



## Plant Washington Solid Materials Handling

**Overview:** Power4Georgians is committed to developing a modern coal energy facility that will not only meet the rigorous environmental standards of the Georgia Environmental Protection Division (EPD) and applicable federal laws, but will be fully protective of the environment.

The solid materials handling facility at Plant Washington has been designed to be one of the most advanced systems for the management of power generation byproducts of any coal-fired power plant in the United States. The facility is very similar in design and construction to a Sub-title D landfill, and is a highly engineered facility with an impermeable liner, leachate collection system, and impermeable cover that has proven very effective in the long-term protection of human health and the environment.

Plant Washington will produce reusable materials including bottom ash, fly ash and gypsum as part of its normal operations. These materials will be available for future use in drywall, road building materials, aggregate for concrete mixtures and other beneficial applications. The materials will be low in moisture content during placement and storage. To facilitate recycling, the ash and gypsum will be managed in separate storage "cells." Plant Washington will be able to store up to a 30 year supply of both ash and gypsum on site. **Plant Washington will not have a slurry pond storage system.**

**Dry Storage** - Dry storage is a superior method of solid materials management. By managing the ash and gypsum as dewatered materials in separate dry storage areas, these materials will be secured against introduction into the environment and will be readily available for recycling.

- Ash from the plant will be dewatered at the plant site and then placed into a fully lined storage area.
- The ash storage facility will cover a footprint of approximately 150 acres, though only a very small percentage of that acreage will be in use as a working area at any given time.
- Improvements to the Solid Materials Handling strategy since issuance of the draft permit for Plant Washington in August 2009 have been made to further enhance environmental protection measures.
- Gypsum, created by one of the emissions control systems, will be dewatered onsite and then placed into a fully lined storage area of approximately 300 acres.

**Stormwater Management** - All solid materials handling-related stormwater runoff (contact and non-contact) will be collected in lined basins and used on site.

- There will be zero discharge of this stormwater from the plant site.
- Storage basins are engineered up to the levels of a 500-year, 24-hour event
- Plant Washington will have emergency overflow basins to ensure zero discharge of stormwater from the solid materials handling facility in a flood event that exceeds even the 500-year levels
- As an added precaution to ensure the protection of groundwater, groundwater monitoring wells will be installed around both the dry ash and dry gypsum storage areas as part of a sophisticated detection system to prevent any potential groundwater contamination. If contamination is detected, a groundwater interception system will be installed to prevent the contamination from leaving the site.

For more information about Plant Washington, visit: [www.Power4Georgians.com](http://www.Power4Georgians.com)

For more information about the Plant Washington Permits, visit:

<http://www.georgiaair.org/airpermit/html/permits/psd/dockets/plantwashington/index.htm>