



# PORTSMOUTH EM SITE SPECIFIC ADVISORY BOARD

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

## Proposed Agenda for the October 6, 2016 Board Meeting

### Chair

### Vice Chair

### Board Members

Lisa Bennett  
Robert L. Berry  
Eric A. Braun  
Bradley Burns  
Maddeline C. Caudill  
Carlton L. Cave  
Al Don Cisco  
Dennis Foreman  
Carl R. Hartley  
Ronda J. Kinnamon  
Neil Leist  
Bernard S. Neal  
Irma C. Payne  
Cynthia Quillen  
Jimmy E. Smalley  
Gregory Stepp  
Judy R. Vollrath

### Deputy Designated

**Federal Official**  
Joel Bradburne

### DOE Federal Coordinator

Greg Simonton

### Support Services

EHI Consultants, Inc.  
1862 Shyville Road  
Piketon, OH 45661  
Phone 740.289.5249  
Fax 740.289.1578

### 6 p.m.

Call to Order, Introductions  
Review of Agenda  
Approval of May Minutes

### DDFO Comments

--15 minutes

### Federal Coordinator Comments

--10 minutes

### Liaison Comments

-- 5 minutes

**Presentation - Robotics Technology, Marty Reibold, Fluor-BWXT** --20 minutes

### Administrative Issues

--20 minutes

- **SSAB Draft Recommendation 16-02**
  - Public Comments on Recommendation
  - Board Comments on Recommendation
- **Annual Executive Planning and Leadership Training Session Update**

**EM SSAB National Chairs Meeting Update**  
**Bob Berry and Carlton Cave**

--5 minutes

### Election of Chair and Vice Chair

--10 minutes

### Adoption of FY 2017 Work Plan

--10 minutes

### Subcommittee Updates

--5 minutes

### Public Comments

--15 minutes

### Final Comments from the Board

--15 minutes

### Adjourn

PREPARING THE FUTURE

# PORTS

D & D PROJECT

# DEPUTY DESIGNATED FEDERAL OFFICIAL PRESENTATION

**Joel Bradburne, Site Lead  
U.S. Department of Energy**

**Portsmouth Site Specific Advisory Board  
October 6, 2016**



- Safety
- Plant Updates
  - X-326 & X-333 Deactivation
  - On-Site Waste Disposal Facility (OSWDF)
  - Land Transfer
- Community Outreach
- Upcoming Events



## D&D Safety Update

As of 9/25/16, worked 183 days without a lost time incident.

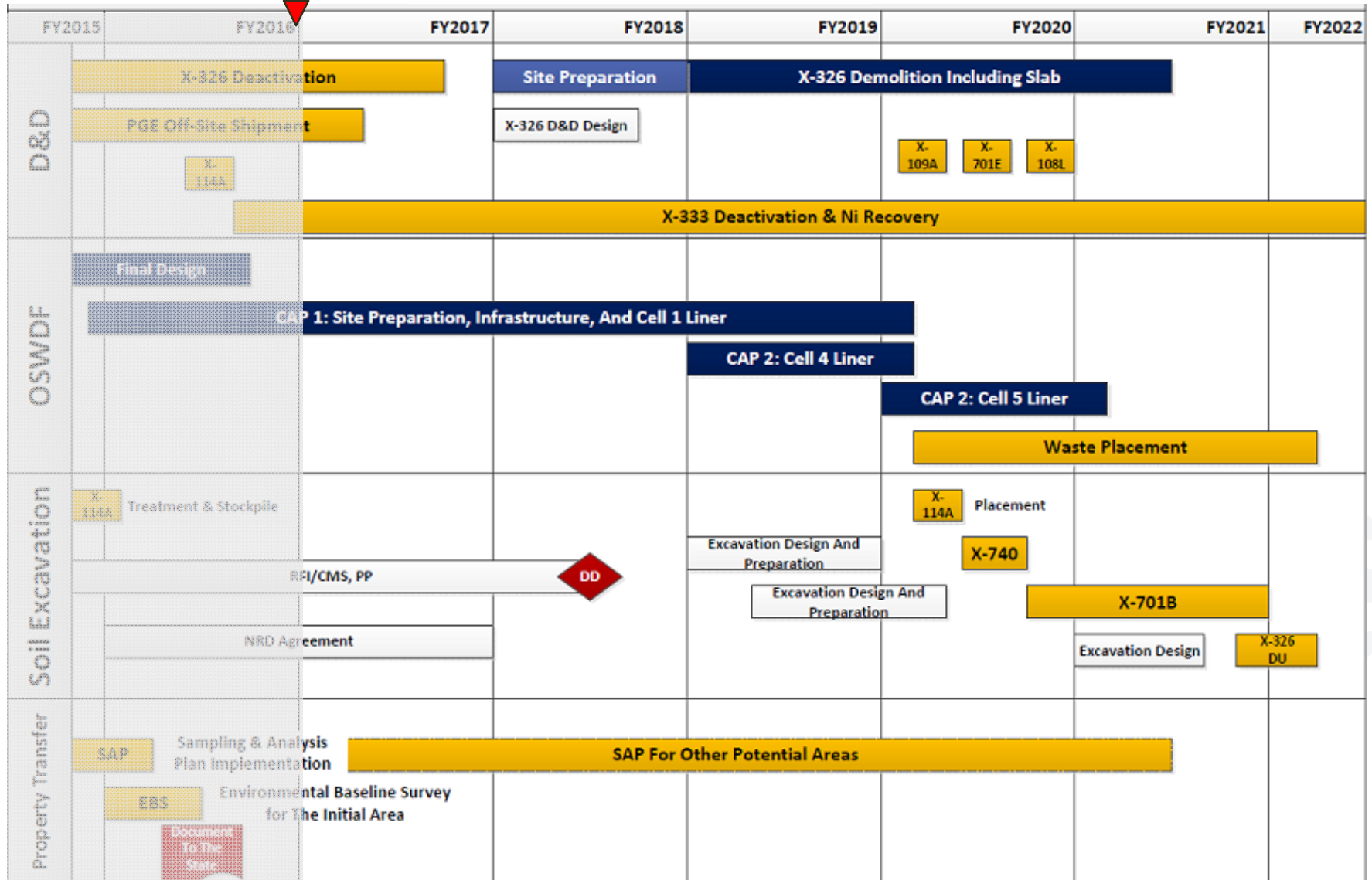
As of 9/25/16, five recordable injuries in CY 2016.

As of 9/25/16, eight recordable injuries in FY 2016.

**YOU are the KEY to SAFETY!**

# PORTS Integrated Baseline

Next 5 Years





# Deactivation of - X-326 & X-333



# Prepping the Old Range for OSWDF

142,540 lbs. of scrap metal  
sent to SODI to be recycled.





# OSWDF Groundbreaking





# OSWDF Update

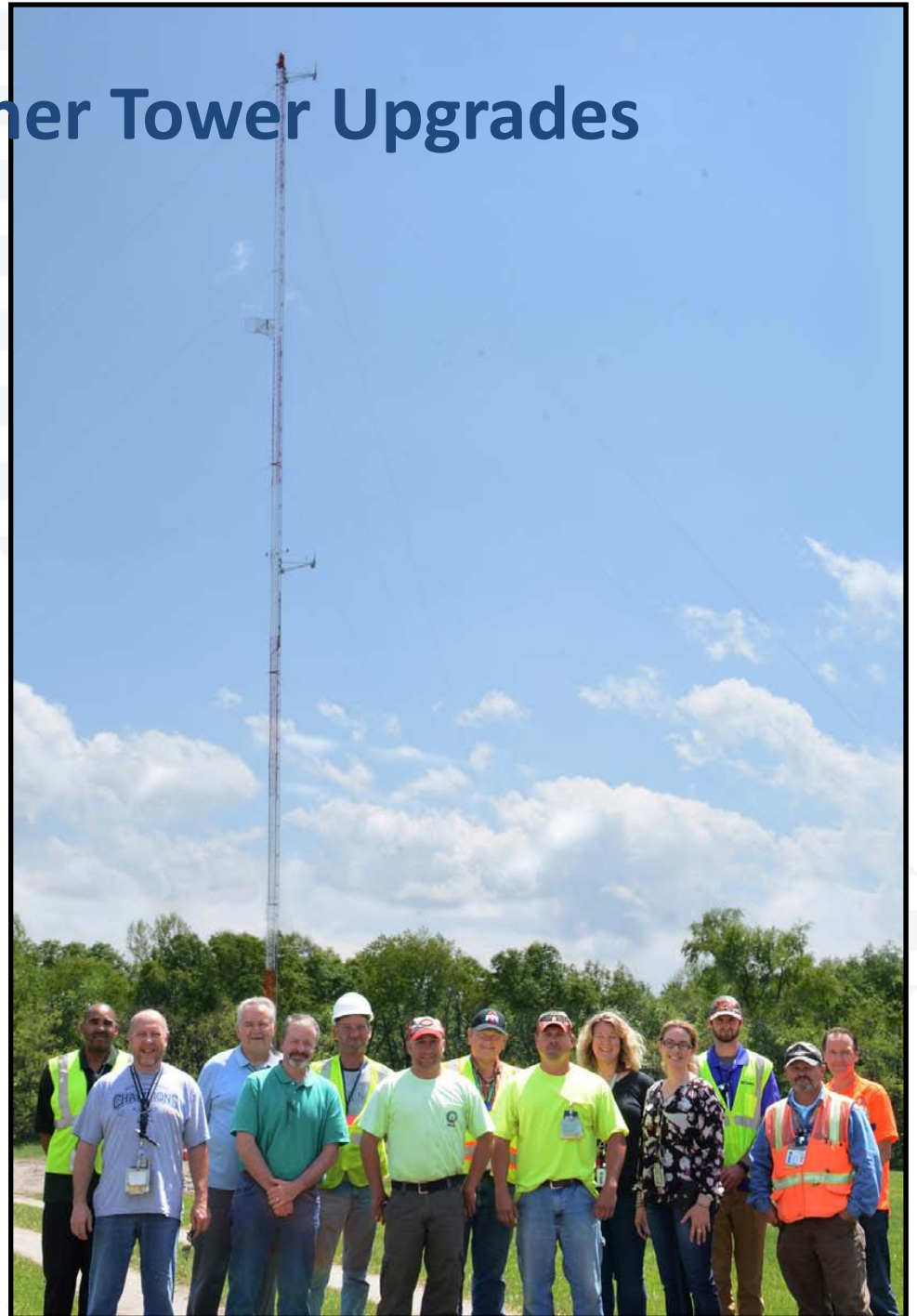


**Sediment Pond as of 9-20-16**





# X-120H Weather Tower Upgrades



# Deactivation of the X-626 Recirculating Cooling Water Facility



# RCRA Waste Management at PORTS



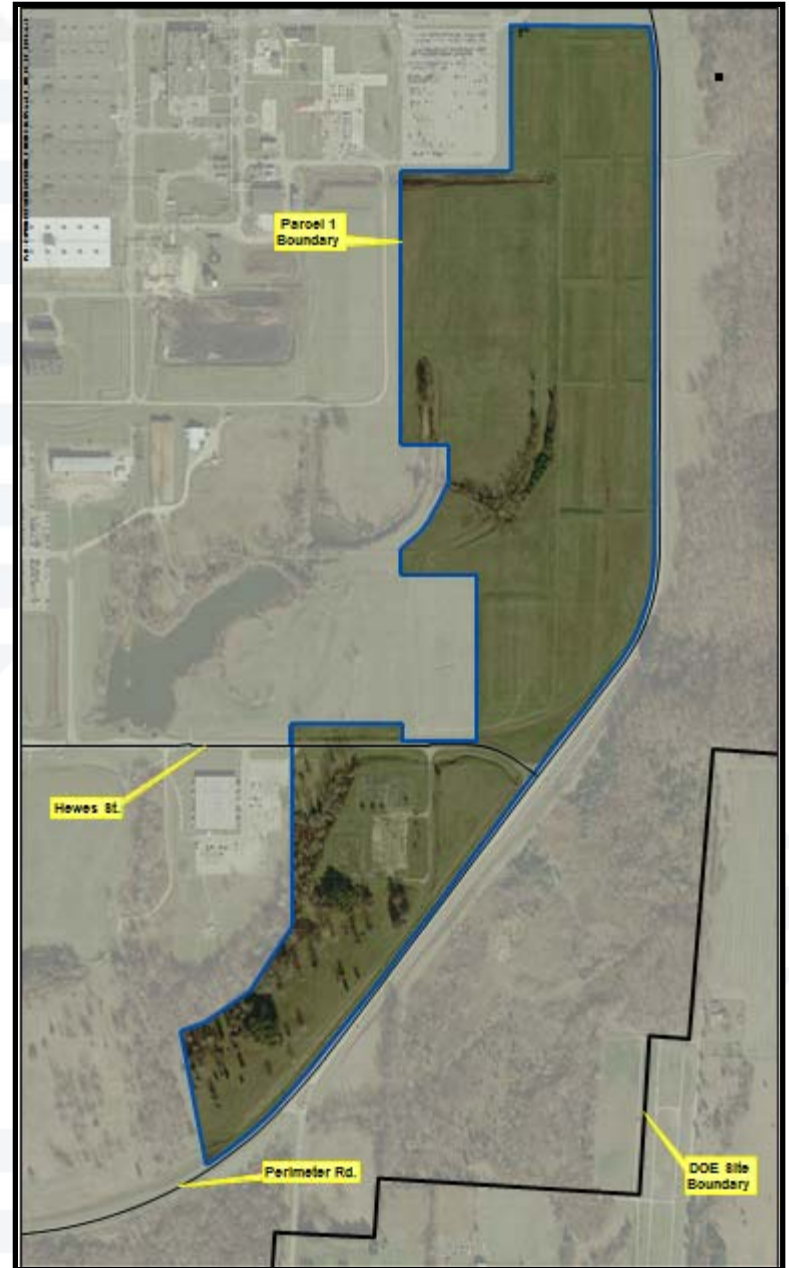


# Major Sampling Effort Concluded



# Property Transfer

- SODI has delivered a formal request for approximately 80 acres of property.
- DOE has formally agreed to pursue transfer
- Environmental baseline survey complete
- Transfer on schedule for spring 2017
- Property appraisal in development by EMCBC





# Environmental Remediation



| Groundwater Treated FY2016 | Groundwater Source                            | TCE Removed FY2016 lbs. |
|----------------------------|---|-------------------------|
| 2,379,100 Gallons          | X-701B Plume                                  | 92.49                   |
| 46,905 Gallons             | Misc. Site                                    | 0.13                    |
| 10,183,730 Gallons         | 7-Unit Plume                                  | 123.87                  |
| 17,801,400 Gallons         | 5-Unit & X-749/<br>X-120 Plumes & PK Drainage | 19.23                   |

The totals from March 29, 2011 (FBP Contract) through August 2016 are:  
 Treated 170 Million Gallons of groundwater  
 Removed 1872.3 pounds of Trichloroethylene (TCE)

# Site Tours



Local Educators



SSAB Tour



Jackson, Pike, Ross, Scioto Commissioners



SODI Board Members Tour



Village of Piketon Tour



Ohio EPA



Science of Safety  
Robotic Workshop



# Mutual Aid

| Off-Site Request FY2016 |           |
|-------------------------|-----------|
| Vehicle Accidents       | 9         |
| Structure Fires         | 5         |
| Other Fires             | 4         |
| HazMat Response         | 1         |
| Medical                 | 4         |
| <b>Total</b>            | <b>23</b> |





# Community Outreach

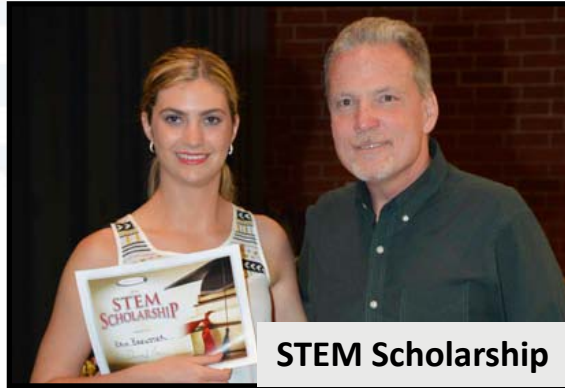
Fluor-BWXT Grant Helps New Business in Jackson County Add Jobs



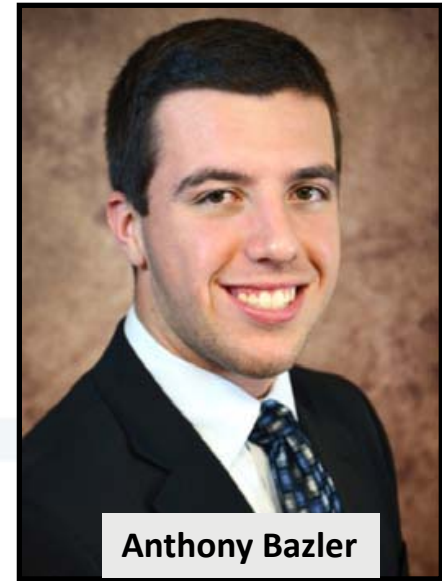
# Educational Outreach



Environment Data Base Online



STEM Scholarship



Anthony Bazler



ASER



Interns



Interns



# Community Outreach



Pike County Trade Show



Feds Feeds Families



Relay for Life



American Red Cross Power of the Purse



County Fairs



Scioto Co. Health Coalition



Comfort Bag Cookout



Blood Drive

# Upcoming Site Events



Public Tour  
Saturday, October 15, 2016



SSAB Full Board Meeting  
Thursday, November 3, 2016

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

# PORTSMOUTH SITE SPECIFIC ADVISORY BOARD ANNUAL WORK PLAN Fiscal Year 2017



The attached SSAB Work Plan has been agreed upon by U.S. Department of Energy and the Portsmouth Site Specific Advisory Board on October 6, 2016:

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Portsmouth Site Specific Advisory  
Board Chair

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Joel Bradburne  
U.S. Department of Energy  
Deputy Designated Federal Official

## INTRODUCTION

The Portsmouth Gaseous Diffusion Plant (PORTS) Site Specific Advisory Board (SSAB) is a stakeholders' board, chartered to provide advice and recommendations to the U.S. Department of Energy (DOE) on decontamination and decommissioning, environmental remediation, waste management and related issues at the Portsmouth Site. The Portsmouth/Paducah Project Office (PPPO) manages the Environmental Management (EM) activities in Portsmouth.

**The SSAB is comprised of up to 20 members, chosen to reflect the diversity of gender, race, occupation, views, and interests of persons living near the Portsmouth Site. The board is committed to reflecting the concerns of the communities impacted by environmental management of the plant site. Besides DOE, the Ohio Environmental Protection Agency (OEPA) and Ohio Department of Health (ODH) are represented in an advisory capacity.**

The scope of the SSAB is to provide advice and recommendations concerning the following EM site-specific issues: environmental restoration; waste management; recycling; future land use and long term stewardship. The Board may also be asked to provide advice and recommendations on any other EM projects or issues.

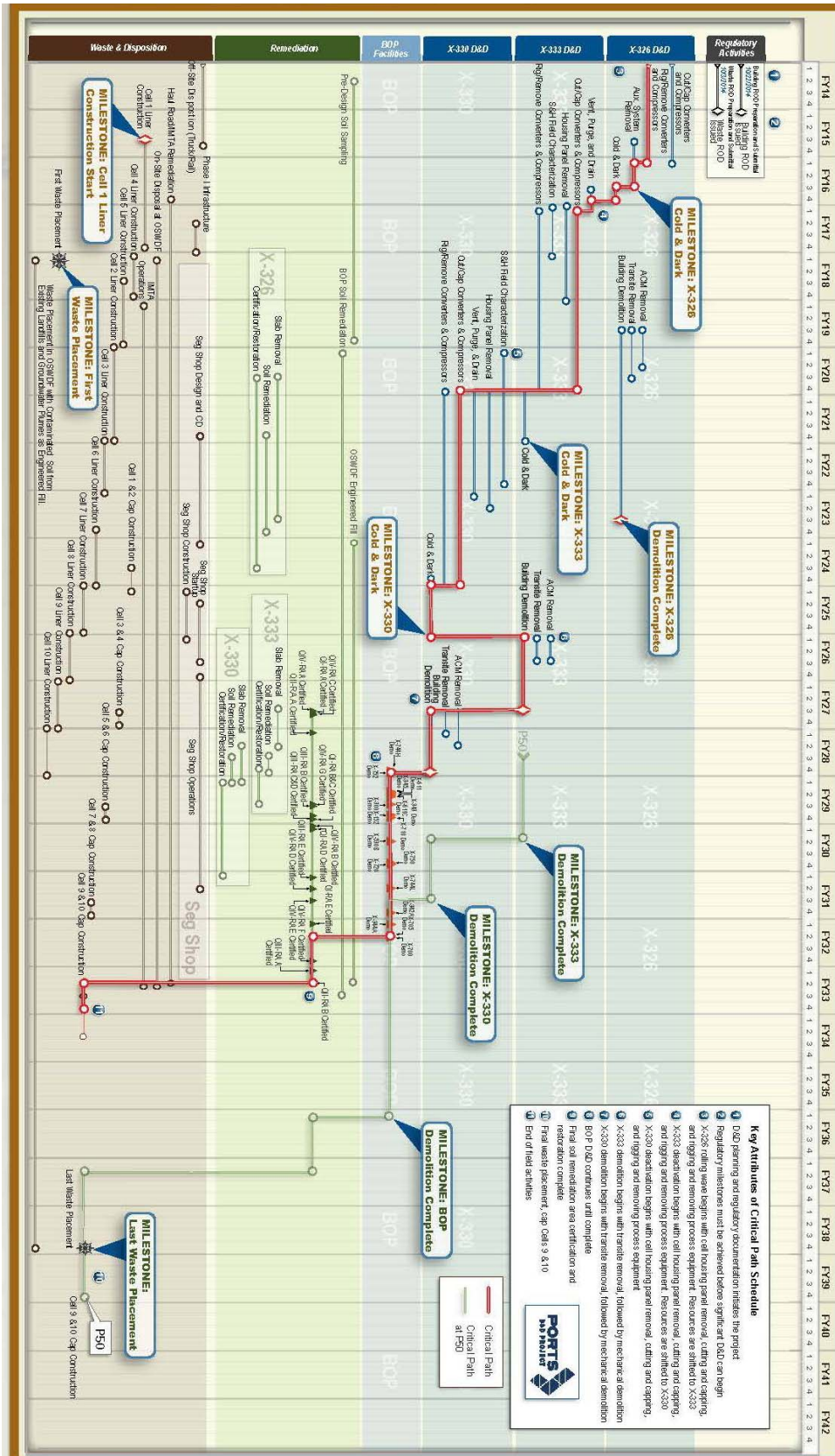
The Board meets bi-monthly to hear presentations by persons working on relevant environmental management topics, listen to and discuss input from citizens, consider recommendations developed by the PORTS SSAB subcommittees, and perform other business. The Board strives for consensus in reaching decisions and conducts business under a set of bylaws, standing rules, and special rules of order, which incorporate the principles of *Robert's Rules of Order*.

Every month SSAB members participate in subcommittees to focus on various topics related to site cleanup. Active subcommittees for the fiscal year 2017 were established based on project priorities, as selected by the SSAB members, with guidance from DOE. They are:

- Historical Legacy & Community Engagement
- Decontamination and Decommissioning/Remediation Progress
- Future Use
- Budget and Lifecycle Planning

This Work Plan addresses the SSAB priorities for the 2017 Fiscal Year. Although the Board intends to structure its activities to focus on the priority projects, it is understood that other topics may present themselves that could result in deviation from the Work Plan. A prescribed process is followed to alter the SSAB work plan with alterations accepted and approved by both the SSAB and DOE.

PORTS-D&D PROJECT LIFECYCLE CRITICAL PATH SCHEDULE





## SUBCOMMITTEE DESCRIPTIONS

### HISTORIC LEGACY AND COMMUNITY ENGAGEMENT

The mission of the Historic Legacy and Community Engagement subcommittee is to make recommendations regarding the short-and long-term visions for preserving and archiving the role of the Portsmouth Gaseous Diffusion Plant in the community and the nation that represents the communities' interests as well as to create avenues for communication to the communities impacted by the environmental management activities at the site.

### HIGHLIGHTS OF PREVIOUS SUBCOMMITTEE WORK PRODUCED THE FOLLOWING RECOMMENDATIONS:

**10-05:** *The PORTS SSAB recommends that DOE develop a plan to offer DOE Plant site tours and develop informational and educational materials for the purpose of increasing stakeholder knowledge and awareness of the daily ongoing environmental management and clean-up operations.*

**10-04:** *The DOE EM SSAB recommends that a meeting be held with official representatives of all counties, cities, villages, and townships within the five county areas of Adams, Jackson, Pike, Ross, and Scioto to discuss the current D&D activities and future land use possibilities to help insure that constructive public comments are obtained.*

**13-03:** *The PORTS EM SSAB recommends DOE and its contractors develop four informative displays to be shown in each of the four counties surrounding the PORTS facility. These displays should be mobile and the locations in each of four counties should vary on a rotating basis...The PORT EM SSAB believes it is important for future generations to understand the importance of the PORTS facility.*

**FY 2017 HISTORIC LEGACY AND COMMUNITY ENGAGEMENT Topics**

| Month     | Subject   |
|-----------|---|
| September | Elect Subcommittee Leadership<br>Volunteer Organization for DOE Science Alliance                        |
| October   | DOE Science Alliance Recap – DOE<br>DOE Science Alliance Recap – Subcommittee Chair                     |
| November  | DOE D&D Project Briefing<br>SSAB Member Recruitment Opportunity   |
| December  | Education Workshop  |
| January   | DOE Quarterly Public Meeting Preparation  |
| February  | Volunteer Organization for Science Bowl   |
| March     | DOE Science Bowl Recap – DOE<br>DOE Science Bowl Recap – Subcommittee Chair                             |
| April     | Volunteer Organization for Ohio University Student ASER Program   |
| May       | Ohio University Student ASER Program – DOE<br>Ohio University Student ASER Program – Subcommittee Chair |
| June      | Traveling Displays Update   |
| July      | Virtual Museum/Oral History Update  |

As appropriate, the subcommittee will strive to prepare and present short briefings supporting proposed recommendations during the bi-monthly board meetings. In order to fulfill its mission, the subcommittee may add additional topics and/or meetings as needed. The subcommittee will be responsible for informing the full SSAB on changes to the subcommittee's work plan.

## **DECONTAMINATION AND DECOMMISSIONING (D&D) /REMEDIAION PROGRESS**

The mission of the Decontamination and Decommissioning/Remediation Progress subcommittee is to evaluate and make recommendations on DOE's planning and implementation of the treatment, storage, disposal and transportation of wastes and materials for which the EM program is responsible.

### **PREVIOUS SUBCOMMITTEE WORK PRODUCED THE FOLLOWING RECOMMENDATIONS:**

**09-03:** *The Portsmouth EM-SSAB recommends the implementation of accelerated D&D and remediation schedule for the Portsmouth site and funding to make that happen*

**09-01:** *The Portsmouth Site Specific Advisory Board recommends that DOE's DRAFT RFP for D&D of the GDP provide support to the local community for regional economic development.*

**10-06:** *The DOE EM SSAB recommends that DOE continue to study waste disposition alternatives. As a part of this study, DOE should look at positive impacts of recycling and waste minimization. This study should include, but not be limited to: waste stabilization, recycling, metal smelting, compaction, and shredding as a means of minimizing waste volumes.*

**11-06:** *The SSAB recommendation on continued investigation of a potential on-site disposal cell and location. This recommendation is an act of good faith on the part of the SSAB to work in coordination with the U.S. Department of Energy, Fluor B&W, Ohio EPA and the various subcontractors to continue their work associated with the CERCLA process.*

**11-01:** *The DOE EM SSAB recommends that DOE continue to study waste disposition alternatives. The PORTS EM SSAB suggests that DOE consider the following parameters if a CERCLA cell is considered such as, but not limited to:*

- *Possible Use of Multiple Smaller Cells,*
- *Ensure Minimal Footprint/Waste Minimization/Recycling,*
- *Reuse Existing Landfills if possible,*
- *Areas not conducive for reuse should be considered,*
- *Consider Impact on Cultural resources,*
- *Blend with Existing Terrain,*
- *No off-site waste accepted,*
- *Community benefit-land use management plans should be developed,*
- *Cells should be Latest Cell technology,*
- *Additional Education for Community members,*
- *Complimentary use of Cell Space,*
- *Industrial Use clean-up standard.*

**12-01:** *The SSAB support for enhanced recycling efforts. An aggressive recycling and reutilization effort on the part of the DOE at the Portsmouth site could be used as the model, by which all future D&D projects would be measured... The many benefits of a state of art recycling program include: reduction of any potential disposal cells disposal cells footprint, reduced site legacy costs, more land available for potential redevelopment, reduction of tipping fees associated with disposal, reduced cost of liner materials, potential reduced production cost and environmental impact of newly manufactured materials as well as being able to fund a portion of the project through revenue generated.*

**13-02:** *The PORTS EM SSAB believes it is important for DOE to understand the basis for its support of an On-Site Disposal Cell (OSCD). That support does not come from an overarching desire to have nuclear waste placed in our community. The only justification for such a decision is that it provides our*

community its best chance for economic stability in the near term and economic growth for the long term. However, the board wants to make it clear to DOE and the Ohio EPA that it objects to an On-Site Disposal Cell unless certain conditions can be met and explicitly outlined in the upcoming Proposed Plan, regardless of any regulatory hurdles that may exist. To put it simply, these regulatory hurdles are not ours to overcome, but rather they are the responsibility of a concerted effort on the part of DOE, site contractors and the Ohio EPA. The PORTS EM SSAB, like elected officials from throughout the region, endorses the concept of the Future Vision Plan. Our principles for supporting an OSDC, which included aspects of Future Vision Plan, need to be outlined in the DOE Proposed Plan. If DOE and/or the Ohio EPA believe any of them are not feasible, or for whatever reason they cannot be accomplished, then the PORTS EM SSAB recommends all D&D waste be disposed of off-site. The principles are as follows:

- The PORTS EM SSAB requests no new waste generated from off-site locations be placed in any Portsmouth OSDC;
- The PORTS EM SSAB requests all contaminated plumes be exhumed and remediated in a manner that slows for future reindustrialization without unnecessary restrictions at those locations;
- The PORTS EM SSAB requests all known landfills within Perimeter Road, as identified in the Waste Disposition Remedial in a manner that allows for future reindustrialization at those locations. If radiological material exists in any of the currently capped landfills that does not meet the Numerical and Administrative Waste Acceptance Criteria, it must be disposed of off-site;
- The PORTS EM SSAB requests all barrier material, outside of the 326 building, be segregated for the potential recovery of its valuable nickel. If the recovery of the nickel material is not deemed to be financially advantageous or achievable,
- the PORTS EM SSAB requests all barrier material be disposed of off-site. Such a determination regarding the reuse of the nickel assets shall be made in the near term and shall not exceed the next 5 years for a finalized plan. Final disposition shall not expand beyond 10 years for all of the recovered nickel to be reused/recycled and be removed from the Piketon site;
- The PORTS EM SSAB requests all current and existing waste from the Depleted Uranium Hexafluoride (DUF6) conversion operations be disposed of off-site as these are known to contain highly toxic and radiological contaminants;
- The PORTS EM SSAB requests the DOE fund an implementable land use plan (as was done for the Miamisburg Mound complex) resulting in a usable end state for whatever reuse opportunities become available. We request that this plan incorporate green space and aesthetics as a component of design;

**15-04:** The Portsmouth SSAB recommends DOE make redevelopment of the Portsmouth site a priority in its decision-making related to the Portsmouth D&D project. With that end in mind, it is imperative that DOE include Reindustrialization and Asset Recovery in the scope of the PORTS D&D project and provide incentives through award fee for the contractor to perform this important piece of the cleanup project. Likewise, all PORTS D&D subcontracts should include language describing the Reindustrialization and Asset Recovery program to ensure all work being performed is compatible with the reuse goals for the site. Successful implementation of the Reindustrialization and Asset Recovery Program at PORTS requires collaboration with the community.

**FY 2017 DECONTAMINATION AND DECOMMISSIONING (D&D) /REMEDIAION PROGRESS Topics**

| Month     | Subject   |
|-----------|---|
| September | Elect Committee Leadership<br>On-Site Waste Disposal Facility Construction Update |
| October   | On-Site Waste Disposal Cell Site Preparations<br>Cold Weather Activities          |
| November  | FY2016 Surveillance & Maintenance Overview  |
| December  | Education Workshop  |
| January   | Lifecycle Baseline Summary Update<br>Near-Term and Long-Term Schedule             |
| February  | Non-Destructive Assay Program Overview  |
| March     | X-326 & X-333 Deactivation Update   |
| April     | Waste Shipping Overview   |
| May       | Recycling Overview  |
| June      | Pump & Treat Overview   |
| July      | Infrastructure Optimization   |

As appropriate, the subcommittee will strive to prepare and present short briefings supporting proposed recommendations during the bi-monthly board meetings. To fulfill its mission, the subcommittee may add additional topics and/or meetings as needed. The subcommittee will be responsible for informing the full SSAB on changes to the subcommittee's work plan.

## FUTURE USE

The mission of the Future Use subcommittee is to evaluate and make recommendations on DOE's ongoing efforts to develop remedial strategies to clean up land contaminated from legacy activities associated with the Portsmouth site including process buildings and soils. The subcommittee will also provide DOE with recommendations on final cleanup levels. The subcommittee will facilitate public participation in providing feedback to DOE on these decisions considering human health and the environment. DOE complex-wide concerns and impacts related to DOE's missions will also be considered.

### PREVIOUS SUBCOMMITTEE WORK PRODUCED THE FOLLOWING RECOMMENDATIONS:

**09-02:** *The Portsmouth EM-SSAB recommends that the future use of the Piketon site never include the interim storage of spent nuclear fuel (High-Level Radioactive Waste)*

**10-03:** *The PORTS SSAB recommends that DOE expeditiously develop and design a metal smelter that would be suitable to recycle different types of metals into ingots from D&D operations at the Portsmouth facility for future use at DOE and nuclear reactor sites under specific and regulatory controlled conditions.*

**10-02:** *The Portsmouth EM Site Specific Advisory Board supports and recommends integrating the community's core values and long-term goals for economic development in southern Ohio with regard to opportunities associated with advanced energy and environmental technology projects at the Portsmouth Site as an end use objective and with regard to related DOE/EM and D&D planning activities.*

**10-01:** *The Portsmouth EM Site Specific Advisory Board recommends that the DOE go forward with the use of an Ohio-based institution of higher learning for the process of conducting a Community wide End Use Study.*

**11-02:** *The DOE EM Portsmouth SSAB recommends that DOE create a dedicated location to fit the needs of DOE and the community that will foster the partnership necessary to make the critical D&D decisions and serve as a central location for information dissemination. The potential exists for DOE to coordinate with the Community Reuse Organization (CRO), the Southern Ohio Diversification Initiative, or other private entities for such a multi-purpose facility-either on-site or off-site- that will simultaneously resolve logistical issues for DOE and the community.*

**12-03:** *The PORTS EM SSAB agrees with that simple premise, that there is no desire for nuclear waste to be disposed of in Pike County. However, in consideration of all the factors, the PORTS EM SSAB believes on-site disposal of some of the material is in the best interest of the community, provided it is accompanied by certain actions from DOE that will be explained later in this recommendation. The PORTS EM SSAB wants to be clear that it does not believe on-site disposal is in the best interest of the community unless these other factors can be executed. If the DOE believes any of them are not feasible, or for whatever reason cannot be accomplished, then the PORTS EM SSAB recommends all radiologically contaminated waste be dispositioned off-site.*

**13-04:** *The PORTS EM SSAB recommends that U.S. Department of Energy fund an implementable land use for the entire reservation, as was done for the Miamisburg Mound Complex, resulting in a usable end state for a variety of reuse opportunities. It is important to establish clear goals for reuse while providing critical habitats for plants and animals. We request that this plan incorporate green space and potential conservation areas adding to the aesthetics as a component of design, and include, but not limited to:*

- *Utility infrastructure and access;*
- *Identification of areas outside the perimeter road best suited for redevelopment;*
- *Preservation of sizable portions of the reservation as green space and potential conservation areas (results of the OU habitat study should be considered in the prioritization and*

consideration of such areas.)

**Letter to the Honorable Stephen Chu:** *The PORTS EM SSAB would like to thank you and your staff for its efforts related to the potential lifting of the suspension of non-contaminated metals in radiological areas for recycling purpose at DOE facilities.*

**13-01:** *The PORTS EM SSAB fully endorses a lifting of the DOE suspension of non-contaminated scrap metals from radiological areas at DOE facilities, including the Portsmouth Gaseous Diffusion Plant... The board fully understands that current release criteria would still be applicable and that this action in no way represents a reduction of standards... The board sees that lifting of the suspension as a key first step to the establishment of a large scale recycling and reuse program that the site will benefit our community and communities across the nation... That is true not only because of the DOE-SODI agreement, but because of the potential for a national recycling center for metals from radiological areas (as described above) that would put us at the forefront of what is sure to become a thriving industry.*

**Letter to Senior Advisory David Huizenga:** *The PORTS EM SSAB invites you and the Honorable Dr. Ernest Moniz, Secretary of Energy, to meet the PORTS EM SSAB members, our elected officials and other community leaders who have a vested interest in the activities at the site. Multiple critical regulatory decisions are upon us and our community is taking a proactive approach regarding future land use of Portsmouth/Piketon reservation and life beyond the D&D program of former uranium enrichment facility.*

**14-01:** *The PORTS EM SSAB recommends DOE provide continued support and funding for the Portsmouth Asset Recovery Program. Additionally, the PORTS EM SSAB recommends DOE aggressively pursue the expansion of the Asset Recovery Program as a way to mitigate waste and prioritize clean, cost-efficient site-wide cleanup*

**15-01:** *As part of the U.S. Department of Energy's DOE commitment to remediate and prepare the former Portsmouth Gaseous Diffusion Plant (PORTS) in Piketon, Ohio, for future industrial reuse, the Portsmouth SSAB recommends any future RFP associated with the Piketon site include community commitment provisions. On future contracts at PORTS, the SSAB recommends DOE: review the scopes of work to determine how best mission requirements, while taking the local economy and the local business community into consideration; make community commitment provisions integral portions of draft RFPs and the resulting contract of various work scopes at PORTS.*

**15-02:** *The Portsmouth SSAB recommends DOE make redevelopment of the Portsmouth site a priority in its decision-making related to the Portsmouth D&D project. With that end in mind, it is imperative that DOE include Reindustrialization and Asset Recovery in the scope of the PORTS D&D project and provide incentives through award fee for the contractor to perform this important piece of the cleanup project.*

**2017 FUTURE USE TOPICS**

| Month     | Subject  |
|-----------|--|
| September | Elect Subcommittee Leadership<br>Introduction to Cleanup Levels  |
| October   | OSWDF Construction Cold Weather Activities                       |
| November  | SODI Update  |
| December  | Education Workshop   |
| January   | Lifecycle Baseline Summary Update                                |
| February  | Infrastructure Update  |
| March     | Landfill and Plume Consolidation                                 |
| April     | JEDISO Update  |
| May       | Integrated Energy System Update<br>SODI Property Transfer Update |
| June      | Ohio University Grant Update                                     |
| July      | Appalachian Partnership for Economic Growth (APEG) Update        |

As appropriate, the subcommittee will strive to prepare and present short briefings supporting proposed recommendations during the bi-monthly board meetings. To fulfill its mission, the subcommittee may add additional topics and/ or meetings as needed. The subcommittee will be responsible for informing the full SSAB on changes to the subcommittee's work plan.



**BUDGET AND LIFECYCLE PLANNING**

The mission of the Budget and Lifecycle Planning subcommittee is to understand and help local stakeholders appreciate the challenges associated with the federal budgeting process and how allocated dollars impact cleanup work at the Portsmouth site. The subcommittee will engage the local communities impacted by the environmental management activities at the Portsmouth Gaseous Diffusion Plant allowing for discussion and education on the site’s funding scenarios.

**PREVIOUS SUBCOMMITTEE WORK PRODUCED THE FOLLOWING RECOMMENDATIONS:**

**Budget Letter to Senior Advisor David Huizenga:** *On behalf of the PORTS EM SSAB, I am writing a letter to express the board’s support of three letters recently written by Ohio’s senators, Sherrod Brown and Rob Portman, and our representative in the House, Congressman Wenstrup.*

**FY 2017 BUDGET AND LIFECYCLE PLANNING Topics**

| Month     | Subject   |
|-----------|---|
| September | Elect Subcommittee Leadership<br>FY 2017 Budget Update                                    |
| October   | SSAB Priorities for FY 2018<br>Subcommittee Recommendation Development for FY 2018 Budget |
| November  | FY 2017 Budget Briefing<br>Explanation of FY 2018 Budget Formulation Process              |
| December  | Education Workshop  |
| January   | Lifecycle Baseline Summary<br>Near-Term and Long-Term Schedule                            |
| February  | Barter Program Overview   |
| March     | President’s Budget Request Briefing   |
| April     | Explanation of FY 2019 Budget Formulation Process   |
| May       | Integrate Lifecycle Baseline Summary for FY 2019  |
| June      | Subcommittee Recommendation Development for FY 2019 Budget                                |
| July      | FY 2018 Budget Update   |

As appropriate, the subcommittee will strive to prepare and present short briefings supporting proposed recommendations during the bi-monthly board meetings. To fulfill its mission, the subcommittee may add additional topics and/or meetings as needed. The subcommittee will be responsible for informing the full SSAB on changes to the subcommittee’s work plan.

## **SSAB MEETINGS**

SSAB meetings are intended to communicate the business of the SSAB and to discuss and vote on recommendations to be submitted to DOE. In addition, Deputy Designated Federal Official (DDFO) comments will be made in the form of a presentation intended to brief SSAB members of recent developments and provide site highlights and accomplishments.

SSAB meetings will also be the forum for educational presentations that complement the working session or site management matters. Examples of suggested topics for presentations may include the annual budget process and risk education.

|                       | <b>Historic Legacy &amp; Community Engagement</b>                   | <b>D&amp;D/ Remediation Process</b>                 | <b>Future Use</b>  | <b>Budget * Lifecycle Planning</b>  |
|-----------------------|---|---|--|---|
| <b>September 2016</b> | Volunteer Organization for DOE Science Alliance                     | On-Site Waste Disposal Facility Construction Update | Introduction to Cleanup Levels                                   | FY 2017 Budget Update   |
| <b>October 2016</b>   | DOE Science Alliance Recap  | OSWDF Construction Cold Weather Activities          | OSWDF Construction Cold Weather Activities                       | Recommendation Development for FY 2018 Budget                                 |
| <b>November 2016</b>  | DOE Quarterly Public Meeting<br>SSAB Member Recruitment Opportunity | FY2016 Surveillance & Maintenance Overview          | SODI Update  | FY 2017 Budget Briefing;<br>Explanation of FY 2018 Budget Formulation Process |
| <b>December 2016</b>  | Education Workshop  | Education Workshop                                  | Education Workshop   | Education Workshop  |
| <b>January 2017</b>   | DOE D&D Project Briefing  | Lifecycle Baseline Summary Update                   | Lifecycle Baseline Summary Update                                | Lifecycle Baseline Summary Update   |
| <b>February 2017</b>  | Volunteer Organization for Science Bowl                             | Non-Destructive Assay Program Overview              | Infrastructure Update  | Barter Program Overview   |
| <b>March 2017</b>     | DOE Science Bowl Recap  | X-326 & X-333 Deactivation Update                   | Landfill and Plume Consolidation                                 | President's Budget Request Briefing   |
| <b>April 2017</b>     | Volunteer Organization for Ohio University Student ASER Program     | Waste Shipping Overview                             | JEDISO Update  | Explanation of FY 2019 Budget Formulation Process                             |
| <b>May 2017</b>       | Ohio University Student ASER Program                                | Recycling Overview                                  | Integrated Energy System Update<br>SODI Property Transfer Update | Integrate Lifecycle Baseline Summary for FY 2019                              |
| <b>June 2017</b>      | Traveling Displays Update   | Pump & Treat Overview                               | Ohio University Grant Update                                     | Subcommittee Recommendation Development for FY 2019 Budget                    |
| <b>July 2017</b>      | Virtual Museum/Oral History Update                                  | Infrastructure Optimization                         | Appalachian Partnership for Economic Growth (APEG) Update        | FY 2018 Budget Update   |



Recommendation 16-02  
October 8, 2016

*Portsmouth EM Site Specific  
Advisory Board*

**Chair**

Bob Berry

**Co-Vice Chair**

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**Deputy Designated**

**Federal Official**

Joel Bradburne

**DOE Federal Coordinator**

Greg Simonton

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**RECOMMENDATION 16-02: Portsmouth (PORTS) Environmental Management (EM) Site Specific Advisory Board (SSAB) Priorities for President's 2018 Budget Request**

**BACKGROUND:** In recent years, the U.S. Department of Energy (DOE) Office of Environmental Management (EM) has requested input from advisory boards across the EM complex regarding community priorities as site budgets are formulated.

The PORTS EM SSAB recognizes that each community has a unique set of circumstances to consider when establishing priorities for these large-scale projects. The circumstances for the Portsmouth site are centered around an economic climate with high unemployment where the focus is on workforce continuity, job creation, reindustrialization and recycling.

It is imperative for the sake of the southern Ohio economy that the Portsmouth decontamination & decommissioning (D&D) project be fully funded with attention paid to reindustrialization efforts to ensure workforce stability during and after the D&D project. It is with these circumstances in mind that the PORTS EM SSAB makes the following recommendation.

**RECOMMENDATION:** The PORTS EM SSAB recommends DOE consider a closure fund approach for the Portsmouth site, as has been executed at other DOE sites. The Portsmouth site does not have extraordinary technical challenges and the threat to the D&D Project here is one of project stability based on potentially inconsistent funding levels, partly as a result of the reliance on uranium barter proceeds.

By establishing Portsmouth as a closure site, the D&D Project can move forward with certainty and more efficiency. That approach proved to be successful at Fernald, Mound Facility in southwest Ohio, and Rocky Flats and the PORTS EM SSAB believes that approach will be successful here.

As for board priorities on the project, clearly workforce continuity in a key priority, along with the construction of the On-Site Waste Disposal Facility, the deactivation of process buildings, reindustrialization efforts (including property transfer), and the continuation of recycling efforts through the DOE-Southern Ohio Diversification Initiative (SODI) Asset Transition Agreement.

The PORTS EM SSAB is emphatic that even if DOE chooses not to make Portsmouth a closure site, another key board priority is for the Department to communicate a strategy to local stakeholders on how the project will continue uninterrupted as the supply for the uranium barter program expires.

The board would like to thank DOE for soliciting this input. The value of the SSAB program, and all programs where public engagement occurs, is significant as evidenced by the numerous examples across the EM complex of how communications with the public have benefitted DOE and stakeholders alike.

Thank you for your attention to the Portsmouth D&D project and recognizing its importance to southern Ohio.

PREPARING THE FUTURE

# PORTS

D & D PROJECT

# Outreach Activities



# Science Alliance

- Oct. 4, 5 & 6
- Record Attendance!













10/12/2016

# Employee Giving Campaign

- September 6 – October 3





# Employee Giving Campaign



10/12/2016

# Employee Giving Campaign



10/12/2016

PREPARING THE FUTURE

# PORTS

D & D PROJECT

## Robotics Technology Thrust

**Marty Reibold**

Director of Strategic Initiatives

Fluor-BWXT Portsmouth

October 2016



# Science of Safety Initiative

Robotic Technology Thrust  
Focus on the EM Workforce

# Science of Safety

**Infusing and integrating scientific and technological advancements into the routines of work planning and execution in a manner that**

- ❖ **improves safety and quality and**
- ❖ **reduces the government's liability for cleanup**





# Robotic Technology Thrust

EM is actively promoting the use of advanced robotic technologies as a key mission-enabler

Work

SAFER

Work

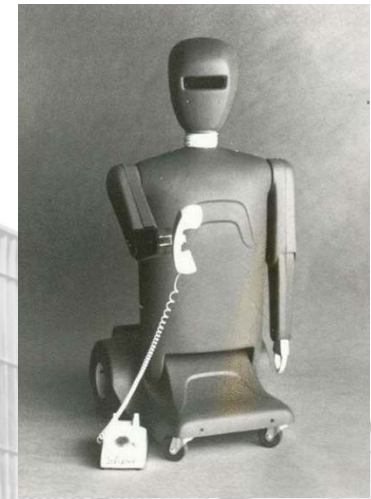
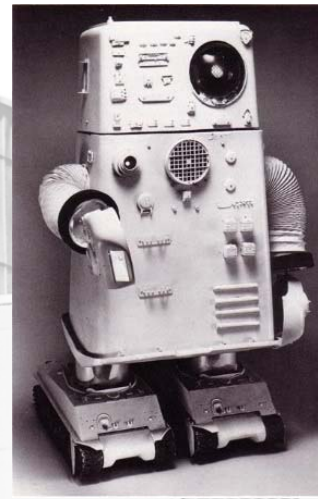
SMARTER



# What is a *ROBOT*?

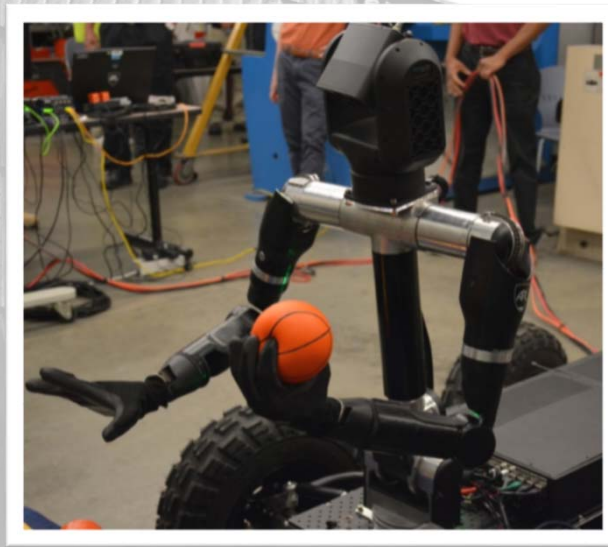
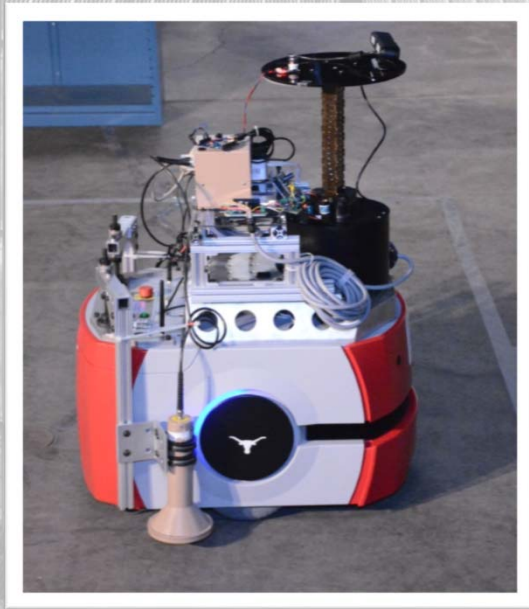
A **reprogrammable, multifunctional manipulator** designed to move material, parts, tools, or specialized devices through various programmed motions for the **performance of a variety of tasks**

*Robot Institute of America, 1979*



# Robotic Technologies Test Bed

Portsmouth Deactivation and Decommissioning Project



# “The Challenge”

- Demonstrate relevancy and utility of robotic technologies to catalyze the Science of Safety initiative
- Key Features
  - Worker safety
  - Work performance
  - Relevant technologies
  - Field demonstrations
  - Workforce engagement
  - Utility
  - Workers operation
  - Complete by summer’s end



# By the numbers...

- 4 days
- 24 robots
- 30 USW/FBP workers
- 11 expert roboticists and technologists
  - 2 DOE national labs
  - 2 other federal labs
  - 2 not-for-profits
  - 5 universities

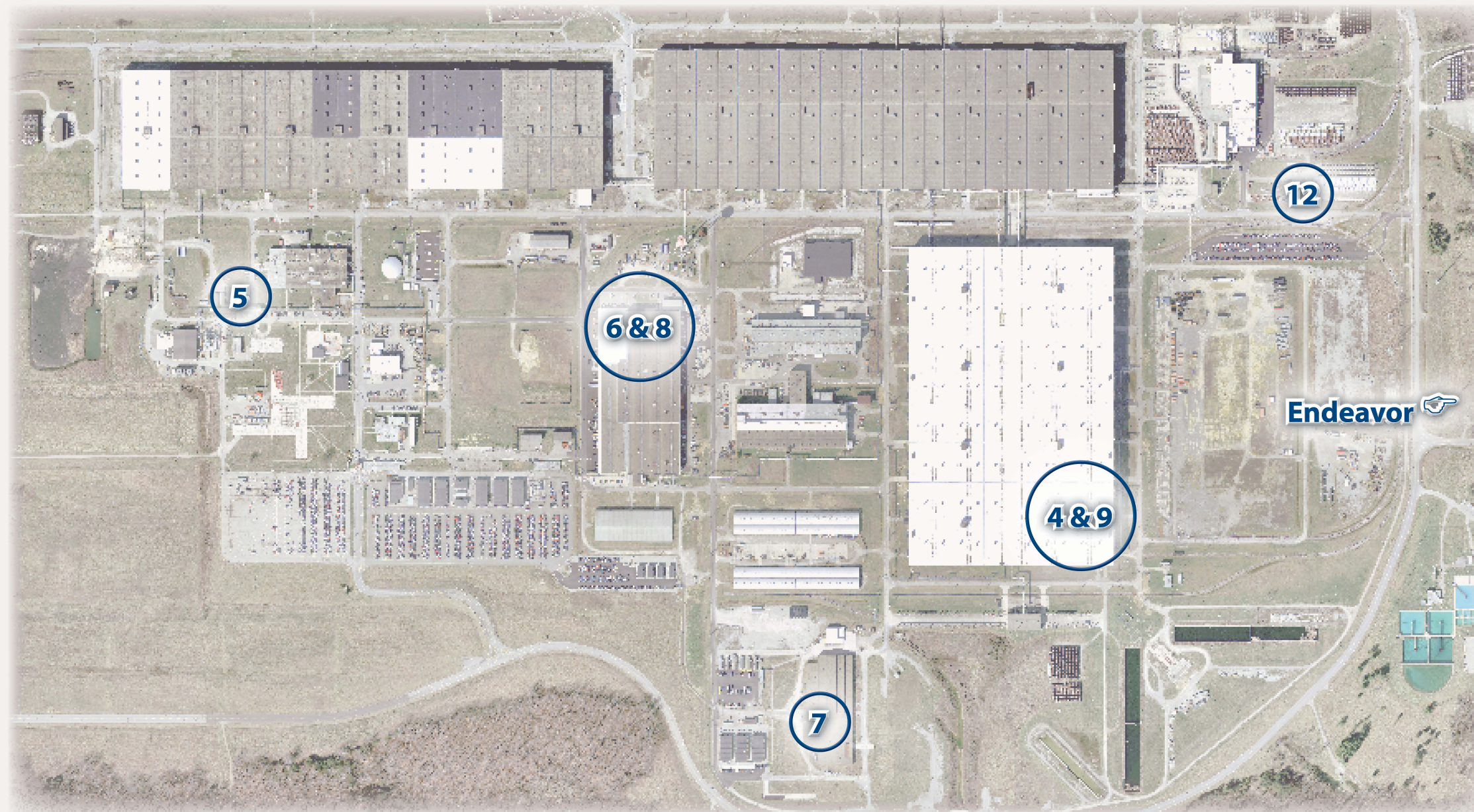




# Collaborators



**Demonstrations**



- 1.) Machine Learning Pipe Crawler - Endeavor**  
Sandia National Laboratories - Scott Gladwell
- 2.) Modular Prosthetic Limb - Endeavor**  
Johns Hopkins University APL - Mike McLoughlin
- 3.) Virtual Reality Immersive Teleoperation - Endeavor**  
Open Source Robotics Foundation - Morgan Quigley
- 4.) Radiation Robotic Rabbit - X-333**  
State University of New York Oswego/Exelon - Joe Garcia
- 5.) Serpentine and Modular Robots - X-760**  
Carnegie Mellon University - Howie Choset
- 6.) Swabbing UAVs - X-720**  
Purdue University - Richard Voyles
- 7.) Forklift Automated Safety System - X-744G**  
Southwest Research Institute - David Chambers
- 8.) Human-Centered Robot-Robot Teams - X-720**  
Texas A&M University - Craig Marianno
- 9.) Mobile Systems for Inspection - X-333**  
University of Texas - Austin - Mitch Pryor
- 10.) Robo-Glove - Endeavor**  
National Aeronautics and Space Administration - Joshua Mehling
- 11.) Virtual and Augmented Reality Modeling - Endeavor**  
Savannah River National Laboratory - John Bobbitt
- 12.) Robotic Inspection of Cylinders - X-745F Cylinder Yard**  
Sandia National Laboratory - Jake Deuel

**MONDAY, AUGUST 22**

8:00 a.m. Endeavor 160 Orientation/Introductions  
Contact: Elizabeth Scott

10:30 a.m. X-333 4 - Radiation Robotic Rabbit  
Contact: Keith Banks, FBP

12:30 p.m. Endeavor 160 Lunch Station - \$8  
Miracle City Academy

1:30 p.m. X-720 8 - Human-Centered Robot-Robot Teams  
Contact: Marty Kelley, FBP

**TUESDAY, AUGUST 23**

7:30 a.m. Endeavor 160 Badging and Security Briefing (Endeavor)

8:00 a.m. Endeavor 160 10 - Robo-Glove  
Contact: John Sisler, FBP

10:00 a.m. Endeavor 160 1 - Machine Learning Pipe Crawler  
Contact: Russ Riddle, FBP

12:00 p.m. Endeavor 160 Lunch Station - \$8  
Miracle City Academy

1:00 p.m. X-333 9 - Mobile Systems for Inspection  
Contact: Dave McClay, FBP

**WEDNESDAY, AUGUST 24**

7:30 a.m. Endeavor 160 Badging and Security Briefing (Endeavor)

8:00 a.m. X-745F 12 - Robotic Inspection of Cylinders  
Contact: Keith Banks, FBP

10:00 a.m. X-744G 7 - Forklift Automated Safety System  
Contact: Dave McClay, FBP

12:00 p.m. Endeavor 160 Lunch Station - \$15  
Scioto Ribber

1:00 p.m. Endeavor EHI 11 - Virtual and Augmented Reality Modeling  
Contact: Bobby Fuhr, FBP

**THURSDAY, AUGUST 25**

7:15 a.m. Endeavor 160 Badging and Security Briefing (Endeavor)

8:00 a.m. X-760 5 - Serpentine and Modular Robots  
Contact: Keith Banks & Marty Kelley, FBP

10:00 a.m. X-720 6 - Swabbing UAVs  
Contact: Marty Kelley, FBP

12:00 p.m. Endeavor 160 Lunch Station - \$8  
Miracle City Academy

1:00 p.m. Endeavor 2 - Modular Prosthetic Limb (Weld Shop)  
Contact: John Sisler, FBP

3:00 p.m. Endeavor EHI 3 - Virtual Reality Immersive Teleoperation  
Contact: Bobby Fuhr, FBP

**FLUOR-BWXT KEY CONTACTS:**

**Marty Reibold:** (740) 648-0803 • **Russ Riddle:** (740) 648-7118 • **Bobby Fuhr:** (740) 648-7902 • **Elizabeth Scott:** (740) 648-0286  
**Dave McClay:** (740) 222-0419 • **Marty Kelley:** (740) 897-5777 • **John Sisler:** (740) 897-2385 • **Keith Banks:** (740) 897-5770