

WELCOME

TO THE PORTS SITE

COMMUNITY OPEN HOUSE



PREPARING THE FUTURE
PORTS
D & D PROJECT



PORTS
SSAB

S O D I

OHIO
UNIVERSITY

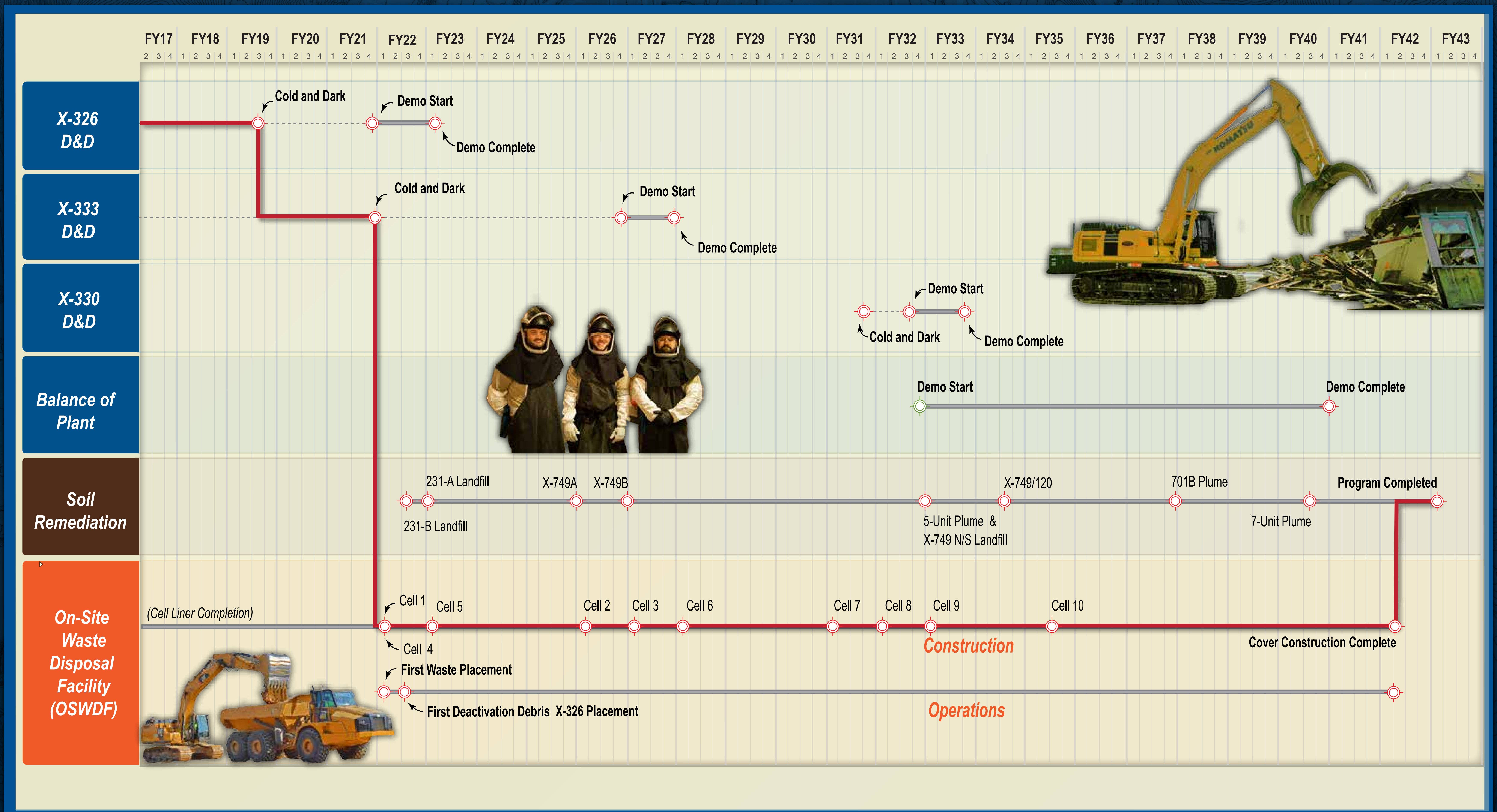


THE PORTSMOUTH SITE CLEANUP GOALS

- ✓ Safely deactivate and demolish the original uranium enrichment buildings
- ✓ Dispose of demolition debris and waste
- ✓ Remediate the environment for future redevelopment and reindustrialization



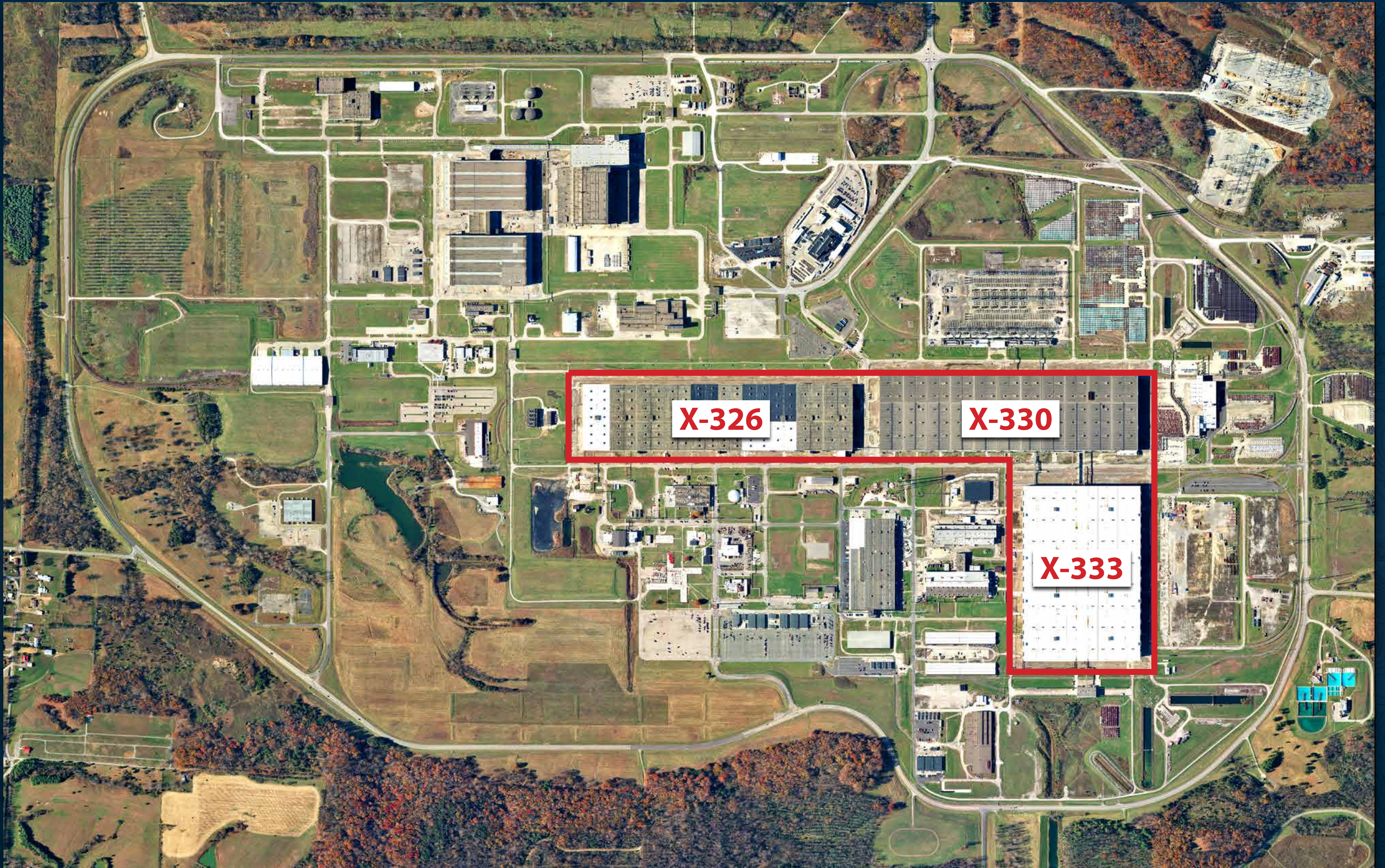
HOW LONG WILL PROJECT TAKE?



Due to weather and other unforeseen circumstances dates may change.



Preparing for Demolition



PREPARING FOR DEMOLITION

X-326 Process Building Deactivation

Ready for Demolition in 2020



Converter lowered in preparation for disposal



Bulk asbestos removal completed Sept. 30, 2019



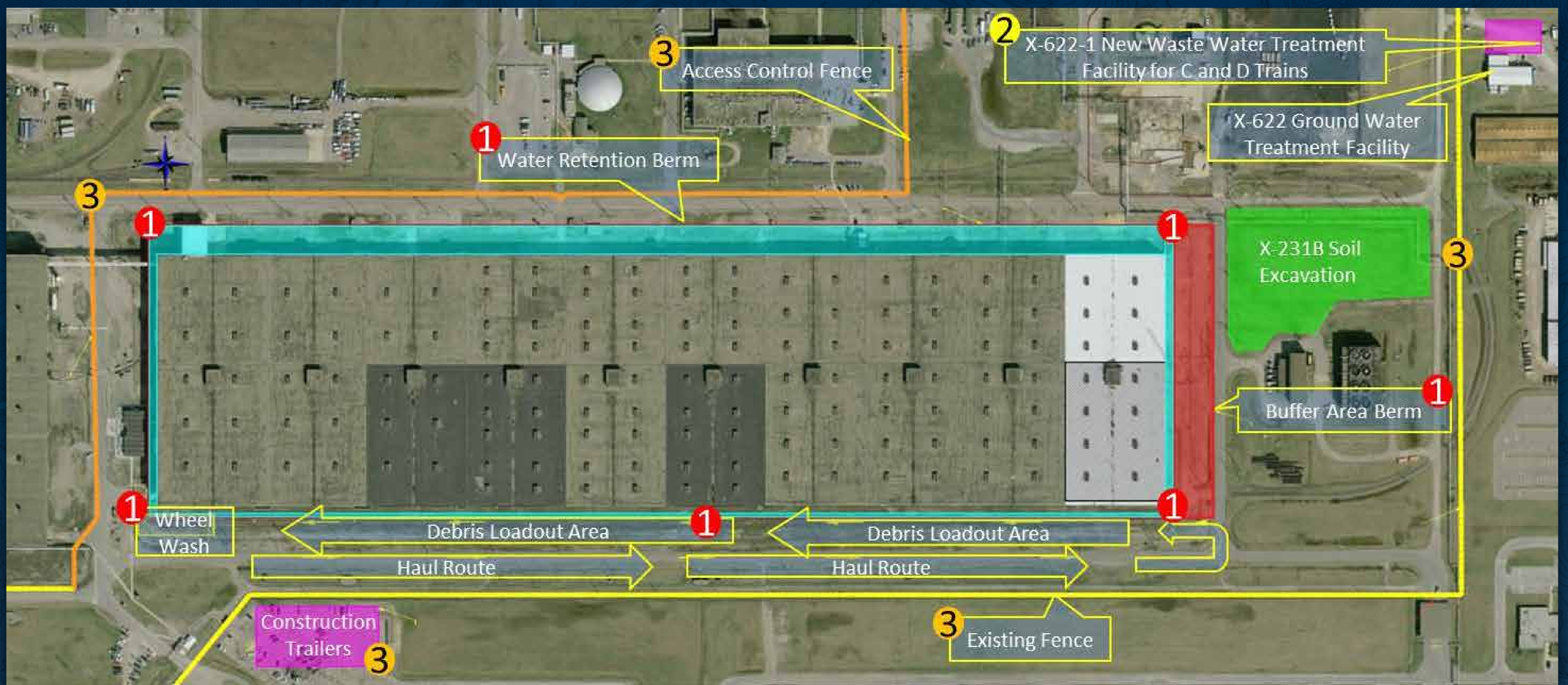
The final power source was removed Sept. 25, 2019

- ✓ Major process gas components removed (converters, compressors & coolers)
- ✓ Bulk process lubrication oil removed
- ✓ Waste requiring off-site disposal removed from the facility (RCRA TSCA & Universal)
- ✓ Utility isolations complete (Cold & Dark)

PREPARING FOR DEMOLITION

Current Work at X-326

- Complete the demolition preparation activities
- Installation of fencing and demolition support facilities and utilities
- Removal of above grade structures and pads around building
- Installation of perimeter liner, berm and water collection/treatment system
- Sealing of penetrations
- Cleaning and applying fixatives inside the building



1

Water Detention System

- Water Retention Berm
- Buffer Area Berm
- Collection Sumps
- Transfer Pumps
- Piping
- Load Out Road
- Wheel Wash Station

2

Water Treatment System

- Tankage, valves, piping, & controls
- Discharge Line
- Outfall Line

3

Infrastructure Support Facilities

- Access Control Fencing
- Maintenance Area
- Temporary Utilities
- Perimeter Monitoring System
- Construction Access Trailer
- Construction Mgmt. Trailer
- Break Trailer
- Shower-Change Trailer
- Donning/Doffing Trailer

4

Remove Area Obstructions

- Tie Lines
- Utilities Pipe Racks
- Portal Structures
- Fuel Tanks
- Power Poles
- Underground Utilities

5

Sealing of Penetrations

- Below Grade Lines
- Tunnels
- Storm Water Manholes
- Drains

PREPARING FOR DEMOLITION

X-333 Process Building Deactivation

Target: Deactivation Complete in 2021



The **X-333** is the largest of the three process buildings with **66 acres** of floor space under roof.

The **X-333** worked in conjunction with the two other process buildings at Portsmouth. It was considered the **low end of the cascade**.

The **X-333 Process Building** contains the largest of the process gas equipment including the massive '000' converters that weigh as much as **66,000 pounds**.

- Converter shells are being size reduced for future placement in OSWDF.
- Approximately 250 site workers actively performing characterization, component removal, size reduction, and hazardous waste removal.

PREPARING FOR DEMOLITION

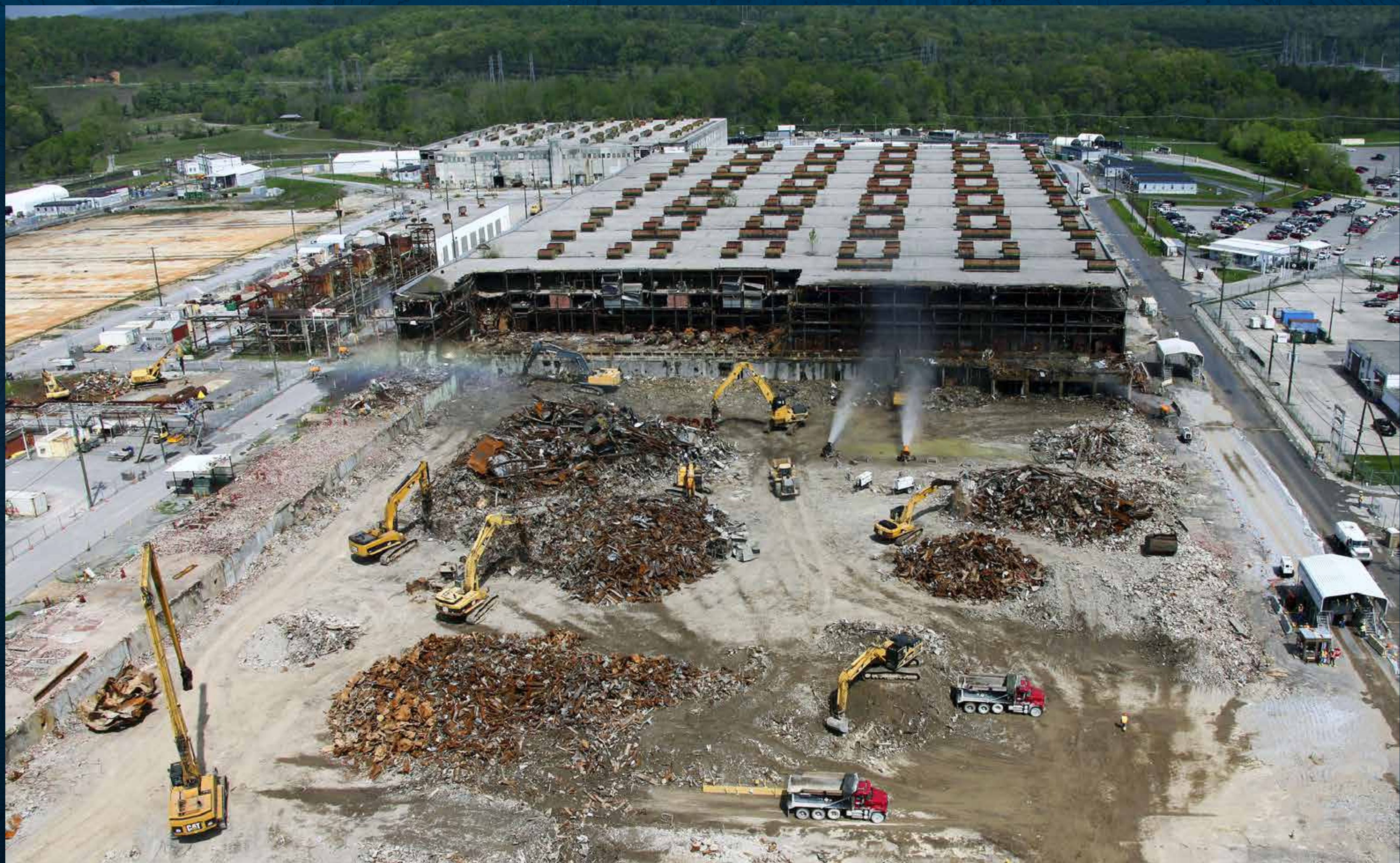
Future Work at X-326



Transite Removal



Demolition in Oak Ridge, TN

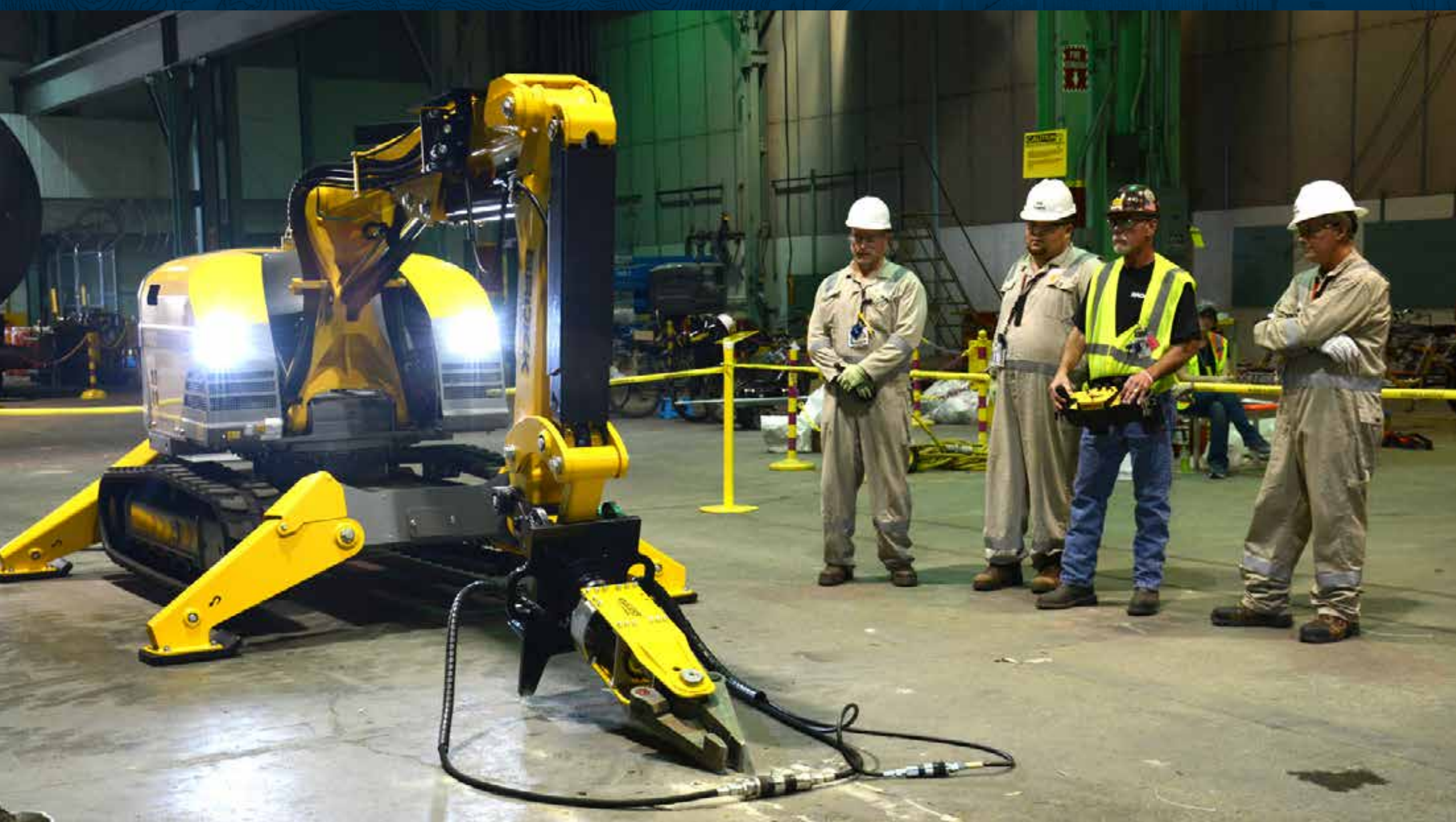


Process building demolition in Oak Ridge, TN

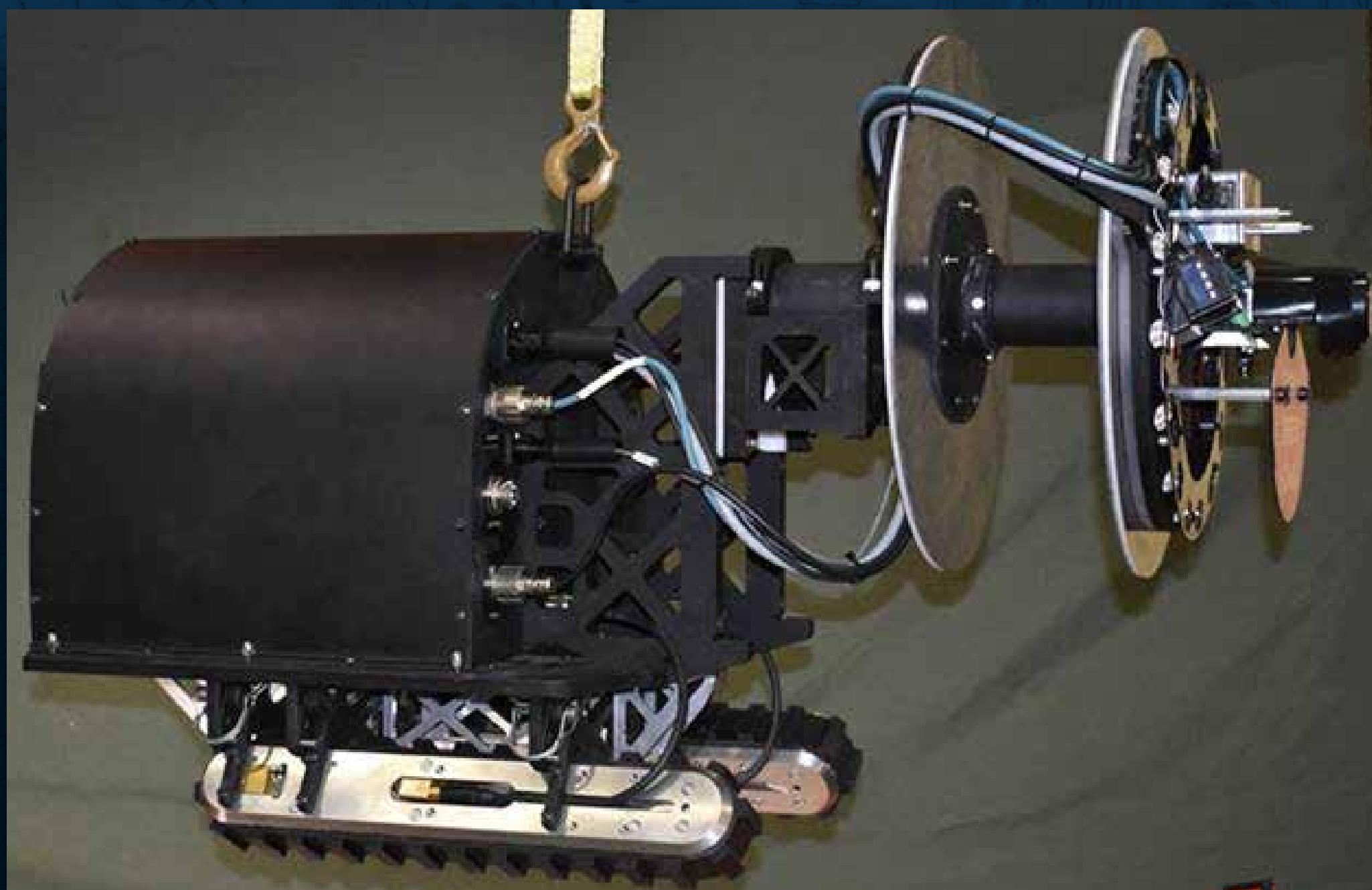
TECHNOLOGY/ROBOT INTEGRATION

X-333 Deactivation and In-Pipe NDA Measurement System

Deactivation work in the X-333 requires **handling, cutting and disassembling the massive '000' converters** and associated process components. Robotic technology will provide increased efficiency and safety for workers.



- X-333 has 15.3 miles of piping (up to 54")
- Current NDA method is manual exterior scan
- Worked with Carnegie Mellon University (CMU) to develop an in-pipe crawler system to directly measure uranium deposits from inside the pipe.

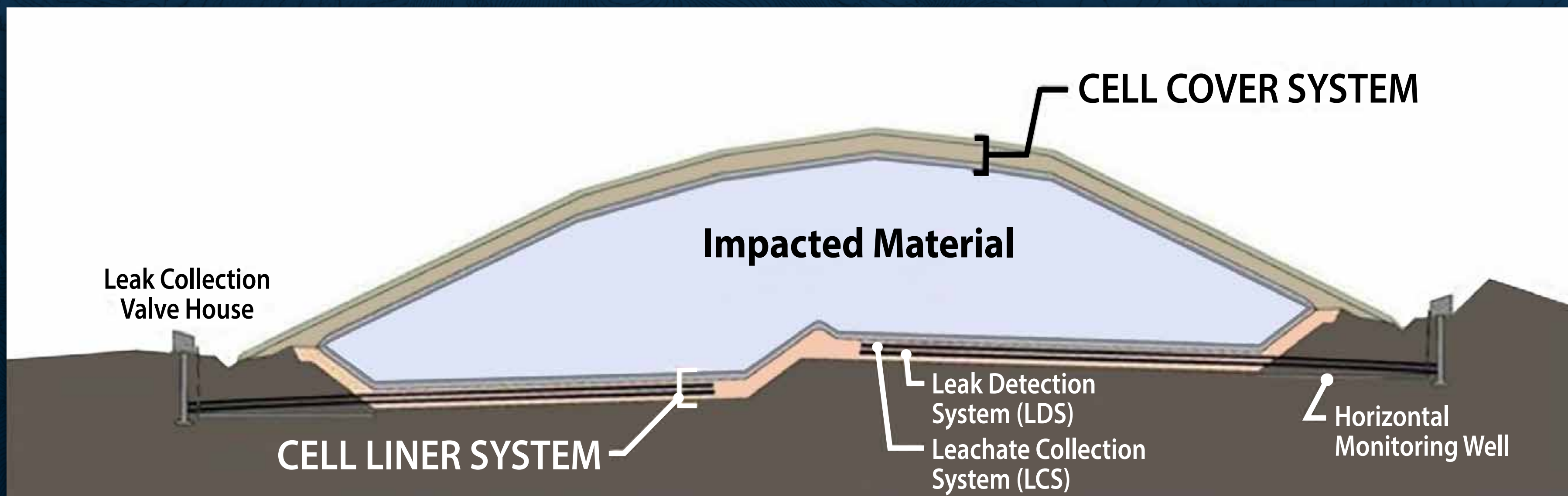


Preparing for Waste Disposition

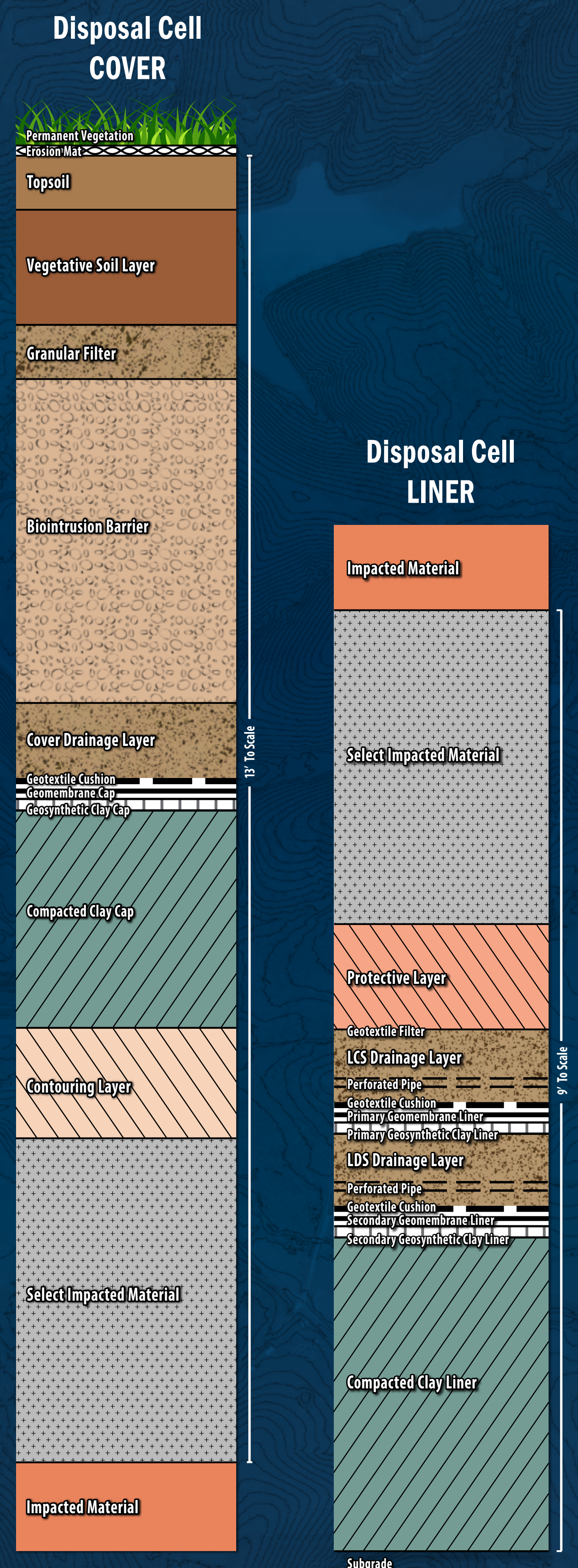
OSWDF CONSTRUCTION

On Site Waste Disposal Facility

The **OSWDF** graphic cross-section.



The On-Site Waste Disposal Facility, **OSWDF**, will provide safe onsite disposal of demolition waste and debris along with consolidation of landfills and plumes from the central plant area.



The final impacted material disposal area footprint of the **OSWDF** will occupy about **100 acres** in the northeast portion of the DOE reservation.

OSWDF CONSTRUCTION

- Nearly 3 million cubic yards of soil have been moved to create the infrastructure areas and laydown areas for the OSWDF Project.



- North Leachate Transmission System Lift Station and Control Manhole structures installed
- North Leachate Transmission System Piping installed



- Cell 1 liner system nearing completion
- Raw Water Line piping system installation nearing completion

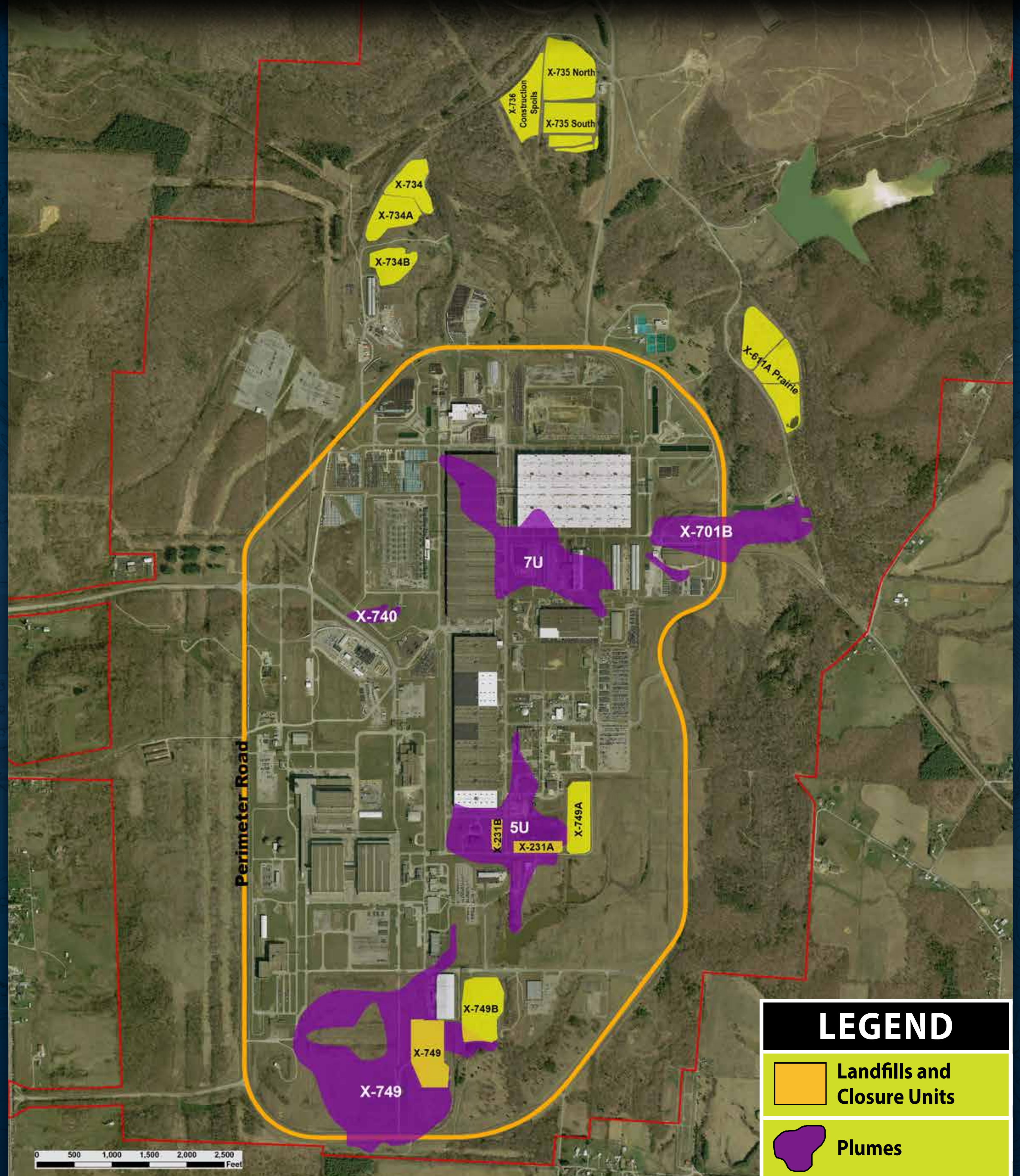


PREPARING FOR SITE DEVELOPMENT

Landfill & Plume Consolidation



- Groundwater plumes are contaminated primarily by TCE, Trichloroethylene, a degreaser used at the site during operations.
- The landfills and plumes currently have compliant final environmental remedies in place.
- A new regulatory agreement, *The Director's Final Findings and Orders for CERCLA Actions to Restore Natural Resources (NRD Order)*, provides a pathway to excavate landfills and plumes within Perimeter Road as fill for the OSWDF.



Environmental Monitoring

ENVIRONMENTAL MONITORING

Annual Site Environmental Report (ASER)

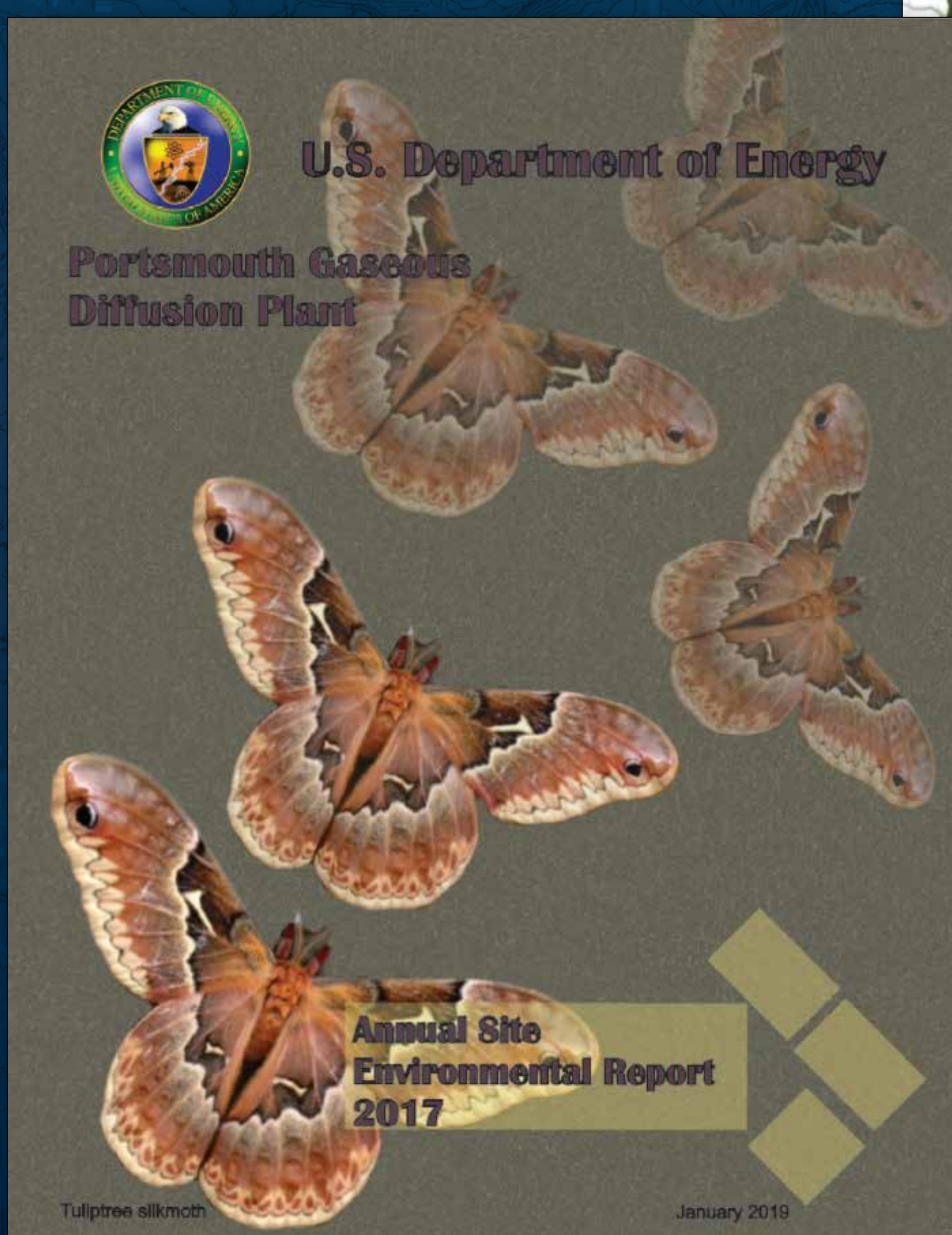
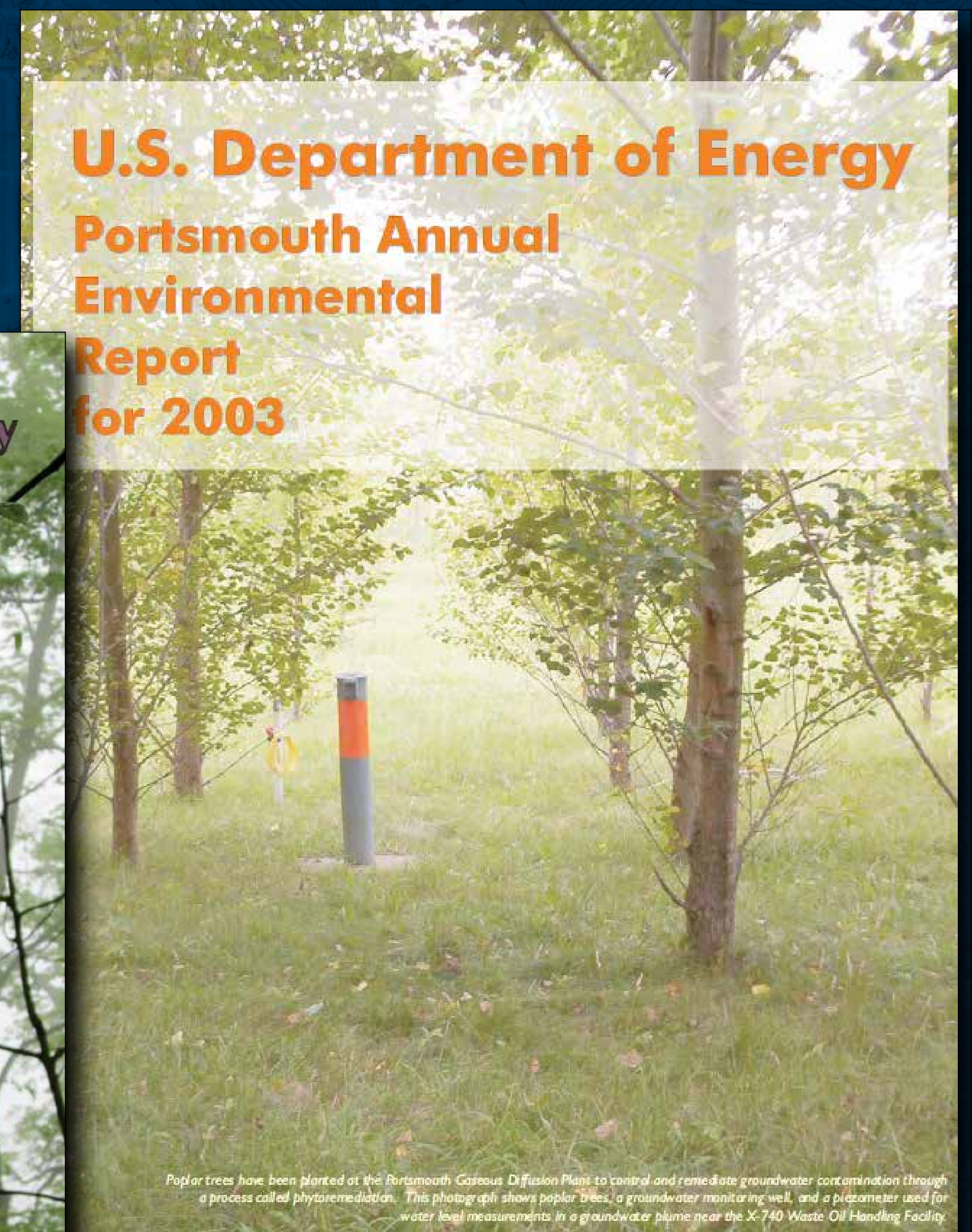
- The Annual Site Environmental Report, ASER, is prepared annually for the public. It is a comprehensive summary of environmental activities and monitoring data from the U.S. Department of Energy's Portsmouth Gaseous Diffusion Plant.
- Current and past copies of the ASER are available to the public at:

DOE Environmental Information Center at the OSU Endeavor Center, 1864 Shyville Road, Piketon, Ohio

- Current and past electronic copies are available online at:

- <https://eic.ports.pppo.gov>
- www.fbportsmouth.com

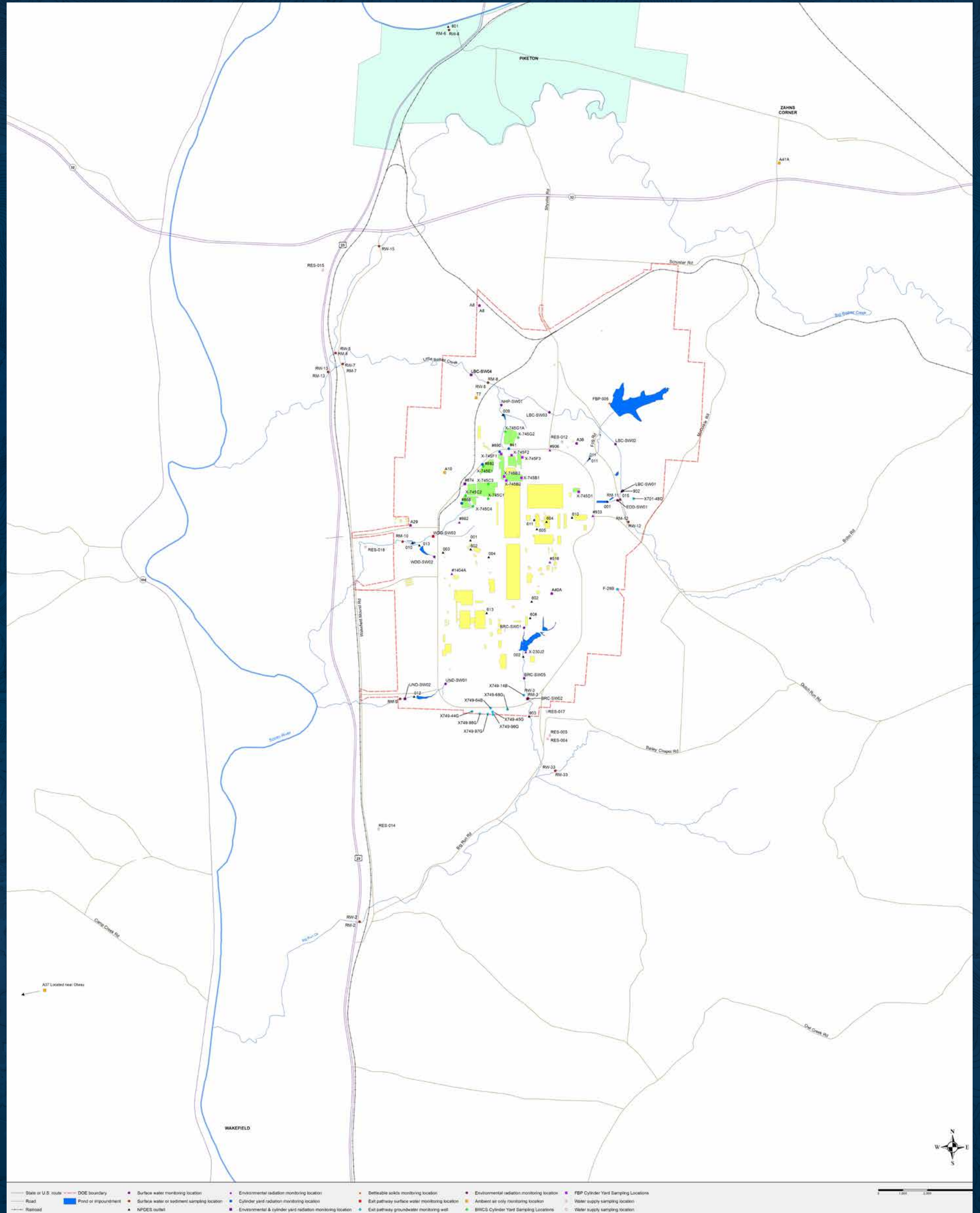
- The report fulfills a requirement of DOE Order 231.1B, Environment, Safety and Health Reporting, for preparation of an annual summary of environmental data to characterize environmental management performance. The Annual Site Environmental Report also provides the means by which DOE demonstrates compliance with the radiation protection requirements of DOE Order 458.1, Radiation Protection of the Public and the Environment.



ENVIRONMENTAL MONITORING

Environmental Monitoring locations on and off site

- DOE ensures the safety and protectiveness of our workforce, the public and environment through a comprehensive environmental monitoring program at Portsmouth that complies with federal and state environmental regulations, permit requirements, and DOE Orders.
- The program includes sampling for radiological and chemical contaminants in the air, water, soil, sediment, vegetation, wildlife and crops on and around the Portsmouth site.
- All data is reported to the public in the Annual Site Environmental Report.



ENVIRONMENTAL INFORMATION CENTER

The EIC provides the public the opportunity to view documents covering the Portsmouth Gaseous Diffusion Plant's construction, operation, decommissioning, and remediation process.



U.S. DEPARTMENT OF ENERGY
EIC Online Document Repository

PLEASE NOTE: This site has transitioned from PORTSMOUTH.EIC.COM to EIC.PORTS.PPPO.GOV on November 8.

Home About Search Links Contact Us Visit Us

PORTSMOUTH ENVIRONMENTAL INFORMATION CENTER
The Portsmouth Environmental Information Center (EIC) is located in Piketon, Ohio. The EIC provides the residents of Southern Ohio the opportunity to view documents covering the Portsmouth Gaseous Diffusion Plant's creation, operation, dismantle and restoration process.
[Read More](#)

RCRA ADMINISTRATIVE RECORD AND POST DECISION FILE
The Portsmouth Gaseous Diffusion Plant (PORTS) is designated as a Resource Conservation and Recovery Act (RCRA) site for corrective actions. Under RCRA, an Administrative Record must be established and maintained for public viewing. The RCRA Administrative Record is an agreement between the Department of Energy (DOE) and the Ohio Environmental Protection Agency (OEPA).
[Read More](#)

CERCLA ADMINISTRATIVE RECORD AND POST DECISION FILE
The Portsmouth Gaseous Diffusion Plant is designated as a Comprehensive Environmental Response, Compensation and Liabilities Act (CERCLA) site for response actions. Under CERCLA, an Administrative Record must be established and maintained for public viewing. The CERCLA Administrative Record is an agreement between the Department of Energy (DOE) and the Ohio Environmental Protection Agency (OEPA).
[Read More](#)

INFORMATION REPOSITORY
The Information Repository contains a collection of documents that were not used to make a cleanup decision, but do pertain to the site or the remediation process.
[Read More](#)

It is suggested that Internet Explorer be used for this site. It is also suggested that Google Chrome is not to be used.

Ohio State Endeavor Center
1862 Shyville Road, Room 207
Piketon, Ohio 45661
740-289-8898

eic.ports.pppo.gov

Hours of Operation

Monday & Tuesday 09:00 - 12:00

Wednesday & Thursday 12:00 - 4:00

If needed, after-hour appointments shall be reasonably available.



Zahn's Corner Middle School

AIR & SURFACE TEST RESULTS

Results from sample analyses conducted by experts at Savannah River National Laboratory show no radioactivity detected above naturally occurring levels, and thus no cause for public health concern.

All sampling results showed

- Low levels of naturally occurring radioactivity
- Dose projections extremely low (1/10,000 of standard)
- No man made isotopes were detected
- No enriched uranium was detected



RELATIVE DOSES FROM RADIATION SOURCES

millirems (mrem)

1,000

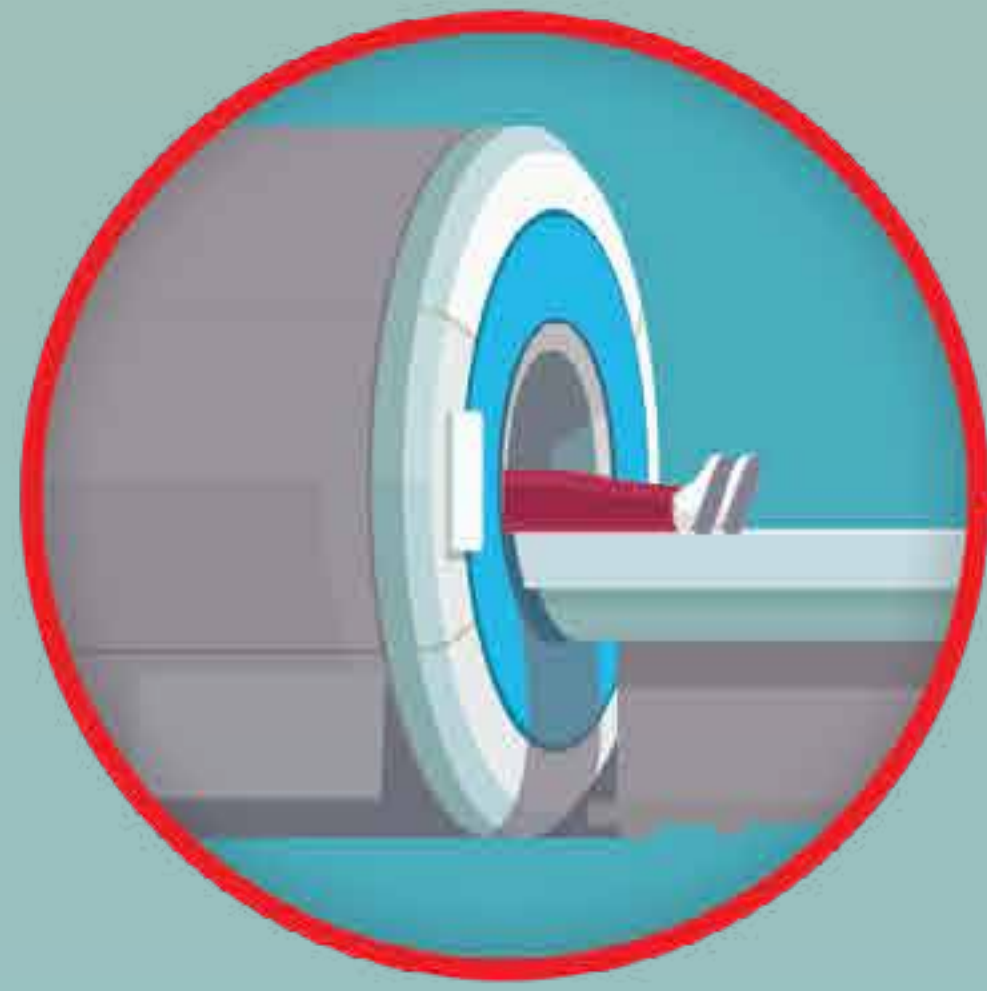
700

500

250

0

Whole body CT scan
(single procedure)



1,000 mrem

Naturally occurring background radiation
(annual)



311 mrem

Mammogram
(single procedure)
*From the International Commission on Radiological Protection 2007



42 mrem

One way flight from Washington, D.C. to Seattle
*From the 2017 DOE Portsmouth Annual Site Environmental Report



1.92 mrem

All doses are from the **National Council on Radiation Protection & Measurements**, Report No. 160 (unless otherwise noted)

*A millirem is a unit of absorbed radiation.



620 mrem

*The average American is exposed to **620 millirem per year***



.04 mrem

Average effective dose measurement based on 2017 and 2018 data



0 mrem

2019 sampling results from Zahn's Corner Middle School

Zahn's Corner Middle School

SAMPLING METHODOLOGY

- MARSSIM – Multiagency Radiation Survey Site Investigation Manual
 - Provides detailed guidance on how to demonstrate that a site is in compliance with a radiation dose- or risk-based regulation.
- Collected samples at 39 locations
- Replicated additional 5 samples requested by school board and community members
- Sampled primarily above ceiling tiles and in other dusty locations
- Samples collected in triplicate for independent analysis by each party

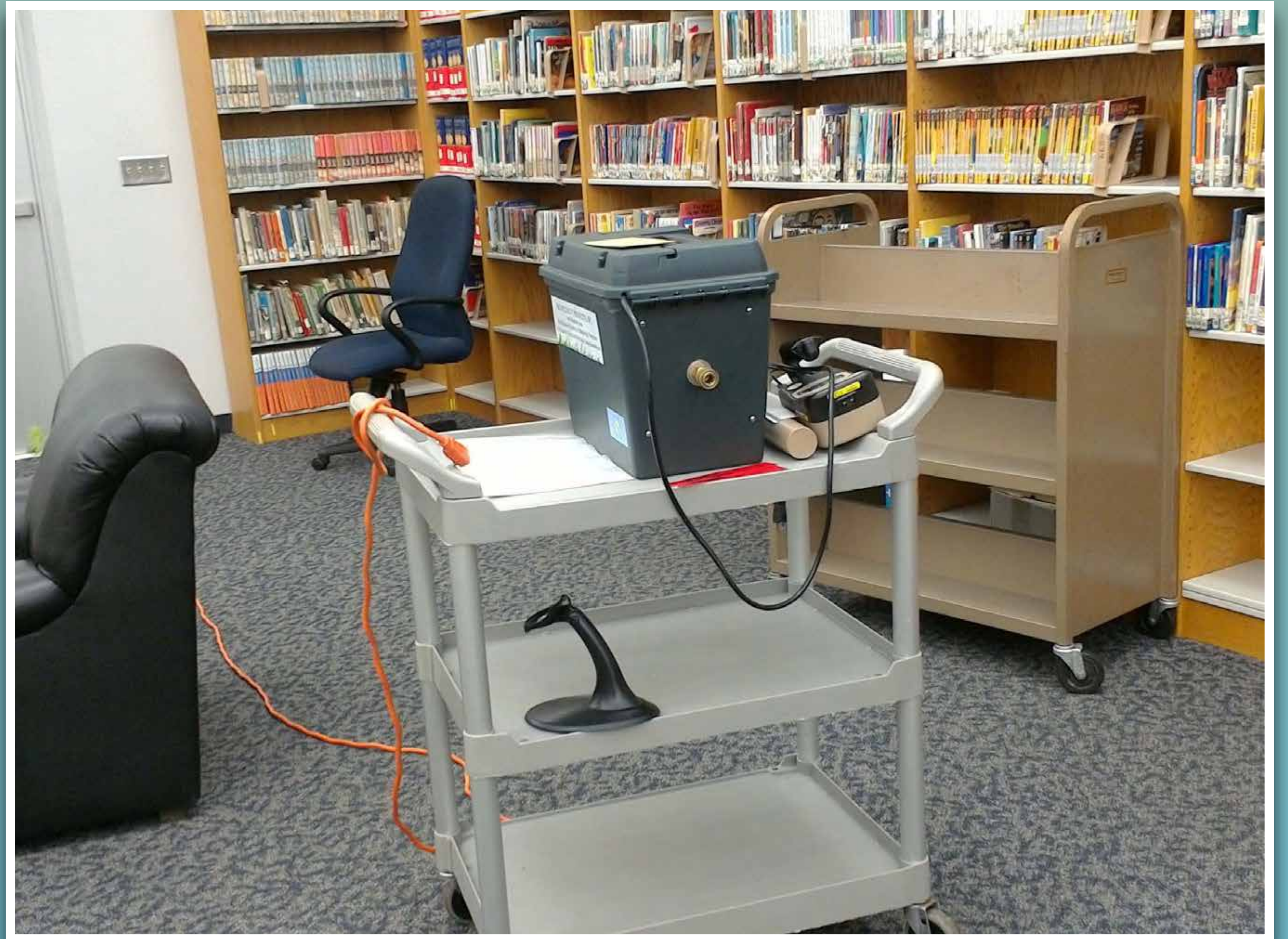


Zahn's Corner Middle School

SAMPLING METHODOLOGY

Air Samples

- Library
- Cafeteria
- Classroom
- Gym
- Foyer
- Hallway at center of building
- Playground
- Outside front entrance



WHY REDEVELOP THE SITE?

Electrical grid • Roads • Water

Rail system • Proximity to transportation routes



SODI

SOUTHERN OHIO DIVERSIFICATION INITIATIVE

Our Mission

To improve the quality of life for Jackson, Pike, Ross, and Scioto Counties through economic diversification, development of underutilized land and facilities on the Department Of Energy (DOE) Portsmouth Gaseous Diffusion Plant Site, and continued support of local industry.



Our Vision

To be a permanent community partner, catalyzing economic development and promoting cooperation in the four-county region.



Who We Are

The Southern Ohio Diversification Initiative (SODI) has been established to successfully transition four southern Ohio counties: Pike, Ross, Scioto and Jackson from dependence on the Department of Energy facility to greater long-term economic stability. SODI was incorporated as a nonprofit corporation in 1997 and serves as the Community Reuse Organization (CRO) for DOE. DOE's former uranium enrichment plant was closed in 2001 and is undergoing Decontamination & Decommissioning. DOE has provided technical and financial assistance to SODI. In 2009, DOE signed an Asset Transition Agreement for Economic Development to transfer excess equipment, scrap materials, facilities, etc. to SODI to promote economic development initiatives.

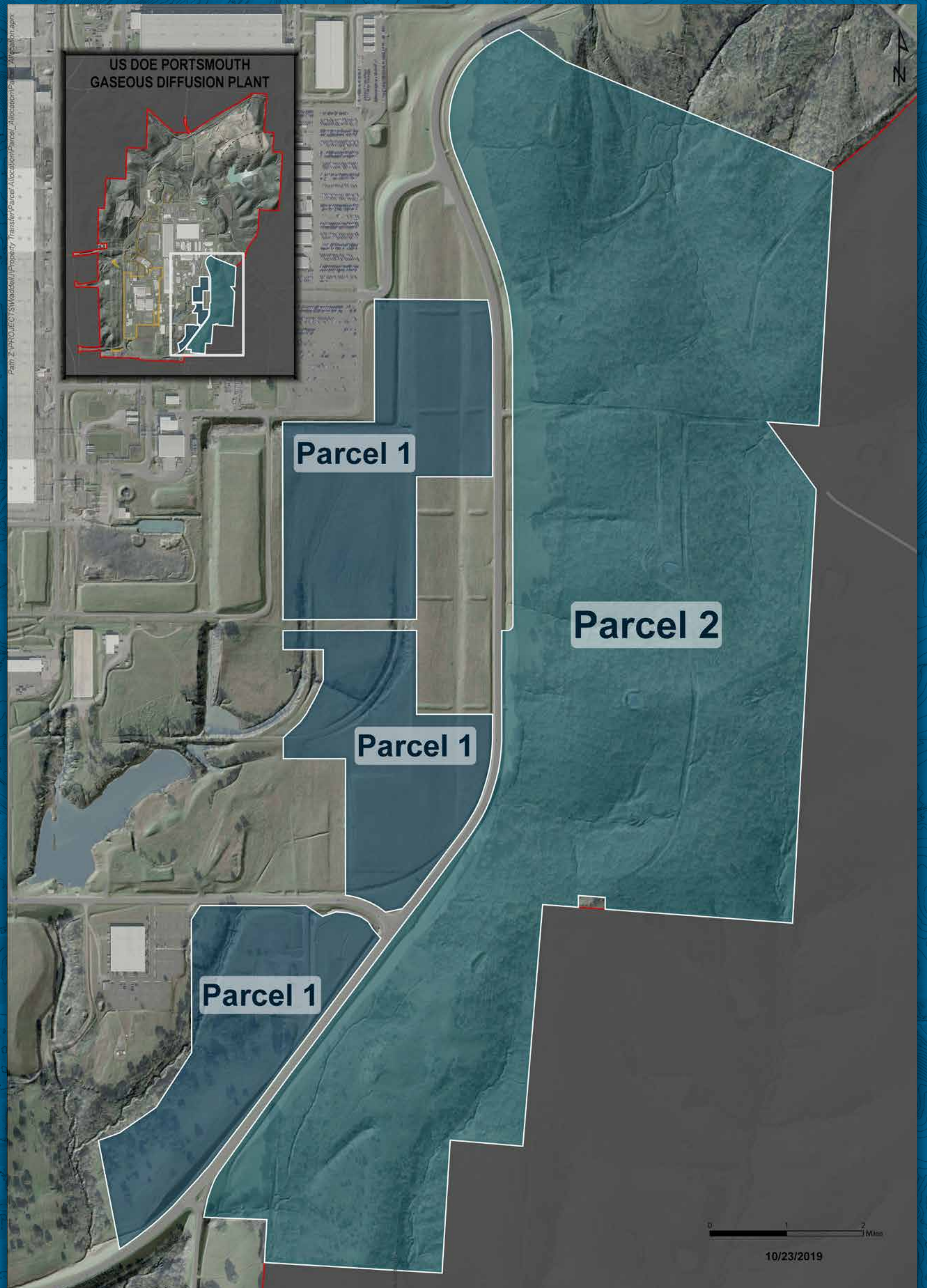
DOE LAND TRANSFER

PARCEL 2 TRANSFER IN PROGRESS

- Transfer of 227 acres scheduled for completion in 2020
- Environmental Baseline Survey being developed
- Transfer requires DOE-Headquarters and Congressional approval

PARCEL 1 TRANSFERRED

Southern Ohio Diversification Initiative (SODI) received an 80-acre parcel on the east side of the reservation on July 20, 2018.



WHAT IS *PORTSFUTURE?*



OHIO UNIVERSITY



CAREER OPPORTUNITIES

Learn more about career opportunities
supporting the mission at Portsmouth



www.fbportsmouth.com



www.pma-iss.com



www.energy.gov/jobs/careers



www.duf6-mcs.com



www.veolia.com



S.T.E.M. EDUCATION

Science, Technology, Engineering, and Math

Science Alliance



Internships



Science Bowl



Student ASER Project



Scholarships



Get Involved

TOUR THE SITE

The Portsmouth site played an important role in the defense and energy security of our nation.

For decades, the site was closed for security reasons but now bus tours are open to the public on a periodic basis in the spring, summer and fall.

- Third Saturday of each month
- Free to the public
- Must be 18 years of age
- Must be a U.S. citizen
- Pre-registration required



REGISTER FOR A PUBLIC TOUR

Please pick your preferred tour date and an alternate date. A minimum of 20 guests is necessary to conduct the tour. We will always do our best to accommodate your preferred tour date.

Deadline for Registration: 2 weeks prior to the date of tour

Maximum Guests per Tour: 40 guests

Questions marked by * are required.

1. **Tour Date (Preferred): ***
2. **Tour Date (Alternate): ***

Call 740-897-2609 or 740-897-2432 to learn more. To register, visit our website at <http://www.fbportsmouth.com/public-tours/register.htm>.



EMPLOYEE GIVING CAMPAIGN

More Than \$1 Million Raised for Our Local Communities



Fluor-BWXT's Employee Giving Campaign recently completed its 2019 season by reaching a significant milestone, surpassing the \$1 million mark in community donations. Since 2012, the campaign has raised a total of \$1,038,129 to invest back into the community and eclipsed the mark after raising \$159,937 in 2019's month-long campaign.



PORTSMOUTH GASEOUS DIFFUSION PLANT



SITE EMPLOYMENT



Approximately **2,500** employees.

Includes DOE and contractor personnel.

