



U.S. DEPARTMENT OF
ENERGY

OFFICE OF
**ENVIRONMENTAL
MANAGEMENT**

D Area Ash Project

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Facilities Disposition & Site Remediation Committee

Purpose

To satisfy the 2014 CAB Facilities Disposition & Site Remediation Committee's request for a presentation on the D Area Ash Project by providing an overview of the planned remediation activities.

Acronyms

FFA – Federal Facility Agreement

GCL – Geosynthetic Clay Layer

GDL – Geosynthetic Drainage Layer

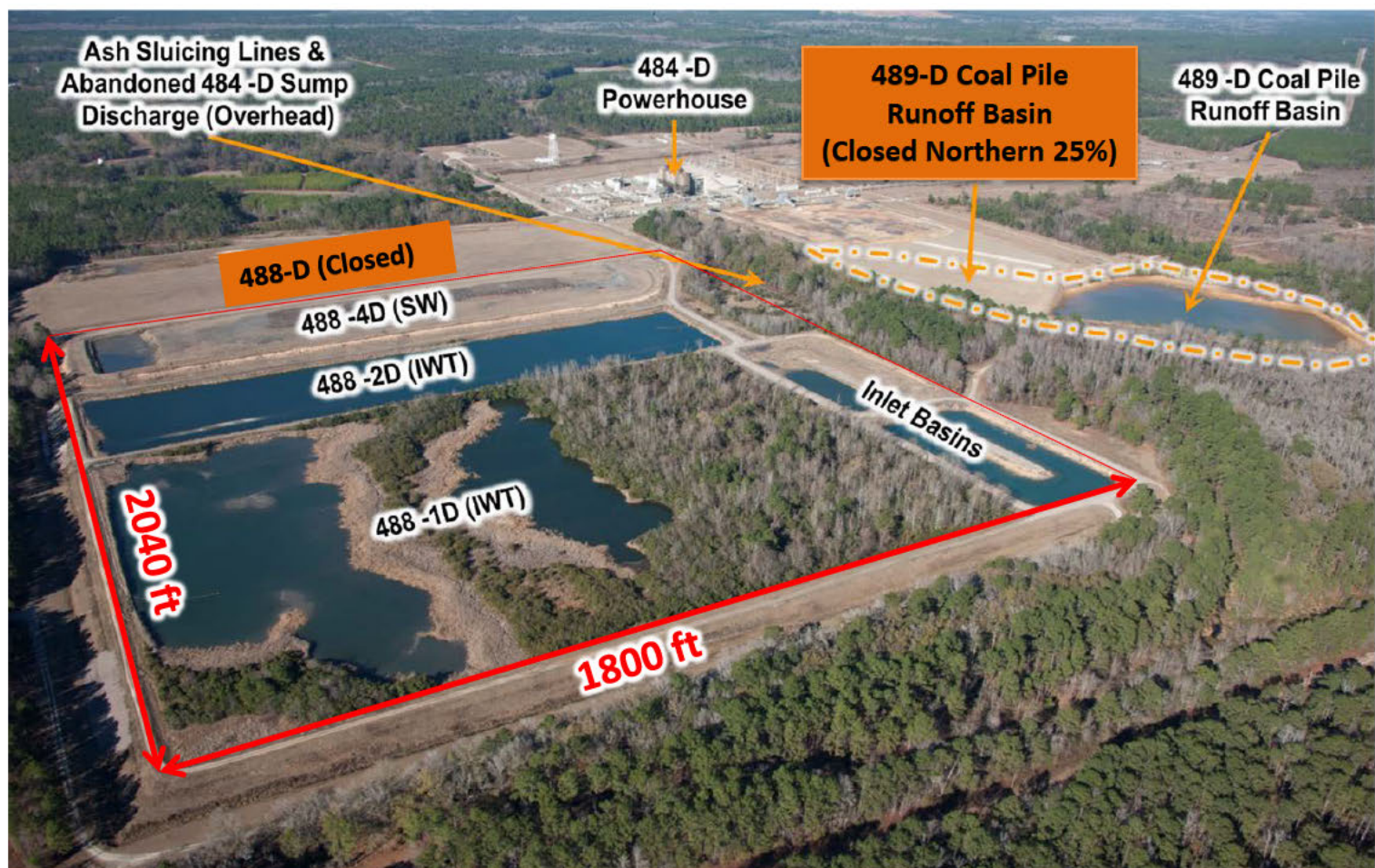
IWT – Industrial Waste Water Permit

SCDHEC – South Carolina Department of Health & Environmental Control

SW – Solid Waste Landfill Permit

USEPA – United States Environmental Protection Agency – Region 4

D Area Ash Basins & Landfill



- D Area Ash Basins (488-2D & -1D) & Landfill (488-4D) supported the operations of the powerhouse (shutdown April 2012):
 - Ash basins are permitted by Industrial Waste Water and Construction Permit (IWT)
 - Ash landfill is permitted under Class Two Solid Waste Landfill permit
 - Permits require closure 180 days after powerhouse shutdown
- D Area Coal Pile Runoff Basin (489-D) partially closed under American Recovery & Reinvestment Act (2011):
- In 2011, USEPA and SCDHEC agreed to close the basins & landfill under Federal Facility Agreement (FFA):
 - DOE led negotiations to allow closure flexibility to meet potential budget forecast
 - Allows closure to occur over 5 years vs 6 months

D Area Ash Project

- **Closure of the landfill and basins will be implemented through a series of removal actions and early final actions to accommodate the FFA milestone schedule.**
- **D Area Ash Project includes:**
 - Dewatering and Clean Closure of the 488-2D Ash Basin; to remain open as a detention structure
 - Geosynthetic Cap Installation over the 488-4D Ash Landfill
 - Geosynthetic Cap Installation over the east end of the 488-1D Ash Basin & the west end will remain open as a detention structure
 - Clean Closure of the remaining portion of the 489-D Coal Pile Runoff Basin

D Area Ash Project

D Area Ash Project Material Requirements

- **Soil - 277, 000 Cubic Yards**

Neat/Compacted Soil to be brought into project site. Includes top soil and fill material for covers and berms. Assuming 13 cubic yards per load of loose materials, this equates to 25,570 truckloads.

- **Material to be Moved and/or Consolidated - 248,000 Cubic Yards**

Ash/Contaminated Soil to be consolidated and/or moved within the project site. Assuming 13 cubic yards per load of loose material this equates to 22,900 truck loads.

- **Geosynthetic Material - 46.5 Acres/2.02 Million Square Feet**

Includes both the geosynthetic clay liner and geosynthetic clay layer.

D Area Ash Project

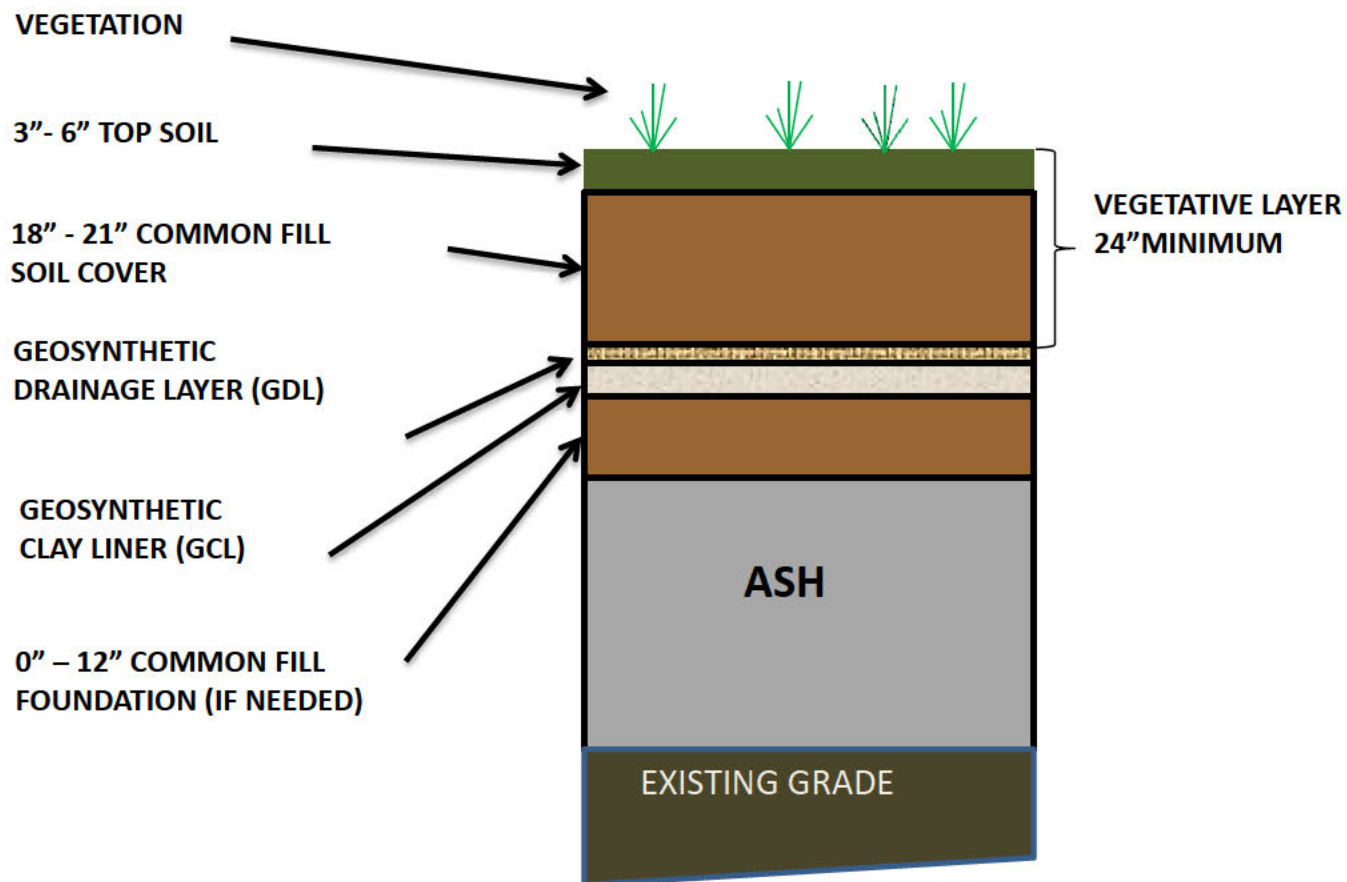
- **Estimated Cost: \$79 Million**
- **FFA Milestone for Removal Action Start: October 1, 2014**
 - August 2014 dewatering 488-2D Ash Basin began
 - September 2014 removal action start with sluice line removal/well abandonment
- **Construction Complete: 2019**

D Area Ash Project



**Typical Installation of Geosynthetic Cover Bottom to Top:
Foundation, Geosynthetic Clay Layer and Geosynthetic Drainage layer, Soil Cover**

D Area Ash Project



Typical Cover System

Summary

- D Area Closure Activities will have an early start in August 2014 (FFA Milestone is October 1, 2014)
- Closure Activities include geosynthetic caps and clean closure of facilities
- Construction Complete is scheduled for 2019