## Virginia and Coal Ash Disposal in Ponds and Landfills

## Summary:1

Plant	Operator	Site	County
Clinch River	Appalachian Power Co	2 ponds/landfill*	Russell
Glen Lyn Power Station	Appalachian Power Co	2 ponds/landfill*	Giles
Bremo Bluff Power Station	Dominion Virginia Power	2 ponds	Fluvanna
Chesapeake Energy Center	Dominion Virginia Power	1 pond	Chesapeake
Chesterfield Power Station	Dominion Virginia Power	2 ponds	Chesterfield
Possum Point Power Station		2 ponds	Dumfries
Clover	Dominion Virginia Power	landfill*	Halifax
Covanta Fairfax Energy	Covanta Energy	data indeterminate	Fairfax
Cogentrix of Richmond	Spruance Operating Services LLC	data indeterminate	Richmond City
Birchwood Power Facility	Birchwood Power Partners LP	data indeterminate	King George
Yorktown	Dominion Virginia Power	landfill*	York
Potomac River	Mirant Corp.	landfill*	Alexandria City
Cogentrix Hopewell (James River Cogeneration Co.)	Cogentrix Energy	data indeterminate	Hopewell City
Cogentrix Virginia Leasing Corp. (Portsmouth)	Cogentrix Energy	data indeterminate	Portsmouth City
West Point Mill	Smurfit-Stone Corp.	landfill*	King William

<sup>\*</sup>indicates one or more coal ash landfills.<sup>2</sup>

*Amount of coal ash generated per year*: Over 2.4 million tons. VA ranks 16<sup>th</sup> in the country for coal ash generation.<sup>3</sup>

The U.S. EPA has not yet gathered information about coal ash disposal in landfills, so a detailed breakdown is not yet available. However, according to a 2007 EPA risk assessment, one coal ash site at the Possum Point facility is unlined with no leachate collection system and no groundwater monitoring.<sup>4</sup>

## Information on Virginia Coal Ash Ponds

Number of Coal Ash Ponds: 11 ponds at 6 plants.<sup>5</sup>

<sup>&</sup>lt;sup>1</sup> United States Environmental Protection Agency (U.S. EPA). Database of coal combustion waste surface impoundments (2009). Information collected by EPA from industry responses to Information Collection Request letters issued to the companies on March 9, 2009.

<sup>&</sup>lt;sup>2</sup> U.S. Department of Energy's Energy Information Administration, Form EIA-767, Annual Steam-Electric Plant Operation and Design Data. 2005.

<sup>&</sup>lt;sup>3</sup> U.S. EPA and United States Department of Energy (U.S. DOE). *Coal Combustion Waste Management at Landfills and Surface Impoundments*, 1994-2004 (August 2006).

<sup>&</sup>lt;sup>4</sup> RTI International. *Human and Ecological Risk Assessment of Coal Combustion Wastes, Draft* (August 6, 2007), prepared for the US Environmental Protection Agency.

<sup>&</sup>lt;sup>5</sup> U.S. EPA. Database of coal combustion waste surface impoundments (2009).

*Pond Ratings*: None of the ponds in VA were rated as "high" or "significant" hazards in case of structural failure.<sup>6</sup> However, contaminants may seep out of coal ash ponds even without a catastrophic failure. Seven of the ponds in VA are over 40 years old.<sup>7</sup> Their age makes it unlikely that they have safeguards like liners and leachate collection systems to prevent water pollution.

*Capacity and releases*: According to the EPA surface impoundment database, the 11 ponds in VA have the capacity to store approximately 41 million cubic yards of coal ash and cover an area of 672 acres. The EPA database notes that an ash pond at the Chesterfield Power Station, which dates back to 1964, experienced an unusual discharge in 2005.

*Damage cases*: The Possum Point Power Station is listed as a "proven damage case" in EPA's 2007 *Coal Combustion Waste Damage Case Assessments* due to cadmium and nickel contamination of groundwater attributed to oil combustion waste. Coal ash was also dumped at the unlined pond.<sup>8, 9</sup>

<sup>6</sup> *Id.* 

<sup>&</sup>lt;sup>7</sup> *Id.* 

<sup>&</sup>lt;sup>8</sup> U.S. EPA. Coal Combustion Waste Damage Case Assessments (July 9, 2007).

<sup>&</sup>lt;sup>9</sup> The Chisman Creek coal and petroleum ash landfill that served the Yorktown Power Station has also been listed as a damage case and Superfund site for vanadium and selenium pollution of residential wells.