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GREG SIMONTON

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D&D/REMEDATION SUBCOMMITTEE

TUESDAY, SEPTEMBER 22, 2015 @ 4:45 P.M.

**THE PURPOSE OF THIS MEETING IS TO PRESENT ON-SITE WASTE DISPOSAL FACILITY
QUALITY ASSURANCE**

AGENDA

- ELECTION FOR SUBCOMMITTEE CHAIR AND VICE CHAIR
- ON-SITE WASTE DISPOSAL FACILITY QUALITY ASSURANCE MEASURES-J.D. CHIOU, FBP
- MISCELLANEOUS

ADJOURN



D&D/REMEDIATION SUBCOMMITTEE

MEETING SUMMARY

SEPTEMBER 22, 2015 • 4:45 P.M.

THE OHIO STATE UNIVERSITY ENDEAVOR CENTER
1862 SHYVILLE ROAD, PIKETON, OH 45661

SSAB Subcommittee Members Present: Al Don Cisco, Martha Cosby, Ronda Kinnamon

SSAB Subcommittee Members Absent: None

Other SSAB Members Present: Carol Caudill, Stan Craft, Judy Vollrath

U.S. Department of Energy (DOE) and contractors: Joel Bradburne, Greg Simonton, Johnny Reising, DOE; Rick Greene, Joe Moore, Restoration Services, Inc. (RSI); Jeff Wagner, Marc Jewett, J.D. Chiou, Jeff Pinkerton, Daryl Howe, Fluor-B&W Portsmouth (FBP)

Liaisons: Dustin Tschudy, Ohio Environmental Protection Agency (EPA); Mike Rubadue, Ohio Department of Health (ODH)

Support Staff: Eric Roberts, Julie Galloway, Cindy Lewis, EHI Consultants (EHI)

Public: None

Cosby opened the meeting:

1. Election for Subcommittee Chair and Vice Chair:

Discussion and vote for Martha Cosby as subcommittee chair and Al Don Cisco as vice chair. Motion passed.

2. On-Site Waste Disposal Facility Quality Assurance Measures presented by J.D. Chiou, FBP:

- **OSWDF Project Mission Need and Objective**
- **OSWDF Siting**
- **OSWDF Siting-Best Available Geological Conditions On Site**
- **OSWDF Site Plan/Facility Concept**
- **OSWDF Liner And Cover Construction Sequences**
- **OSWDF Initial Site Preparation – FY 2016**

- **OSWDF IMTA, ILTS, Haul Road, And Liner 1 Construction-FY2017 to FY2019**
- **OSWDF Project Organization**
- **OSWDF QA/QC Tasks, Roles, And Responsibilities**
- **OSWDF QA/QC Function**
- **OSWDF QA/QC Functional Organization Chart**
- **OSWDF Major QA/QC Related Documents/Plans**
- **OSWDF Construction Major QA/QC Activities**
- **Liner And Cover Construction QA/QC**
- **OSWDF Operations QA/QC-Multiple Check Points**
- **Waste Tracking, Receiving, And Placement QA/QC**
- **OSWDF Major QA/QC Related Deliverables**
- **Regulator And Stakeholders Involvement In QA/QC**

<p>Kinnamon: When the cell is completed, where does the water go?</p> <p>Does DOE pay for the continued monitoring of the cell?</p>	<p>Chiou: The south end goes south and the north end goes to the north then it will connect with the pipeline.</p> <p>Yes, DOE does continue the monitoring of the cell.</p>
<p>Cisco: The waste material is on the bottom.</p> <p>There is only a certain time of the year that you can cut the trees?</p> <p>Why is there a time limit on cutting the trees?</p>	<p>Chiou: The waste is in-between the two piles.</p> <p>Reising: Yes, we are getting ready to do that. We have six months from October – March to cut 200 acres of trees.</p> <p>Because the long-eared, bat lives there and we cannot cut them while they are here.</p>

3. Miscellaneous: None at this time.

Cosby: Meeting adjourned

4. Action Items: None at this time.



PORTS SSAB D&D Subcommittee

On-Site Waste Disposal Facility (OSWDF) QA/QC

September 22, 2015



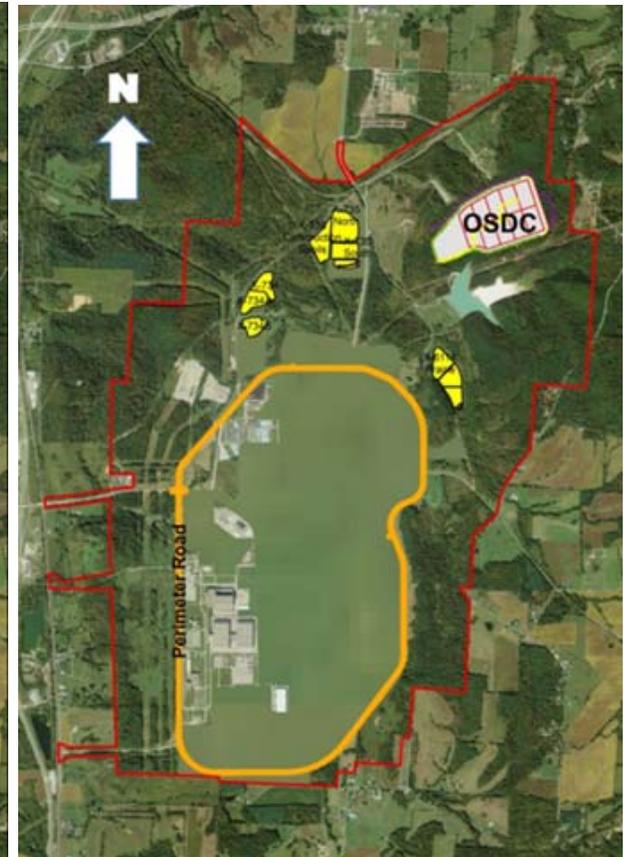
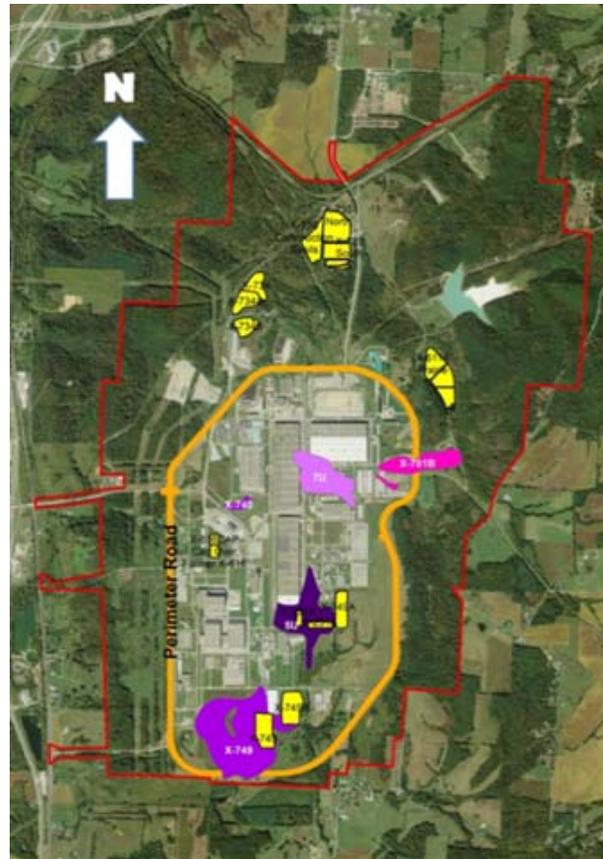
OSWDF Project Mission Need And Objective

Today

Post D&D/Remediation

- **Mission Need:**

A need exists for disposition of the wastes that will be generated through decontamination and decommissioning (D&D) of excess buildings and structures at the Department of Energy (DOE) Portsmouth Gaseous Diffusion Plant (PORTS) site located near Piketon, Ohio, which currently does not have the capability to dispose D&D or environmental remediation wastes on site.



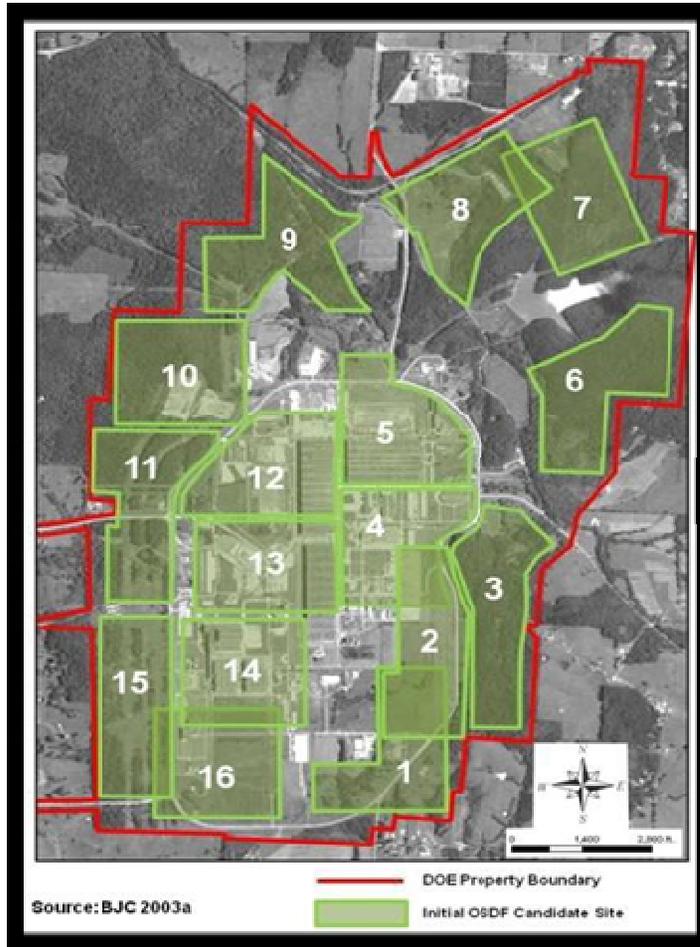
- **Objective:**

Design and construct a multiple-cell, 5-million cubic yard On-Site Waste Disposal Facility (OSWDF) to provide a cost-effective, reliable, and compliant waste disposal method for the final disposition of impacted material (waste) generated from PORTS D&D and other site non-D&D cleanup activities.

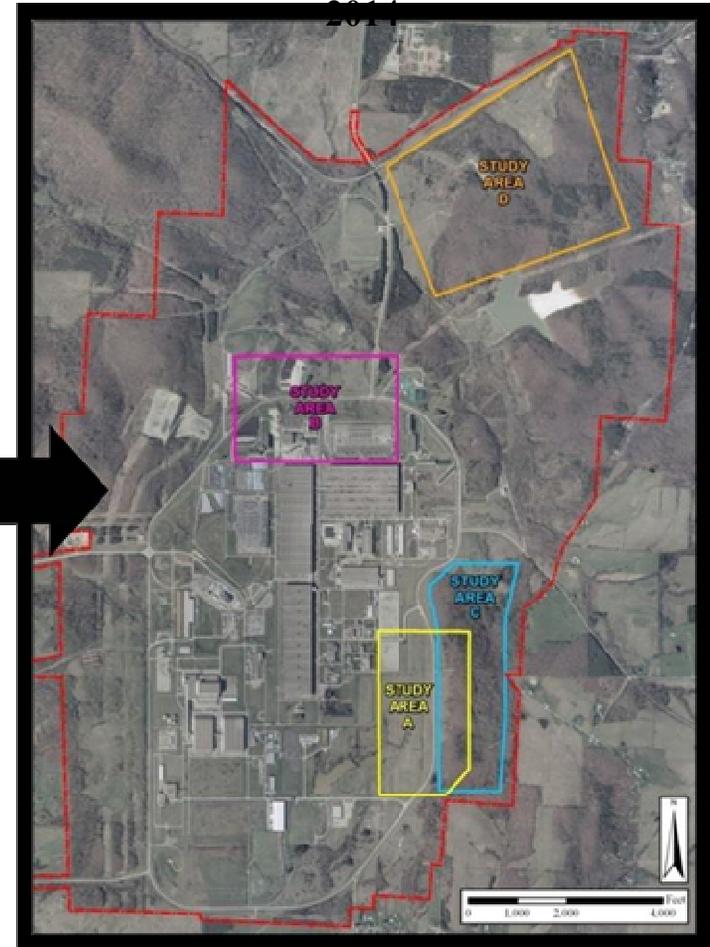


OSWDF Siting

16 Original Locations – 2003



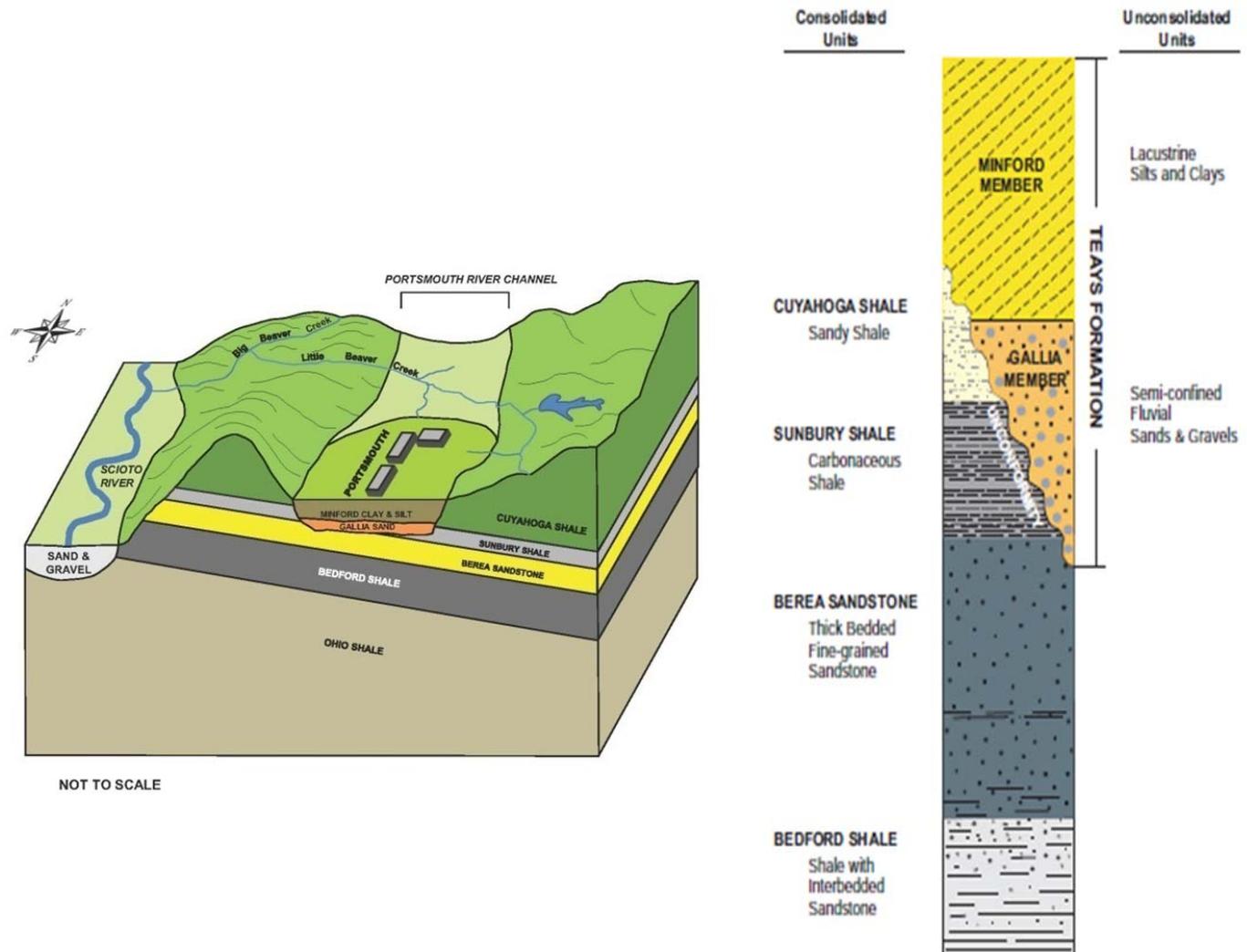
4 Study Areas Evaluated in WD RI/FS – 2011



Study Area D was selected as the best site.



OSWDF Siting - Best Available Geological Conditions On Site





OSWDF

Site Plan/Facility Concept

- ~100 Acres Footprint With 10 Cells And 2 Contingent Cells
- 220 Acres Construction Support Area
- On Competent Bedrock
- Over 100 Feet Above The Upper Most Aquifer
- Over 5 Million Cubic Yards Of Capacity
- Accept LLW, MLLW, TSCA, and Classified Wastes
- Gravity Drain With A Dedicated On-Site Leachate Treatment Plant



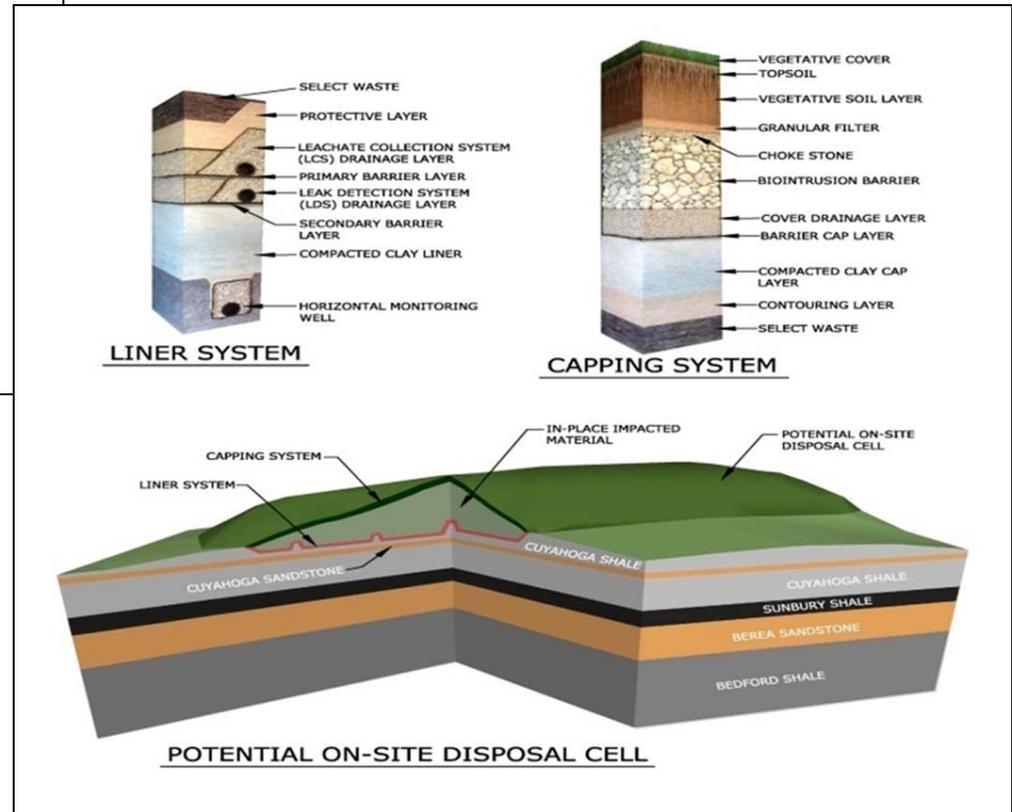
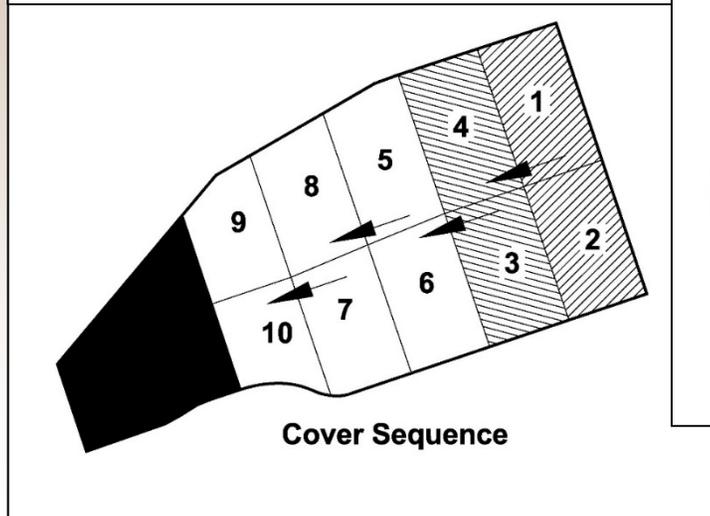
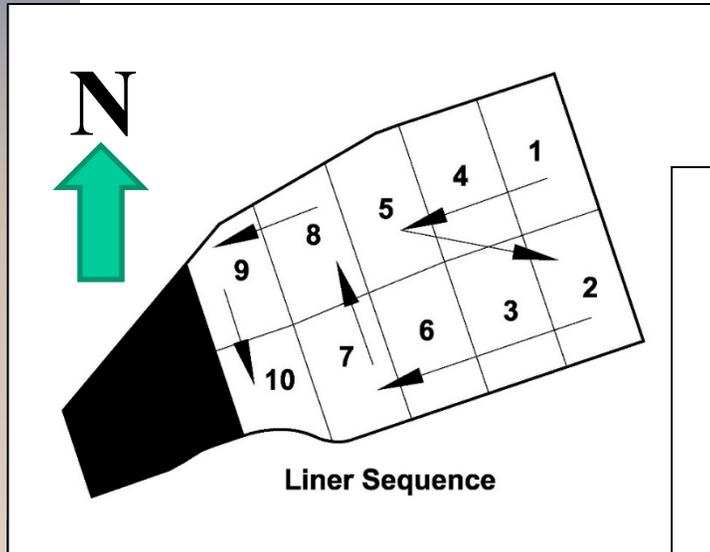
PRELIMINARY ON-SITE DISPOSAL CELL CROSS SECTION
(NO VERTICAL EXAGGERATION)



PRELIMINARY ON-SITE DISPOSAL CELL CROSS SECTION
(3X EXAGGERATION)



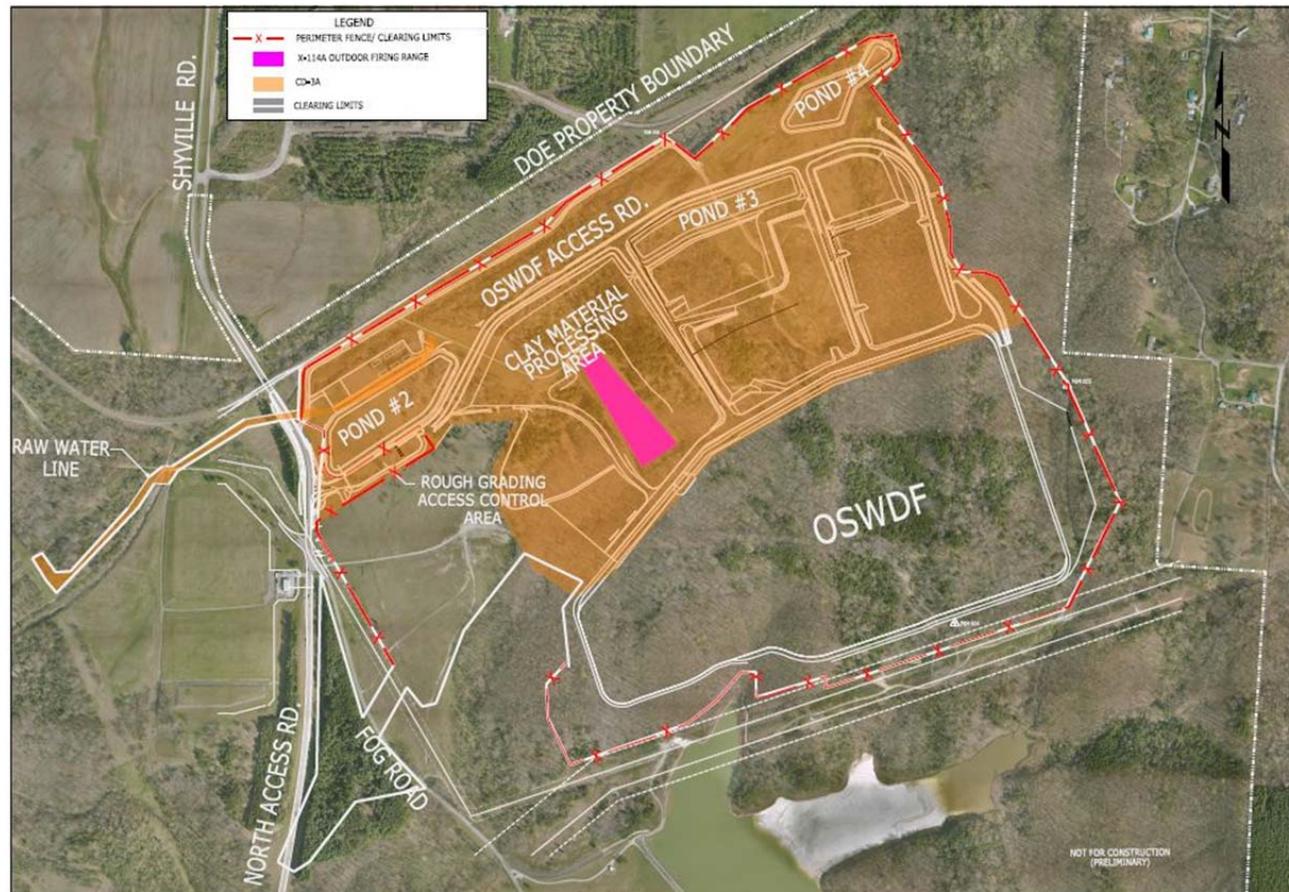
OSWDF Liner And Cover Construction Sequences





OSWDF Initial Site Preparation - FY2016

(Clearing, Access / Erosion Controls, Utilities, Trailers, Rough grading)



- Site (Tree) Clearing
- X-114A Outdoor Firing Range D&D
- Sedimentation/Detention Ponds
- Access Control/Perimeter Fence
- Raw Water Line/Water Fill Station
- Time Lapse/GPS/Air Monitoring Stations
- Grub, Strip and Stockpile Soil
- Cut/Fill/Rough Grading
- Access Roads/Improvements
- Construction Trailers/ Power/Utilities
- Project/Const. Mgmt./ Procurement



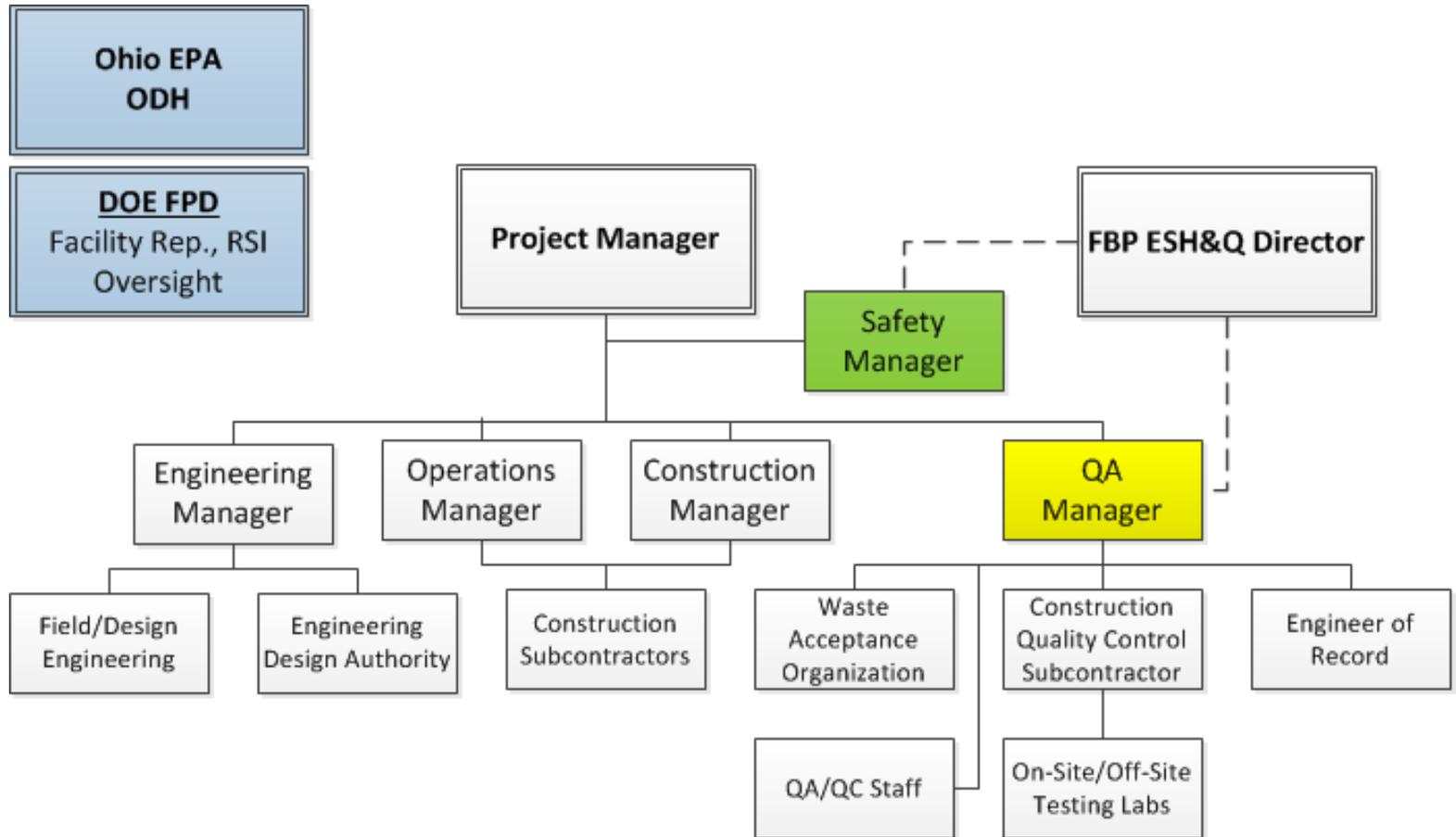
OSWDF IMTA, ILTS, Haul Road, And Liner 1 Construction – FY2017 to FY2019



- Cut-Fill and Rough Grade
- Phase 2 Grubbing / Stockpile Top Soil
- Construct IMTA
- Construct IMTA Haul Road
- Construct Fog Road Bypass/Overpass
- Install Water Filling Station 2, 3, and 4
- Raw Water Line Installation
- Install Permanent Trailers
- Cut-Fill/Rough Cell 1 and North LTS
- Install Interim Leachate Treatment System
- Prepare Clay Processing/Load-out Areas
- Install Construction Power Utilities
- Construct Cell 1 Liner
- IMHR Construction



OSWDF Project Organization

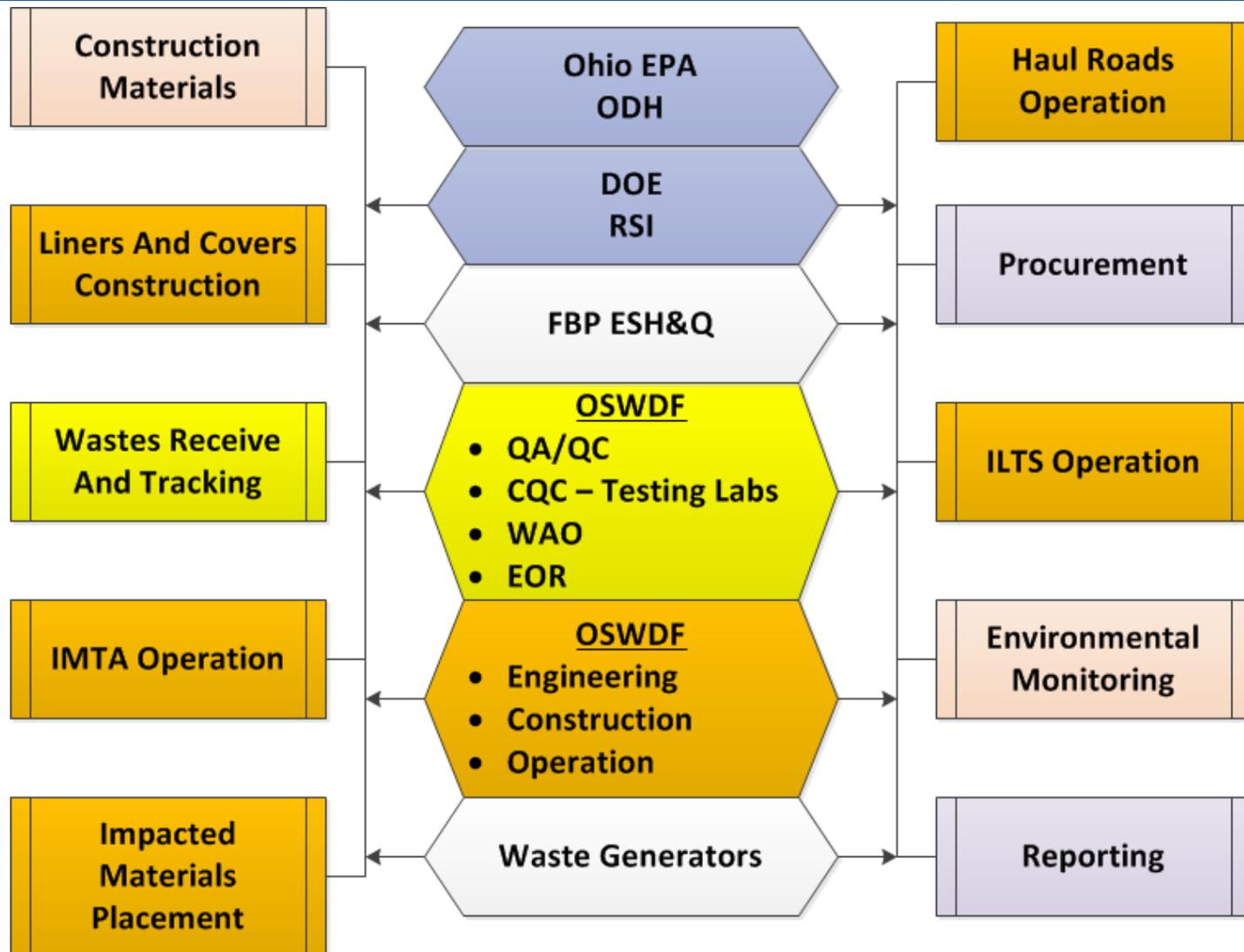


(also see Slide 10)



OSWDF QA/QC

Tasks, Roles, And Responsibilities



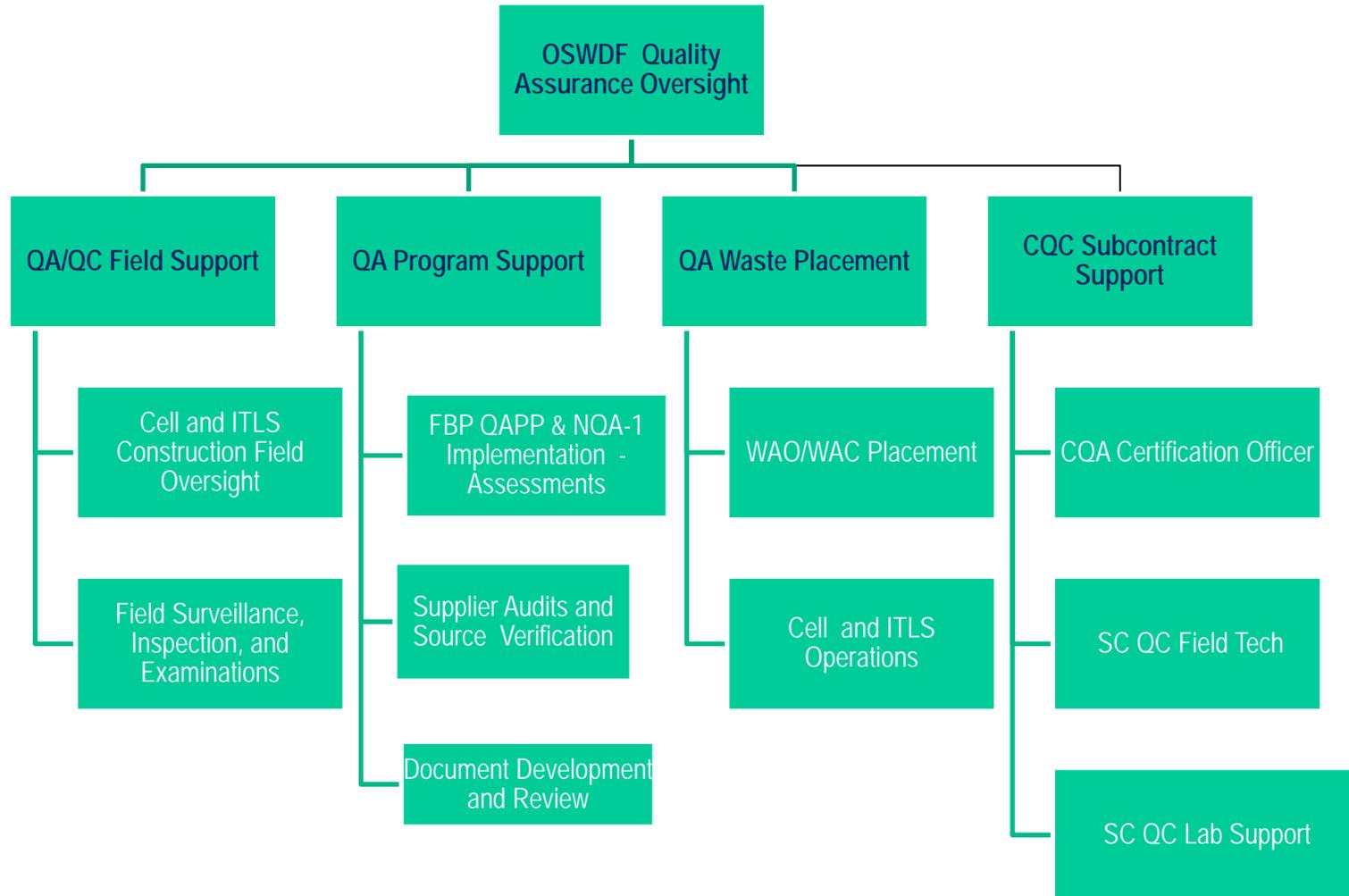


OSWDF QA/QC Function

- In Addition To Continuous **DOE** And **Ohio EPA** Oversight.
- Independent Of **Engineering** And **Construction** Functions.
- Coordinate With **Environmental Protection (EP)** And **Waste Acceptance Organization (WAO)**.
- Will hire a Construction Quality Control (CQC) firm to augment in-house QA/QC staff.
- Subcontract CQC will perform those QC inspections, examinations, tests and verifications specified in the OSWDF Construction Quality Assurance (CQA) Plan and Impacted Material Placement Plan (IMPP) that require special QC qualifications, certifications, and equipment not currently available within FBP QA.
- Subcontract CQC will prepare periodic certification reports to in-house QA/QC and the Engineer Of Record.



OSWDF QA/QC Functional Organization Chart





OSWDF Major QA/QC Related Documents/Plans

- Final Design And Certified For Construction (CFC) Packages
- Performance Standards Verification Plan
 - **Construction Quality Assurance (CQA) Plan**
 - OSWDF Monitoring Plan
- Waste Acceptance Criteria (WAC) Implementation Plan
- Impacted Material Placement Plan (IMPP)
- Closure Plan
- PA Maintenance Plan
- ❖ *Consistent With The ARARs, DOE Orders, And FBP Quality Assurance Program Description (QAPD)*



OSWDF Construction Major QA/QC Activities

Specified In The Construction Quality Assurance (CQA) Plan, Major QA Field Oversight Activities Will Include:

- **Surveillance**
 - ✓ General Construction Activities
 - ✓ Construction Materials (Concrete, Aggregate, etc.) Receiving
 - ✓ Clay Processing And Testing
 - ✓ Liner (Clay, GCL, GML, And Penetration Boxes) Installation
 - ✓ On- and Off-site Testing Laboratories

- **Inspections**
 - ✓ Implement Quality Inspection Plans (QIPs) for all Civil, Electrical, Mechanical, Manufacturing, and Welding Works
 - ✓ Inspect Implementation Of Monitoring Plan (Surface Water, Erosion Control, Fugitive Dust, And Groundwater)

- **Examinations**
 - ✓ Examine Pressure Testing Data for Pipes and Tanks
 - ✓ Examine Clay Compaction Test And Survey Data
 - ✓ Examine HDPE Fusion And Extrusion Welds



Liner And Cover Construction QA/QC



6319-D5107



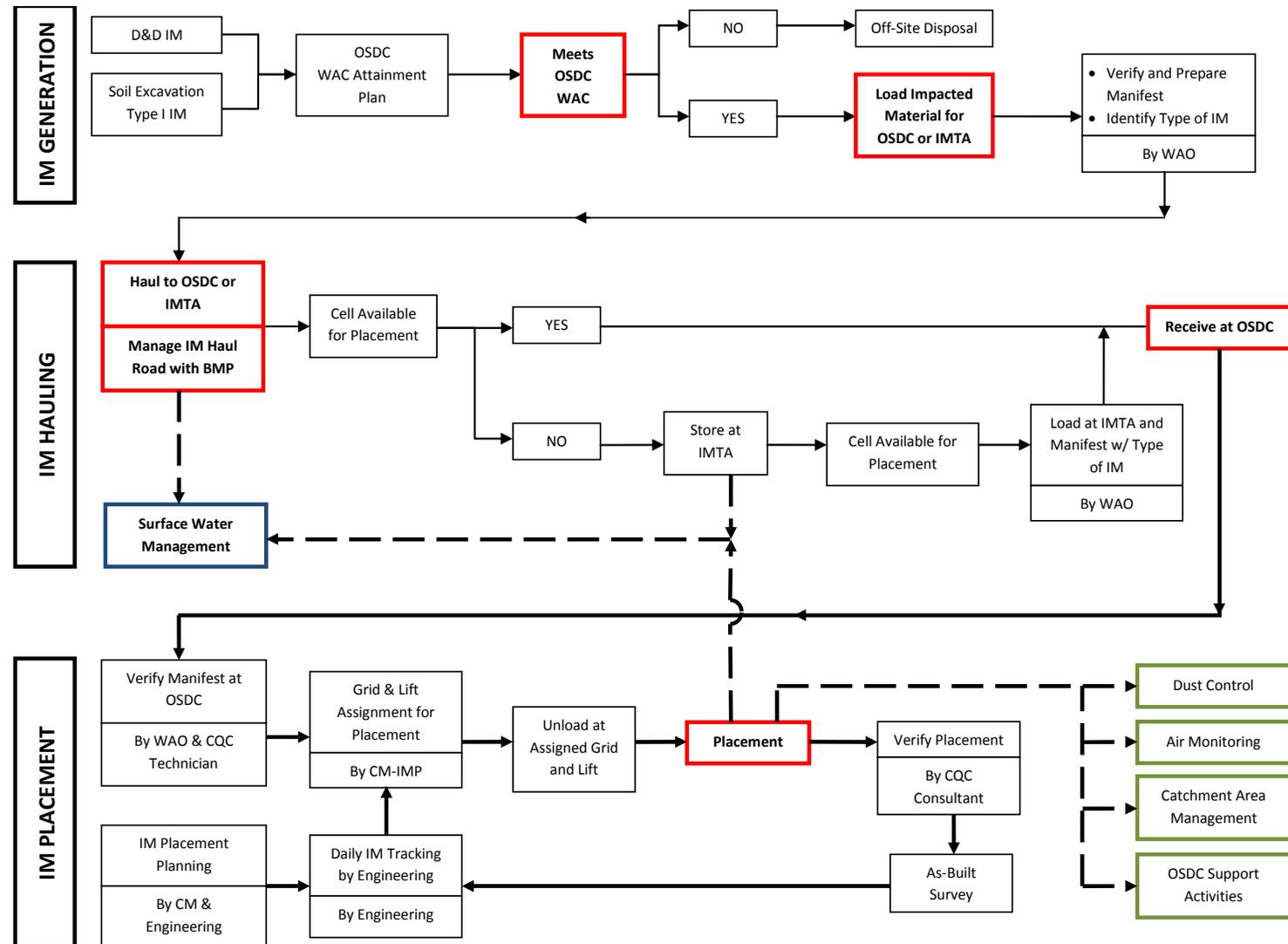
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OSWDF Operations QA/QC - Multiple Check Points





Waste Tracking, Receiving, And Placement QA/QC





OSWDF Major QA/QC Related Deliverables

- Surveillance, Inspection, And Assessment Reports
- CQC Reports
- DCN Log
- Liner- And Cover-Specific Certification Reports
- WAO Waste Profiles And Tracking Reports
- Annual Construction And Operation Reports
- Quarterly And Annual Monitoring Reports
- DOE Order 435.1 PA Annual Report



Regulator And Stakeholders Involvement In QA/QC



8186



8189-D0047