

## 6. CLOSURE NARRATIVE

---

Solid Waste Handling Permit 038-014D(LI) was issued by the Georgia Environmental Protection Division (EPD) for the Plant Yates CCR Landfill Gypsum Stack (Gypsum Stack), on February 14, 1992. The Gypsum Stack is an Inactive CCR Landfill as defined in 391-3-4-.10(2)(a)3 of the State CCR Rule in that it no longer received CCR or other wastes on or after October 19, 2015. The Gypsum Stack was closed by removal of all CCR and liner associate structures and materials.

Georgia Power initiated closure of the Gypsum Stack on June 23, 2015, which consisted of complete removal of the CCR (gypsum material) for beneficial reuse and/or off-site disposal. An estimated 81,160 cubic yards of material was removed from the Gypsum Stack, including the protective cover soil and six-inch over-excavation of soil beneath the geomembrane (compacted clay layer). Approximately 21,159 cubic yards (equivalent to approximately 29,993 tons) of gypsum was sold for beneficial agricultural purposes. The remaining amount of gypsum, protective cover, and over-excavation soil, approximately 60,001 cubic yards, was consolidated on-site in the AMA. No material was transported off-site for disposal. The CCR removal was completed on October 11, 2016 and closure construction was substantially completed with topsoil and vegetation on October 21, 2016. The Gypsum Stack closure by removal activities were documented in the Closure Certification Report, Closure of the Private Industrial Solid Waste Landfill Gypsum Stack, dated January 19, 2017 signed and sealed by James C. Pegues, P.E which was submitted to Georgia EPD. A summary of the general removal activities is provided below.

After removal of all gypsum, the leachate collection system and the HDPE liner, the remaining clay liner was fine graded to remove any remaining visible gypsum resulting from spillage during the gypsum, liner and leachate system removal process. The surface of the remaining clay liner was then visually inspected by Southern Company Services (SCS) Technical Services Civil Design personnel, representatives of Georgia Power Environmental Affairs and Brantley Engineering LLC, Georgia (Construction Quality Assurance contractor). Following visual confirmation that all gypsum and associated structures and materials had been removed, the area was documented by photographs and a topographic survey. Following completion of the topographic survey, an additional 6 inches of subgrade, which was free from any visible gypsum and associated materials, was removed. Upon completing the 6-inch excavation, additional photographs were taken and a subsequent topographic survey performed.

Following removal of the gypsum, associated structures and materials, and the additional 6-inches of subgrade, the area was backfilled and graded to the planned grades shown on the drawings prepared by SCS Technical Services Civil Design. The filled and graded area was then seeded and stabilized in accordance with the erosion and sedimentation control plan for the closure of the landfill. There are no outstanding construction costs associated with the closure of the Gypsum Stack. The Gypsum Stack is not subject to the post closure care requirements because it was closed by removal of all CCR.

GPC shall monitor groundwater semi-annually pursuant to the requirements defined in the Groundwater Monitoring Plan included in the permit. Since the Gypsum Stack was initially constructed with a geosynthetic liner, GPC proposes to monitor groundwater for a period of five (5) years following acknowledgement of the Gypsum Stack Closure Certification Report to confirm that groundwater constituent concentrations are not detected at statistically significant levels above the groundwater protection standards established in State CCR Rule 391-3-4-.10(6)(b), which reference the constituents in the Federal CCR Rule Subpart D, Appendix III and IV. A demonstration certified by a Qualified Groundwater

Scientist will be submitted to EPD for approval documenting that groundwater constituent concentrations are not detected at statistically significant levels above the groundwater protection standards established in Rule 391-3-4-.10(6)(b) for constituents listed in Appendix IV. GPC may make such demonstration at any point after constituents no longer exceed groundwater protection standards. Evaluation criteria may include but are not limited to, additional sampling, analysis, calculations, and/or modeling to demonstrate compliance with 391-3-4-.10(7)(b) as determined by the Qualified Groundwater Scientist and approved by EPD.

Closure of the CCR unit may be recognized by EPD upon the completion of 5-years of groundwater monitoring after removal of all CCR waste, if constituents do not statistically exceed groundwater protection standards in Appendix IV, and the submission of a demonstration made by a Qualified Groundwater Scientist that the groundwater monitoring data is in compliance with 391-3-4-.10(7)(b).

In accordance with the Georgia Water Well Standards Act (O.C.G.A. § 12-5-120), at least once every five years, the owner of the property on which a monitoring well is constructed shall have the monitoring well(s) inspected by a professional engineer or professional geologist, who shall direct appropriate remedial corrective work to be performed if the well does not conform to standards. Well inspection records and records of remedial corrective work are subject to review by EPD. Additionally, as part of the closure plan, the cost estimate based upon current year cost for the well inspections must be provided for as part of the cost calculations for the groundwater monitoring period.

The post CCR removal groundwater monitoring cost is provided in Table 1. In compliance with applicable securities laws and regulations, unredacted cost estimates for post CCR removal groundwater monitoring will be provided to EPD under separate cover. The costs include all items necessary for a third-party to complete the post CCR removal groundwater monitoring requirements in accordance with the Groundwater Monitoring Plan included herein. The cost estimates provided to EPD are based on an area of 16.08 acres and 2021 unit costs and will be adjusted annually for inflation. GPC will provide a demonstration of financial assurance upon approval of the cost estimates by EPD.

Closure application documents will be maintained in the facility's operating records until post CCR removal monitoring activities are completed.

**TABLE 1**

**Gypsum Landfill Post Removal Cost Estimate**

Item Description	Quantity	Unit	Unit Cost	Cost
<b>Post Removal Cost</b>				
Maintenance - Grass <sup>1</sup>				
Dike & Road Maintenance				
<b>Environmental Monitoring</b>				
Groundwater Monitoring & Reporting				
Sampling				
Reporting				
Laboratory Analysis				
Groundwater Well Maintenance and Abandonment				
Well Maintenance				
Well Abandonment				
			Subtotal	
			Contingency	
			<b>5 Year Post Removal Cost Estimate</b>	

Notes:

1. Maintenance - Grass includes cost for mowing the site five times per year.
2. Post-closure care will extend to August 2024. Sampling costs assumes 7 wells (7 currently permitted and sampled); Assumes semiannual reporting through August 2024 or 5 reports.
3. Sampling and laboratory analysis assumes 7 wells + 3 QA/QC = 10 samples collected 2 times/year through August 2024 or 5 sampling events.
4. Assumes all wells (7 total) are abandoned at the conclusion of Post-Closure Care.

