Georgia Power is permanently closing its 29 ash ponds at 11 coal-fired power plants across the state and has committed that all ash ponds will stop receiving coal ash within three years. Additionally, the company is completely removing the ash from 19 ponds located adjacent to lakes or rivers where proven engineering methods designed to enhance the protection of groundwater around the closed pond may not be feasible. The ash from these ponds will either be relocated to a permitted landfill, consolidated with other closing ash ponds or recycled for beneficial use. More than 85 percent of the coalash Georgia Power produces today is recycled for various uses such as Portland cement, concrete and cinder blocks. The company's remaining 10 ash ponds will be closed in place using proven engineering methods and technologies that are designed to enhance protection of groundwater.

Environment – A Balanced Approach

At Georgia Power, we strive to provide our customers with reliable and affordable electricity while minimizing the company's environmental impact. To meet the needs of 2.5 million customers, Georgia Power has created a diverse energy portfolio that delivers sustainable power.

At Georgia Power, compliance with federal and state environmental requirements is only the beginning of our environmental commitment. In addition to compliance, we emphasize conservation and recycling, and help our customers make efficient use of energy. We challenge ourselves every day to preserve the environment and strengthen the communities in which we live, work and serve.

Cornerstones of Our Commitment

Three principles serve as the cornerstones of our environmental commitment:

Solutions

Our environmental record is a top priority and we are taking steps in the communities we serve to improve the environment, including investing more than \$5 billion in environmental controls at our power plants in Georgia.

Balance

We strive to maintain a balance that furthers environmental stewardship while providing for growing energy needs and the economy.

Stewardship

Providing environmental leadership is fundamental to Georgia Power's vision and our commitment to create sustainable change.

For more information visit www.georgiapower.com/environment





Plant Branch

Ash pond closure and dewatering

ASH POND DEWATERING

Typical Wastewater Treatment System

6. Filtration

particles.

Typical Wastewater Treatment System

This diagram depicts the typical wastewater treatment process that's being implemented at Georgia Power facilities. These systems are being utilized for enhanced treatment of wastewater during the dewatering process.

Ash Pond Closure and Dewatering

As Georgia Power closes its ash ponds, water in the ponds must be removed so the ash pond can either be excavated or closed using proven engineering methods and technologies. In some cases, the water may be reused in plant processes, while in other cases, it will be treated before being discharged. This treatment and removal activity is known as "dewatering." Throughout the dewatering process, the company will comply with its National Pollutant Discharge Elimination System (NPDES) permits, as well as the state Coal Combustion Residuals (CCR) Rule.

Before Georgia Power dewaters any ash pond, the company provides advance notice to the Georgia Environmental Protection Division (EPD) Additionally, the company prepares and submits an "ash pond dewatering plan" to EPD for its approval. That plan identifies the enhanced water treatment system, controls and monitoring that will be used during the process to ensure that the water discharged is protective of water quality standards.

4. Clarification

Particles are removed through clarification. This is a mechanical system that slows the water down and enables settling of particles in the wastewater.

3. Flocculent Addition

Wastewater treatment chemicals are added, helping particles group together to improve treatment performance.

> 2. pH Adjustment pH adjustment is performed to neutralize the incoming wastewater and facilitate improved

. Equalization Flow equalization is performed to control water volume being sent to the treatment system. This equalized flow enables consistent and efficient system operation.

ASH POND

treatment.

8. Quality Control Any water not meeting the required standards is recycled back to the ash pond for additional treatment.

RIVER

Physical filtration may be performed

with sand and cartridge filters. These

filters may be installed sequentially to provide removal of any remaining

Ash Pond Dewatering – Planning & Processes

The dewatering plan submitted to the Georgia EPD describes the additional safeguards and enhanced wastewater treatment system (illustrated above) that Georgia Power will put in place to ensure the facility's NPDES permit effluent limitations continue to be met and that the receiving waterbody continues to be protected

Solids Removal

Solids will be removed and dis-

posed of at a permitted facility.

during the ash pond dewatering process. The plan provides an overview of the wastewater treatment system; a narrative description of the key processes; details of the major process control measurements being performed; and a plan for performing additional effluent monitoring.

Monitoring Continuous effluent monitoring is performed to ensure that the discharge is protective of public health and the environment.

Plant Branch Monthly Dewatering Results SAMPLE TABLE

Prepared by:

Parameter	Units	Effluent Concentration		Permit Limits		
		Minimum	Maximum	Daily Avg	Daily Max	
Flow	MGD	***	***	•••	•••	
рН	SU	***	•••	6.0 - 9.0		
Total Suspended Solids	mg/L	***	***	30.0	100.0	
Oil and Grease	mg/L	***	***	15.0	20.0	

Parameter	Units	Measured Effluent Concentration		
		DATE	DATE	
Turbidity	mg/L	***		
Total Dissolved Solids	mg/L	***		
Total Residual Chlorine	mg/L		••••	
Ammonia	mg/L	***	***	
Total Kjeldahl Nitrogen	mg/L			
Nitrate-Nitrite	mg/L		•••	
Organic Nitrogen	mg/L	***	***	
Phosphorus	mg/L	***	***	
Ortho-Phosphorus	mg/L	***	***	
Hardness	mg/L	•••	•••	

Parameter	Units	Effluent Concentration ³		Calculated River Value ³		Water Quality Standard ⁴
		DATE	DATE	DATE	DATE	Standard
Arsenic	μg/L	***	***	***	***	340
Cadmium	μg/L	***	***	***	***	1
Chromium ⁵	μg/L	***	***	***	***	16
Copper	μg/L	***	***	***	***	7
Lead	μg/L	***	***	***	***	30
Nickel	μg/L	***	***	***	***	260
Selenium ⁶	μg/L	***	***	***	***	5
Zinc	μg/L	***	***	***	***	65
Mercury	ng/L	***	***	***	***	1400

Tetra Tech verifies th ND = Not Detected.

Numeric water quality criterion shown is for Hexavalent Chromium

= Not Applicable

Georgia Power will sample and test the treated water for a broad range of substances, including metals, in accordance with its EPD-approved dewatering plan. Independent third-party contractors will conduct the sampling work. All samples will be analyzed by accredited independent laboratories for 20 parameters (see sample table above). Dewatering

Georgia

Power

plans and all sampling data will be reported to the Georgia EPD. Data tables summarizing results of individual rounds of testing at Plant Branch will also be posted on Georgia Power's website at www.georgiapower.com/environment with detailed footnotes that clearly explain the data