



*Many Voices Working for the Community*

# Oak Ridge Site Specific Advisory Board

---

## Approved September 12, 2012 Meeting Minutes

The Oak Ridge Site Specific Advisory Board (ORSSAB) held its monthly meeting on Wednesday, September 12, 2012, at the DOE Information Center, 1 Science.gov Way, Oak Ridge, Tenn., beginning at 6 p.m. A video of the meeting was made and may be viewed by contacting the ORSSAB support offices at (865) 241-4583 or 241-4584. The presentation portion of the video is available on the board's YouTube site at [www.youtube.com/user/ORSSAB/videos](http://www.youtube.com/user/ORSSAB/videos).

### Members Present

Jimmy Bell  
Alfreda Cook  
Lisa Hagy  
Bob Hatcher  
David Hemelright  
Bruce Hicks

Charles Jensen, Secretary  
Ross Landenberger<sup>1</sup>  
David Martin  
Fay Martin  
Donald Mei  
Maggie Owen, Chair

Greg Paulus  
Coralie Staley  
Robert Stansfield  
Thomas Valunas

### Members Absent

Janet Hart  
Howard Holmes  
Jennifer Kasten  
Jan Lyons  
Scott McKinney<sup>2</sup>  
Scott Stout  
Sam Yahr<sup>1,2</sup>

<sup>1</sup>Student Representative

<sup>2</sup>Second consecutive absence

### DDFO, Liaisons, and Federal Coordinator Present

Susan Cange, Deputy Manager for DOE-ORO Environmental Management (EM) and Deputy Designated Federal Officer (DDFO)  
Connie Jones, Environmental Protection Agency (EPA)  
Melyssa Noe, ORSSAB Federal Coordinator, DOE-ORO  
John Owsley, Tennessee Department of Environment and Conservation (TDEC)

### Others Present

Andy Binford, TDEC  
Susan Gawarecki  
Spencer Gross, ORSSAB Support Office  
Steve Kenworthy, Citizen's Oversight Panel  
Harry McNabb  
Norman Mulvenon, Citizen's Oversight Panel

Pete Osborne, ORSSAB Support Office  
Ken Schneider, UT-Battelle  
Laura Wilkerson, DOE

Nine members of the public were present.

### **Liaison Comments**

Ms. Cange – Ms. Cange said DOE Oak Ridge was spending many hours working on the FY 2013 budget. Congress has not yet approved a budget for FY 2013 and has announced there will be a six-month continuing resolution. While the department knows how much money it will have to operate over the next six months, Ms. Cange said the amount is less than the appropriated amount for FY 2012. She said that will result in some impacts on work underway. There will likely be some layoffs of employees because funding is not available to continue current employment levels. Mr. Paulus ask about a percentage of employee cutbacks. Ms. Cange said it could be as much as 10 percent because of automatic budget cutbacks that could be triggered if Congress doesn't agree on a budget. The cutbacks would affect contractor and sub-contractor workers.

Ms. Jones – no comments.

Mr. Owsley – Mr. Owsley introduced Mr. Binford, director of the TDEC Bureau of Environment and Remediation.

### **Public Comment**

Mr. Mulvenon said he had reviewed the summary of the ORSSAB annual meeting and expected to have some comments on the meeting at a future date. He encouraged the board members to listen carefully to Ms. Wilkerson's presentation on the cleanup plans for the Oak Ridge Reservation (ORR).

Ms. Gawarecki said she had heard that UCOR, DOE's prime cleanup contractor in Oak Ridge, plans to lay off up to 200 people. She said DOE is one of the largest employers (through contractors and subcontractors) in East Tennessee. She said research done by the University of Tennessee indicated that whenever a job is created 3.2 other jobs are created as a result. Consequently, layoffs will affect a similar number of jobs. She encouraged the board members to talk to community leaders who, she said, help influence federal officials to keep budgets in place.

### **Presentation**

Ms. Wilkerson's presentation was on cleanup plans for Oak Ridge National Lab (ORNL). The main points of her presentation are in Attachment 1.

Ms. Wilkerson introduced Bill McMillan and reported that he had just been named as the portfolio director for ORNL cleanup that will include the Uranium-233 Project and balance of ORNL cleanup with a few exceptions for which she will remain responsible. She also introduced Ken Schneider and Bill Biloski with UT-Battelle, the management contractor for ORNL.

ORNL supports vital science and energy research for the United States. Many new facilities have been constructed at the lab over the previous 10-15 years as part of ongoing modernization at the lab. Most of the new facilities have been built to the east of the older central campus. On the west end of the lab new facilities have been constructed for bioenergy research.

The central campus of the lab is the primary area of focus for cleanup. It includes shutdown research reactors, isotope production facilities, and waste treatment facilities.

The cleanup of ORNL will be complex and lasting over a number of years (Attachment 1, page 5). Ms. Wilkerson said the primary challenge will be completing the cleanup safely in the midst of ongoing activities at the lab. Much of the cleanup will involve various radioisotopes that will be difficult to deal with.

Ms. Wilkerson noted the priorities for cleanup at the lab (Attachment 1, page 6). Within those priorities several accomplishments have been achieved. One of the most significant was the removal and disposition of Tank W-1A and surrounding contaminated soil near Building 3019. The tank and the surrounding soil was a significant source of groundwater contamination in the central campus (Attachment 1, page 7).

Another accomplishment was hydraulic isolation of the Solid Waste Storage Areas 1 and 3, about 21 acres, at the Bethel Valley Burial Grounds in the southwest portion of the lab (Attachment 1, page 8).

Forty-three excess facilities were demolished within the central campus. Legacy materials were removed and disposed from about 35,000 square feet of space (Attachment 1, page 9).

In the northwest corner of the lab, contaminated soils and slabs were remediated (Attachment 1, page 10). This area is now available for re-use for private sector companies and lab use.

All of these projects were completed using Recovery Act funds that became available in 2009. One project that was not funded with Recovery Act money was the Corehole 8 Extraction System to improve system to capture and treat the Corehole 8 plume caused by leakage from Tank W-1A (Attachment 1, page 11).

Another accomplishment was the installation of a line of monitoring wells on the west side of the Clinch River to detect any possible migration of contaminants from the Melton Valley Burial Grounds on the east side of the river. About a year's worth of monitoring results has been collected. The most recent data do not indicate presence of radionuclides in groundwater on the west side of the river. There were some slight indications of radionuclides, well below drinking water standards, in early monitoring results, but that has not been repeated since. Mr. Bell asked how many times in how many wells the early indications were noted. Ms. Wilkerson said there were 'a couple of hits in a couple of wells.' Ms. Cange said one of the theories is that private wells on the west side of the river might have pulled contaminants under the river to the west side.

Ms. Wilkerson said as a result of some cost savings in projects, additional work has been implemented at the lab. Those projects are noted on page 13 of Attachment 1. As of April demolition and removal of four of the six cells at the Building 3026 site has been completed (Attachment 1, page 14). The two remaining cells are being cleaned of radiological contamination prior to demolition and removal. That work is expected to be complete in early 2013.

Six radioisotope thermoelectric generators are being dispositioned that were stored in the central campus. Additional characterization has begun for legacy material removal from nine isotope facilities (Attachment 1, page 15).

Ms. Wilkerson said additional work is being done to disconnect one leg of the buildings that are connected to the 3039 Central Stack (Attachment 1, page 16). She said these are primarily laboratory and administrative buildings.

Recently an investigation was completed on about 18,000 acres on the ORR that are believed not to have been impacted by surface contamination and thus should not be part of the National Priorities List (Attachment 1, page 17). Documentation to that effect is being finalized and will be submitted to the regulators by the end of September.

Ms. Wilkerson discussed near-term priorities for ORNL (Attachment 1, page 18). Longer term plans are noted on page 19 of Attachment 1. Ms. Wilkerson completed her presentation with a before and after artist's rendition of what the ORNL campus will look like when cleanup is completed (Attachment 1, page 20).

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

Mr. Hemelright – DOE had established a timeline for completion of cleanup, but with the additional Recovery Act funding from 2009, how much did that shorten the timeline? Ms. Wilkerson – That's a complicated question to answer. The original baseline we established did not include all of the buildings and all of the areas that have now come into the EM program as a result of modernization efforts at ORNL and Y-12 National Security Complex. The timeline is now driven mainly by budget assumptions that we expect to remain constant and extends into the 2040s. Recovery Act money allowed us to make significant progress within the scope of the EM program that includes much more than what we started with.

Mr. Hatcher – Is the rate of new building at the lab paralleling or exceeding the rate of the cleanup process? Ms. Wilkerson – The modernization efforts have left a backlog of facilities that are ready to come into the EM program, but because we don't have the funding to accept those facilities we have to defer that work, and the landlord has to keep those facilities in a safe condition until we're able to take them. Mr. Hatcher – How does that affect modernization of the lab? Ms. Wilkerson – As you saw you have a campus that is being developed on either end of the central campus and the middle is awaiting remediation and decontamination. Mr. Hatcher – So the central campus is slowing down the rate of modernization of the entire lab? Ms. Wilkerson – I wouldn't say it is slowing it down, because the lab has chosen to expand to the east and west. I think what they plan for the central campus once we complete the work there is to provide for green areas and parking areas, things like that. So it's not slowing it down, but it's not complementing it until we complete the cleanup.

Mr. Bell – With respect to the (3039) stack that has underground tunnels and filter systems that are contaminated, is it the long-range intent to eliminate that stack? Ms. Wilkerson – Yes, the stack mainly supports buildings that are excess in the central campus area. Once those buildings are demolished the stack will no longer be needed. There will be a handful buildings with ongoing missions on the laboratory side that will have to have some sort of dedicated stack system to supply ventilation for those facilities. Mr. Bell – The underground tunnels, will they be cleaned up or filled in? Ms. Wilkerson – We would have to work with the regulators in how we address the remediation of those areas. We haven't gotten that far into those details yet. Mr. Bell – So the long-range purpose is to convert ORNL to a minimum low activity level operation? Ms. Wilkerson – There are still high level activities at the lab that are mainly in Melton Valley area. I don't think they're going

to a low-rad or no-rad approach. Mr. Schneider – The hot cell facilities that we currently have in operation in the central campus area, primarily Buildings 3025, 3025E, the long-range plan is to get them on standalone ventilation systems so we can get those facilities off the central stack. Work is going on now for 4501 and 4505 to get them on standalone stacks.

Mr. Bell – The line from 3019 to Tank W-1A, is anything being done to circumvent any releases from that area? Ms. Wilkerson – That line has been capped and there are no ongoing releases from the building. The line is still there but it is no longer transporting anything from the building.

Mr. Bell – I think what you mentioned about contaminant transfer across the Clinch River is very important. Why that first transfer was recognized is a big question. I had heard that one sample was taken from a well and was analyzed and that caused DOE to put in new water lines and shut off private well usage at tremendous cost. Is it true that there was only one set of analysis to start that? How many samples were taken to decide there was an actual transfer? Mr. Owsley – In 2007 DOE released a monitoring report for their picket wells on the east side of the river that showed contamination at depths. The state went across the river and sampled a number of private wells a number of times from 2007 to 2010. DOE agreed to install their own monitoring wells and also convert some of the drinking water wells to monitoring wells. During that period the state and DOE have found basically the same things – sporadic, low levels of contaminants. The reason for providing water was to take the groundwater wells offline so they weren't pulling groundwater and to allow the groundwater to stabilize so the monitoring could be undertaken under static conditions. Ms. Cange – As Ms. Wilkerson said the latest round of sampling did not replicate any of the previous sporadic hits. Mr. Bell – How does that correlate with rainfall? Mr. Owsley – The geology of the site is very complex and it is expected that conditions in the wells will change as the water table moves up and down. Trying to determine if the contamination is there and is presenting a problem is what DOE, TDEC, and EPA are trying to work out. Ms. Cange – One of the things we have agreed to among the three agencies is to develop a groundwater strategy for this entire area. That strategy is to be complete about a year from now. We're bringing in several hydrologists who have been working on this for many years. They are helping us pull together this comprehensive strategy and plan.

Mr. Kenworthy – Given the current budget projections, outside of the uranium-233 and transuranic waste processing, when will work at ORNL central campus begin again? Ms. Wilkerson – In 2018 to early 2020s. Ms. Cange – That's based on if our funding remains level with what it is today.

Mr. McNabb – Who is the contractor on this program? Ms. Wilkerson – UCOR has the contract, which includes surveillance and maintenance and operation of the gaseous and liquid waste treatment facilities. It does not include decontamination and decommissioning activities at the lab. The work we've done through the Recovery Act is work that has been done primarily through the EM nationwide indefinite delivery, indefinite quantity contracting that includes a lot of contractors. We have used SEC, LATA-Sharp, UT-Battelle through some subcontractors, and Bechtel-Jacobs. As far as having a contractor in place to do remedial work at the lab it is not included in the UCOR contract because that work is not contemplated for the near term. Mr. McNabb – Who provides health physics services? Ms. Wilkerson – Currently that is UCOR. Ms. Cange – We should also mention that we have other contractors such as Isotek, which is performing the uranium-233 disposition and Wastren Advantage, Inc., which is performing the transuranic waste processing. We have a large number of contractors that have a role in certain activities at the lab.

### **Committee Reports**

**Board Finance & Process** – Mr. Paulus reported that the board will end with a surplus at the end of FY 2012 that will carry over to FY 2013.

The committee reviewed section 7 of the ORSSAB bylaws and made no changes.

At the October meeting, the committee will review the reporting spreadsheet with the possibility of expanding it to be clearer in how monies are accounted.

Mr. Paulus reminded committee chairs to consider committee budget requests for FY 2015 at their next meetings.

The committee will meet on Thursday, September 27 at 4:30 p.m. at the DOE Information Center.

**EM** – Mr. Hatcher reported that Dan Goode, U.S. Geological Survey, was a guest of the committee at its meeting on August 15. Mr. Goode was in Oak Ridge on a preliminary visit as a candidate to study groundwater flow through fractured rock on the ORR. He went on two tours both on and off the reservation on August 15 and 16 to get a better understanding of the geologic characteristics of the ORR. He said the discussion did not focus on groundwater modeling, but more on addressing the problems of groundwater pathways and fractured rock hydrology for the reservation that is not understood very well. He said this fits in well with an outline that Dave Adler gave at the committee meeting with the emphasis of four areas on the reservation that will be addressed by DOE in the future. He said Dr. Goode has the potential for bringing new ideas on examining the problem that would be beneficial to DOE in groundwater remediation efforts.

The committee approved a draft recommendation on improving the document search capabilities at the DOE Information Center. That recommendation was to be voted on at this meeting, but a quorum for voting on recommendations did not exist. It will be put on the October agenda for consideration.

The committee will meet on September 19 at 5:30 p.m. at the DOE Information Center and will continue the discussion on groundwater flow research. The committee will also develop its work plan for FY 2013, develop a budget request for FY 2015, and elect committee officers for FY 2013.

**Public Outreach** – Mr. Hemelright reported that the next commentary from the committee for distribution to local papers is on the effectiveness of Recovery Act funding of projects in Oak Ridge.

Committee member Mr. Holmes suggested inviting political and community leaders of the area to board meetings to see any potential for interacting with the board.

The committee reviewed and approved the editorial plan for the next Advocate newsletter. Mr. Hemelright said he will take copies of the summer and fall newsletters to the fall EM SSAB chairs' meeting in Washington, DC, October 2-3.

Mr. Hemelright said committee member Mr. McKinney is still working with WBIR television on doing a feature on the board.

The committee reviewed some renditions for possible modifications to the ORSSAB exhibit at the American Museum of Science and Energy.

The committee will meet Tuesday, September 25 at 5:30 p.m. at the DOE Information Center. It will discuss its budget request for FY 2015 and elect officers for FY 2013.

Stewardship – Mr. Hemelright reported that the committee reviewed the latest version of the Long-term Stewardship Site Transition Summary. It decided not to make any comments on the summary until it had an opportunity to review a 13-step guidance document that is being developed to go with the transition summary.

It was suggested a conference call with stewardship contacts in Washington, DC be set up for the October meeting to discuss in more detail the site transition summary and the guidance document.

The committee suggested a test transfer of a small parcel on the ORR from DOE EM to its original landlord to see how useful the site transition summary is.

The committee will meet September 18 at 5:30 p.m. at the DOE Information Center. It will develop its FY 2013 work plan, its FY 2015 budget request, and elect officers for FY 2013.

Executive – Ms. Owen reported the committee met on August 23 and discussed the annual planning meeting, which she said went very well. She said it was well planned, goals were accomplished, and it was a productive meeting. She encouraged members to read the summary of the planning meeting that was included in this month's meeting packet.

The committee reviewed the annual meeting evaluations and discussed how some things could be improved or modified for the next meeting.

The committee reviewed travel procedures and travel requests for upcoming meetings.

The committee selected topics for presentation at the EM SSAB chairs' meeting in October. For a major board issue the committee selected the problem of understanding groundwater flow in fractured rock on the reservation. For its major board activity, the board selected a related item of working with a possible researcher to study groundwater flow on the reservation.

The committee will meet on September 27 at 5:30 p.m. at the DOE Information Center.

#### **Announcements and Other Board Business**

ORSSAB will have its next meeting on Wednesday, October 10 at 6 p.m. at the DOE Information Center.

Ms. Cange introduced Mr. Landenberger as the new student representative to the board.

Ms. Cange recognized Ms. Owen for her service to the board.

The minutes of the July 11, 2012, meeting were approved.

Messrs. Martin, Hemelright, and Jensen were elected as board chair, vice-chair, and secretary respectively for FY 2013.

**Federal Coordinator Report**

No report.

**Additions to the Agenda**

None.

**Motions****9/12/12.1**

Mr. Jensen moved to approve the minutes of the July 11, 2012, meeting. Mr. Hatcher seconded and the motion passed **unanimously**.

**9/12/12.2**

At the August annual meeting the Nominating Committee presented a slate of candidates for board officers consisted of Mr. Martin for board chair, Mr. Hemelright vice chair, and Mr. Jensen secretary. At this meeting Mr. Paulus asked for any other nominations from the floor. Being none he moved to elect the slate of candidates for board officers. Mr. Valunas seconded and the motion passed **unanimously**.

The meeting adjourned at 7:20 p.m.

**Action Items**

*Open*

*Closed*

1. Jack Hanley, Agency for Toxic Substances and Disease Registry will supply the name of the document he mentioned that details the differences between the agency's public health assessment processes versus an EPA environmental risk assessment. **Completed.** Mr. Hanley supplied the document on July 23 (Attachment 2) and was forwarded to board members on that date.

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

I certify that these minutes are an accurate account of the September 12, 2012, meeting of the Oak Ridge Site Specific Advisory Board.

Chuck Jensen, Secretary



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

October 16, 2012