



# PORTSMOUTH EM SITE SPECIFIC ADVISORY BOARD

•OSU Endeavor Center• 1862 Shyville Road • Piketon, Ohio 45661 • (740) 289-5249 •

## Proposed Agenda for the May 10, 2018 Board Meeting

**Chair**  
Robert L. Berry

**Co-Vice Chairs**  
Lisa Bennett  
Carlton L. Cave

**Board Members**  
Todd Burkitt  
Bradley Burns  
Jody Crabtree  
Maddeline C. Caudill  
Al Don Cisco  
Dennis Foreman  
Wade Fraley  
Brandon Greene  
Carl R. Hartley  
Turman Helton  
Ronda J. Kinnamon  
Irma C. Payne  
Cynthia Quillen  
Jimmy E. Smalley  
Beckie Thomas-Kent  
Judy R. Vollrath

**6 p.m.**  
Call to Order, Introductions  
Review of Agenda  
Approval of March Minutes

**DDFO Comments** --15 minutes

**Federal Coordinator Comments** --10 minutes

**Liaison Comments** -- 5 minutes

**Presentation–** --20 minutes

- **Performance of DOE Disposal Facilities -J.D. Chiou**

**Administrative Issues** --20 minutes

- **EM National Chairs Recommendation**
  - Public Comment on Recommendation
  - Board Comments on Recommendation
- **DRAFT Recommendation 18-02**
  - Public Comment on Recommendation
  - Board Comments on Recommendation

**Subcommittee Updates** --5 minutes

**Public Comments** --15 minutes

**Deputy Designated  
Federal Official**  
Joel Bradburne

**Final Comments from the Board** --15 minutes

**Adjourn**

**DOE Federal Coordinator**  
Greg Simonton

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**PORTSMOUTH EM  
SITE SPECIFIC ADVISORY BOARD**

MINUTES OF THE THURSDAY, MAY 10, 2018, SSAB MEETING • 6:00 P.M.

**Location:** The Ohio State University Endeavor Center, Room 160, Piketon, Ohio

**Site Specific Advisory Board (SSAB) Members Present:** Chair, Bob Berry, Co Vice-Chairs, Lisa Bennett, Carlton Cave; Dr. Todd Burkitt, Brad Burns, Carol Caudill, Jody Crabtree, Al Don Cisco, Rick Fraley, Dennis Foreman, Turman Helton, Ronda Kinnamon, Cynthia Quillen, Jimmy Smalley, Beckie Thomas-Kent, Judy Vollrath

**SSAB Members Absent:** Brandon Greene, Carl Hartley, Charlene Payne

**U.S. Department of Energy (DOE) and Contractors:** Greg Simonton, DOE; Rick Greene, Restoration Services, Inc. (RSI); Julie Galloway, Cindy Lewis, EHI Consultants (EHI); J. D. Chiou, Jack Williams, Dennis Carr, Fluor-BWXT Portsmouth (FBP)

**Liaisons:** Sean Kubera, Ohio Department of Health (ODH); Amy Tegethoff, Tom Schneider, Ohio Environmental Protection Agency (EPA)

**Facilitator:** Eric Roberts, EHI

**Public:** Kevin Shoemaker, Southern Ohio Diversification Initiative (SODI); Pat Marida, Sierra Club; Jeanne Wilson, Senator Sherrod Brown's Office; Lee Blackburn, Joni Fearing

Approved by Bob Berry, Board Chair

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Bob Berry

**Call to Order:**

**Berry:** I would like to call the meeting to order.

**Roberts:** I would like to welcome everyone, and I will be facilitating the meeting. There will be a public comment period after the presentations. The board should stay within its defined scope and follow the meeting ground rules adopted.

**May Agenda:**

**Roberts:** Are there any modifications or proposed changes to the May agenda?

- **Bennett:** I make a motion to approve the May agenda.
- **Thomas-Kent:** I second the motion.
  - **Motion carried, minutes approved**

**March Minutes:**

**Roberts:** Are there any modifications or proposed changes to the March minutes?

<b>Question/Comment:</b>	<b>Answer:</b>
<b>Burns:</b> I am not on the member's present list, but I was present.	<b>Roberts:</b> Sorry about that. Cindy will add you.

- **Burns:** I make a motion to approve the March minutes after the correction.
- **Bennett:** I second the motion.
  - **Motion carried, minutes approved**

**DDFO comments provided by Greg Simonton, Federal Coordinator, DOE:**

- **DOE Public Availability Sessions**
- **PORTS-Safety Works**
- **PORTS Integrated Baseline**
- **D&D Progress-X-326 Deactivation**
- **D&D Progress-X-333 Deactivation**
- **D&D Progress**
- **OSWDF Construction**
- **Groundwater Cleanup**
- **Future Use – First Property Transfer**
- **Depleted Uranium Hexafluoride (DUF6) Conversion Plant Update**
- **Site Tours**
- **Mutual Aid-FY2018**
- **Educational Outreach**
- **Community Outreach**
- **Upcoming Outreach Events**

<b>Question/Comment:</b>	<b>Answer:</b>
<p><b>Kinnamon:</b> What happens to the Freon once it is shipped to Paducah?</p> <p>My memory is that some of the contaminants were plowed into the ground, because they did not know the risk involved. And you just said how long will we monitor the plumes, well for a long, long time. We will clean them up, but the need for the plumes will still be there, am I correct or not? The monitoring, because this is a long-term thing, it is in the ground and leaches out.</p>	<p><b>Carr:</b> DOE has a contract to destroy the material. It will be processed in Paducah and will not be released as Freon. It will be destroyed.</p> <p><b>Simonton:</b> The monitoring you mean? If you dig up the source, dig up the landfill and the soils that are contaminated, you stop digging when you get to a point that if you stop digging it will not have to be pump and treat going forward, then it will be monitored until the regulators and the department are satisfied that it doesn't need to be anymore.</p>
<p><b>Foreman:</b> How big of a process is that?</p> <p>They couldn't do that here?</p> <p>Would we have more than Paducah has?</p> <p>Do you have an exact cost of building a road and observation deck to watch them dump waste? Because when the community asks for money, help, and we do not get help and I see an observation tower to watch them dump waste, that is not cool. I would like to know the exact cost, not an estimate. We can see from here, I do not know why we need an observation deck.</p> <p>It would be a good idea to have a camera so you can survey the work.</p> <p>In theory, how long can pump and treat continue? Waverly has a pump and treat to. I would like to know more about that, because of our water, and I am concerned.</p>	<p><b>Carr:</b> I do not really know what the process is, but it is used at other facilities.</p> <p>They wanted to consolidate it to one location.</p> <p>No, Paducah has much more.</p> <p><b>Simonton:</b> No, but I can get that for you. I do know it is a much safer way to view the site.</p> <p><b>Schneider:</b> Pump and treat can continue a long time.</p>

How do we get money for the Dogwood Festival and Beaver Oktoberfest? I would like to see some money go to Pike County.	<b>Simonton:</b> That is Fluor and they have a process to go through for that. We will get the information to you Dennis.
<b>Smalley:</b> Are the plumes pretty much contained now?	<b>Simonton:</b> They are managed, but we are still pulling trichloroethylene out.
<b>Burkitt:</b> How long have you done the pump and treat?	<b>Simonton:</b> '80's and '90's. It is part of the closure operations. We can get specific information on it. We presented on it years ago. It has a history of the landfills, contamination that is associated with it, the years, and the closure information.

*A copy of the DDFO presentation is available on the SSAB web site ([www.ports-ssab.energy.gov](http://www.ports-ssab.energy.gov))*

**Federal Project Coordinator comments provided by Greg Simonton, Federal Project Coordinator:** None

**Liaison comments provided by Sean Kubera, ODH:**

**Kubera:** Nothing new to add.

**Liaison comments provided by Dustin Tschudy, OEPA:**

**Tegethoff:** None

**Schneider:** I was just going to introduce Amy. She is replacing Dustin. She will be full-time to this project, unlike Dustin who had other projects, too.

**Performance of DOE Disposal Facilities-J.D. Chiou, FBP:**

- Onsite Waste Disposal
- Fernald OSDF
- Fernald OSDF – Leachate Collection System
- Fernald OSDF – Performance 2016
- Oak Ridge EMWMF
- PORTS OSWDF – Overview
- PORTS OSWDF – Cross Section
- PORTS OSWDF – Liner, Cap, Underlying Formations
- PORTS OSWDF – Cells and Leachate Lines
- PORTS OSWDF – CAP-1 Project Area
- PORTS OSWDF – Initial Site Preparation
- PORTS OSWDF – Site Preparation, 1.7M CYs Moved

<b>Question/Comment:</b>	<b>Answer:</b>
<b>Burkitt:</b> Was there any type of land transfer at Fernald or anything like what we are doing?	<b>Chiou:</b> No land transfer was done at Fernald.  <b>Schneider:</b> Because the community wanted green space.

<p>Does EPA site review or just review the report? When you are doing the monitoring, have you found any failure and if so what do you do?</p>	<p><b>Chiou:</b> They do both.</p> <p>These greenhouses were not part of the original design. They were triggered by failure in the design very early into the design, now everybody loves it. It allows much easier monitoring.</p>
<p><b>Foreman:</b> It says over one million tons of waste shipped off-site. What is the estimate of waste that will be shipped off here, how many millions of tons? How big is our place compared to them?</p> <p>We will be shipping off less than they are?</p> <p>Are the cylinders from here or were they brought here? There is a mixture of cylinders here.</p> <p>How many millions of pounds were shipped from Fernald to Piketon? Some of that Fernald stuff was shipped here. Are they completely shipped off yet?</p> <p>I have a question. Can you explain it since you were one of the designers. Mr. Schneider of OEPA when they did the 12 investigations of Cincinnati, that is where the uranium is in the water and EPA says it is acceptable levels, is that correct? Do we know what our concerns are, what are our contaminants? Because I have not heard once what is going to be in our leachate system or what is going to be released into the Scioto River. They do not clean it all up because they say it cost too much. Ohio EPA says the amounts are acceptable, but to me acceptable levels is what is naturally occurring, so when we add something in</p>	<p><b>Chiou:</b> We will have about three hundred thousand cubic yards shipped off-site.</p> <p>Our place is about four thousand acres and Fernald is about one thousand fifty acres.</p> <p>I only counted the debris, if you count cylinders, we will ship more in terms of waste.</p> <p>Here, most of the material for uranium is from our site.</p> <p>Yes, and we are shipping them off now.</p> <p><b>Carr:</b> We are close. About 45 million pounds came in and I believe there is a little less than a million left. It is all sitting in containers waiting on approval. As soon as it is approved, it will go.</p>

<p>to it, to me it is not acceptable. When you go fishing in Ohio, you can hardly eat any of the fish now. Correct me if I am wrong. So I want to know what our contaminants are because two months ago OEPA wanted to double the amounts of mercury into our water streams. So since you are the expert you must have known that uranium would be in the water stream and Mr. Schneider knows what the acceptable levels are for Ohio EPA. I want to know what are our acceptable levels and what will be released out of this cell? Don't you think the public needs to know? They need to know the proposed amount. You have to have an idea.</p> <p>This is the first time we have had someone full-time. I did not know we did not have someone full-time for all this time. I am a little upset about this. At least we have one now.</p> <p>What is the longest cell designed like this be in effect?</p> <p>In Oak Ridge, there is a problem with contaminants in the water and they want something better that is legal. I am just listening to everything you say.</p> <p>Therefore, they have not figured out the problem.</p> <p>I am asking because we have had a lot of rain this year.</p> <p>Our collection ponds are unlined.</p> <p>But anything that the water makes contact with, Mr. Schneider made the</p>	<p><b>Chiou:</b> We are still working on the lines and we have a list of the proposed discharged limit to the cell and Ohio EPA has yet to approve it, so we do not have the number set yet.</p> <p><b>Schneider:</b> We have always had multiple people.</p> <p><b>Chiou:</b> Weldon Springs, it was closed four or five years before Fernald.</p> <p>Yes, it is in the surface water, but it is under the regulatory limits. They want a better surface water management protocol, but what they are doing is still legal.</p> <p>They have some suspicion. The mercury source somehow came in contact with the water.</p> <p>Everything we do we run though the rainfall patterns. We use 2011 and that year has had the highest rainfall in one-hundred years in this area. It was 54 inches.</p> <p>The collection ponds have nothing to do with the leachate those are sedimentation ponds.</p> <p>Stays in the cell, nothing will come out. The sedimentation ponds only collect run off .</p>
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comment a little while ago, anyplace in that cell.  I requested film from the drone when we had all that rain. I have never seen that yet. From when the water was pumping out of here. I would like to see that before the next meeting.	We can get that to you. We did film it.
<b>Quillen:</b> Is the monitoring done by the state EPA or the federal EPA?	<b>Chiou:</b> Both. DOE has the legacy people write a report and both U.S. EPA and Ohio EPA review that.

**Administrative Issues:**

**EM National Chairs Recommendation:**

<b>Question/Comment:</b>	<b>Answer:</b>
<b>Kinnamon:</b> I would like to push until the next meeting.	
<b>Caudill:</b> Since it is just an analysis of the proposal I made a motion that we move forward on this.	
<b>Quillen:</b> I second it, all we are asking is for more information correct?	<b>Roberts:</b> As I understand it, yes.
<b>Burkitt:</b> If I understood Bob correctly, after we get the additional information then we will vote again, is that correct?	<b>Berry:</b> Yes, that is correct.
<b>Roberts:</b> Are there other folks who would feel more comfortable taking more time before we vote? Seeing none, we will move forward with this. Carol made a motion, and Cindy seconded that we move forward. Any more discussion from the board?	

**Public Comment on Recommendation:**

**Marida:** I agree that the recommendation that the chairs made to study it more is important at very minimum. It looks very concerning to me when they use words like over classification and they say it is costing too much. This sounds like this is something that really should be investigated.

**Fearing:** I agree with what was said. I do not claim to understand this fully, but I do know that DOE and the federal government, which DOE is part of and the EPA lies. They make stuff up and try to change things. As soon as I saw this I knew they are doing it again. Why are we sitting here spending all these hours talking about something that someone understands what we are dealing with at some degree then



they throw this in and say we are going to change? It makes no sense to me other than they lie and want to save money. I am glad the board wants more information before making this decision. You just cannot trust them, I am sorry, I do not mean to insult people here, but you just cannot trust them, it is part of culture, everything gets buried. We have been buried as far as being a plant that was hidden. We do not want to bury this anymore, when we get many resolutions saying we do not want a waste buried here, left here in a wet environment. So really read every word, question everything. That is the government's fault. I do not care how much it cost. Get it cleaned up properly.

**Board Comments on Recommendation:**

<b>Question/Comment:</b>	<b>Answer:</b>
<b>Roberts:</b> Any more comments from the board?	
<b>Foreman:</b> I have one. I am reading the attachment. The study they are talking about I am just trying to figure it out. So they are wanting to see how much it cost to drive the calculations of the road, exposure to the people, how are you going to mitigate those. So are they saying the people in the neighborhoods, is that what I am reading here? Or are they just talking about workers?	<b>Roberts:</b> Being I was not there, I cannot tell you actually, what happened. However, having facilitated the last several of these. It is hard to get 16 people from different boards to all agree. I am guessing there are some folks that have very specific questions answered, but working into the recommendation was just too difficult. So this is just a series of questions they would like to have addressed.
<b>Kinnamon:</b> Once I got to the questions, I feel better, not after reading the first page.	

**Motion approved** (12 approved, 0 opposed, 1 abstained, 0 recused)

**Draft Recommendation 18-02:**

<b>Question/Comment:</b>	<b>Answer:</b>
<b>Foreman:</b> I do not have this nice presentation, but I do have a demonstration to show you. In the desert, they have 770 feet to their groundwater. They only get 4 inches of rain. We deal with a lot of rainfall in Ohio, so over here 54 inches of rainfall some parts of the cell shows 21 feet, some at 90. The decisions we make today will affect people in a thousand years from now. The communities all around here voted to oppose the on-site waste cell. These communities all have	

<p>heard from Mr. Carr and Mr. Bradburne and they still voted against the cell.</p> <p>I would like to response to the thing about the semi-trucks. I have been reading and I am glad you did that, you responded to everybody and everybody put it out there. I did the math on your semi-trucks, which I do not think the semi-trucks should be on the road. I did my homework with your response. If we can trust Dennis Carr to build a cell, we can trust him to ship it all out on railroad cars. If he tells me he cannot do it then I do not have faith in him to build a cell. This recommendation does not stop the on-site cell, it is more of a discussion of what is actually going into this thing. None of us on this board actually knows what will go in the cell.</p>	
<p><b>Smalley:</b> I lost my dad to cancer. I have mixed emotions about this. I have four grandchildren and another one on the way. My dad never got to see them, it really concerns me. The communities all around are opposed to this and I believe that we do need more. It is supposed to last a thousand years, but we do not know that. We do need more information and more public eye on it. There is a lot of people upset about this. I have had people say what can we do to stop this? I tell them, I do not know if you can stop a runaway train. It is approved by EPA and the government. I think we need more clarification all the way around.</p>	
<p><b>Berry:</b> I do not want to see the ROD opened up. This was not done in a day, there was ample time when the ROD was opened, now it is closed, and you say you do not want to stop a disposal cell, but once that ROD is open, I do not see how the disposal cell will at least be delayed if not stopped. The site is working in conjunction with getting the debris</p>	

<p>ready to put into the cell. If the cell stops you cannot just tear this building down and pile them up, you cannot dig the plumes up and pile them up and wait for the cell to come. What would happen to the workers that is at the plant now, if the cell is stopped, you would not need all the people you have. You made a comment earlier about taking money from the site to build the cell, but I do not think they are allowed to do that, it is a line item the money for the cell comes right from that. You cannot take money for that for operations and you cannot take money from operations to put in the cell. They are separate financial issues if I am correct. No offense but everyone I have ever talked to says EPA are some of the hardest people to deal with, so if the Ohio EPA and the U.S. EPA says that they approve of this plan that it is a safe plan, the best plan, then I believe that. I am not talking government or DOE, I am talking EPA. EPA does not let you fudge things, they do not turn their head and let you do something that is going to cause damage. Our elected officials, Portman came in and tried to get us as much guarantee as possible. These things are done, I will put my faith in the site and the leaders. Since I joined this board the things Joel Bradburne and others told me were going to take place, have taken place. They always say judge us on our actions not what you believe we will do.</p>	
<p><b>Burns:</b> Looking at things I am also a resident of Pike County and I do care about your children, and mine, although my grandchildren do not live here. I won't be here in a thousand years, but I am concerned about what Dennis Foreman talked about, I am concerned about the children and everything, but as Bob said, I have done a little homework of my own, not near as much time as</p>	<p><b>Burkitt:</b> I just want to say while I respect what you are saying, I also respectfully disagree with it and not being argumentative, I haven't been here long enough to argue with anyone, but there is a piece of me that thinks you were right the plant was built here, but I am to the point of thinking we have done our part, now someone else can step-up. I do not know what the best way to deal with</p>

Dennis has, but looking and estimating how many truckloads of waste it would take, we won't even talk about money. Say a semi-truck can haul 59 thousand pounds and we are talking about four hundred million tons of debris and stuff to be removed, you are looking at 80 thousand semi-truck loads and what it would do to the highways and the state, can you get permits to ship all that stuff there? This plant was built here, I was not here, I have never worked there and I do not work out there now. This plant was built here and everybody's families worked here. I have friends all over town that have cancer. Cancer is awful and I feel bad for anyone that has lost someone from that, but just because you work out there does not mean you have cancer from there. Maybe they did, I do not know. We built the plant here in this county and now it is time to dismantle the plant and you have 2500 workers dismantling the plant. The plant has been around what 50 years with no concerns about when it would be torn down or what to do with the waste. The people here prospered from that plant, the people in all the counties around prospered from the plant. I feel like we reaped the benefits, let us do something with the waste.

I know Joel Bradburne is not here tonight, is there a representative from DOE here tonight? Ok, I just wanted to make sure, Eric can you tell me as far as DOE is concerned if we opened the ROD what does that open up, what kind of work stoppages? I know it will go further than that, because they would have to change things. How is that going to affect the money that Congress has allowed us to have and not send it to Paducah or others? Can you tell me that?

anything with the waste, I do not, it is not that I have an idea. My grandpa went to school to the sixth grade, but he was one of the smartest people if not the smartest that I have ever been around my entire life. Full of things like measure twice, cut once he would try to teach me patience when I would work on something, he would say it is better if you take your time and do it right the first time rather than rush and hurry up to get something finished than go back and redo it. I do not mean to make a statement saying this is the best option or that is the best option. I want to make a statement saying it is OK to talk about things and make sure we are all on the same page and that we all understand and maybe everyone does but me. I really am trying to understand. I am not unique in our communities in thinking there is information, misinformation, but to me slowing down and making sure something is done correctly is worth it. I would rather take our time than rush through and make it something for our future. We want people to be here and be healthy.

**Roberts:** Greg is DOE.

**Simonton:** I can answer some of that, It is a tough question to answer, but I will try. First, when you give us a recommendation, it is advice and we have a choice, we can accept, reject or partially accept a recommendation. So passing this simply gives us an indication of your sentiment, not passing it does as well. It is painfully obvious that there is contention on both sides of this issue. The department would make a decision of to

<p>Greg, I appreciate you stepping out there and half way answering my question. That is kind of my hesitation on this recommendation, because I want to be assured that if this recommendation goes through, I know they still do not have to open the ROD, but if this board agrees to pass this recommendation, I want to be assured that my wife still has a job, I want to be assured that all of you who work out there still have a job and that life will go on.</p>	<p>accept, reject or partially accept the recommendation. If they do accept the recommendation, I do not think anyone knows all the implications, but I will say this; we are funded by Congress, Congress passes a spending bill, the President signs it and it becomes law. In there they tell us what we are going to do and how much we have to do it. So right now, we have a decision in place, it is a legal decision, we also have funding and direction currently from Congress, President and law that will not change. Congress would be key in that. I do not think anyone in our office could tell you all the things that would happen, it would depend on Congress. They could keep the project going and do it this way. It is impossible to answer. The recommendation itself could be accepted or not. That is above anybody's pay grade at the site.</p>
<p><b>Bennett:</b> It has been an honor to be on this board. I like you guys, we always wonder what the motive is. This board is an advisory board and I know that the community is desperate for jobs, we need our kids back, we need things like the Science Bowl for kids and I do not want to rush, I want it to be open. But I have sat down in meetings with these guys. DOE there is so much love for this area, the neighbors in the area. I just want us to move forward and get the</p>	

<p>land transfer. I so look forward to getting back on our feet. We need to work as a team.</p>	
<p><b>Cisco:</b> I have been around here for a long time. I was born in the front bedroom of a house here. I was five years old when the plant came in and we got electric. The A-plant is one of the best gifts this community has known. However, I think it is one of a hindrance too, because a lot of the industries shy away from the nuclear plant. A lot of them are afraid to get close to it. It has been a great asset. It has been a hindrance everything has been moving away. So my thing is let us clean this place up and make it a prosperous place rather than a place people run from. Whatever it takes, I know the cell is a lot better than just letting it float in the air not being contained. It is not contained, they say we have a fracture in the layer down there, but what is there is there and if it will not leak where it is then how would it leak in a cell that is contained with 12 feet of liners or something like that. The people from these other sites that have cells are very pleased with their cells. Let us make this a useful place. Let us not let them pass us by.</p>	
<p><b>Kinnamon:</b> You all know that I spent my life in economy development in Southern Ohio working with the plant, Pike County, Ross County, Jackson, Scioto and all the others for many, many years. What Al Don says is true that some did fear the A-plant, no question about that. The A-plant has been good to Southern Ohio, billions and billions of dollars have been spent here, of which we will very soon not have the billions of dollars into our economy, so we need to be very careful about what we do. We have to make the right decisions. Right now, the counties around us have said that they have questions and are afraid and would</p>	

<p>like us to reconsider some things or at least let some sunshine in to look at what is going on. It is my firm and experienced belief that so will every single industry that considers locating here if we move forward without that today. They will have the same questions. Therefore, when the money stops, we have to have this developed. The best way to get it developed is to give comfort to any and all that are looking to locate here to remove that fear. When we have all our communities afraid, I am pretty sure that the industries are going to be just as fearful. So therefor, I am in favor of 18-02.</p> <p>I just want to reinforce that about not putting the horse before the cart. Having this recommendation does not mean anything will change. What this is saying is simply the same thing as what we passed earlier, the recommendation for more information. If we do it for them, I think we should do it for the people that we call our neighbors. They have already came forward to us and said they want more information, they want sun shining in on what we are doing. This does not mean that you are voting for something to stop. We are simply asking that the ROD be reopened, everything can continue as it is now unless there is something that comes up and then it is like, Thank God we made that decision. We are not afraid of what we might find out, so why not pass this?</p>	
<p><b>Caudill:</b> I totally agree with you Ronda, I have children and grandchildren that will be living here. Down the years if my children and grandchildren find out that I was on this board and I did not fight for them to have clean water and have this taken care of before we got too far down the line that we couldn't do it. That is my opinion and I totally agree with you.</p>	

<p><b>Cave:</b> I was listening to everybody's opinions and it came to me talking about the land use and the businesses might not want to come because they would be located on what we would call brown field. It took my mind to Lucasville to the prison, no one wanted to build across from the prison. You ride up that road now and you see \$300,000 and \$400,000 dollar homes. I know it is a different concept. You have the prison and here you have the dump (cell) for industry to know that their ground has been cleaned up that is not going to in my opinion stop them from reindustrializing the site. I guess being around the other sites and things and realizing nobody wants any of these sites in their backyards. Nobody wants it, but there has to be a compromise to the alternative to just leaving it and putting a fence and guard around it for the next thousand years. That is unacceptable, then we still have the problem. We made our living from the plant and even prospered from it. I am not dismissing anything else, anybody's tragedies or anything like that, but what I am trying to say is we made a living. We need to man up and take care of this stuff. If you transfer it you go through seven states, they do not want it coming through their state either, believe me. What happens when they say you can only ship so many shipments through own state, we will never be done. I can see us building this cell and keeping people from Pike and Scioto counties working. I am in flavor of doing this.</p>	
<p><b>Quillen:</b> Yes, I have a couple of things. Is there a chance that Congress will say, we are not going to give you any more money and just shut the door? Then what would this place be if they weren't going to do the cell, not going to tear the plant down, not allocate any money for</p>	



<p>any future tear down and just walk away? I have worked out there for 35 years and seen the funding go up and down.</p> <p>The other question I have is where does Paducah fall into place? Have they even started yet?</p>	<p><b>Roberts:</b> The federal government has to clean it up for environmental reasons. Even bare bones, it is probably a much greater number than we even want to think about. When they talk about hotel cost to even keep the place safe, to just walk away still cost.</p> <p>Paducah’s baseline is stretched way out there.</p>
<p><b>Roberts:</b> So what do we want to do? Clearly there is a split, we can call for a vote and go forward with it or we can take it back to committee and see if we can find a compromise to work on together, or pack up and go home?</p> <p>Ok, there is a motion. Let us open it up for open comments.</p>	<p><b>Foreman:</b> I have a question, 18-02 Mr. Simonton, you are DOE basically is there anything wrong with asking questions? We are supposed to be a community board and what I am saying is the communities have spoken and they want more clarification, which is not a bad thing. The people are speaking and 18-02 is not anything against the government. One of your questions was what if they find something bad? Like Ronda said we better find out now, there is no do over on a thousand year cell. If they find something bad and this goes forward, that is not good.</p> <p>I make a motion that we pass 18-02 just like it is.</p> <p><b>Berry:</b> I make a motion that we vote.</p> <p><b>Bennett:</b> I will second it.</p>

**Public Comment on Recommendation 18-02:**

**Wilson:** I am Jeanne Wilson and I am with Senator Sherrod Brown’s Office. I want to thank you for allowing me to be here. I want to go over two things, you were asking whether or not they can shut down the money and just leave it alone. Congressman Scherer, Johnson, Wenstrup and Senator Brown and Portman are on the record that this site needs to be completely cleaned up. So they will all I am sure stick to that. When I visited Fernald, I asked for a meeting there to see what the difference was between that site and this one and they even invited the environmentalist that work with DOE when they decided what to do with that site and they decided to make it a reserve and how everything that would happen with that site was in conjunction

with DOE. The difference between Fernald and the Piketon site, they choose to have a reserve not something that would be reindustrialized. But the biggest difference is that their Record of Decision and Waste Acceptance Criteria were ironclad. That has not been the case here. There are loopholes you could drive that convoy of trucks though with both the ROD and WAC. Senator Brown has said that the community should be listened to, that DOE should be listening to and respecting the community. 15-05 that recommendation said that there needed to be language that strictly prohibited certain things from going into the cell and whenever that was not the case, this board rejected having the cell. Senator Brown's office just wants to see Piketon being treated the same way Fernald was. All of the other waste disposal sites, correct me if I am wrong, until now had that ironclad language. With ironclad language if DOE fails to follow it, you have something you can act on, you can sue them in federal court, you can require them to live up to the language without that ironclad language you cannot do that. Therefore, we think the community should be listened to and that includes this board. Senator Brown fought very hard for there to be a Site Specific Advisory Board for a reason. The community should have a say. Right now Piketon and this community is being treated differently than Fernald and the communities that went before. That is all I have to say. Thank you.

**Blackburn:** Lee Blackburn former member of the SSAB board. I was one of the original members. This is a very, very, very important issue. This is something the entire area is going to have to live with for the next thousand years. If you do it wrong, there are no do overs. So you have to make sure you get it right. My reading on 18-02 is simply asking for the ROD to be reopened, I do not see any data that says we should have the waste off-site or on-site, I just see that people are concerned. They had the ROD and it did not say that the bedrock under the cell is fractured, and people are upset about that. People have the right to express themselves and say this is an issue for us and hear why. In terms of Carlton's comment as it relates to bringing in industry, if all the government personal are against it, they will not be recommending this site as a place to come. Let these people have a chance to have their say so they feel better about bringing industry in. I get it if they are not recommending anyone. Yes, there are a number of townships in the area (local government) that have said they have concerns. It will be people with the government that will either recommend this site or not and if they do not feel comfortable they are not going to recommend it, so the industry is not going to come. I think you need to give them the opportunity to express themselves. As it relates to the amount of time, if you open up the ROD it is not going to be open forever, properly 90, 60 days for people to make comments and there is still the issue of whether or not DOE will even accept your recommendation, but if they do it will not be for a very long time and if you look at where they are going to put this on-site disposal cell even though the bedrock is fractured it is probably the best location. If you start talking about shipping it off, not only is there an issue of cost but there is also an issue of safety. I think it was pointed out by Brad that it would be thousands of truckloads of material and the possibility of accidents. From my perceptive people should have the right to at least have their say about the fact that they did not realize the bedrock was fractured.

**Marida:** I have been coming since 1981 and want to thank Senator Brown for his part in creating the Site Specific Advisory Board because, as Jeanne said, the Government was so opposed that they did not want even an advisory board looking into what they were doing for years, then when Senator Brown was elected, he made that happen. Therefore, we are very thankful for that. Those billions of dollars that were spent here could have been spent across the county for economy development. Instead, they were spending it on nuclear weapons that could have put an end to all life on earth. This country needs to get its priorities set straight. As far as waste acceptance criteria, the Sierra Club does not support sending all the debris and very slightly soil contaminated with uranium clear across the country, but there are certain things that should not be buried in a cell. One of the things is the coding that is cutting up the pipes. DOE brought in high level processed radioactive waste to this site and Paducah and run it through the enrichment process in the buildings for years, contaminating the whole place with transuranic waste and plutonium condensed on the inside of these pipes so these pipes, so these pipes have to be cleaned or cut up and sent off. We cannot put great amounts of plutonium into this cell. The other thing that absolutely must happen is all the landfills need completely cleaned up not just some of the landfills. The Huntington Nickel plants needs dealt with also. As far as the workers, this is a distraction as to part of the discussion as to what is going into the site. When this plant went out of business I do not think the DOE (and I am not trying to insult anybody that is here that works for DOE or EPA), but overall they did not care about the workers. Workers were exposed to materials for a project that really were not necessary. We care about the workers. As far as trusting a government agency, well here it says lack of commitment by DOE. You have to keep doing the work and make sure that the government does what we need to do, what needs to be done. If you were a multi-million dollar organization, what would you do? Our responsibility as citizens is to make sure they do what we want done and not just trust anybody. I do not expect you to trust me when I say, you should question everything everybody here says. Thank you very much.

**Fearing:** I want to thank everybody, this is a grueling process. I know how hard you have been working. Some of you may know I recently ran for State Representative District 90. I did lose the primary, however I got 903 votes out of 4,000, which I was proud of, I was so proud of it because I made the A-plant site the point of my campaign. Not that everybody that voted for me was voting for that reason, but I do feel like I bring many voices with me tonight. I spoke numerous times at the Portsmouth City Council about this issue. I spoke in New Boston. I spoke at the Cold War Patriots. If you have never been to a Cold War Patriots meeting, I highly recommend that you try to go. You will see the bottom line, you will see people waiting for lung transplants that they cannot get because they have too much beryllium in their system. You will see people with backpacks with hoses under their noses because they cannot breathe. Everyone with the white card, you are working to protect our nation. We did not build this site Al Don Cisco said we built this site. The DOE government built this site, built all those sites, they swooped in

out of nowhere and took thousands of the best quality agricultural land that we had in this nation and built toxic plants on them. DOE, EPA, NRC they are all the government, that is what we are dealing with. The ROD I want to get back to that. Yes, please we need to get that reopened, we need to allow more people to voice their opinions. Again, I feel that I am bringing many of these voices with me tonight. I do agree that other industries probably will not want to come if there is a dump there. I want to reference what Greg Simonton said in the Portsmouth Daily Times that the site looks like a piece of Swiss cheese. And if we don't get those plumes and landfills out of there, there is very little that can be done for reuse, but I would argue as well that if you leave 100 acres of that toxic material, that will be a huge issue. They are being spot checked but I do not agree that that is enough, people are not going to want to come here. So clean it up. You just heard from Jeanne. Why should we have to compromise, why do we have to be held hostage because we are being told we will not get all the money we were promised for the entire clean-up that was promised? We have done our share; hundreds of people have been sick and are dying or have died. We have done our part for the protection of our nation. It has to do with water verses dry. Safer place to put it verses not safe place to put it. No place is completely safe, but we have done our part to protect our nation and we should not have to continue to be exposed to this stuff in a way that is not safe to leave it. I heard all of you tonight, I did, but this was promised when the plant was built. The clean-up fund was started. There is money, we deserve to have this done. Thank you

**Roberts:** One last chance anything from the board that we have not heard yet.

<p><b>Foreman:</b> One thing I asked you about was conflict of interest, legal counsel never sent anything back, is that correct?</p> <p>I just want to make that statement because there are times on my village counsel when I have to abstain from a vote because it might be an issue where I might benefit. I cannot be a contractor for the village and vote on things for the village to approve my contract. That would be a no no, that is just how it works, so on this board when we make a vote, I just want to make sure that is brought up.</p>	<p><b>Roberts:</b> We will get an answer back from the Department of Energy. Yes.</p> <p>So, Dennis has brought up the question of conflict of interest with the board. The answer we received is as members of the board you are representatives of the community you are not elected officials you are not special government employees, you are not government employees, you are representatives of</p>
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<p>Can I get a copy of that from the legal counsel? I want that for my record. When I talked to my attorney, the reason was I had to back out of a vote, we have a member that has to leave the room when we speak about things. I just want to make sure that when you make a decision that you are making it for the right reasons. Most of the people that come to me do not want to say anything that work there because they are afraid of losing their job.</p> <p>When someone is not picked for the board do they get a response to tell them why? When I get told no, I want to know why.</p>	<p>whatever hometown you are from so therefore on this particularly advisory board you are not conflicted unless by chance we are voting on a recommendation that directly affects a company you own. That is the only way you would be conflicted. If we were to say DOE, we really think you should hire Lisa Bennett, she would recuse herself. On this topic, you are intended to represent your community. In this community if you don't work at the site, not related to someone who works at the site or have a neighbor that works at the site it is because you live under a rock. This is a very small community so that is what happens so you work, live, related to or know people that are associated with the site and that is OK. And because of that there is no conflict of interest.</p> <p>No, they do not.</p>
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**Motion opposed** (8 approved, 6 opposed, abstained, 0 recused) Two-thirds majority required to pass.

**Subcommittee Updates:**

**Roberts:** We are at 10 o'clock so running late tonight. We still have subcommittee reports which are written in your blinders with your permission we can consider those submitted? The other thing, we have to do is have public comments.

**Burns:** Can we bypass those tonight? I will make a motion.

Everyone agreed.

**Public Comment:**

**Blackburn:** My pet peeve is that we are still leaving toxic waste outside of Perimeter Road to sit there and not be consolidated. It is going to impair industries from coming in and to me it is like a multiple gunshot victims get to the hospital and the hospital says we are going to treat you for one gunshot and forget about the rest. If you do not clean these things up it is going to come back to haunt you. Some day they will build on the site, not knowing that it is there and many people are going to be exposed to the nasty stuff. That is all I have to say. Wait one more thing, you should make a recommendation, I asked a question about the ROD and they said it has been capped we have done everything we have to so we are not going to do anything, so the only way they are going to take it seriously is for the board to make a recommendation.

**Marida:** I wanted to talk a little bit about the open houses that some of us attended. Unfortunately, they were not well attended. We saw on the invitations that those were co-sponsored by the Site Specific Advisory Board. We were here two months ago and no one mentioned it, we did not even know it was happening. So I am wondering if the SSAB did indeed vote to agree to co-sponsor the open houses. SODI and Voinovich School were there and they pretty much presented what DOE had said, so they are getting money from DOE and they echoed everything the DOE had to say. Greg said he was not sure what was going to go on the 80 acres, but SODI maybe had a clue because there was a report on the SSAB website. I do not think it is there anymore, as Eric said it has been taken over by the PPPO Office or something. So you are filming this tonight, I do not know if we have even seen film of the SSAB, it would be nice if you are doing this, where does it go, it would be nice if we had access. I really am curious as to whether the SSAB was actually asked to co-sponsor the open houses.

**Fearing:** I said most of what I wanted to say. I am disappointed that Recommendation 18-02 did not pass. I am going to hold you people hostage instead of the government holding us. By the way, it is really not funny, you laugh at all this stuff like it is funny, but it really is not lives are at stake here. Dennis I want to thank you for all your hard work, all of you, and I did want to tell you that I did apply for this board, not this one but years ago, but I was rejected and was not told why. I could only guess why, but I wanted to say, when I started dealing with these issues, I came back to Portsmouth in 2004 and attending all of these meetings and speaking up. I have been listening to you all night sir and I would appreciate being listened too. Thank you. Now I do not remember what I was going to say. Portsmouth City Council passed a resolution that is huge, against the dump. This is huge. This is not funny and my dad did die because he worked here and it was verified by the

government and we got the money, but money did not bring back my family members. People have died. People are dying now across the country. So when I hear it might be a little dangerous to ship off waste, you know what? It is dangerous to work here, it is dangerous to live here, it still is. I do not want anybody else to get sick or hurt, of course not. The whole entire country has to take responsibility for this. We have protected this nation, we protected the world if you want to look at it that way. So now we have to argue and bicker for a few billion dollars to get this place cleaned up. It was promised to us. Which is absolute insanity. My dad's blood is here, along with a lot of other people so when I get told by my opponent and others in a community that I do not belong here because I was born here but we moved away when I was little that I should not really matter, that my voice is not heard. Well guess what, how much more do you have to belong than to have your parent's blood running in the street? This is not a game, this is about human lives. Thank you.

**Final Comments from the board:**

<p><b>Smalley:</b> I just want to say being on the budget committee, I wanted to ask Dennis, I keep hearing these rumors about lay-offs, canceled over-time NDA and everything. I thought we had a guaranteed budget this year, so just wondered what is going on.</p>	<p><b>Carr:</b> This had nothing to do with the budget. This year we are trying to get 326 done, so we are turning resources into getting that done. So as a requirement in that building, official overtime to get that done and so internal to the site over the last six to 10 years we have been making internal adjustments up and down. Right now we have a fixed budget we need to spend additional dollars in 326 to get that done, so if you hear of someone being laid-off they are not being laid-off by FBP. It is the same thing we have been doing every year, we adjust within our contract range, we never knew how much we would have. So right now money is tight inside the site in order to get done with what we committed to the department to get done. So any adjustment that is being made is being made with subcontractors.</p>
<p><b>Foreman:</b> That is an awful long answer for NDA people. I thought they are the ones that do the testing, am I wrong Mr. Smalley, you have been there.</p> <p>Are all the pipes done?</p>	<p><b>Carr:</b> That is because that role is ending. It is not all NDA technicians, we also have inside technicians and NDA technicians with subcontractors.</p> <p>We are getting there.</p>

<p>With that being said Mr. Simonton, do these people have a pathway to another job? This is somewhat weird that we are talking about no barter and everything being so great and now we are talking about people losing their jobs. I am a little upset, what is that young man going to tell their family when they go home tonight? I am not going to sit on this board much longer if we are going to hear stuff like that.</p>	<p>This is a project. The project adjusts its workforce up and down based upon the work that is in front of it. We have worked very hard. I have to give compliments to Senator Brown and the rest of them for maintaining a funding source. Our focus is to maintain sustainability in our workforce. Now we have flexibility in our funding and we have changes in scope that require adjustments in the type of people that we have. We have designed our workforce to be able to absorb the flex in subcontractors and that is where the adjustments have taken place over the years. They knew coming in that they were a temporary employee.</p>
<p><b>Cisco:</b> In this area, we have a lot of people that worked back at the A-plant when they made a lot of mistakes. I guarantee that everybody here knows someone that died from cancer and never worked at the plant or even close to it. Everybody said he died of old age. No he died because something quit working and cancer helped it do that. I lost a brother that worked at the plant and he died of cancer so we have a bad taste in our mouth. Now we have safe procedures.</p>	

**Berry:** Adjourned

**Next Meeting:** TBD

**Action Items:**

- DOE to find out the exact cost of building the observation deck.
- EHI to get the history of the landfills, contamination that is associated with it, the years, and the closure information that was presented years ago.
- Get information from Fluor to Dennis on how to get donations for the Dogwood Festival and Beaver Octoberfest.
- E-mail Dennis the drone footage that he requested.



# U.S. DEPARTMENT OF ENERGY



## Deputy Designated Federal Official Presentation Portsmouth Site Specific Advisory Board

Greg Simonton, Federal Coordinator  
May 10 , 2018

# DOE Public Availability Sessions



# SPORTS SAFETY WORKS

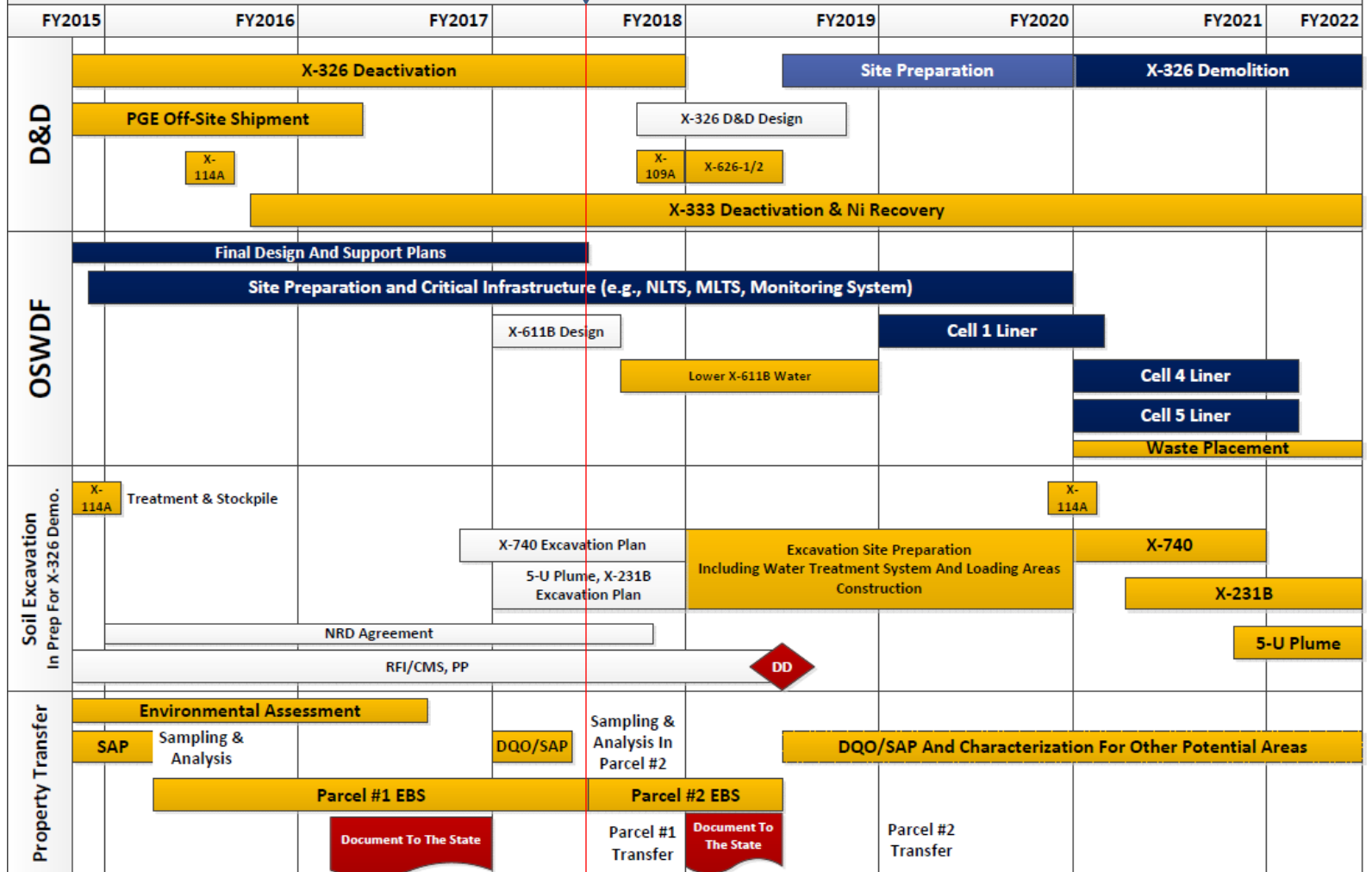
## Integrated Safety Management System



Exercise Fine Tunes Emergency Response

# PORTS Integrated Baseline

April 25, 2018





# D&D Progress – X-326 Deactivation



# D&D Progress – X-333 Deactivation





# D&D Progress – X-333 Deactivation – Free of Freon at Portsmouth





# D&D Progress –

## Resolving Legacy Issues While Saving Project Funds



**BEFORE**



**AFTER**



# OSWDF CONSTRUCTION-



**View Inside the Observation Tower**

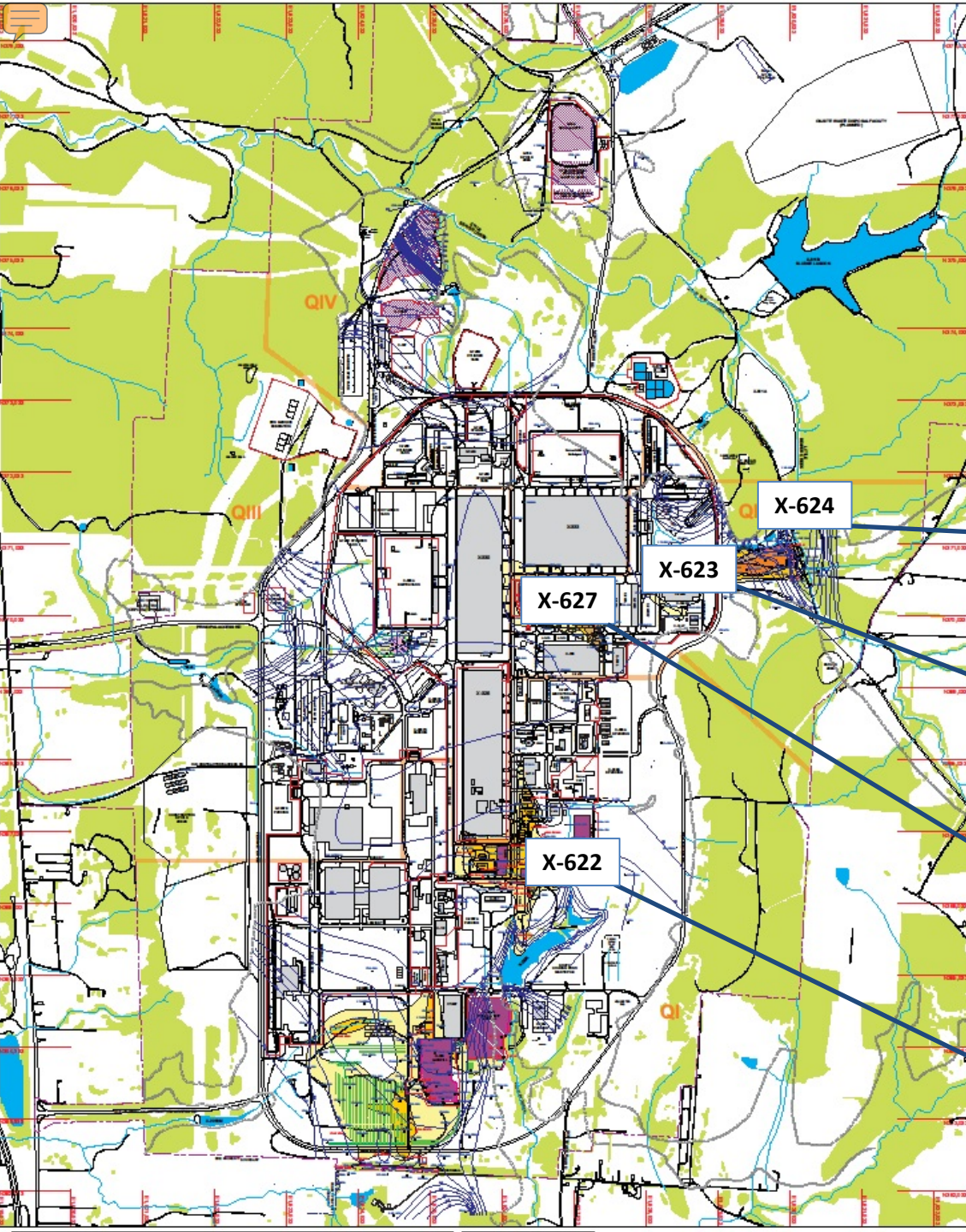


**OSWDF Observation Tower**

# Groundwater Cleanup



# Groundwater Cleanup



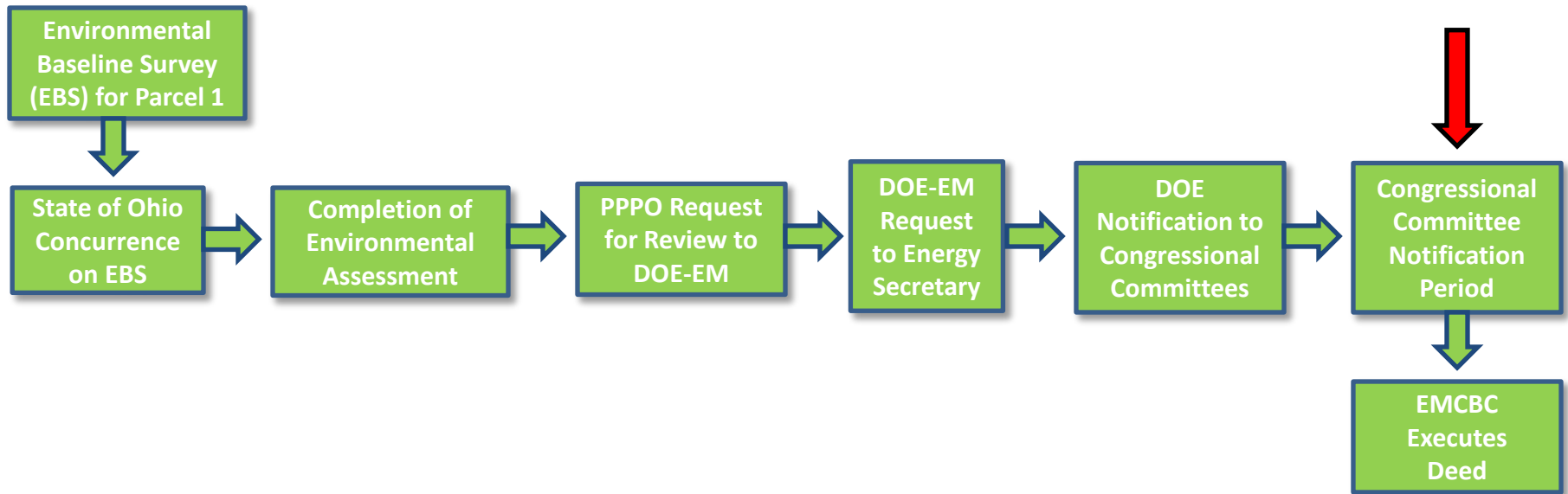
Groundwater Treated FY18-Nov.	Groundwater Source	TCE Removed FY18-Nov. lbs.
Gallons <b>1,730,300</b>	X-701B Plume	66.47
Gallons <b>1,440</b>	Misc. Site	0.00
Gallons <b>5,426,299</b>	7-Unit Plume	67.13
<b>9,667,600</b>	5-Unit & X-749/ X-120 Plumes & PK Drainage	11.95

# Future Use – First Property Transfer

- Parcel 1 is about 80 acres and is scheduled for transfer to SODI in summer
- Requires DOE-HQ and Congressional approval
- Office of Management and Budget has reviewed Parcel 1 package
- Parcel 1 has been delivered to Congressional committees for 60-day review
- Final step will be deed signing by EM Consolidated Business Center and SODI



# Future Use – First Property Transfer



This is a high level overview of key steps in the property transfer process as outlined by 10 CFR 770 – Transfer of Real Property at Defense Nuclear Facilities for Economic Development.

# Depleted Uranium Hexafluoride (DUF6) Conversion Plant Update



# Site Tours



**Public Tour**



**SSAB Subcommittee**



**Portsmouth City Council  
Members**



**Trade Officers**

# Mutual Aid –FY2018

## PORTS Fire Services Provides Mutual Aid to Communities

Off-Site Requests FY2018	
Vehicle Accidents	7
Structure Fires	7
Other Fires	1
HazMat Response	0
Medical	18
<b>Total</b>	<b>33</b>



**PORTS Fire Services receives multiple requests in any given month to provide mutual aid to surrounding volunteer fire departments and the Emergency Medical Service (EMS).**



# Educational Outreach



Ross County 4-H STEM Class

More information is available on the NSB website:

<http://www.science.energy.gov/wdts/nsb>

# Community Outreach



**American Red Cross**



**Crazy Sock Day to Raise Money for Down Syndrome**



**MAKO Finished Products**



**Wing Ding**

# Upcoming Outreach Events

- SSAB August Executive Planning Session  
Date - TBD

*For a full list of SSAB activities, check out the website at  
**<http://www.ports-ssab.energy.gov>***



U.S. DEPARTMENT OF  
**ENERGY**

OFFICE OF  
**ENVIRONMENTAL  
MANAGEMENT**

# **DOE LLW/MLLW Disposal Facility Performances At Fernald, Oak Ridge, And PORTS**

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May 10, 2018

## DOE EM Onsite Waste Disposal



### Disposal Facilities

- Existing CERCLA Disposal Facility
- Future CERCLA Disposal Facility/Decision
- ▲ LLW Operations Disposal Facility
- △ Future LLW Disposal Facility
- Closed Disposal Facility

2016 Intergovernmental Meeting  
DOE Environmental Management  
On-site Waste Disposal  
Robert Edwards, PPPO Manager  
November 18, 2016

# Fernald OSDF



- Operations began in the first of eight cells in 1997
- Excavated and dispositioned over 2.95 million cubic yards of contaminated soil and debris
- The final cap of cell 8 was installed in 2006
- The site transferred to the Office of Legacy Management in 2006
- Site renamed Fernald Preserve in 2007

# Fernald OSDF

Late 80s



Over 1M Tons of Wastes Shipped Offsite by Trains and Trucks

~2010

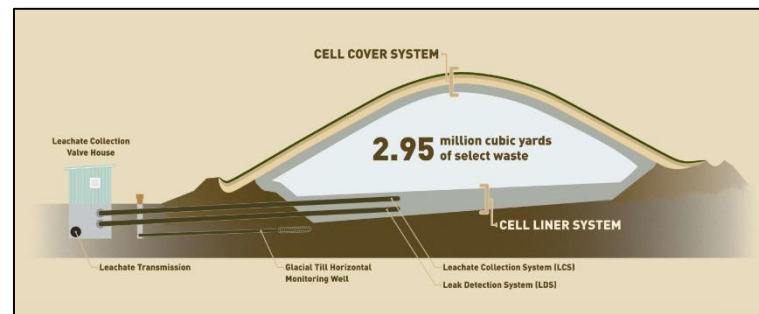


2003/2004



Intensive Oversight by USEPA and Ohio EPA

Onsite Disposal According to WAC



## Cell-Specific Valve Houses



**Post-closure responsibilities of LM maintain oversight of onsite waste disposal facilities**

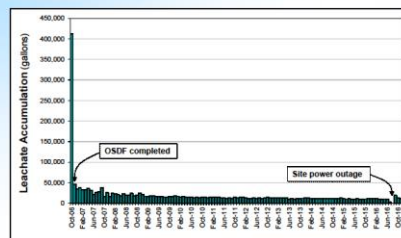


- **Regulatory monitoring requirements continue**
- **Public outreach and information continues**



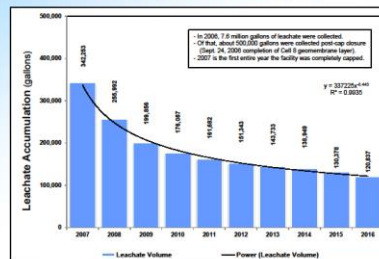
- No indication of leaks
- Highest recorded levels of Leak Detection System accumulation:
  - Cell 6: 0.18 gallon per acre per day (gpad)
  - Low flow response leakage rate: 2 gpad
  - Initial response leakage rate: 20 gpad
  - Action leakage rate: 200 gpad
- Leachate Collection System volumes have stabilized and continue to diminish indicating the cell cap is functioning as designed
- Leak Detection System accumulation rates indicate the liner systems are performing as designed
- Water quality trends in the horizontal till wells and Great Miami Aquifer wells indicate concentration fluctuations beneath the facility are not related to facility performance
- No visual signs of compromised cap integrity

On-Site Disposal Facility  
Leachate Collection System – Monthly Flow



U.S. DEPARTMENT OF ENERGY Legacy Management

On-Site Disposal Facility  
Leachate Collection System – Annual Flow



U.S. DEPARTMENT OF ENERGY Legacy Management

Chemical data shows that the water draining from the LDSs is very different from the leachate in the LCSs or groundwater in till wells under the cells. So the liners are not leaking.

While the LDSs of earlier cells already dried out, some later cells are still draining water accumulated in their LDSs at decreasing rates well below any response or action limits.

On-Site Disposal Facility  
Low Flow Response Leakage Rate Basis

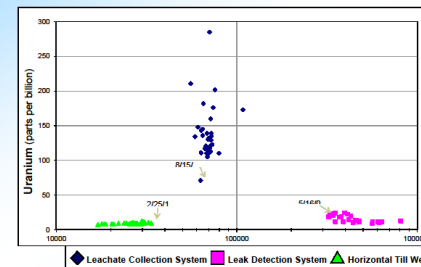
Year	Maximum Accumulation Rate (gpad)	Maximum Flow Rate (gpd)
2008	1.36	8.70
2009	0.48	3.10
2010	0.21	1.30
2011	0.38	3.50
2012	0.10	0.64
2013	0.07	0.40
2014	0.06	0.40
2015	0.23	1.50
2016	0.18	1.20

Action leakage rate	200 gpad	1,300–1,900 gpd
Initial response leakage rate	20 gpad	130–190 gpd
Low response leakage rate	2 gpad	13–19 gpd

gpad: gallons per acre per day  
gpd: gallons per day

U.S. DEPARTMENT OF ENERGY Legacy Management

On-Site Disposal Facility  
Uranium versus Sodium Concentrations: Cell 3



U.S. DEPARTMENT OF ENERGY Legacy Management



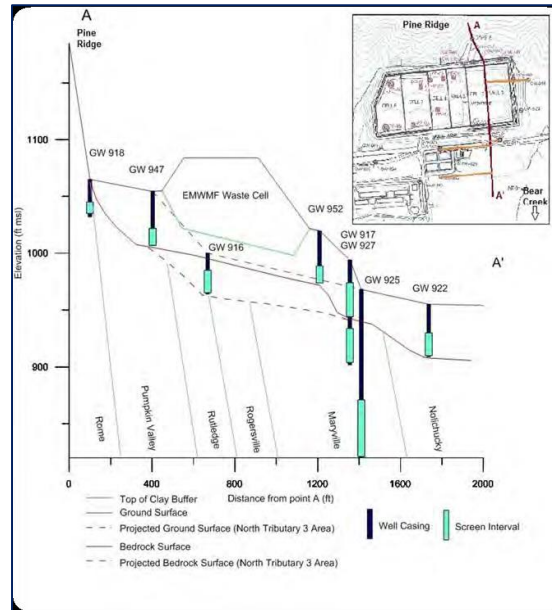
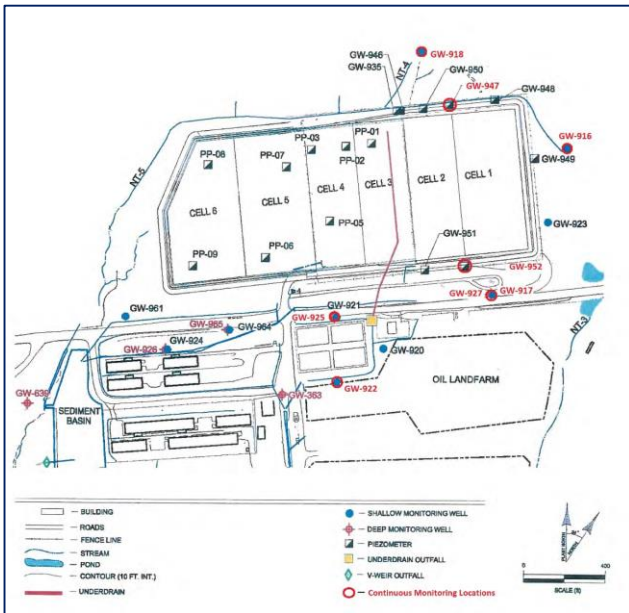
- Operations began in 2002
- Capacity of 2.2M cubic yards is approximately 70% full
- Cleanup of the K-25 site anticipated to be complete in 2020

## Has A Different Liquid Management Approach:

- **Contact Water** – rainwater that only flows over the waste layer
  - Collected, stored in modular tanks, sampled and tested
  - Discharged into the Bear Creek, if sampling results are within limits
  - Treated, if not
  - Is the topic of ongoing discussions between DOE and Regulators
- **Leachate** – water that infiltrates through the waste layer
  - Collected, stored, and trucked to the ORNL wastewater treatment plant
- **Underdrain Water** – groundwater that flows in the drainage layer under the liners
  - Monitored



TDEC Division of Remediation Oak Ridge Office issues Environmental Monitoring Report annually including site specific monitoring results on haul road and EMWMF.



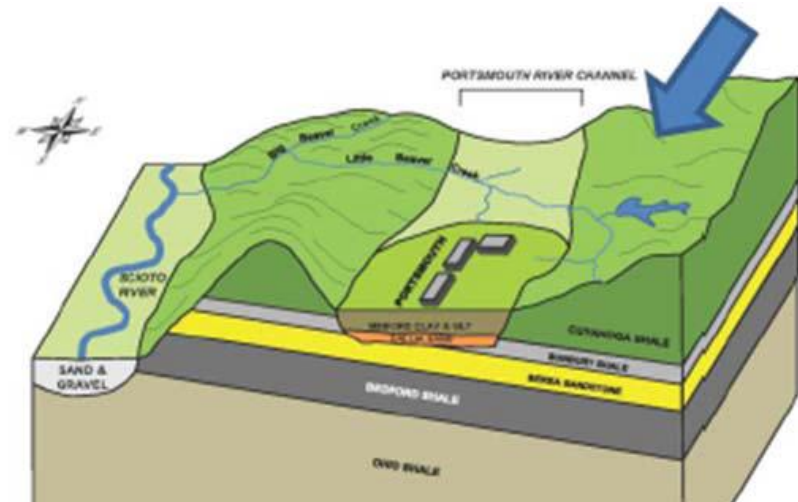
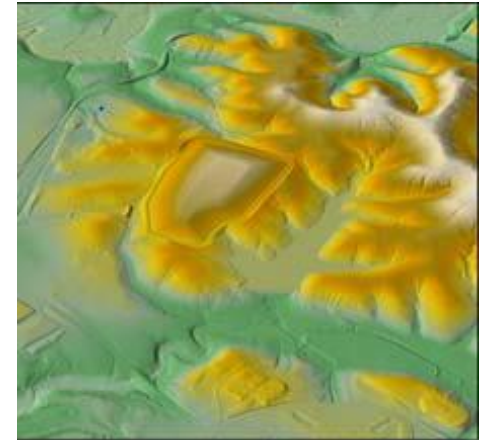
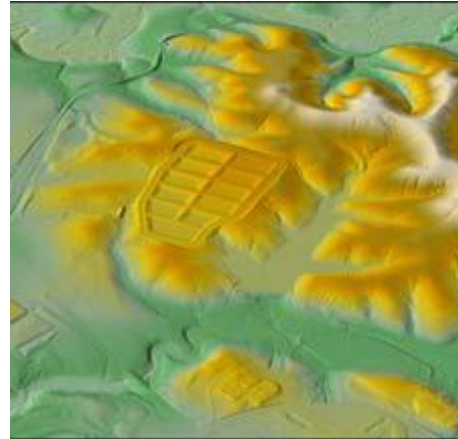
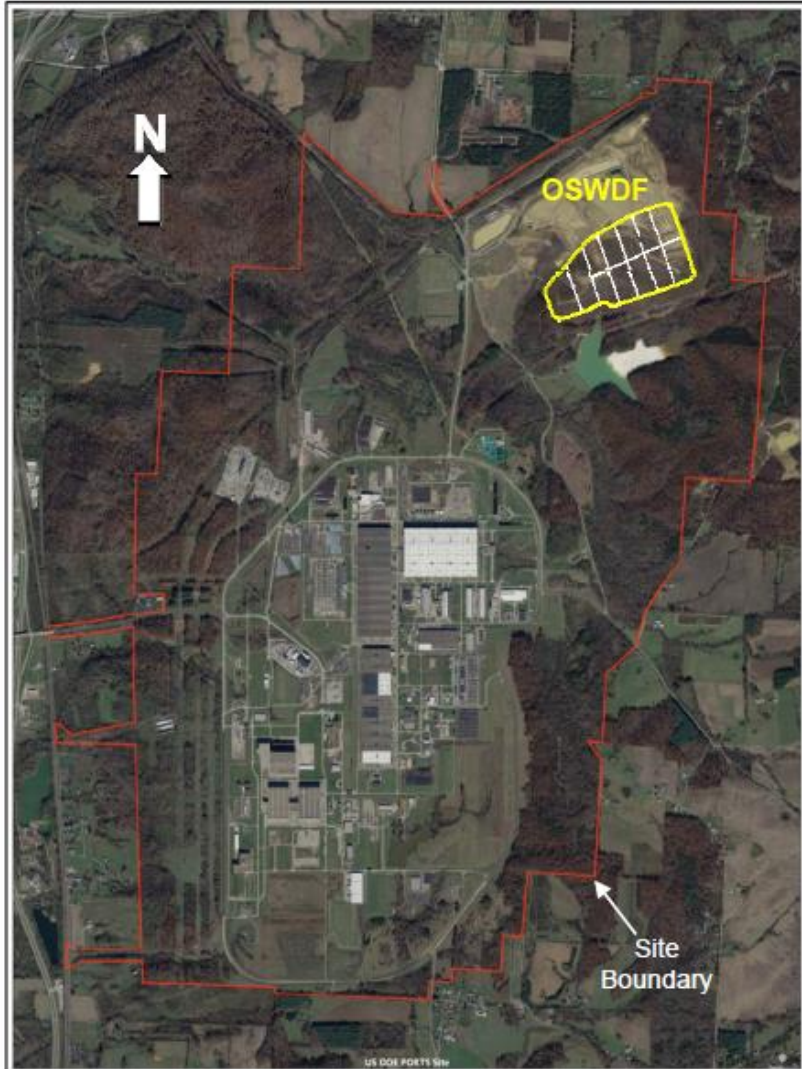
TDEC has not identified anything in these annual reports or other documents (e.g., the TDEC letter to DOE dated October 25, 2017) that would indicate that the EMWMF liners may be leaking.

During its 15 years of operation, the Environmental Management Waste Management Facility (EMWMF), the Oak Ridge Reservation's DOE-operated CERCLA disposal facility, has accepted more than 1.7M yd<sup>3</sup> of waste, safely and compliantly. Annual Phased Construction Completion Reports (PCCR) are conducted for the EMWMF with detection monitoring data collected from 15 surrounding groundwater wells. These reports are approved by both the Tennessee Department of Environment and Conservation and EPA. None of these previous reports, including the one published in FY2017, indicate that contaminants derived from wastes disposed at EMWMF have been released to surrounding groundwater.

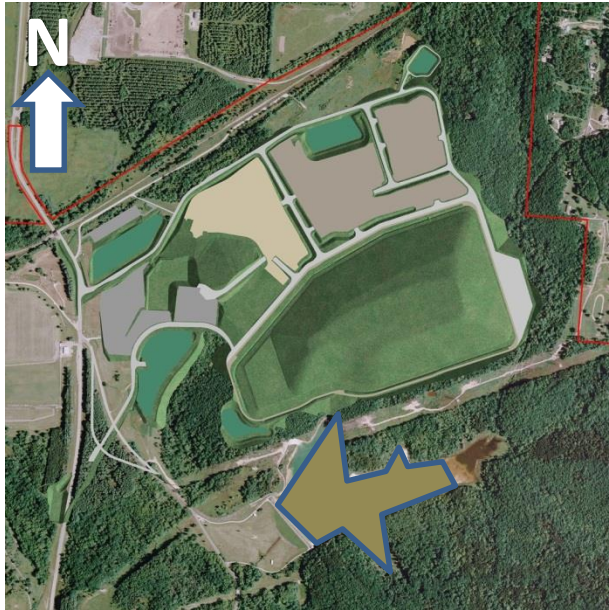
Both TDEC and EPA have expressed support, in writing, for onsite disposal in Oak Ridge, and the formal CERCLA process to site, design and construct a second onsite CERCLA disposal facility is proceeding.



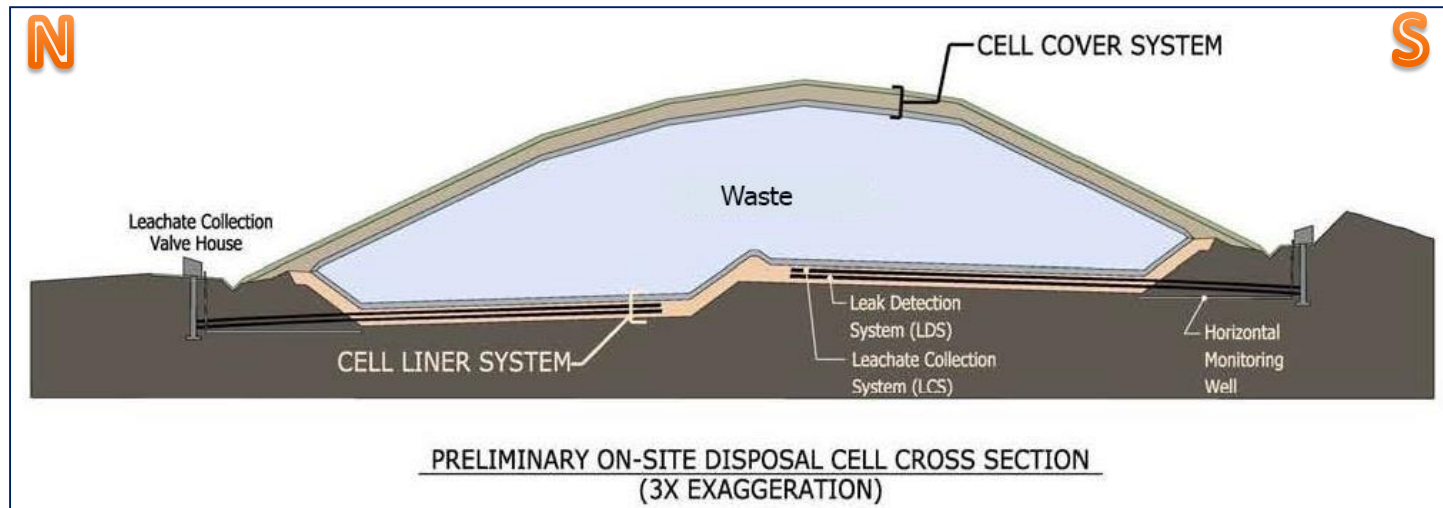
# PORTS OSWDF - Overview



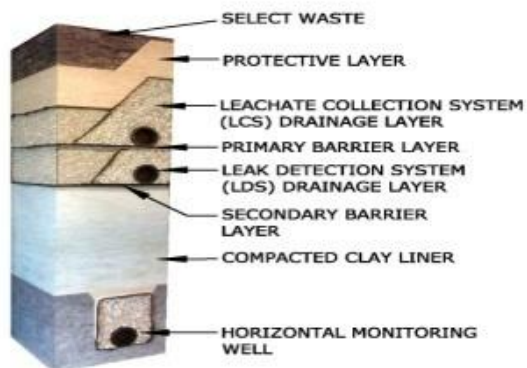
# PORTS OSWDF – Cross Section



- Is designed to collect all liquid within the OSWDF waste placement footprint during operation and post-capping for proper treatment before discharge.
- Does not differentiate contact water from leachate.
- Will conduct sampling at valve houses, horizontal wells, vertical wells, nearby streams, and treatment discharge.



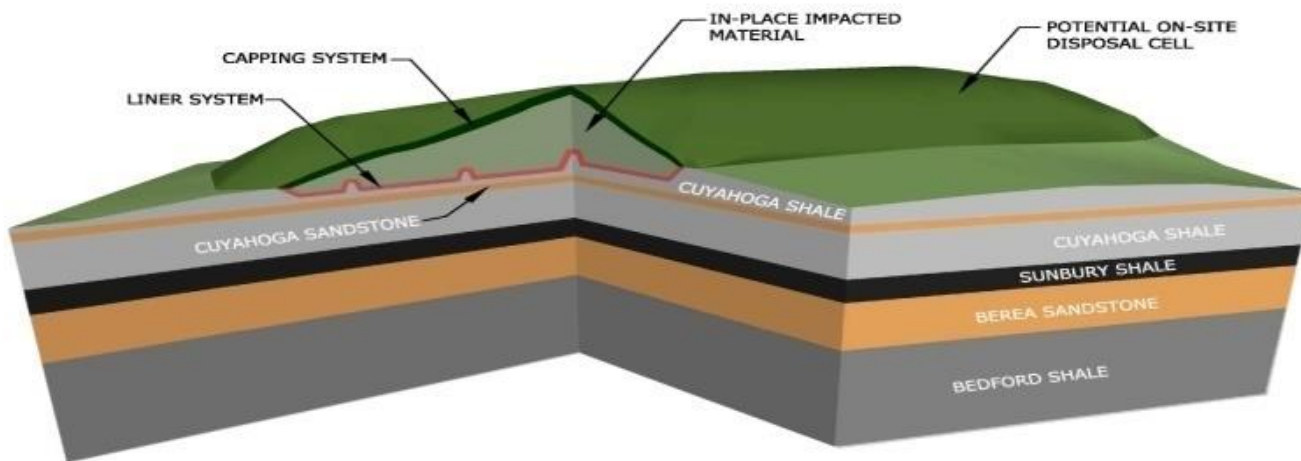
# PORTS OSWDF – Liner, Cap, Underlying Formations



**LINER SYSTEM**



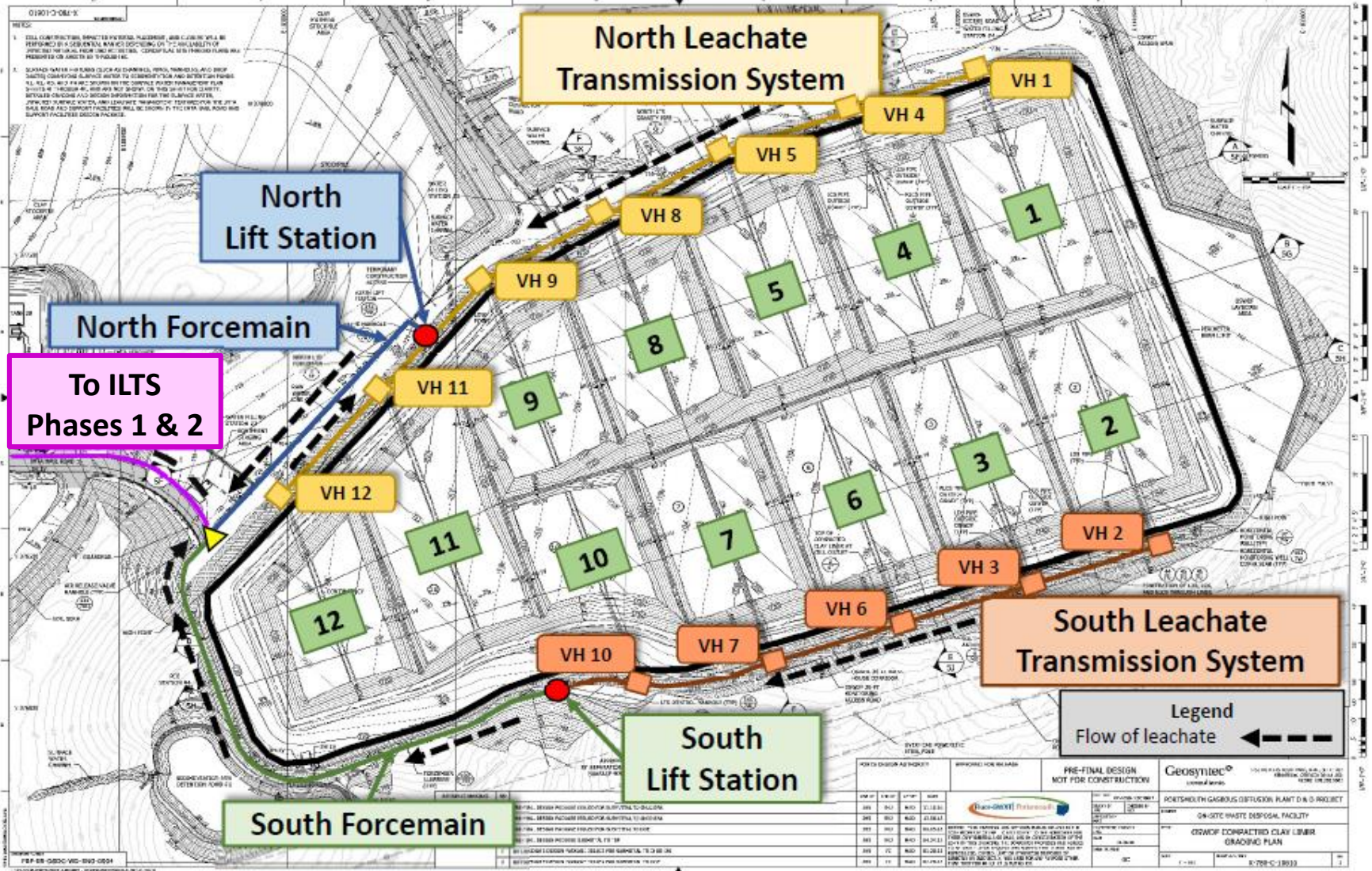
**CAPPING SYSTEM**



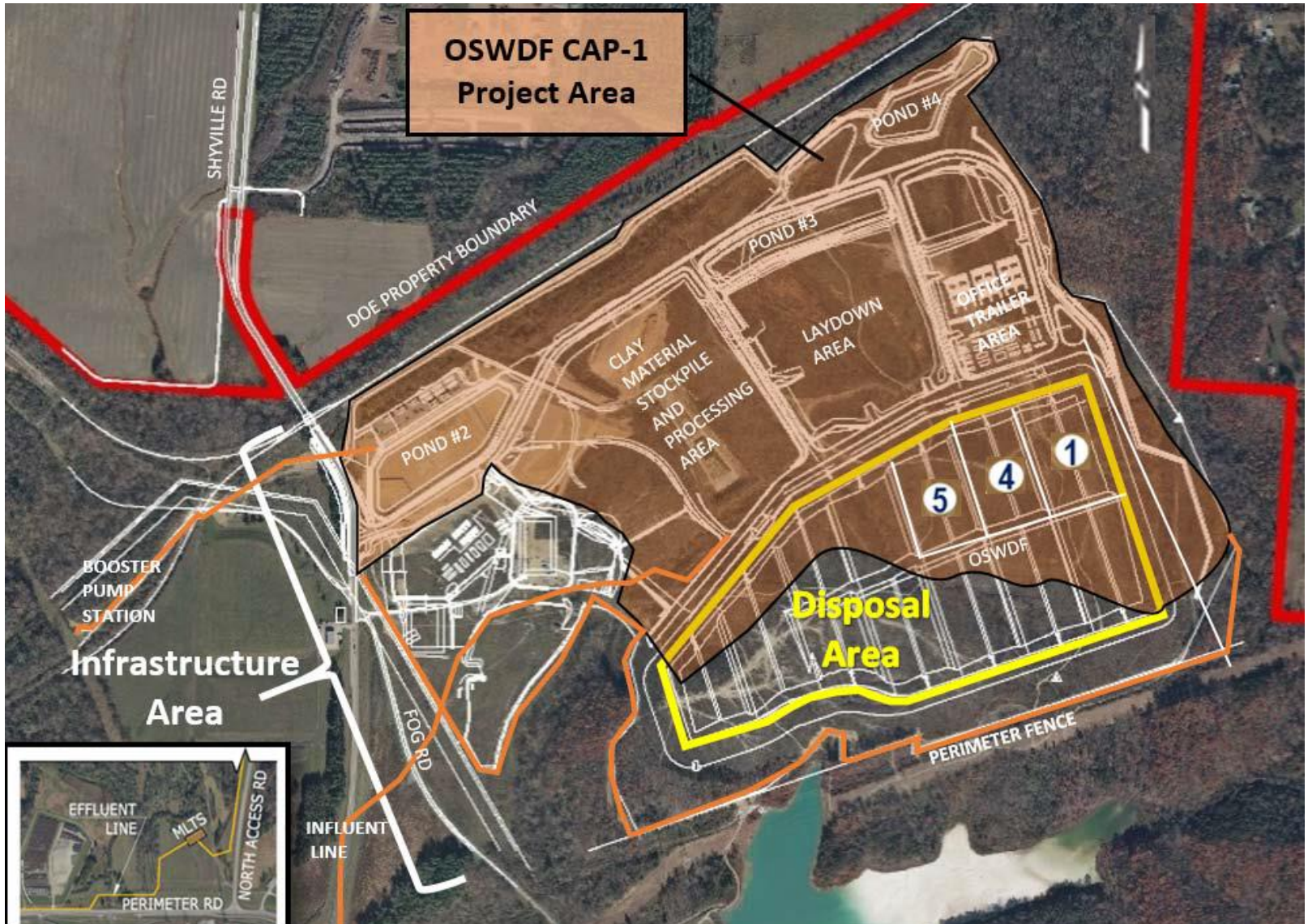
**OSWDF Cross Section And The Underlying Formations**

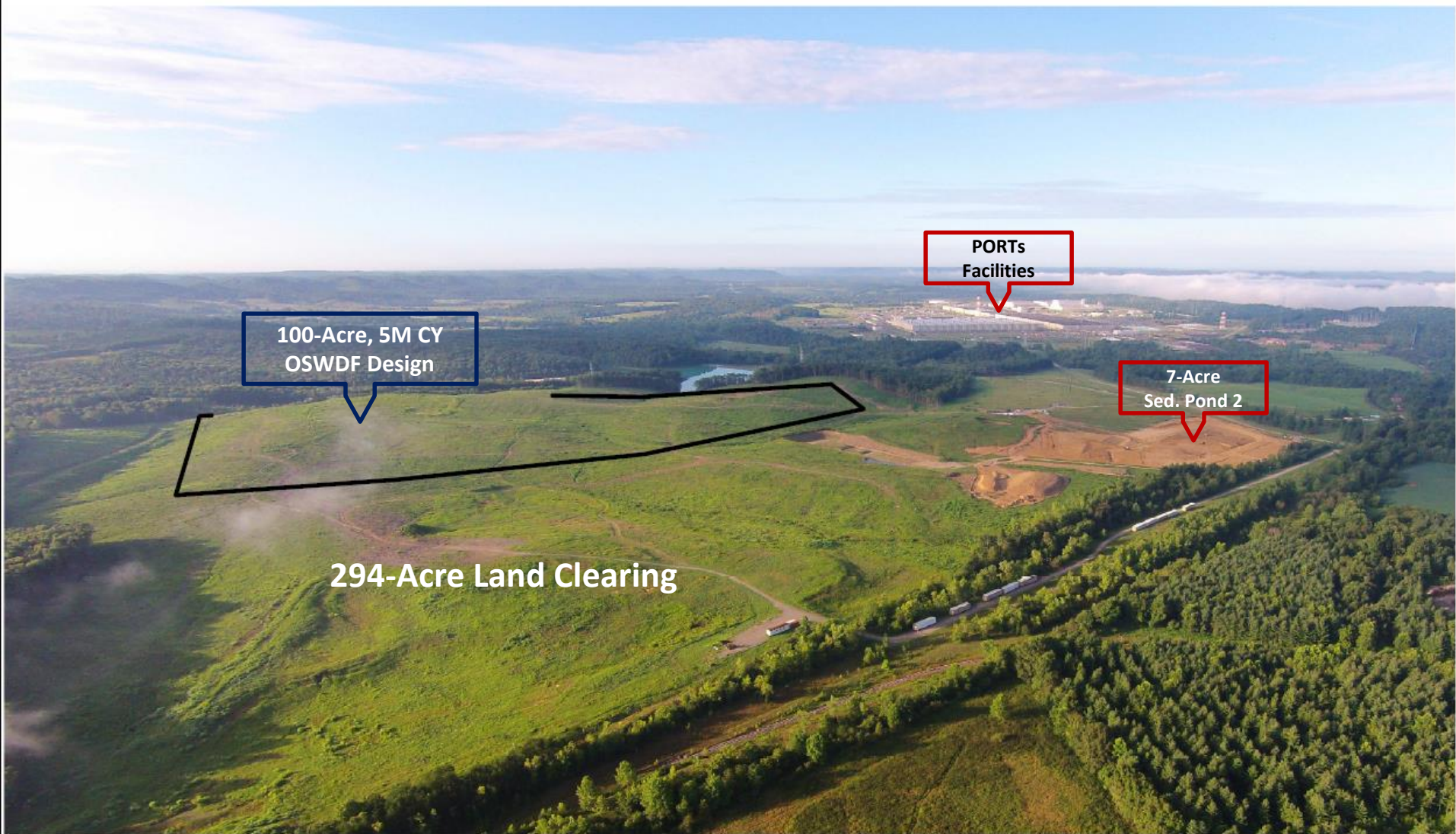


# PORTS OSWDF - Cells And Leachate Lines



<p>PORTS DESIGN ARCHITECT</p> <p>ARCHITECT FOR THE PROJECT</p> <p>PRE-FINAL DESIGN NOT FOR CONSTRUCTION</p> <p>Geosyntec</p> <p>PORTSMOUTH GASEOUS DETENTION PLANT D &amp; S PROJECT ON-SITE WASTE DISPOSAL FACILITY OSWDF CONTRACTED CLAY LUMBR GRADING PLAN</p> <p>DATE: 11/11/2011 SCALE: AS SHOWN PROJECT NO: 11-001 DRAWING NO: 11-001-001</p>	<p>DATE: 11/11/2011 SCALE: AS SHOWN PROJECT NO: 11-001 DRAWING NO: 11-001-001</p>
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*Portsmouth EM Site Specific  
Advisory Board*

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**DOE Federal Coordinator**

Greg Simonton

**SUPPORT SERVICES**

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Recommendation 18-02

May 10, 2018

**RECOMMENDATION 18-02: Portsmouth (PORTS) Environmental Management (EM) Site Specific Advisory Board (SSAB) Recommends DOE Open Waste Disposition Record of Decision and Offer Second Public Comment Period**

**BACKGROUND:** From the beginning of the Portsmouth Decontamination and Decommissioning Project, the issue of waste disposition has been at the center of public dialogue. Many community groups, including this board, have provided input, all with the common goals of providing future economic opportunities and environmental protections for the region.

Despite this agreement, how the D&D waste is to be disposed has been a divisive and damaging topic for our communities. It is the position of the Portsmouth SSAB that the waste disposition issue is unresolved and the longer this divide exists, the deeper the wounds will become among concerned parties. The waste disposition issue needs a conclusion that is satisfactory to the public and there are such varying views on the topic that it is unclear which path forward is appropriate.

Therefore, the Portsmouth SSAB offers the following recommendation to finally bring this issue to an end so we can all move forward toward our collective, and broader, objectives.

**RECOMMENDATION:** The Portsmouth SSAB recommends the U.S. Department of Energy open the Waste Disposition Record of Decision and provide a second Public Comment Period that could lead to modifications to the existing Record of Decision. This recommendation does not call for any specific modifications with the understanding the board would provide input at the time of the second Public Comment Period. Rather, the board's position is that a second Public Comment Period is necessary based on the level of unrest and uncertainty that exists on the issue of waste disposition within multiple segments of our community.

This is not a criticism of DOE's previous process, but rather a recognition that many citizens believe additional information has come to light that the public should have had access to before the initial Public Comment Period (e.g., TSCA requirements, geological conditions, etc.). Regardless of the merit of those arguments, there is no debate that a community consensus on this issue does not exist and that a second, and final, Public Comment Period will give the community an opportunity to demonstrate community preference to DOE for how the D&D waste is to be disposed.

It should be noted that the Portsmouth SSAB has consistently taken a position that on-site disposal is acceptable under certain conditions. DOE has yet to formalize the commitments requested by the board in Recommendation 13-02, although the recent

efforts by DOE to more firmly commit DOE to the consolidation of landfills and plumes within Perimeter Road is appreciated. However, as illustrated in Portsmouth SSAB Recommendation 15-05, the board does not accept on-site disposal unless all conditions outlined in 15-05 are formally committed to in regulatory agreements.

The Portsmouth SSAB would like to thank DOE for its interaction with the board. The DOE has consistently offered detailed information to the board on a range of complex topics. The board believes this type of interaction with the community is imperative and that there is value in understanding community concerns. For those same reasons, the board believes this recommendation offers a viable path forward to a conclusion of this controversy, a conclusion that is necessary for our community and for project continuity.

Thank you.

**EM SSAB Chairs**  
**Recommendation to the Department of Energy**  
**Recommendation Regarding the Energy Community Alliance Report on Waste Disposition**

**Background**

The Energy Communities Alliance (ECA) sponsored the wide-ranging report “Waste Management: A New Approach to DOE’s Waste Management Must be Pursued.” These recommendations would, if implemented, bring about major changes in longstanding national policies regulating the categorization, treatment, and disposition of DOE legacy radioactive waste. The environmental management of such wastes would henceforth be based, not on origin, but on the radioactive characteristics of the waste and the resulting risks to human health and to the environment.

The report underlines the urgency of pursuing a new approach. According to figures cited in the report, DOE’s overall environmental waste liability has more than doubled to \$372 billion over the past 20 years, of which EM’s portion has grown over \$90 billion from \$163 billion to \$257 billion. Reducing the lifecycle costs of these radioactive wastes and the burden on local communities requires a new decision approach based on risk management.

The systemic problems of the DOE/EM program identified by the ECA report are clear and compelling. The present classification waste based on origin, rather than risk goes back to the beginnings of the nuclear weapons program. The economics of the program are currently unsustainable—somewhat akin to making the minimum payment on a growing credit card balance. The current classification categories in DOE Order 435.1 (Radioactive Waste Management) do not align with NRC domestic or IAEA international standards. In principle, transition to a risk management approach would result in less “over-classification” of waste and reduce the volume of wastes subject to higher levels of handling. According to the ECA report, costs would be significantly reduced—estimated at \$2.5 million per day.

The ECA report itself is based on much prior research dealing with the same problem. The ECA is composed of representatives of local communities hosting DOE facilities and thus has a degree of local “buy-in.” Furthermore, the report ostensibly has the support of the Waste Management industry, as evidenced by remarks by industry leaders at the 2018 Waste Management Conference in Phoenix.

However, while the report presents a coherent and consistent argument on behalf of a new approach, it would be difficult to determine the merits based on this policy study alone. The lack of empirical data is a significant drawback. There are no charts or figures in the study. The “new” system of classifying waste is not defined either in general terms or specific levels of radioactivity. Methods for determining or calculating the conversion of existing to new classes of waste are not presented. Global figures for total amounts of waste and total costs are presented narratively. But it is not possible to evaluate the differential impact by DOE facility or State. The WIPP facility plays a prominent role in the proposed solution as the recipient of significantly increased volumes and types of waste. But the specific amounts are not explained. WIPP is also expected to receive increased capital expenditures for expansion, but specific numbers are not provided. Information on the notional return on investment is not provided (except the vague estimate of \$2.5 million per day mentioned above). On the whole, the merits are asserted but not really evaluated or empirically justified.

The ECA Report sets forth policy changes to advance desirable and widely-accepted goals of cleaning up nuclear wastes nationally. But given the empirical shortcomings, the report should be regarded, at this juncture, as a worthwhile, but preliminary policy study. A pro or con recommendation on the merits of the proposal is not possible at this time.

### **Recommendations**

1. The Chairs recommend that DOE/EM undertake a comprehensive analysis of the ECA report, including technical, financial, environmental, safety, transportation, and other implications of implementing its recommendations. This is for the purpose of evaluating the impact of such changes.
2. The Chairs recommend that DOE/EM evaluates the site-specific impact of implementing the recommended changes including both potential risks and benefits.
3. In undertaking its evaluation, the Chairs recommend that DOE/EM should address, at a minimum, the questions developed by the Chairs set forth in the attachment.
4. The Chairs recommend that DOE/EM provide a timeline for performing the analysis and brief its results on an ongoing basis to the Chairs and their respective SSABs for comment and input.

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### **References**

1. ***“Waste Disposition: A New Approach to DOE’s Waste Management Must Be Pursued,”*** Energy Communities Alliance, September 2017.  
**<https://static1.squarespace.com/static/55c4c892e4b0d1ec35bc5efb/t/59ce7384cd39c3b12b97f988/1506702214356/ECA+Waste+Disposition+Report.pdf>**



## **Attachment**

### **Relevant Questions Concerning the ECA Report**

#### **Technical**

What would the “risk” based classification look like?

Are there precedents for such a classification?

Would it replace or complement existing DOE classification system?

If risk is substituted for origin, what would be the technical definitions, based on what criteria?

Do changes require new federal legislative action? If by regulation, could the changes be challenged in court?

Would regulations regarding exposure to radioactivity for workers and the public need to be changed, if waste is recategorized?

#### **Materials**

How much waste would be removed from the HLW category under new definition?

How would volumetric changes be determined, on average or by individual containers?

How much of new TRU & LLW derive from liquid waste?

How would TRU and LLW currently comingled with HLW be separated?

How much would be potentially directed to WIPP?

Would container volumes currently stored at WIPP be recalculated.

Provide charts/graphs showing quantities currently classified and quantities following classification.

#### **WIPP**

What is current WIPP capacity limit? What would be new limit if container contents were recalculated?

Is this a manual or algorithmic recalculation?

What legal changes would be required? Do changes require action by state legislatures?

What burdens does WIPP expansion impose on the sites? Transportation and transportation safety, personal exposure, traffic, roads, environmental?

How would those burdens be mitigated?

#### **Cost/Benefit**

What is the economic impact of the changes?

What is the return on investment?

What is the cost/benefit impact for DOE sites?

## ENVIRONMENTAL MANAGEMENT SITE-SPECIFIC ADVISORY BOARD

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Hanford Idaho Nevada Northern New Mexico  
Oak Ridge Paducah Portsmouth Savannah River

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Ms. Anne Marie White  
Assistant Secretary for Environmental Management  
U.S. Department of Energy, EM-1  
1000 Independence Avenue, SW  
Washington, DC 20585

Dear Assistant Secretary White:

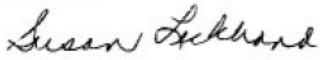
The EM SSAB appreciated the video greeting you provided to us at our recent meeting in New Mexico. We welcome you to your new position as Assistant Secretary and look forward to providing you with informed, clear and useful input and recommendations and invite you to attend our next EM SSAB Chairs Meeting tentatively scheduled for the EM Cleanup Workshop on September 11, 2018.

The EM SSAB is the largest, most diverse advisory board in the EM complex. We represent many thousands of citizens, public interest groups and tribal nations impacted by the EM legacy waste clean-up sites across the country.

Many of us understand that regulations are sometimes duplicative, cumbersome and overly restrictive. That being said, we encourage DOE to scrutinize proposed regulatory changes to ensure those changes are in step with each SSAB's core values, inclusive of the following considerations:

- Protect worker health and safety;
- Protect and restore the groundwater;
- Protect the environment – do no harm during cleanup or with new development;
- Involve the public;
- Secure sufficient funding;
- Maintain the integrity of the State regulatory agreements;
- Develop and deploy new technology, without impeding cleanup;
- Incorporate long-term stewardship needs in current and future cleanup decisions;
- Partner with local communities and workforce in order to maintain the skill set necessary to accomplish these cleanup activities.

We look forward to meeting you soon.



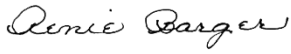
Susan Leckband, Chair  
Hanford Advisory Board



Steve Rosenbaum, Chair  
Nevada SSAB



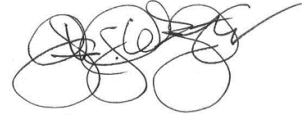
Dennis Wilson, Chair  
Oak Ridge SSAB



Renie Barger, Chair  
Paducah CAB



Gil Allensworth, Chair  
Savannah River Site CAB



Gerard Martinez y Valencia, Chair  
Northern New Mexico CAB



Bob Berry, Chair  
Portsmouth SSAB



Keith Branter, Chair  
Idaho Cleanup Project CAB

cc: Mark Gilbertson, EM-4  
Betsy Connell, EM-4.3  
David Borak, EM-4.32