PORTSMOUTH EM
SITE SPECIFIC ADVISORY BOARD

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

Proposed Agenda for the June 1, 2023, Board Meeting

6:00 pm
Call to order, introductions
Review of agenda

DDFO Comments-Jeremy Davis **--15 minutes**

Federal Coordinator Comments-Greg Simonton **--10 minutes**

Liaison Comments **-- 5 minutes**

Administrative Issues

- **Recap of ECA Forum** **-- 5 minutes**
- **Draft Budget Recommendation 23-01** **--10 minutes**
  - Public Comments on Recommendation
  - Board Comments on Recommendation
- **Chairs Recommendation from March 2023** **-- 5 minutes**
  - Public Comments on Recommendation
  - Board Comments on Recommendation

Public Comments **--15 minutes**

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

Adjourn

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SITE SPECIFIC ADVISORY BOARD

MINUTES OF THE THURSDAY, JUNE 1, 2023, 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, Jody Crabtree; Vice-Chair, Herman Potter; Bryan Davis, Turman Helton, Beth Workman

SSAB Members Absent: Dr. Todd Burkitt, Amy Hawk, Wayne Mclaughlin, Matt Setters

U.S. Department of Energy (DOE) and Contractors: Jeremy Davis, Greg Simonton, DOE; Julie Galloway, Cindy Lewis, EHI Consultants (EHI)

Liaisons: Tom Schneider, Ohio Environmental Protection Agency (EPA)

Facilitator: Eric Roberts, EHI

Public: Pat Marida, Sierra Club; Diana Cahall, Lee Blackburn, David Manuta, David Lipp

Approved by Jody Crabtree, Board Chair

Jody Crabtree

Call to Order:

Crabtree: 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.

June Agenda:
Roberts: We have a copy of the agenda in front of you. Are there any changes or alterations we need to make to the agenda? none

DDFO comments provided by Jeremy Davis, Deputy Designated Federal Official:

- **70 years of Synergy**
- **X-326 by the Numbers**
- **X-326 D&D Lessons Learned**
- **X-330 and X-333**
- **X-333 Deactivation**
- **D&D Synergy**
- **Paducah Site Collaboration-NDA**
- **Waste Management**
- **OSWDF – Project Management Excellence**
- **Recent Site Activity**
- **Property Transfers**

A copy of the DDFO presentation is available on the SSAB website.
(www.ports-ssab.energy.gov)

No Questions at this time for DDFO.

Kevin Shoemaker, Southern Ohio Diversification Initiative (SODI)

We signed an agreement with New Point Gas, a company interested in making hydrogen. They are interested in purchasing 80 acres of land from SODI inside Perimeter Road, and that purchase is scheduled for September of this year.
We are also working with a company called OKLO Energy. OKLO Energy is a small modular reactor company that's been working directly and closely with the Department of Energy to determine how to solve the carbon problem with all the coal facilities going offline. What to do and try to replace that baseload electricity and other electric around the country. OKLO is building a power plant at Idaho National Lab.
OKLO announced last week that their second and third power plants will be built here at the PORTS site. The good news about the announcement is that they would be working with Centrifuge because they would be using the material being reached

by censors at the facility. SODI believes manufacturing components for the power houses might be something that they use at these two power plants here. There could be a fabrication of fuel that comes out of Centrifuge, and a third factory is possible. These are small first steps, but they are a big step in terms of the Office of Nuclear Energy with the Department of Energy, which is very excited about the prospect of this happening. SODI will have a public meeting in the next few months, where each of these companies will be here to talk to the public and answer any questions you have. Those will be publicly advertised so that people can come and ask any questions and get any information that they need. SODI is now in conversations with American Electric Power, and we'll be meeting with them soon to talk to them about how they can work with OKLO on this project.

Question/Comment:	***Answer:***
B. Davis: What is the timeline for building and going online? What is the timeline for possible construction and full-time jobs once the plants are built?	***Shoemaker***: I think 2026 is what it looks like. They have that information on the OKLO site.

Federal Project Coordinator comments provided by Greg Simonton, Federal Project Coordinator:
Roberts: Greg, do you have anything?

Simonton: Nothing at this time.

Liaison comments:

Schneider: Nothing at this time.

Administrative Issues:

Roberts: Jody attended the ECA meeting last week. Jody, do you have anything to add about that?

Crabtree: Several talking points appeared to ease the community's minds. Kevin's announcement was the highlight of the event.

Draft Budget Recommendation 23-01 Portsmouth (PORTS) Environmental Management (EM) Site Specific Advisory Board (SSAB) Priorities for Site Budget

Public Comment on Recommendation:

Question/Comment:	***Answer:***
Marida: Department of Energy has had a really big hand in promoting its own business here. Really, the chair of the site-specific advisory board ought to be	

running the meeting and maybe getting a little more public input before it comes to this vote. Newpoint gas and 80 acres purchased in September. You have the Valley Institute says this will not come to fruition, that it would need to get publicly funded. Of course, everything that goes on here from now on will be almost, if not completely, 100% funded by the public, which means it will come out of yours and my pockets. That would be good if it were something that was really useful to the public, but a lot of this is war making and we have a lot of information about how this new fuel could easily be enriched to make weapon grade enriched uranium. Also, the exports add supposedly less than 20%, be exported worldwide. That could mean that other countries could use it to make nuclear weapons. Very proliferation problem. But for Newpoint Gas to really do this, they would need to get part of the $6 billion from the Invasion Reduction Act and the Ohio River Valley Institute says that this company is just too small and does not have enough clout to compete for that money. The OKLA reactor. Maybe they would want to speak a little bit more about that. This is a concept. It has never yet been built. The technology is unproven. It's what they call PowerPoint reactors because there's been many of them challenged that they are unworkable. It will be publicly funded. And one of the concepts of this particular reactor is that it would be buried, and they would abandon the waste here. So, this is what you may be looking forward to. As far as the upcoming public meetings. They are set in such a forum that you can ask questions of certain people, but the answers will never be heard by the general public, and they won't appear anywhere. And they say in the past they	

never appeared anywhere. Also, the Department of Energy did not do the required environmental impact statements for either the new center's housing project or the depleted uranium project. And our organization attempted to force them to do this with the depleted uranium. They said we were too late and somehow noticed earlier than we found out. Of course, these are very difficult to find out when these notices go out because they're listed in atoms at the national level. And we don't see that, it's really hard to find them. And then there's a remote possibility that our challenge against the licensing, without the required environmental impact statement that that could still do something might still be able to come out of that. You're saying that they don't want to call this a film, but I will say that what's going on, all the radioactivity no matter what they're doing here, it is still somewhere, and it will be here essentially forever in the environment somewhere. Everything it touches becomes radioactive. So, when you are talking about generating more radioactivity, such as what would happen if there was a new power plant here, then that's what you were talking about. That's what they are going to be saddled with here. And as I said, you and I will pay for this and it might be good if it was something clean that didn't need to be done, need guards over it like a solar panel or a wind turbine. I'll say that what I'm looking forward to is DOE having a project. There is a Department of Renewable Energy and that should be the focus instead of more nuclear. We need something that's clean, it's quick, it's ready to go now. Whereas a new reactor would be at a minimum of 12 years and possibly a lot, longer than that.	

Cahall: Very briefly investigate a path forward for metal recycling, and particularly the recovery of nickel. Dito just recently published a request for proposals to remove the contamination from the nickel presently being stored at the Portsmouth site. Now they recovered nickel from the Paducah site that they call volumetrically contaminated. They are calling the Portsmouth site nickel sick viciously contaminated. I had never heard of that word before. I think DOE made that up. Implying that it's superficial lying on the surface. I'm not sure that's true, but the request for proposals in terms of removing that contamination may shed more light on that. Would that be a smelter as a way of recovering that nickel and getting rid of the contamination? Do you have a sense of what kind of proposals they will get?	***J. Davis:*** The request for proposal is to remove that surface contamination from the material. I don't want to speculate too much, but they're looking at different technologies to remove surface contamination, such as solid cleaning, and other decontamination efforts, such as liquid. So, it will be determined. ***Roberts:*** That's a great question. And we can talk about it after the meeting.
Mantua: I want to speak just for a minute or so about the nickel, because there's really two types of nickel at the site, because the process there would be literally hundreds of miles of that pipe and some of that is already gone with the demolition of 326. But the part of the converter that has me concerned, is that the barium material, which is still a classified technology, and may have nickel. And even though that's the enrichment process, that material almost assuredly is still contaminated. Now, back when we had an operating plant, we had methodology for doing that. But I don't know how much of that can be reconstructed with the demolition and such to where we can be confident the uranium separates from the nickel. And now, just as a side note and some of you may remember this back in 98 when we had the fire, we actually had nickel in the barrier melt and that was more than	

3000 degrees Fahrenheit. And when I went out to do my inspection the next morning, it looked like there were elephants' feet where the nickel had dripped out and accumulated. Now, keep in mind, a fire is not going to be a safe way to do things. But we had a learning experience of what to avoid and I'm wondering how much thinking has gone into recovering the nickel, which does have market value but at the same time not risk having contaminated material purchased by an end user. Depending on where that converter was, the concentrations, the assets of the uranium could be vastly different, which means that the radiological properties are going to be vastly different. And that's a problem that doesn't exist in Paducah, because of the limit of their assay, but it's a problem that does exist here and it needs to be well thought about before we deploy blue collar people in to do those jobs.	

Draft Recommendation 23-01:

Potter: I would like to make a motion that we proceed with a vote, with the one correction.
Helton: I would like to second the motion.

Motion approved *(5 approved, 0 o*pposed*, 0 abstained, 0 recused)*

EM National Chairs Recommendation March 2023:

Public Comment on Recommendation:

Question/Comment:	***Answer:***
Roberts: Any discussion from the public on this recommendation?	***Cahall:*** I would think this would be the most basic recommendation for DOE to do. I mean, if they can't do this, why write them.

Board Comments on Recommendation:

Question/Comment:	***Answer:***
Roberts: Any more comments from the board? If there are none. I am looking for a motion.	

Potter: I would like to make a motion that we approve the National Recommendation.
Crabtree: I would like to second the motion.

Motion approved *(5 approved, 0 o*pposed*, 0 abstained, 0 recused)*

Public Comments:

Blackburn: I'd like to read an email that I sent to Jeremy Davis, a copy to his boss, Joel Bradburn, at PPO, Sherrod Brown, and Eric Roberts. I wrote this e-mail on May 10, about three weeks ago. I have yet to receive a response. Jeremy below is an email I sent you on Friday, May 5, 2023, for which I have yet to receive a response. And quite frankly, I'm incensed. As you can see in the email, I requested information about several DOE presentations and the original schedule for May 9 and May 11, 2023, not receiving a response from you, or reaching anyone in the office, when I called. I traveled some 170 miles roundtrip to attend the presentation on May 9. Only to discover it had been canceled. And unfortunately, this is not the first time this has happened. While I am clearly not happy about the wasted time, the Aspen energy, not to mention the wear and tear on my car, what I'm really upset about is the total lack of concern on the part of the DOE for the general public.
Over the years, I have wasted countless hours trying to obtain information that should be readily available on the SSAB website. But isn't the lack of information simply appalling. As I mentioned in the email below, there has never been anything on the website about committee meetings, nothing posted about the May 9th presentations, nothing about their cancelations, nothing about why SSAB meeting isn't being held in May, and nothing about why DOE can't do a simple thing like livestream SSAB meetings. So those who can't physically make a board meeting can still be informed about the site. I can only assume it's DOE's intent to keep the public in the dark about the site and this needs to stop. I'm tired of constantly searching for information and not finding it. So, before I came here tonight, I checked the SSAB website to find out what had been posted for the meeting in March, and it was seven pages, seven pages there were no minutes. There was nothing about who attended what was discussed, committees that had met nothing. So, I looked at January and it was not much better. Now, one of the things that you need to be aware of is that this committee is governed by a federal advisory committee, and the Federal Advisory Committee Act says detailed minutes of each meeting of each advisory committee shall be kept and shall contain a record of the persons present, A complete and accurate description of matters discussed, and conclusions reached in copies of all reports received, issued, or approved by an advisory committee. The accuracy of all minutes shall be certified by the Chairman of the Advisory Committee. So, you know, you need to be concerned about the fact that you're in violation of the Federal

Advisory Committee Act, and you need to get things posted and you need to let the public know what's going on. I look around the room here and I see 20 people. There are a thousand times more people just in the surrounding community, and they have no real way of determining or understanding what's going on at the site or at this board meeting. Thank you.

Marida: I'm one of the coordinators of the Ohio Nuclear Free Network. And I know the Department of Energy is aware of this but are the board members aware that we are hosting a citizen forum this Saturday, June 10 at 1 p.m. at the Comfort Inn in Piketon. Are people aware of that? The title of the forum is Radioactive Contamination, Environment and Public Health and the Future of the Portsmouth Nuclear Site.

We have three speakers, Michael Ketterer, who has been here before. He is a Ph.D. in analytical chemist. He is a professor emeritus of chemistry and biochemistry at Northern Arizona University. He has access to probably the world's most sensitive and brand-new spectrophotometer at Northern Arizona University, where he continues to analyze offsite samples from the Portsmouth nuclear site and has proven he has the ability to show that these particular isotopes were generated at the Portsmouth nuclear site. At first, the Department of Energy denied that there was plutonium on the site, even though they had brought in highly active waste for decades and run it through the entire process buildings that contaminated the whole site with neptunium and americium and technetium and the things that are being found in these air monitors today. And then they claim that it was from the Nevada testing. That is what the Department of Energy claimed. And then after that, they brought in a health physicist who is neither a medical professional or a medical doctor nor a physicist. To say that it was within it is below allowable levels or acceptable levels, and that there's no reason for concern. Doctor Ketterer disputes that and he will be speaking.

The second is Joseph Mangano. He is an epidemiologist, and he is the executive director of the Radiation and Public Health Project in New Jersey. He has done a study that was commissioned by our group using all statistics from the Centers for Disease Control showing a soaring death rate near this uranium enrichment plant from 1950 through the latest statistics in 2020. This area went from Pike County, went from below the national average, just about 35% above the rate of cancer. But overall death rate from zero to the premature death rate from 0 to 74, it went from below the national average to 35% slightly above the national average, went to 85% above, almost double the premature death rate in those years. He's going to be at this forum and going to be announcing the release of the new seven County Health Impact Study. And those include Pike County and six surrounding counties. And those statistics are also very startling and show that this contamination is being spread fairly wide.

The last speaker will be Terry Lodge attorney. He is a specialist in environmental law and civil rights. And he is going to talk about the future of the site and some of

the things I was talking about the new plan activities here and how it's related to military and war making and depleted uranium that is going to be used in tanks and in shells that could be and used as it has been in Afghanistan and in Iraq and in the former Yugoslavia. And we know for certain that that depleted uranium is being used in tanks, by Britain and Ukraine and possibly also by the United States. So those are our speakers, we encourage people to come at 1 p.m. at the Comfort Inn in Piketon, on Saturday, June 10. And it will be live-streamed, and I can send out information for Eric to pass on to the board.

But if you go to the YouTube channel for Ohio Nuclear Free Network, you can find it. If you look on June 10 and it will also be recorded, so I did want to say about the myth about the nickel. It is currently illegal to put radioactivity into the recycled metal stream for the reasons that Diana was concerned about. But the Department of Energy has been trying to change that and make that change that law and allow radioactivity to be put into the recycled metal stream. So, citizens have been saying they've been opposing that change for years. We hope that won't happen. And we do believe that the nickel will not even close to getting all the radioactivity out of it.

And last but not least, I would like to say that, you know, this cleanup has been quicker and dirtier than it has been so efficient because it's been a uncovered demolition and other areas have had this demolition covered. And that is also increasing the amount of dust and particulates that's coming off the site.
Thank you.

Cahall: I'd just like to repeat again, please let people know when the committee meetings are, especially when there is a change, like if they're not going to be on the whatever, third Tuesday of the month, if you've got to cancel, please let people know in advance and you could do that. I think on the website. Thank you.

Mantua: One of the things that I was talking about with the office is the uranium metal that's used, was made in Paduch as well as Fernald. And they were used instead of aluminum. Now I'm an old Navy guy, we use a lot of thermal, which is aluminum, this is even better. The thing is there is contamination that results from that. That has been found in Yugoslavia or former Yugoslavia and in other places where it had been used. Now, keep in mind, that's made from the depleted uranium rather than from the high assay material that we would make here, and what are the issues on the modular reactor. My first question on that is one of the assays, one of the concentrations, because most reactors work in 5% or less enrichment, which the Halo is up to almost 20%. So, you would have to reconfigure the reactor to go to hybrid-rich fuel. So, the more standard plan would have something specified by, NRC three, four or five %. And there are a lot less risks with the global assay and contrary to one of the comments is the lower the assay in general, the less likely it would be to go critical. You really have to be well outside the design parameters in order for a large reactor to go critical. There is a safety margin that's built into doing that. If I had those questions answered, I would be in a much better position to advise the community on if it's a good thing or not. Now I go back to my time when we had a rivalry with Paducah, Carbide versus Goodyear, and one

of the funny stories on that is we had a problem with three elements. I got together with a group of engineers. We found the stock week. The bottom line was over a period of time we saved the site, $80 million. We had a solution that worked. Same issue comes up in Paducah the problem was even bigger. Yet they were reluctant to adopt the technology that we had developed safely at Portsmouth with our cost savings, just to make new orders might have been $100 million. It's something to think about. I'm hoping that that rivalry is a thing of the past. The OKLA thing is extremely interesting. I point out on the hydrogen DOE should be tying the kind of technology that they're going to support because I consult in this space now and I want to point out and you may be hearing this language for the first time, that there's pink, blue and green hydrogen, and that's going to depend on what the feedstock is. So, if you want to use that for gas DOE may frown on OKLA for doing that because that's considered pink, blue might be through electrolysis, and green is based on solar energy. The bottom line here is that not all hydrogen is created equal. And so, we need to be very sure on what the feedstock is that we're using. And then the last point I want to reiterate what Kevin said AEP and a lot of the large companies would not come in and spend R&D money on something that is not already been demonstrated. So, any of the money of DOE's smaller forms that they're encouraging is you get the big boys to come in if the small pilots are proven out, and so DOE with this SSAB I think you've got an obligation to support these pilots because when we talk about reindustrialize, that's a fantastic way to do it. If we can demonstrate that, we can do it safely. The history is not very good because we've got people sick, so hopefully doing this safely will enable us not to have to worry about getting people sick.

Roberts: Just a couple of quick things Diana, Lee I would love to talk to you after the meeting about what you're seeing on the website and see if we can figure out what's not there and everything that should be.

Are there any final comments from the board? Thank you. We had folks out for weddings, graduations, and vacations. We've got new members coming right around the corner, hopefully by the end of summer, which will give you guys a cover to help fill out the board. We appreciate you all being here.

Final Comments from the board:

Action Items:

- EHI to send out the recommendation.

Department of Energy

Portsmouth Paducah Project Office

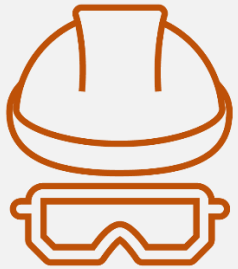
PORTS SSAB | 2023
Waste Management
Symposia

70 Years of Synergy

The Legacy Continues

X-326 by the Numbers

320,000+
SAFE HOURS
WORKED



18 mo
ahead of
SCHEDULE

2.6
MILLION
square feet
DEMOLISHED

1 MILLION
NDA
MEASUREMENTS

$20M
under
BUDGET

135,000
cubic yards
DEBRIS DISPOSED

235,000
cubic yards
EXCAVATED

7,000
process
components
REMOVED

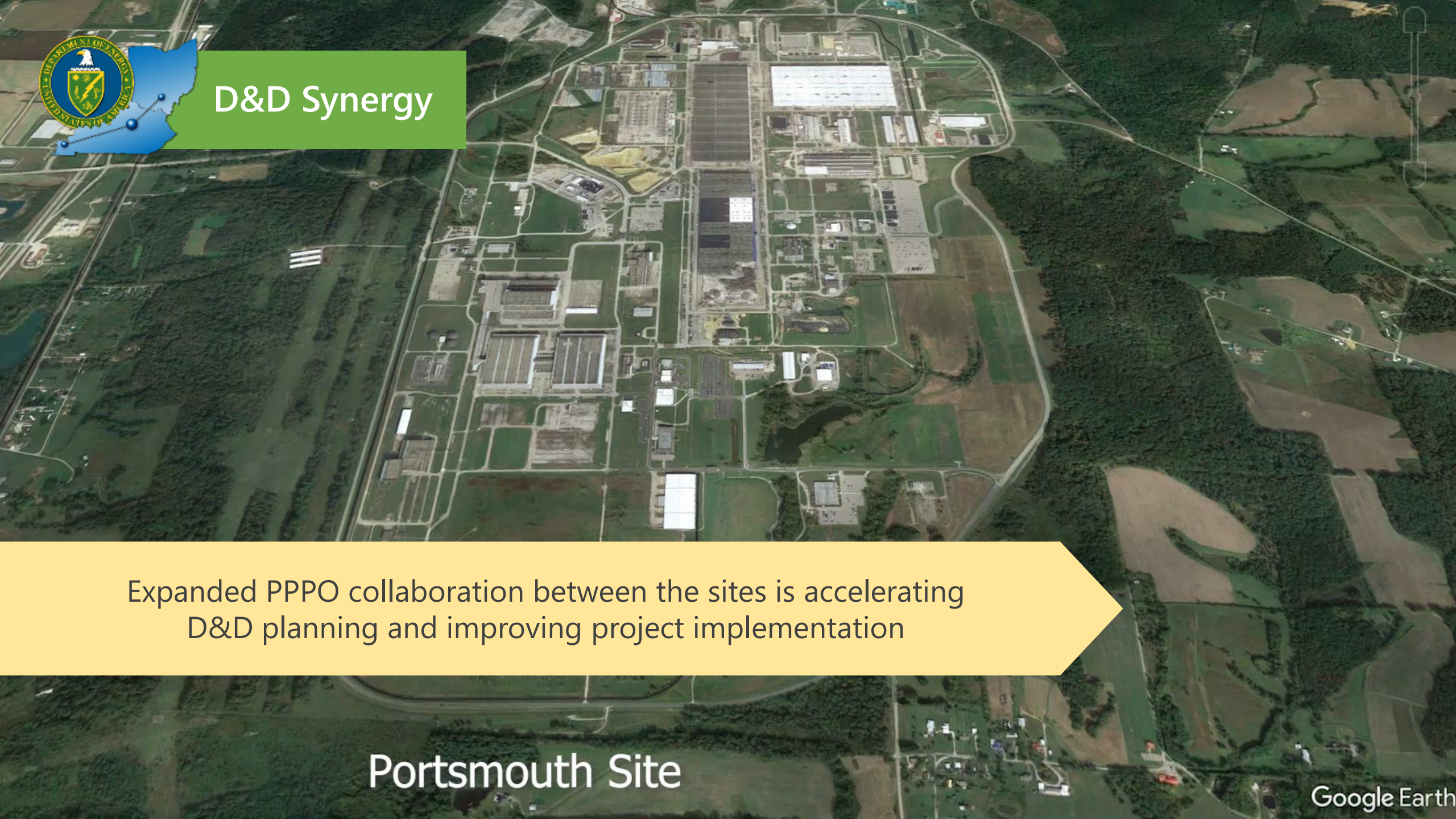
X-326 D&D Lessons Learned

X-330 and X-333

Cooperative and direct knowledge transfer at Portsmouth allows project personnel to contribute to process improvement, increasing project confidence and efficiencies

X-333 Deactivation

D&D Synergy

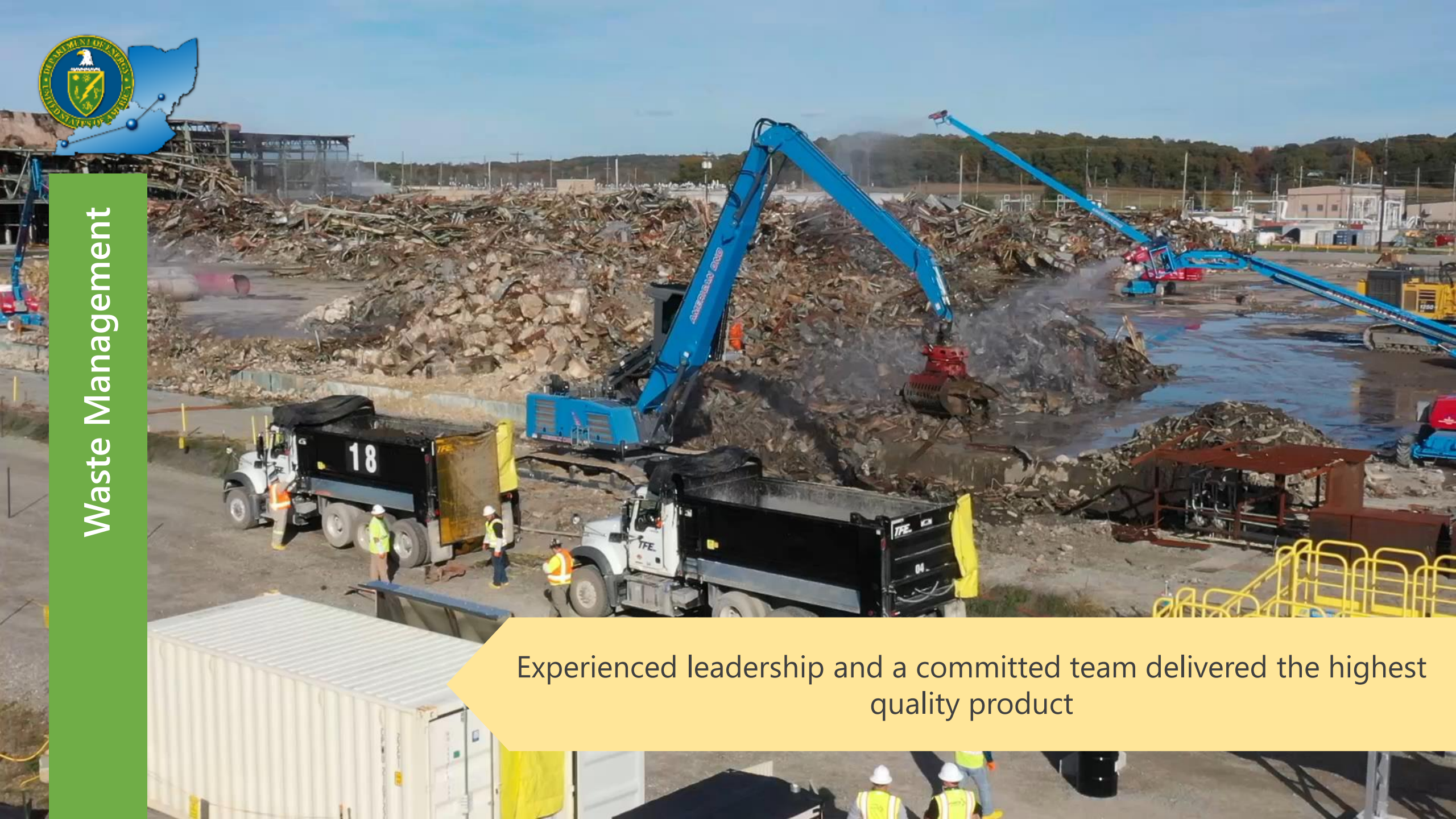


Expanded PPPO collaboration between the sites is accelerating D&D planning and improving project implementation

Paducah Site Collaboration - NDA

Waste Management

Waste Management



Experienced leadership and a committed team delivered the highest quality product

OSWDF - Project Management Excellence

- Received the Secretary of Energy's Project Management Award of Excellence for the mission-critical OSWDF initial construction project

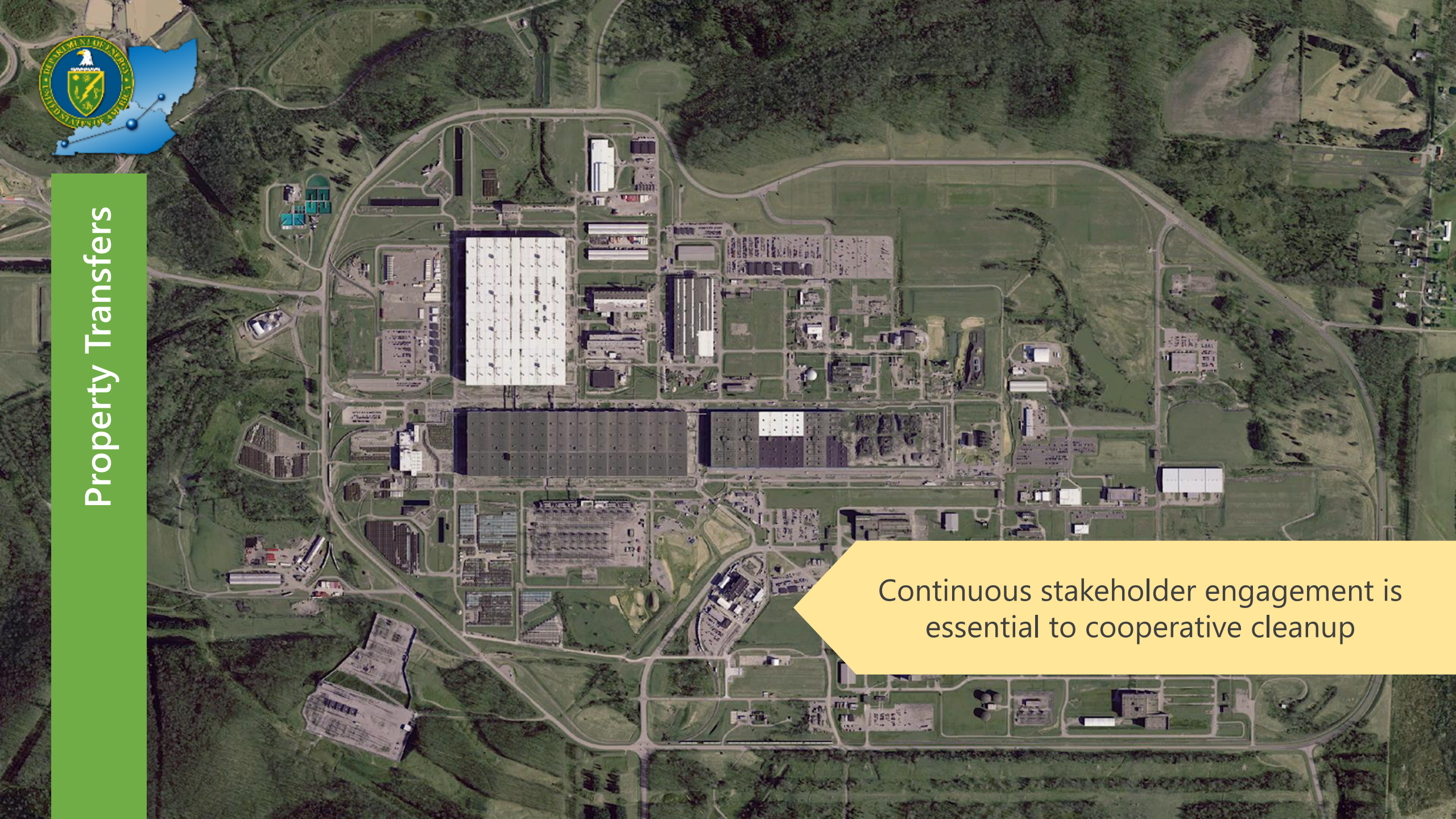
- ✓ 22 months ahead of schedule
- ✓ $37 million under budget

Celebration lunch with the workforce

Recent Site Activity

- New Substation construction
- X-626 Cooling Tower and Pumphouse Demo

Property Transfers



Continuous stakeholder engagement is essential to cooperative cleanup