



PORTSMOUTH EM SITE SPECIFIC ADVISORY BOARD

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

Proposed Agenda for the March 3, 2016 Board Meeting

Chair

William E. Henderson II

Vice Chair

Robert Berry

Board Members

Lisa Bennett

Maddeline C. Caudill

Carlton L. Cave

Al Don Cisco

Martha A. Cosby

Ervin S. Craft

Carl R. Hartley

Ronda J. Kinnamon

Neil Leist

Bernard S. Neal

Irma C. Payne

Cristy D. Renner

Judy R. Vollrath

Deputy Designated Federal Official

Joel Bradburne

DOE Federal Coordinator

Greg Simonton

6 p.m.

Call to Order, Introductions

Review of Agenda

Approval of January Minutes

DDFO Comments

--15 minutes

Federal Coordinator Comments

--10 minutes

Liaison Comments

-- 5 minutes

Presentation-President's Fiscal Year 2017 Budget Request/PORTS Lifecycle Baseline Overview, Joel Bradburne, DOE

--20 minutes

Administrative Issues

--20 minutes

Subcommittee Updates

--5 minutes

Public Comments

--15 minutes

Final Comments from the Board

--15 minutes

Adjourn

Support Services

EHI Consultants, Inc.

1862 Shyville Road

Piketon, OH 45661

Phone 740.289.5249

Fax 740.289.1578

Chartered as an EM Site Specific Advisory Board under the Federal Advisory Committee Act

2015 PIKE COUNTY CHAMBER OF COMMERCE ORGANIZATION OF THE YEAR

PREPARING THE FUTURE

PORTS

D & D PROJECT

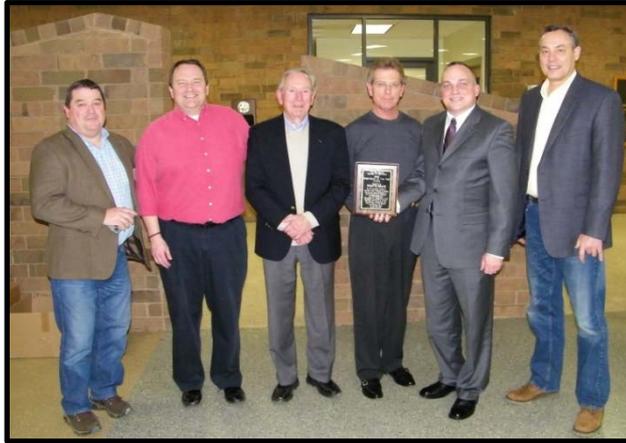
DEPUTY DESIGNATED FEDERAL OFFICIAL PRESENTATION

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

Portsmouth Site Specific Advisory Board
March 3, 2016



Congratulations SSAB -Pike County's 2015 Organization of the Year



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

D&D Safety Update

Outstanding!! JANUARY 2016
2 MILLION
FBP Safe Work Hours!

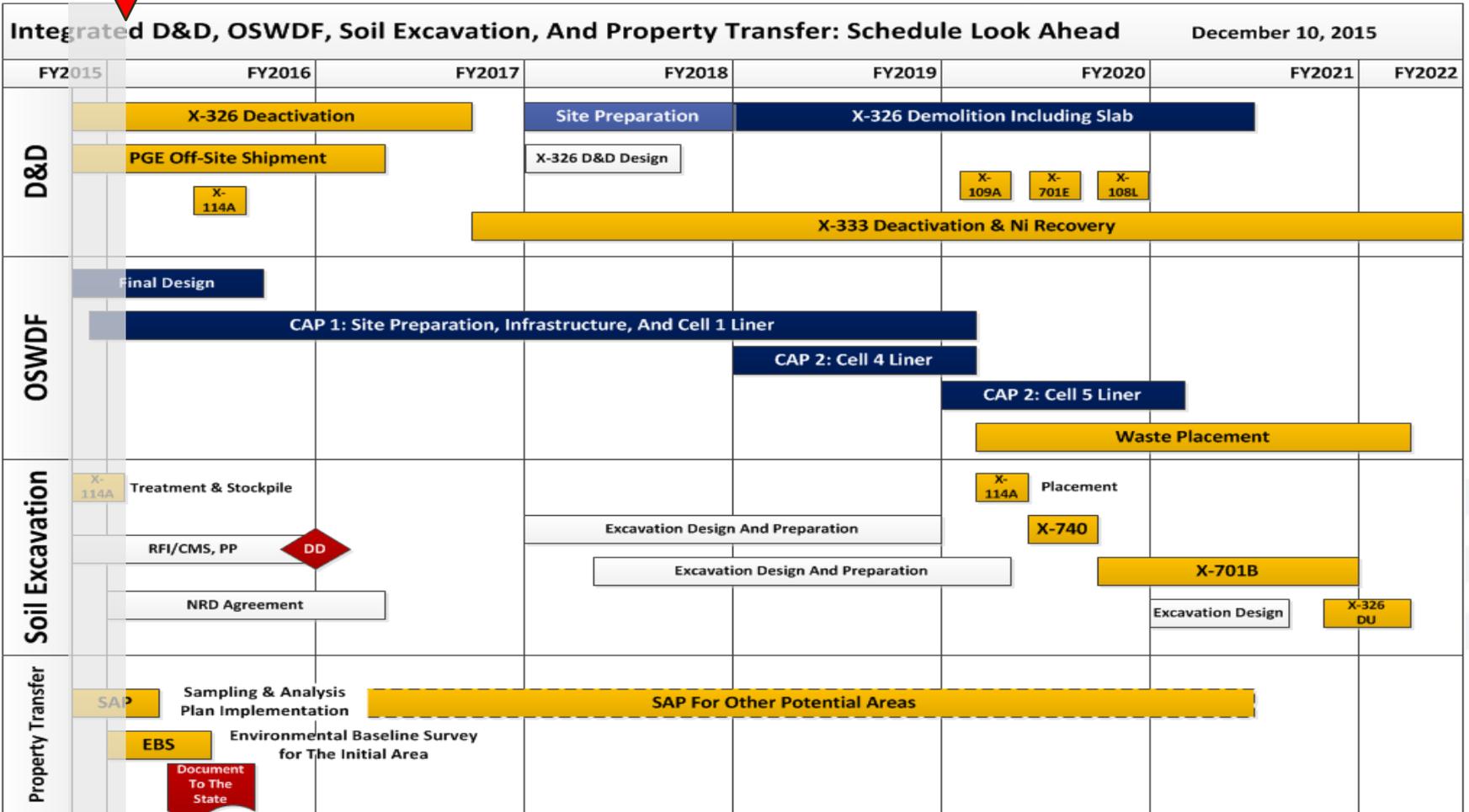
Floor-BWXT | Portsmouth
Zero Lost-time Injuries
SAFETY WORKS



YOU are the **KEY** to **SAFETY!**

PORTS Integrated Baseline

Next 5 Years



Deactivation of - X-326



On-Site Waste Disposal Facility



NORTH ACCESS ROAD



3 drums with 814lbs of metal (mainly brass), was donated to SODI from the old firing range.



Plant Updates

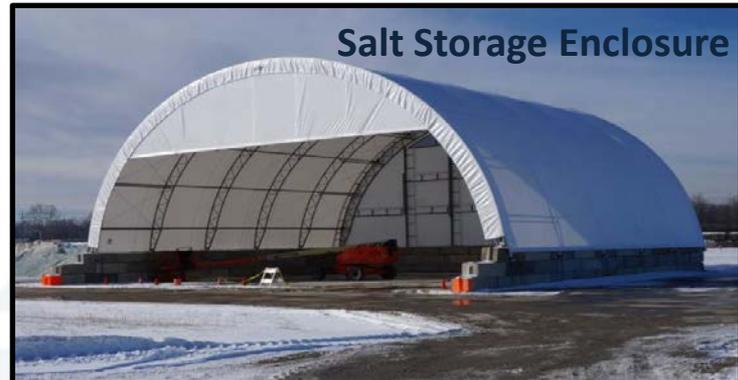
Fire Hydrants
Replaced/Repaired



New Overhead Power Lines



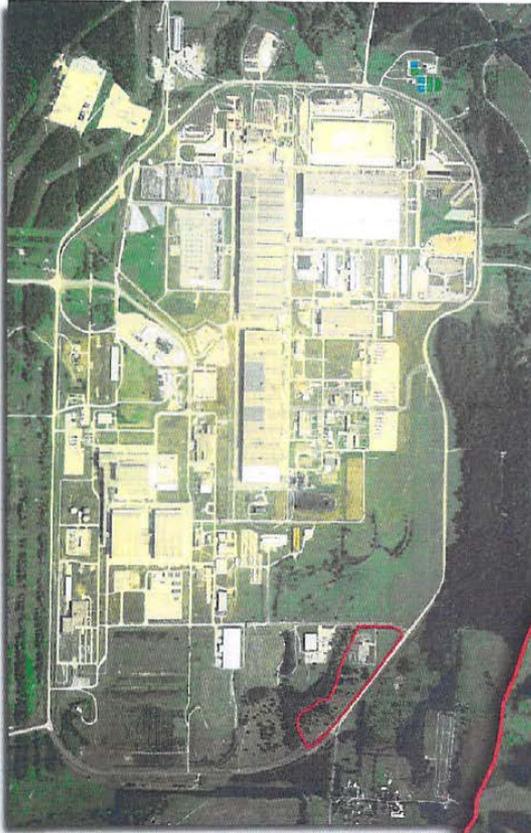
Salt Storage Enclosure



Land Transfer/ Re-Industrialization

Exhibit A

- FBP has delivered the draft Environmental Baseline Survey and is in review by DOE
- DOE communication with SODI continues
- ORISE Independent Verification work at site has been completed



Environmental Remediation



Groundwater Treated FY2016	Groundwater Source	TCE Removed FY2016 lbs
338,600 Gallons	X-701B Plume	9.97
41.085 Gallons	Misc. Site	0.13
3,635,130 Gallons	7-Unit Plume	54.48
6,000,000 Gallons	5-Unit & X-749/X-120 Plumes & PK Drainage	8.13

Current Ports DUF₆ Status:

- Conversion line operations suspended pending resolution of chemical exposure during system pressure test
- Corrective action plan developed and submitted to PPPO for review and approval
- Detailed, resource loaded recovery plan being executed to resume conversion line operations actions

Plant availability:

	<u>Ports</u>
FY12	26%
FY13	58%
FY14	80%
FY15	25%



Site Tours



Assistant Secretary for DOE Office of Environmental Management, Dr. Monica Regalbuto, toured the PORTS site recently.



Congressman Brad Wenstrup's Staff



US Army Reserves
Columbus DLA

Mutual Aid



Off-Site Requests FY2016

Vehicle Accidents	3
Structure Fires	2
Other Fires	1
HazMat Response	0
Medical	0
Total	6



40 or More Years of Service



Community Outreach



Adena



Jasper Elementary



Portsmouth West HS



Holzer



SOMC



JEDISO Receives International Award

Upcoming Site Events



Science Bowl IV
Friday, March 11, 2016



SSAB Fernald Trip
Saturday, March 12, 2016



SSAB Full Board Meeting
Thursday, May 5, 2016



Controlled prairie burn on Northeast Bypass Road
Date: TBD depending on weather from now until
April 17, 2016.

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

Project Objectives



DOE's mission at the Portsmouth Gaseous Diffusion Plant (PORTS) is to completely resolve the environmental liability through an integrated process of decontamination and decommissioning (D&D), soil and groundwater remediation, and waste disposition, and then return the site to the community—all the while operating the site safely and efficiently.

Decontamination and Decommissioning



The heart of the PORTS D&D Project mission, D&D of the process buildings and Balance of Plant (BOP) facilities, includes characterization, removal of contents (including size reduction as required), and demolition of structures.

Environmental Remediation



Environmental remediation includes soil and groundwater remediation of impacted areas and characterization of non-impacted areas, that ensure they pose no contamination risk. Landfill excavation will provide millions of cubic yards of engineered fill for the OSWDF.

Site Operations



Site operations support the safe, efficient operation of the PORTS facilities, and provide technical and management support to the D&D, waste management, and remediation objectives.



On-Site Waste Disposal Facility



The design, construction, and operation of an on-site waste disposal facility (OSWDF) will provide a disposal location for legacy waste from D&D activities, as well as engineered fill generated by soil remediation activities. A segmentation shop will safely size-reduce large process gas equipment prior to placement.

Waste Management



Waste management disposes of PORTS legacy waste efficiently and in full compliance with DOE, federal, state, and local regulations. This includes planning disposition pathways, characterizing, removing, packaging, transporting, and disposing of waste on- and off-site.

Nuclear Materials Management



Excess nuclear material management and disposition includes activities associated with nuclear material disposition, such as identifying disposition pathways for Uranium Management Center lots.

PORTS D&D Project Organization

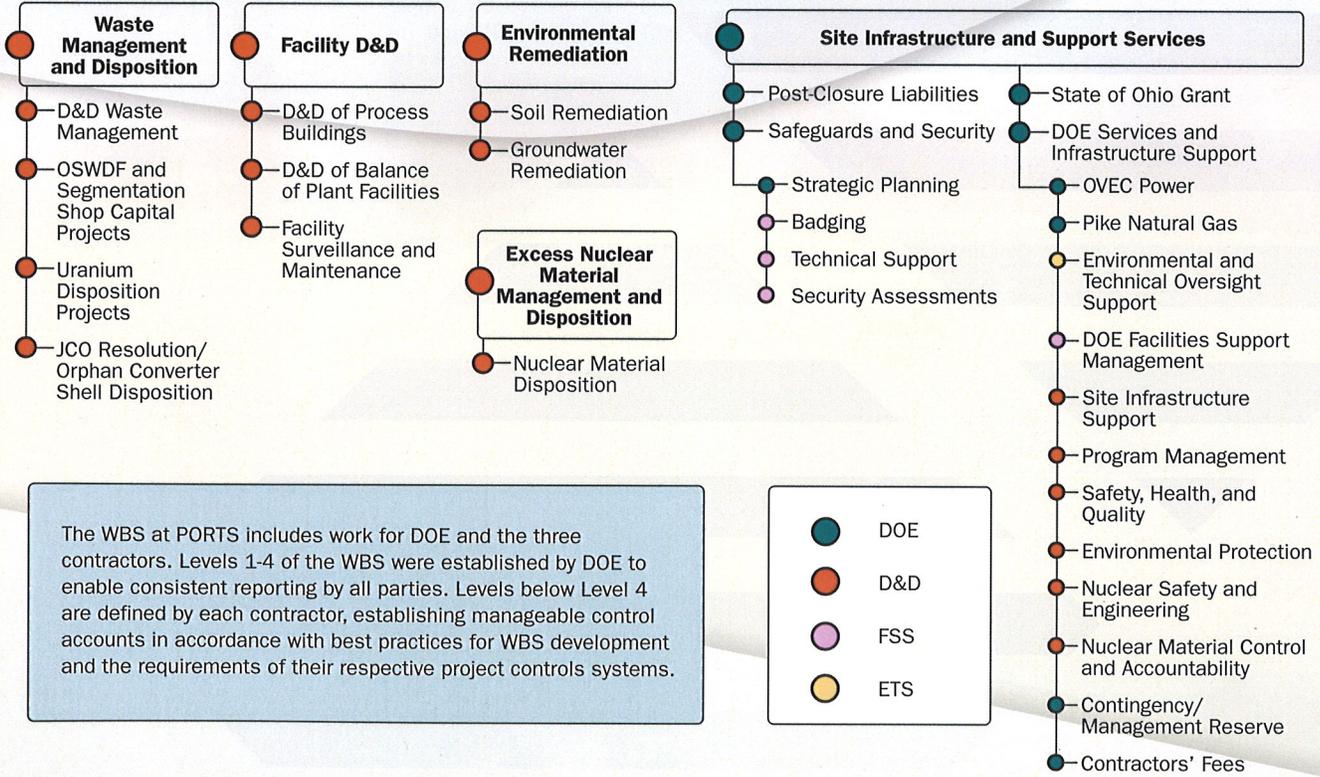


The PORTS Work Breakdown Structure (WBS) includes activities for DOE and three contractors: the Decontamination and Decommissioning (D&D) Contractor, the Environmental Technical Services (ETS) Contractor, and the Facilities Support Services (FSS) Contractor.

DOE holds ultimate responsibility for achieving the objectives for the PORTS site and funds and oversees the work of the three contractors to that end. The ETS Contractor acts as DOE's technical representative, overseeing the work done by the D&D and FSS Contractors for quality, cost reasonableness, and adherence to contractual requirements. The FSS Contractor provides ongoing facility operations support. The D&D Contractor provides program management and implementation of the site operations, D&D, environmental remediation, and waste management objectives for PORTS.



Work Breakdown Structure and Division of Responsibility



Project Execution Strategy

A Lifecycle Plan has been developed for the safe completion of the PORTS D&D Project. This plan is designed to be a living document being progressively updated to reflect the best ideas and lessons learned across the duration of the D&D project.

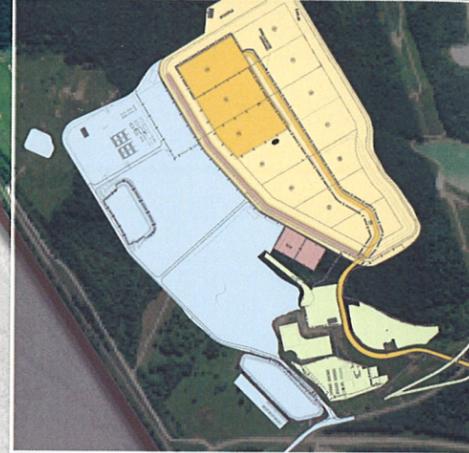
Foundational Elements of the Lifecycle Plan

- Anchored on Decontamination & Demolition of the three main Process Buildings with debris disposal in an On-site Disposal facility (OSWDF).
- Capacity of the OSWDF designed to accommodate the volume of waste from the D&D project given its current uncertainties.
- Place debris waste in the OSWDF using fill obtained from the excavation of contaminated soil from the site's landfills and groundwater plumes.
- Ship off site materials not meeting the OSWDF Waste Acceptance Criteria (WAC).
- Continue safe operations to disposition the site inventory of accountable materials, cylinders, and containerized legacy waste.
- Meet regulatory obligations for environmental monitoring and groundwater pump/treatments.
- Advance the demolition of facilities in a manner fully integrated with both the construction of capacity in the OSWDF, the excavation of plumes for fill, and the needed cleanup/certification of impacted areas of soil.
- Explore the viability of recovering the barrier material from X-333 and X-330 and if deemed viable consider retro fit of X-700 or X-333 for the needed segmentation shop.
- Achieve an end state vision that includes leaving usable utility infrastructure for future community use with final grading to ensure safety and positive drainage.

Project Priorities For Next Five Years

- Complete Cut and Cap, removal and shipment of X-326 PGE
- Complete Auxiliary Systems Deactivation; achieve Crit Incredible and Cold and Dark of X-326
- Complete demolition and disposal of X-326
- Construct and operate three OSWDF cells
- Excavate approximately 350,000 cubic yards of soil from X-740 and X-701B plumes to support placement of X-326 demolition debris
- Complete NDA Characterization of X-333
- Deactivate and demolish X-710 Lab Building, X-626 Cooling Tower, and other BOP facilities
- Complete Conceptual and Detailed Design of converter Segmentation Shop for nickel recovery
- Complete barter operations and autoclave operations to address enriched cylinders and misc. cylinder inventory
- Disposition accountable items and RCRA waste in X-326, Lots 14 and 4a
- Operate X-705 to disassemble PGE, and disposition removed deposits
- Complete characterization and regulatory decision documentation for deferred units

On-site Waste Disposal Facility



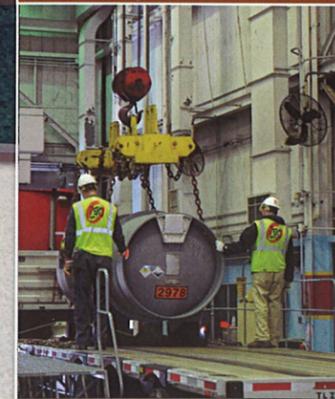
Equipment Removal



Process Building D&D



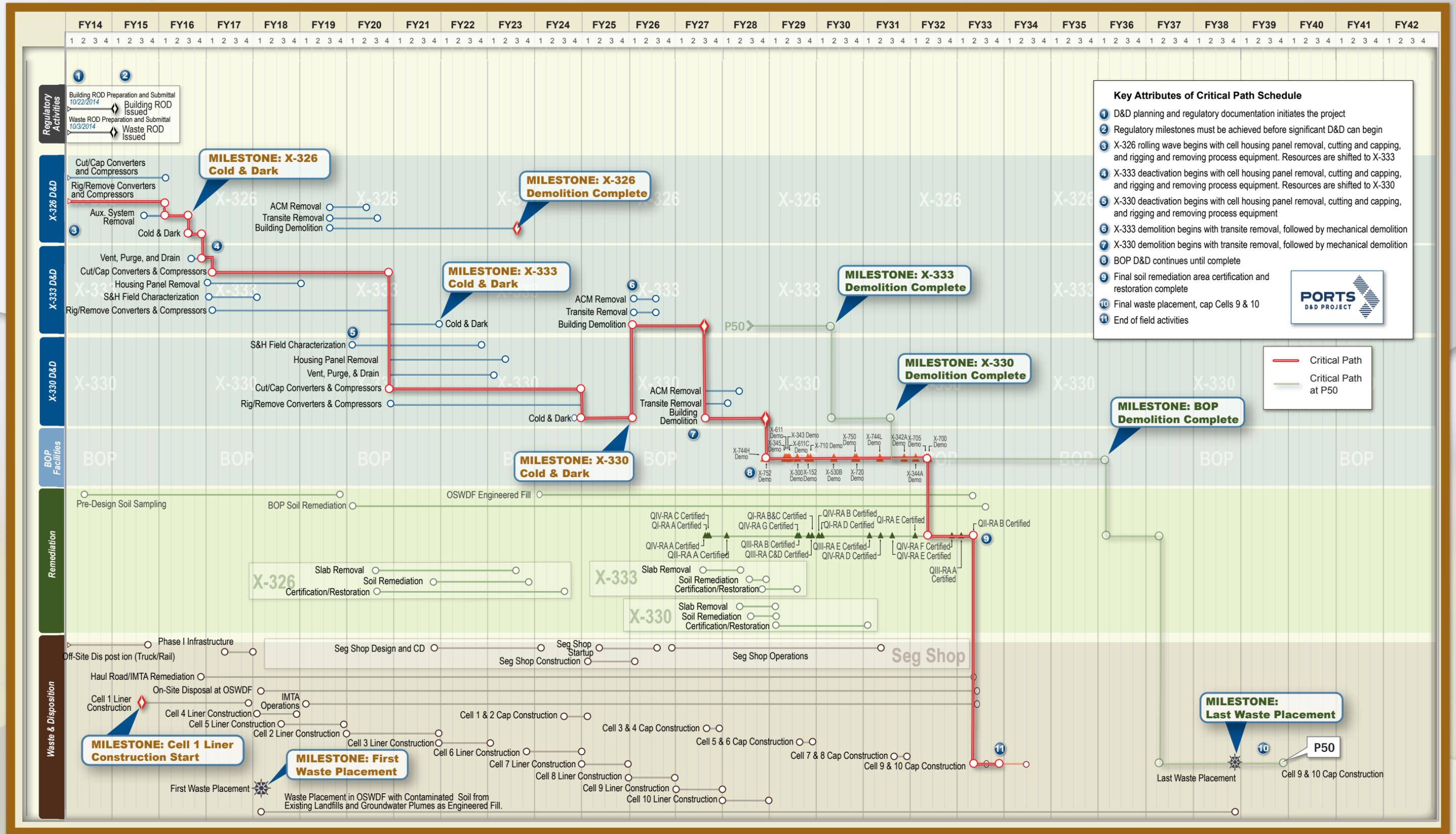
Barter Cylinder Transfers



Balance of Plant D&D

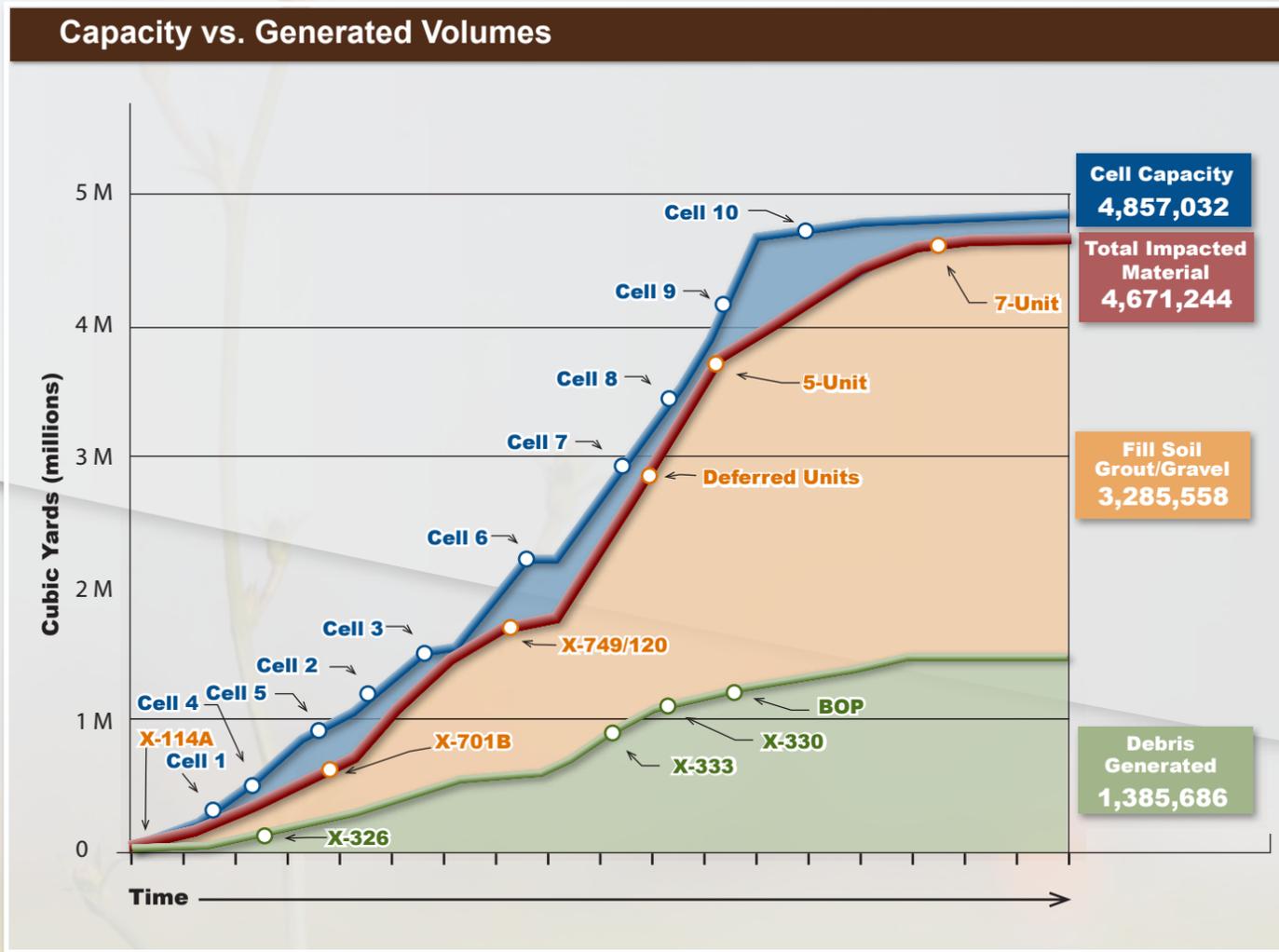


PORTS D&D Project Lifecycle Critical Path Schedule



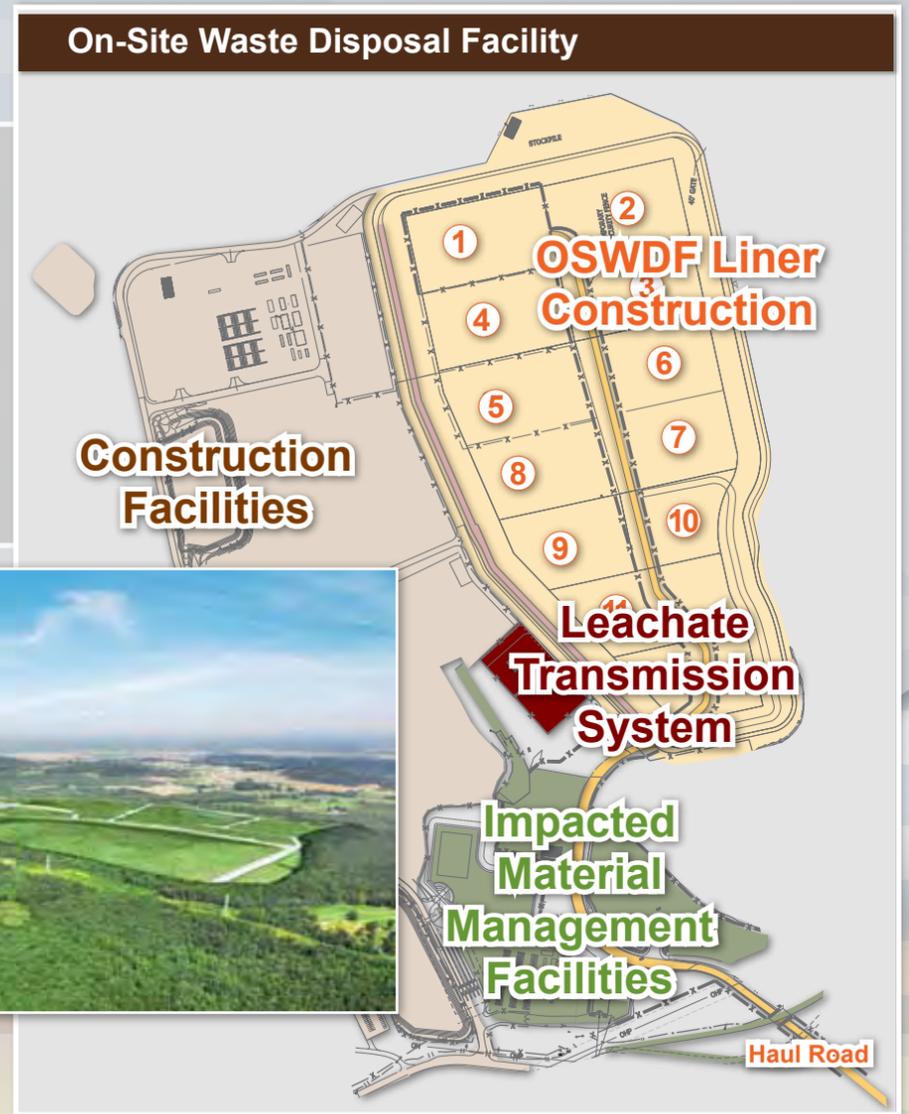


On-Site Disposal of Waste Generated by D&D

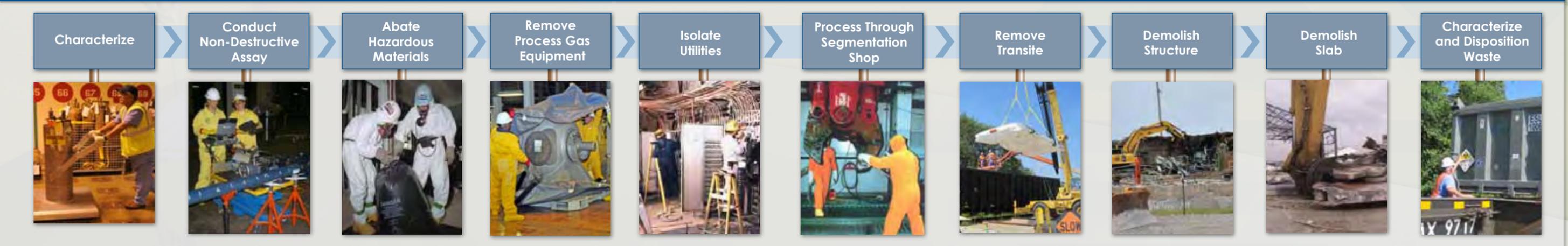


Strategic Advantages of OSWDF

- Dispose of demolition debris on-site to avoid expensive off-site shipment and disposal
- Use soils from excavated plumes as impacted material needed to support placement of debris
 - Eliminating purchase of off-site soil
 - Reducing pump-and-treat and long-term monitoring

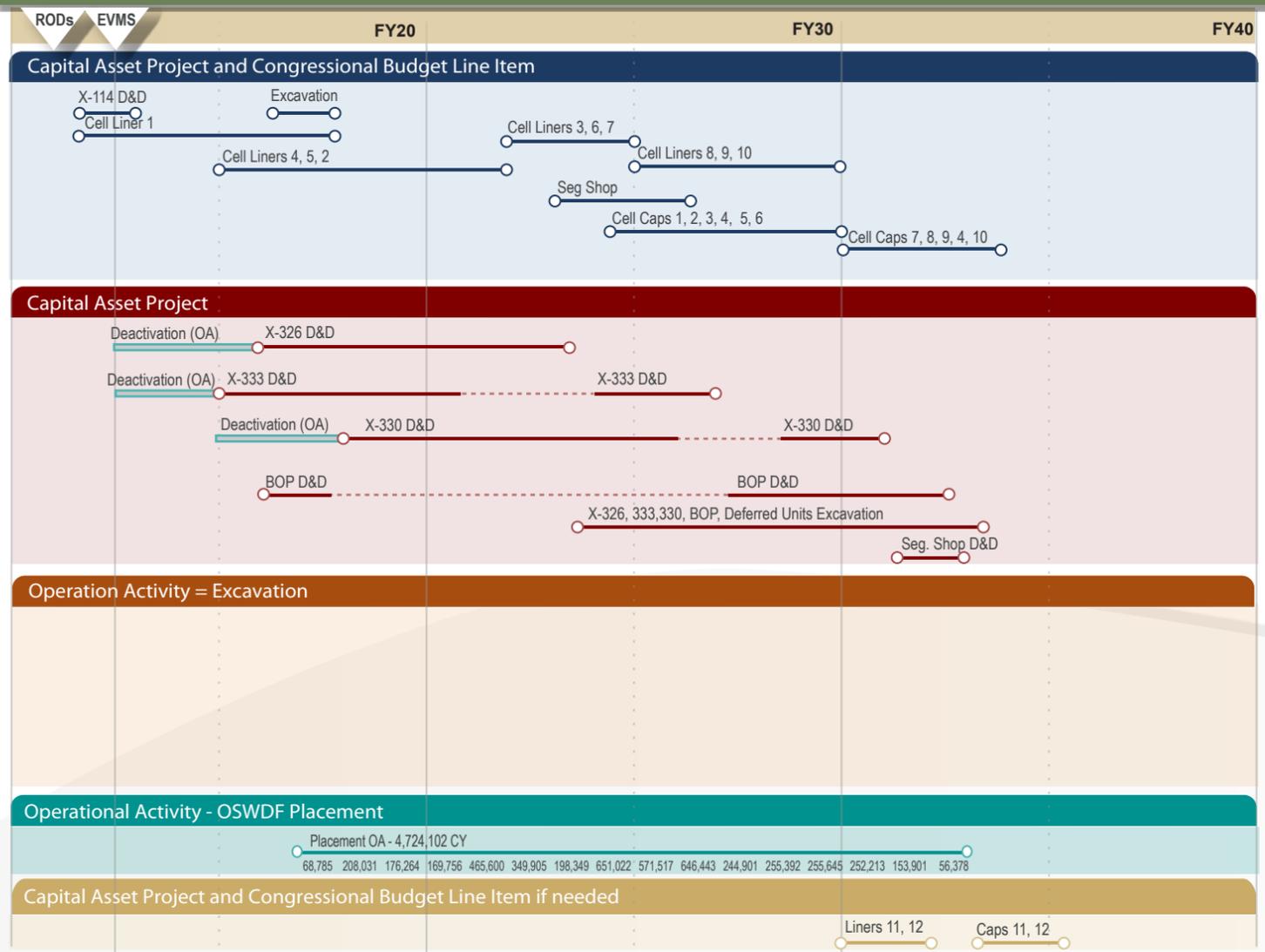


D&D Process





Integrated Capital Asset Projects, Congressional Budget Line Items, and Major Operation Activities



Key Decisions and Risks

Remaining Major Decisions

- WAC approval/CAMU standards (FY15)
- On-site vs. off-site disposal (FY15)
- Final Hazard Analysis for on-site disposal (FY15)
- Final clean-up levels (FY16)
- Level of characterization required for WAC/HA attainment (FY16)
- Nickel recovery/converter segmentation (FY17)

Risks

- WAC will be so restrictive as to disallow disposal of waste as planned
- Extended work suspension due to major site event or incident
- Required infrastructure replacement cost increase due to lifecycle duration
- Final Hazard Analysis or DAS for on-site cell significantly restricts material disposal



Artist's rendering of PORTS site Future State - 2039