discussion of Meeting:

I attended meeting sessions over three days. Noteworthy sessions included:

- The Plenary Session Mark Whitney, Acting Assistant Director for DOE Environmental Management (EM) Division was one of the speakers – he discussed the DOE EM cleanup budget and priorities.
- Hot Topics in DOE EM this panel included discussion on how EM ranks projects (by risk), safety and security programs, progress toward reopening WIPP, changes at Los Alamos (cleanup moving from NNSA to EM), DOE acquisition strategy, and planning and budgeting for FY17.
- Beyond US DOE Cleanup panelists included Sue Cange and Dave Adler and discussion included the successful reuse of land parcels at ETTP.
- The Effectiveness of Advisory Boards see discussion below on significance to ORSSAB

Of note also was the student poster session that I attended concerning emerging technologies for environmental cleanup. Posters included: three-dimensional modeling used to communicate risks and inform site cleanup priorities, the use of bacteria to treat hexavalent chromium, and the potential for using a humate solution for groundwater cleanup.

VII. Significance to ORSSAB:

This trip was important to me because it put the cleanup efforts of EM at the Oak Ridge Reservation (ORR) into perspective with respect to the entire DOE EM complex. Further, at the technical session on The Effectiveness of Advisory Boards, I met several representatives from other Advisory Boards (Savannah River, Paducah, and New Mexico). Discussion involved using

on-line meetings to get better participation for committee meetings and using GIS to help the public visualize what different remedies might look like.

VIII. Names & Telephone Numbers of Significant Contacts:

Not Applicable

IX. Action Items:

ORR will be featured DOE site at next year's Waste Management Symposium. I would like to encourage other members of the ORSSAB to attend the meeting so that we can bring attention to our successes. We should discuss the possibility of having some of our members participating in panel sessions or making presentations.

X.	Traveler's	Signature	&	Date:
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Signature: Bullinde Time Le	Date: 4/30/2015
Belinda Price	1/30/2013



TRIP REPORT

I. Name of Traveler: Alfreda Cook

II. Date(s) of Travel: April 21-23, 2015

III. Location of Meeting: DoubleTree Hotel, Augusta, GA

IV. Name of Meeting: Environmental Management Site-Specific Advisory Board Chairs' Meeting

V. Purpose of Travel: To attend the 2015 spring session of the semi-annual

Environmental Management (EM) Site-Specific Advisory

Board (SSAB) Chairs Meeting

VI. **Discussion of Meeting:** The meeting was hosted by the Savannah River Site SSAB.

<u>Day 1</u> provided an all-day, but partial, tour of the DOE Savannah River Site (SRS) which encompasses more than 198,000 acres covering 310 square miles. The day included presentations on the site's history and current EM cleanup activities and a walking tour of the operational liquid high-level waste vitrification facility and the solid low-level waste disposal facility. A drive-by of additional waste disposal areas included a transuranic waste burial area that will not undergo remediation per approval by regulatory agencies, and other active disposal trenches that depend on the dense clay soil to control migration of contaminants. The tour ended with a presentation at the on-site Savannah River Ecology Laboratory (SREL) operated by the University of Georgia. The SREL studies the effect of environmental contaminants on the many species of plants and wildlife that exist within the SRS and surrounding areas. An up-close look at some of the wildlife capped off the tour.

<u>Day 2</u> convened at the hotel with a welcome and remarks by dignitaries from the DOE, City of Augusta, and SRS. The SSAB Chairs' Round Robin followed and provided updates on organizational activities and accomplishments at each site since the last Chairs' Meeting. The agenda progressed with updates by DOE on the EM program, budget, communication strategies, current waste disposition concerns (e.g., re-opening the Waste Isolation Pilot Plant), long-range plans for management of waste with no current path to disposal, and the EM safety culture. The list of dignitaries included:

- Hardie Davis Jr., Mayor, City of Augusta
- Terry Spears, Deputy Manager, Savannah River Site
- David Borak, EM SSAB Designated Federal Officer

- Mark Whitney, Acting Assistant Secretary for Environmental Management
- Frank Marcinowski, Deputy Assistant Secretary for Waste Management
- Connie Flohr, Acting Deputy Assistant Secretary for Program Planning & Budget
- Candice Trummell, Director, Office of External Affairs
- Julie Goeckner, Senior Advisor for Nuclear Safety Culture

<u>Day 3</u> provided a forum for SSAB Chairs to discuss best practices for compiling recommendations to DOE EM on site issues of concern. In addition, pending recommendations that required consensus by all sites prior to presentation to DOE were discussed, re-worked, or tabled as warranted.

VII. Significance to ORSSAB:

It is important that SSAB members from across DOE EM sites interact to exchange ideas that ensure the success of the organization. Additionally, site tours promote a better understanding of cleanup concerns that are unique to each site.

VIII. Names & Telephone Numbers of Significant Contacts:

IX. Action Items:

Steve Hudson (Chair, Hanford SSAB) and I will revise for clarity the draft recommendation "Best Practices for Informed Budget Advice / Recommendations" for presentation at the fall 2015 Chairs Meeting.

X. Traveler's Signature & Date:	
Signature: Alfreda Cook	Date: 5/15/2015



TRIP REPORT

I. Name of Traveler: David Hemelright

II. Date(s) of Travel: 20 April -23 April 2015

III. Location of Meeting: Double Tree Hotel, Augusta, GA

IV. Name of Meeting: Semi-Annual Advisory Board Chair's 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.

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, Savannah River 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.

Normally, a detailed report is compiled, but if the reader has perused the reports of Pete Osborne, Alfreda Cook, and Bob Hatcher pretty much all the information contained in those reports would be the same in here. We all were at the same tour, same presentations, and heard the same things. A complete overview of the meeting is available on line from the DOE EM HQ website along with all the presentations made; http://energy.gov/em/downloads/chairs-meeting-april-2015. Once again Eric Roberts was able to effectively "heard 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.

Budgets affect all the sites. Mark Whitney feels that the annual budgetary process is an event that should be shared with the community and that DOE EM (and beyond) should hear of the 'priorities' of the local site and how the local populace feels about the direction that the clean-up is proceeding. Both Oak Ridge and Hanford, including the Office of River Protection, take up most of the DOE EM clean-up funds. Both of these sites have recently held public meetings to lay-out the FY 2017 budget priorities. Oak Ridge was asked to report to the assembled chairs at the next meeting to outline the 'who, what, when and where' of the public meetings and the ensuing outcome. There is to be a joint chairs' recommendation on the "Best Practices" of budget information. Steve Hudson, HAB Chair and Alfreda Cook, ORSSAB, will jointly compile a white paper for the next chair's meeting in Santa Fe, NM in September 2015.

VII. Significance to ORSSAB:

See all above and other participants' reports.

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:

Presentation materials from the Oak Ridge Partnership public budget meeting were forwarded to Steve Hudson, Hanford Advisory Board Chair and to David Borak, Designated Federal Officer for the Advisory Boards, for dissemination to the other chairs.

X. Traveler's Signature & Date:

Signature: Dave Hemelright Date: 22 May 2015



TRIP REPORT

I. Name of Traveler: Pete Osborne

II. Date(s) of Travel: April 21–23, 2014

III. Location of Meeting: August, GA

IV. Name of Meeting: SSAB Chairs Meeting

V. Purpose of Travel: To support ORSSAB participation in the meeting and gather

information necessary to follow up on meeting actions and

recommendations.

VI. Discussion of Meeting:

The meeting was held Wednesday, April 22, from 8:00 a.m. to 4:30 p.m., and Thursday, April 23, from 8:30 a.m. to 12:30 p.m. at the DoubleTree Hotel in Augusta. A tour of the DOE Savannah River Site preceded the meeting on Tuesday, April 21, from 7:15 a.m. to 4:00 p.m.

The meeting was facilitated by Eric Roberts, who supports both the Paducah and Portsmouth Site Specific Advisory Boards (SSABs). Oak Ridge attendees included Dave Hemelright and Alfreda Cook, who represented ORSSAB during the meeting discussions; ORSSAB member Bob Hatcher; and Melyssa Noe, ORSSAB's Federal Coordinator. Environmental Management (EM) SSAB Designated Federal Officer Dave Borak had returned just the previous week from a 6-month assignment, so he was able to attend the meeting.

The agenda can be found in the notebook distributed at the meeting (Attachment 1). Copies of all meeting presentations are also available on the EM SSAB chairs website maintained by DOE-Headquarters at http://energy.gov/em/downloads/chairs-meeting-april-2015. Minutes were taken during the meeting, and a transcript should be available from DOE in the near future.

Wednesday, April 22

The first day of the meeting featured presentations by Acting Assistant Secretary for EM Mark Whitney; a round robin presentation of the eight SSABs' topics, activities, or accomplishments; an update on the EM budget by Connie Flohr, Acting Deputy Assistant Secretary for Program Planning and Budget, and a preliminary discussion of a chairs' recommendation on the budget; and a roundtable discussion on DOE communication strategies, led by Candice Trummell, Director of the DOE Office of External Affairs.

EM Program Update – Mr. Whitney spoke on a variety of topics, including EM progress to date, the continuing investigation and recovery of the Waste Isolation Pilot Plant (WIPP), and recent personnel changes at EM Headquarters. He talked at length about what was going on at each of the EM sites represented at the meeting, discussing progress that's been made, as well as the challenges facing each facility. Given that he never seemed to refer to notes during his presentation or the Q&A afterward, his knowledge about the details of the many projects at the sites was very impressive. He stated early on that he intended to leave the majority of WIPP discussion to Deputy Assistant Secretary for Waste Management Frank Marcinowski, but it was impossible not to discuss projects at the various sites without coming back to that topic again and again. The bottlenecks occurring across the complex are being managed, but the longer it takes to get WIPP back open, the greater the problems will be. One obvious

omission in his talk was the state of the vitrification facilities at Hanford. In all, it was a good presentation of the state of things at EM and a good exchange between Mr. Whitney and the chairs.

<u>Chairs' Round Robin</u> – Each board was given a few minutes to talk about their site-specific topics, accomplishments, or their most recent activity. Dave Hemelright gave the ORSSAB presentation, which focused on the progress of reindustrialization at East Tennessee Technology Park.

EM Budget Update – Connie Flohr, Acting Deputy Assistant Secretary for Program Planning and Budget, went through the usual stuff: how funding supports priorities, the budget timeline, funding by site, changes by site, the outlook for next year, etc. Nothing earthshakingly new to report. There wasn't too much bellyaching from the chairs about their site budgets, although there certainly was some, but I think they have finally gotten used to the fact that regardless of how much they complain about their site budget, Headquarters will focus budget on the priorities it sets. The FY 2016 priorities were clearly delineated, with WIPP at the top of the list:

- Continue recovery of transuranic waste disposal operations at WIPP.
- Continue construction of the Low Activity, Lab, and Balance of Facilities at Waste Treatment and Immobilization Facility and design of the Low Activity Waste Pretreatment System at Hanford.
- Continue Defense Waste Processing Facility liquid waste processing and supports construction and commissioning of Salt Waste Processing Facility at Savannah River Site.
- Complete major facility cleanout and demolition projects.
- Address key infrastructure needs across the complex.

<u>Proposed Chairs Product: Budget Best Practices</u> – Discussion segued from Ms. Flohr's presentation into the draft chairs' recommendation, "Best Practices for Informed Budget Advice/Recommendations," which had been spearheaded by the Hanford board. Everyone seemed in agreement with the content of the recommendation, but then focus shifted to the intent of the document. Unlike other chairs' recommendations, there was no real statement of "we want DOE to do such and such." The decision was reached to add a statement of purpose to it and then submit it (upon approval by the eight boards) as a white paper. Steve Hudson, the Hanford chair, and Alfreda Cook agreed to work on the statement of purpose. It will then come back to the chairs at the fall 2015 meeting for discussion.

Roundtable Discussion: DOE Communication Strategies – Discussion was led by Candice Trummell, who is the Director of the DOE Office of External Affairs, under which the EM SSAB operates and is managed by Dave Borak. Ms. Trummell most recently reached out to the boards via her March 11, 2015, memorandum "Environmental Management Site-Specific Advisory Board Membership Policies and Guidance," which was written in response to requests received during the September 2014 Field Managers Meeting in Idaho Falls, Idaho. The memorandum summarizes EM SSAB membership requirements, with the intent of providing greater consistency in candidate solicitation, appointment, and reappointment across the EM complex.

One of her main points was to establish that while the board, through its eight local site board entities, is a conduit for public engagement for EM, the individual SSABs are not in the business of proselytizing on behalf of EM. She understands their interest in getting the word out about EM activities and that it is a natural side function of the boards, but they shouldn't make it a priority at the expense of their primary job of making recommendations to EM. They should definitely make recommendations to EM on how and what EM communicates, and they should work closely with the EM Public Affairs offices at their sites. Still, she allows for site preferences in the matter and is agreeable to letting site management make decisions about it, given the specific circumstances of their board, their site, and their public.

She pointed out that Savannah River does something called 'info pods' that they take around to educate the public, and that *The Hanford Story* video won an Emmy award (which I did not know). Mr. Hemelright pointed out that the chairs had made a recommendation to EM recently on communication tools.



Discussion turned to the "By the Numbers" 'infographics' that EM is developing for the sites, which will be used in public meetings and in other ways to give a snapshot of what's been achieved. (These are available in the meeting notebook.). When asked, Ms. Trummell could not say if or how the infographic sheets had been reviewed by site personnel. She asked for input from the boards, although she gave no specific direction on when it should be provided. I think we're to send any comments to her via Elizabeth Schmitt.

Ms. Trummell closed out her portion of the meeting by asking when the chairs would like to have her back again to talk about how this discussion has changed things. Steve Hudson at Hanford suggested a year, and Alfreda Cook suggested the next meeting, but no decision was reached. Mr. Borak remarked that she can always provide updates during the chairs calls.

EM SSAB Product Development

Participants at the meeting discussed four draft recommendations:

- 1. Best Practices for Informed Budget Advice and Recommendations
- 2. Supplemental Environmental Projects
- 3. Additional Surface Storage at WIPP
- 4. Identification and Preparation of Interim Disposition Site(s) to Enable Las Alamos National Laboratory Transuranic Disposal Operations and Nation's Other Sites' Waste Disposal Operations to Remain Continually Operational

Discussion on each of the recommendations was lengthy, so for the sake of brevity, I will simply state the outcomes.

- 1. Best Practices—A statement of purpose will be added, and it will be turned into a white paper, rather than a recommendation, by Steve Hudson (Hanford) and Alfreda Cook. It will then presented at the fall chairs meeting.
- 2. Supplemental Environmental Projects—The recommendation was tabled because some of the chairs thought it was too specific to just New Mexico. Most thought it a worthwhile topic, though, that has applicability across the complex, so discussion of the issue will be added to the fall chairs meeting agenda.
- 3-4. Additional Surface Storage at WIPP & Identification and Preparation of Interim Disposition Site(s)—The decision was made on Wednesday to combine these into one recommendation since they addressed essentially the same issue. A subcommittee was tasked to come up with a hybrid document, which was presented for discussion on Thursday. The resulting product, "Draft Recommendation on Additional Surface Storage at WIPP," retained the original title of recommendation 3, but has a

broader statement of purpose and includes a subsection called "Intent." The revise went through a nearly one-hour scouring by the group before it was finally approved by a unanimous vote. It will now go before the eight boards for approval.

Thursday, April 22

The second day of the meeting offered a less formal agenda of presentations and discussions.

<u>DOE-HQ News and Views</u> – Mr. Borak made only a few remarks since so much had been covered on Wednesday.

<u>WIPP Update</u> – Frank Marcinowski, Deputy Assistant Secretary for Waste Management, gave a very comprehensive overview of recent events at the Waste Isolation Pilot Plant (WIPP). A thorough reading of his presentation and the meeting minutes that will be issued by Headquarters would be required to digest the large amount of information he provided.

Mr. Marcinowski also distributed a waste disposition map for the Idaho site that is being developed as a prototype. He asked the boards to comment on it before he goes forward with other sites.

<u>Safety Culture Overview</u> – Julie Goeckner, Senior Advisor for Nuclear Safety Culture, gave a detailed overview of DOE's definition of its safety culture. See the presentation for details.

VII. Significance to ORSSAB:

Understanding other boards' issues and maintaining working relationships with the other SSABs (especially on interdependencies such as budget) is invaluable to helping this board do its job. Working on joint recommendations provides added value for the meeting participants and DOE.

VIII. Names & Telephone Numbers of Significant Contacts:

A list of EM SSAB contacts is available from me or Spencer Gross.

IX. Action Items:

- 1. Review and comment on the "By the Numbers" 'infographics' that EM is developing for the sites.
- 2. Review and comment on the waste disposition map for the Idaho site that is being developed as a prototype.

X. Traveler's Signature & Date:

Signature: ___ Date: 5/12/15