



Many Voices Working for the Community

Oak Ridge Site Specific Advisory Board

Monthly Meeting of the Oak Ridge Site Specific Advisory Board

Approved February 8, 2017, Meeting Minutes

The Oak Ridge Site Specific Advisory Board (ORSSAB) held its monthly meeting on Wednesday, February 8, 2017, at the DOE Information Center, 1 Science.gov Way, Oak Ridge, Tennessee, beginning at 6 p.m. A video of the meeting was made and may be viewed by contacting ORSSAB support offices at (865) 241-4583 or (865) 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

Kathryn Bales
Richard Burroughs
Martha Deaderick
David Hemelright, Secretary
Howard Holmes
Greg Paulus
Belinda Price, Chair
Deni Sobek
Fred Swindler
Venita Thomas
Ed Trujillo

Rudy Weigel
Phil Yager
Dennis Wilson, Vice Chair

Members Absent

Leon Baker
Christopher Beatty
Mike Ford
Rosario Gonzalez
Eddie Holden
Mary Smalling

Liaisons, Deputy Designated Federal Officer, and Alternates Present

Dave Adler, ORSSAB Alternate Deputy Designated Federal Officer (DDFO), Department of Energy, Oak Ridge Office of Environmental Management (DOE-OREM)
Carl Froede, Environmental Protection Agency (EPA), via telephone hookup
Randy Young, Tennessee Department of Environment and Conservation (TDEC)
Melyssa Noe, ORSSAB Alternate DDFO, DOE-OREM

Others Present

Spencer Gross, ORSSAB Support Office
Brian Henry, DOE
Pete Osborne, ORSSAB Support Office

Nine members of the public were present.

Liaison Comments

Mr. Adler – Mr. Adler said there is discussion about when to schedule the next ORSSAB meeting related to FY 2019 DOE-OREM budget request development. The topic was scheduled for the March 8 meeting, but he said there is consideration of delaying the topic to April. Mr. Adler said there would be more substantive things to discuss in April than in March. There is no additional budget information available to share with the board. The federal government is currently operating under a continuing resolution. DOE-OREM is using FY 2016 budget appropriations. The continuing resolution funds OREM through April 28, but Mr. Adler said there is speculation the government could operate under the resolution for the balance of the year.

Mr. Adler said there is also consideration of ORSSAB hosting a public workshop on the OREM FY 2019 budget request. That would require a venue change to accommodate more members of the public who could provide input on the budget request.

Mr. Adler said OREM field operations are progressing as normal. At the national level the new leadership team has not been named. He reminded the board that the former OREM Manager Susan Cange is leading the DOE EM efforts nationwide. She will remain in that position until a permanent political appointee is selected.

He said tonight's presentation will be on all the current landfill operations on the Oak Ridge Reservation (ORR). He said it is important for the board to understand that OREM cleanup operations use a network of landfills on the reservation to dispose of the various types of waste streams that are generated at the DOE Oak Ridge site.

Mr. Trujillo asked if under the continuing resolution if funding is provided at, above, or below the proposed budget. Mr. Adler said it's an unpredictable process. Mr. Adler explained that under the continuing resolution it is a per month allocation that is equivalent to the per month allocation received under FY 2016 budget. That per month allocation rate is larger than the budget President Obama had requested. Congress appropriated more money than requested. There is no presidential request for FY 2017 yet. He reiterated that there is expectation that FY 2017 will remain under the continuing resolution. Mr. Adler said the new administration will have a role in the FY 2018 budget request to Congress.

Mr. Paulus said the FY 2016 had an increase over the FY 2015 budget of about \$28 million. The budget request for FY 2017 was lower than the FY 2018 request, but he wanted clarify that OREM is currently spending at the FY 2016 appropriation of the extra \$28 million. Mr. Adler said that is correct.

Mr. Young – no comments.

Mr. Froede – no comments.

Public Comment

None.

Presentation

Brian Henry is the Portfolio Federal Project Director for landfill operations at the Y-12 National Security Complex. His presentation was on Waste Disposal Capacity for Oak Ridge Reservation Landfills. The main points of his presentation are in Attachment 1.

He began by saying that the ORR has a suite of landfills that support all of OREM's cleanup programs. With current and planned future capacity OREM is in position to finish the cleanup of the ORR. All ORR landfills are permitted by TDEC or the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). Each landfill has established waste acceptance criteria (WAC) to determine if waste is acceptable for disposal (Attachment 1, page 2).

The aerial photograph on page 4 of Attachment 1 shows the locations of all the active landfills on the ORR. The Environmental Management Waste Management Facility (EMWMF) is the primary CERCLA facility that accepts waste from cleanup operations at East Tennessee Technology Park (ETTP). The original sanitary landfill, Landfill I, is near EMWMF and has been closed for several decades. Landfill II has also been closed for several decades. Landfill 6 was a sanitary industrial landfill and has been closed for some time. The currently operating landfills are IV, V, and VII and are all near Y-12.

The chart on page 5 of Attachment 1 shows all of the active landfills on the ORR, the type of waste they accept, and the type of permit they have. The EM Disposal Facility (EMDF) is in the planning stage and will be permitted under CERCLA. It is needed to complete future cleanup of the Oak Ridge National Lab (ORNL) and Y-12.

When project waste generators evaluate waste they follow a waste disposal hierarchy shown on page 6 of Attachment 1. The first option is recycling or reuse if possible. Construction debris can be disposed in Landfill VII. If waste cannot go into Landfill VII, Landfills IV and V are the next options. They can accept sanitary waste including office/cafeteria waste, equipment, and construction demolition debris. Landfill IV can also accept classified waste. Both can accept minor levels of chemical or asbestos contamination. Waste that is non-CERCLA and can't go into Landfills IV, V, and VII, must be shipped offsite. Waste generated under CERCLA can be disposed in EMWMF. That waste can have low levels of radiological and/or chemical contamination. Waste that doesn't meet the EMWMF WAC must be shipped offsite. Mr. Henry said that about 90 percent of waste by hazard or radiological activity is sent offsite, but 90 percent of volume of waste generated on the ORR is disposed onsite.

Mr. Henry discussed in more detail each of the operating landfills. Landfill IV is the smallest of the landfills, about 4 acres, and opened in 1989. It has a permitted capacity of 89,000 cubic yards and is about 50 percent full (Attachment 1, page 7). Mr. Henry said landfills are built out as needed, so in the case of Landfill IV it is constructed so far to accept about 71,000 cubic yards of waste. Mr. Henry said it would probably be 10 or more years before this landfill is expanded to permitted capacity.

Landfill V (Attachment 1, page 8) opened in 1994 and has a 26-acre footprint. It has a capacity of 2.1 million cubic yards and is about 40 percent full. It is a lined facility with a leachate collection system. Only about half of the permitted capacity has been built. Mr. Henry said some waste envisioned to go in EMWMF from ETTP met the WAC for disposal in Landfill V and preserves some extra space for EMWMF. Mr. Henry said he expected Landfill V to be expanded in five to 10 years.

Landfill VII (page 9) receives construction/demolition debris. It is a 30-acre site that opened in 2001. It is unlined and can accept up to 2.09 million cubic yards of debris. It is about 25 percent full. Mr. Henry said build out of part of Landfill VII will likely happen in 2018-19.

EMWMF (page 10) accepts low-level CERCLA waste. It opened in 2002 and covers about 28 acres. It has several lined cells. It has a total capacity of 2.18 million yards and is about 75 percent full. It receives contaminated soils, remediation waste, and demolition debris. Mr. Henry said the original design for a final cap was to be 13 feet thick. It is now believed an 11-foot thick cap will provide sufficient protection, and DOE is working with TDEC and EPA to redesign the cap that will allow for an extra 100,000 cubic yards of capacity. He said that is important to provide a cushion to have extra disposal capacity before the proposed EMDF is open. Completing cleanup of ETTP in the 2020 timeframe will basically fill up EMWMF.

Mr. Henry said different types of waste need to go in different places in a landfill. Large heavy objects should go on the floor of the landfill cell. As EMWMF fills up there is less space to handle large objects. He said EMDF needs to be open about two years before EMWMF fills up so large objects can go into EMDF.

For the proposed EMDF a remedial investigation/feasibility study is being done to determine the location. A number of alternatives (including offsite) will be proposed for EMDF. All of the onsite alternatives being considered are in Bear Creek Valley near EMWMF. One alternative is adjacent to the east of EMWMF. Two smaller sites are to the west of EMWMF and two full size locations are farther west. All of the disposal sites range in capacity from 2.2 to 2.8 million cubic yards.

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

Mr. Paulus – When I joined the board all of the talk was about burial grounds. Are the burial grounds I, II, and VI? Mr. Henry – We have waste buried in various places on the ORR, and there are burial grounds in the vicinity of the landfills I talked about. All of the ones I talked about are not the burial grounds you refer to. Mr. Adler – This was a presentation on the current suite of operating landfills. If you look at the old landfills that were used from the 1940s to the 1970s those have been closed in place and our current planning assumption is for those to remain closed in place. Each of the main plants (Y-12, ORNL, and ETP) have associated burial grounds. Most of those burial grounds have been closed in place with measures designed to minimize the transfer of contaminants from the burial grounds to groundwater or surface water. There are a few sites where that would be very difficult to do. In fact some were in old streambeds, so that waste was excavated and placed in some of the landfills Mr. Henry talked about. They presented the most significant transfer potential to ground and surface water. But again Mr. Henry's presentation was on existing operating landfills.

Mr. Young – You mentioned low-level contaminated waste that doesn't go into the EMWMF. Where does that waste go? Mr. Henry – Landfill IV and Landfill V routinely have special waste permits where we tell TDEC that waste has a small amount of contamination and we ask for permission to put it in one of those landfills.

Mr. Weigel – You said Landfill V has a leachate collection system. Does Landfills IV and VII have leachate collection systems? Mr. Henry – Landfill VII is unlined. It has no leachate collection system. Landfill IV is divided into areas 1 and 2. Area 1 is fairly small. It is unlined and does not have a leachate collection system because that was not required at the time it was built. Area 2 is lined and has a leachate collection system. Any future buildouts in Landfills IV and V will have leachate collection systems.

Ms. Price – Is mercury contaminated waste allowed in any of the landfills? Mr. Henry – The landfills have land disposal restrictions. If there is mercury contamination in a waste stream the waste generators determine if the mercury is low enough that it meets the land disposal restrictions. If that's the case it could go into EMWMF. We have waste handling plans in place for all the waste covered under CERCLA. Another way to meet land disposal restrictions is for waste to be treated, such as macro encapsulation. Theoretically macro encapsulated mercury waste would meet waste disposal restrictions. But we currently have no waste handling plans that allow for treated mercury waste to go into EMWMF. So generally if it doesn't meet the land disposal restrictions and requires treatment it would be sent offsite for treatment and disposal.

Ms. Price – Mercury is going to be an issue of cleanup at Y-12. Are there any preliminary thoughts about how that will be dealt with? Mr. Henry – Some of the work we're doing at Y-12 now involves some of the COLEX (column exchange) equipment that is outside of Alpha 4 that does have mercury contamination. That is going to be a good case for us to work out how we're going to handle mercury contaminated equipment. As we do that work we're working with the regulators to segregate the waste into waste that has minimum mercury contamination that can be disposed in our landfills and waste that needs treatment and has to go offsite. So we have a waste handling plan now that covers some mercury bearing waste. That's a project going on now that gives us experience in dealing with those issues.

Mr. Trujillo – Since there is going to be mercury to be dealt with at Y-12 is it possible Y-12 could become a center for treatment of mercury to meet land disposal restrictions? Mr. Henry – I can't speculate on that, but to put it in context, when we look at our waste disposal forecasts we expect the cleanup of Y-12 to generate about 2 million cubic yards. Based on what we know now the mercury contaminated waste will generate about 100,000 cubic yards. It's not going to be a significant portion of the waste. Mr. Trujillo – I was thinking 100,000 cubic yards would be a premium cost to send offsite. Maybe something could be done here rather than sending offsite. Mr. Adler – This site is unique in the amount of mercury

that was used for industrial processes where mercury was used. There is no expectation that we would receive other sites' mercury bearing waste. There are other commercial industrial processes that generate mercury bearing waste, but we're not going to be in the business of providing services to commercial operations. The question is how much mercury we will ship offsite. There is a fair amount of stockpiled pure metallic mercury in Oak Ridge but that will not go into EMWMF or new proposed landfill. If some commercial enterprise wanted to come in this area and treat mercury waste they would have to work with TDEC to get proper permits for that type of facility.

Mr. Froede – A haul road was built from ETTP to EMWMF to haul waste. Will a similar road be built for Y-12 and ORNL cleanup? Mr. Adler – We already have a network of haul roads that we can use to transport waste from ORNL and Y-12 to all of the operating landfills and any potential landfills in Bear Creek Valley.

Committee Reports

EM & Stewardship

Mr. Trujillo said the committee had additional discussion regarding groundwater from the January 11 ORSSAB meeting and there were a number of ideas about a potential recommendation on the topic. He said a first draft has been created and is being reviewed by the issue managers for the topic.

The committee also reviewed DOE's response to Recommendation 233 on the Proposed Environmental Management Disposal Facility. Mr. Trujillo said the response addressed the board's recommendation and was accepted by the committee.

The committee will meet on February 25 for a follow up discussion on tonight's topic of landfills on the ORR.

Executive

Ms. Price said the committee noted on incoming correspondence a transmittal of scheduled updates of project work plans based on recent modifications to the Federal Facility Agreement. That information will be provided to board members prior to the next board meeting on the OREM budget request for FY 2019.

A draft ORSSAB annual report for FY 2016 has been produced by staff. After final revisions are made it will be provided to board members.

Staff has begun work on the next Advocate newsletter to be published in April.

The board's annual meeting will be in August. Ms. Price said board members had positive comments about last year's venue, the Tremont Lodge in Townsend, and staff will secure a date with the lodge.

Ms. Price said Elizabeth Ross has resigned from the board.

Open Discussion

Ms. Price asked board members to think about any DOE EM related issues that should be discussed at the EM SSAB Chairs' meeting in May.

Mr. Trujillo asked if the travel schedule available to members is still current. Ms. Noe said there has been no direction to change the schedule, but she would advise members if there is a change.

Announcements and Other Board Business

ORSSAB's next meeting will be determined.

Alternate DDFO Report

Ms. Noe said there are no current recommendations pending from the board for OREM to consider.

She said the current board membership drive is wrapping up, but if any applications come in they can be considered. She reminded board members that if they had candidates in mind for the board to let her or staff know. Mr. Paulus asked how many applications had been received. Ms. Noe said about 15.

The spring EM SSAB Chairs' meeting will be in Paducah, Ky., May 9-11. May 10 is the date of the normal ORSSAB meeting so a decision will be made about that meeting date.

She reminded the board again that the March meeting may be moved to April.

Ms. Noe said staff will work with Mr. Henry to arrange a tour of the landfill areas for board members between now and the EM & Stewardship Committee meeting on February 22, 2017.

Motions

2/8/17.1

Mr. Hemelright moved to approve the minutes of the January 11, 2017, board meeting. Mr. Holmes seconded and the motion passed **unanimously**.

Action Items

Open Action Items

None.

The meeting adjourned at 7:01 p.m.

Attachments (1) to these minutes are available upon request from the ORSSAB support office.

I certify that these minutes are an accurate account of the February 8, 2017, meeting of the Oak Ridge Site Specific Advisory Board.

Dave Hemelright, Secretary



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

May 11, 2017