PERIODIC RUN-ON AND RUN-OFF CONTROL PLAN

391-3-4-.10(5) and 40 C.F.R. PART 257.81

PLANT WANSLEY COAL COMBUSTION RESIDUALS (CCR) LANDFILL EXPANSION

GEORGIA POWER COMPANY

The Federal CCR Rule, and, for Existing CCR Landfills where applicable, the Georgia CCR Rule (391-3-4-.10) require the owner or operator of an existing or new CCR landfill or any lateral expansion of a CCR landfill to prepare a run-on and run-off control system plan to document how these control systems have been designed and constructed to meet the applicable requirements of this section of the Rule. *See* 40 C.F.R. § 257.81; Ga. Comp. R. & Regs. r. 391.3-4-.10(5)(a). In addition, the Rules require periodic run-on and run-off control system plans every five years. *See* 40 C.F.R. § 257.81(c)(4); Ga. Comp. R. & Regs. r. 391.3-4-.10(4)(b).

The CCR landfill known as the Plant Wansley Coal Combustion Residuals (CCR) Landfill is located on Plant Wansley property in Heard and Carroll Counties, Carrollton, Georgia. The landfill consists of three existing constructed cells (numbered 1 thru 3), two constructed lined sedimentation ponds, and a constructed lined clear pool pond. The proposed expansion of the landfill includes the addition of Cell 4 located north of Cells 1 and 2 and adjacent Cell 3 creating a contiguous landfill footprint for all four (4) cells. The final cover system of the landfill will be a ClosureTurf® closure system as opposed to the conventional landfill closure system. ClosureTurf® is a patented, three component system comprised of an Agru Super Gripnet®, engineered turf, and sand infill.

Storm water flows used for the development of the run-on and run-off control plan were calculated using the Natural Resources Conservation Service (NRCS) method (also known as the Soil Conservation Service (SCS) method) for a 25-yr, 24-hr storm event. The stormwater detention system has been designed in accordance with the Georgia Soil and Water Conservation Commission requirements and Technical Release 55 (TR55) as well as other local, city, and government codes.

For areas outside of the final closure system (ClosureTurf®), the runoff curve number data was determined using Table 2-2A from the Urban Hydrology for Small Watersheds (TR-55).
The manufacturer of ClosureTurf®, WatershedGeo, has assessed the curve number for the ClosureTurf® system to be between 92 and 95 depending on the storm intensity. The supporting

calculations of this plan assume a curve number of 95 for areas lined with ClosureTurf® to be conservative. The rainfall distribution for Plant Wansley (Type II) was determined from Appendix B from TR-55. Precipitation values were determined from National Oceanic and Atmospheric Administration (NOAA) Atlas 14, Volume 9, Version 2.

The NRCS provided information on the soil characteristics and hydrologic groups present at the site. It was determined that hydrologic group "B" best reflects the characteristics of the soils on site and was used to generate inputs for the calculations. This information was placed into Hydraflow Hydrographs 2022 and used to generate appropriate precipitation curves, runoff curve numbers and storm basin runoff values.

Cells 1-4 of the Plant Wansley CCR Landfill Expansion were designed with perimeter berms and drainage ditches around the cells that prevent stormwater run-on during the peak discharge of a 25-yr, 24-hr storm event from flowing onto the active portion of the landfill. The perimeter berms and drainage ditches also route the stormwater run-off from the landfill through the system of sedimentation/clarifying ponds designed to handle the run-off from a 25-yr, 24-hr storm.

Stormwater runoff from the landfill is collected in a series of side slope tack-on drainage berms along the outer slope of the landfill which conveys the stormwater by gravity to downchute flumes. These downchute flumes convey the stormwater through downchute drop inlets to the perimeter drainage ditches which route the stormwater by gravity to the North and South Sediment Ponds. The North and South sediment ponds are interconnected to the clear pool pond, which is located between the two. Pumps located in the clear pool pond are utilized to send water back to the Plant area before discharging in accordance with the facility's NPDES wastewater permit. Calculations indicate that the existing sediment ponds were properly designed and constructed to handle the stormwater run-off from the expanded landfill for a 25-yr, 24-hr storm event. This plan is supported by appropriate engineering calculations included in Appendix H of the Engineering Report (Stormwater Management System Design Calculations) submitted with the Georgia Environmental Protection Division CCR Landfill Expansion permit application.

The facility is operated subject to and in accordance with § 257.3-3 of EPA's regulations.

I hereby certify that the run-on and run-off control system plan meets the requirements of 40 C.F.R. Part 257.81.

RBL

R. BRANT LANE, P.E.

Licensed State of Georgia P.E. No. 27185

Run-on and Run-off Control System Plan for Landfills:
Calculation Summary

for

Plant Wansley Coal Combustion Residuals (CCR) Landfill Expansion

Prepared by:

Hodges, Harbin, Newberry & Tribble, Inc.

Originator: ______________________ 12/8/25

Ryan S. Willoughby, P.E. Date

Reviewer: ______________________ 12/8/25

R. Brant Lane, P.E. Date

Approval: ______________________ 12/8/25

R. Brant Lane, P.E. Date

1. Purpose of Calculation

The purpose of this calculation is to determine if the existing sedimentation ponds and clear pool pond can sufficiently handle run-on/run-off during a minimum 25-yr, 24-hr storm event per federal stormwater requirements Title 40 CFR Part 257.81 and the Georgia Environmental Protection Division's (EPD) Georgia CCR Rule 391-3-4-.10.

2. Summary of Conclusions

Based on our analysis, the detention pond system is adequate to collect and control the volume of water resulting from a 25-yr, 24-hr storm, as required.

STORM DURATION (yr-24 hr.)	Normal Pool Elev. (FT)	PEAK INFLOW (CFS)	PEAK OUTFLOW (CFS)	PEAK ELEV. (FT)	Freeboard Spillway Crest (FT)	Freeboard Top of Pond (FT)
25 – 1 PUMP	725.50	1,263.91	8.24	735.67	4.69	5.69
25 – NO PUMP	725.50	1,263.91	0	737.57	2.79	3.79

3. Project Narrative

The CCR landfill known as the Plant Wansley Coal Combustion Residuals (CCR) Landfill is located on Plant Wansley property in Heard and Carroll Counties, Carrollton, Georgia. The landfill consists of three existing constructed cells (numbered 1 thru 3), two constructed lined sedimentation ponds, and a constructed lined clear water pond. The proposed expansion of the landfill includes the addition of Cell 4 located north of Cells 1 and 2 and adjacent Cell 3 creating a contiguous landfill footprint for all four (4) cells. The final cover system of the landfill will be a ClosureTurf® closure system as opposed to the conventional landfill closure system. ClosureTurf® is a patented, three component system comprised of an Agru Super Gripnet®, engineered turf, and sand infill.

Cells 1-4 of the Plant Wansley CCR Landfill Expansion were designed with perimeter berms and drainage ditches around the cells that prevent stormwater run-on during the peak discharge of a 25-yr, 24-hr storm event from flowing onto the active portion of the landfill. The perimeter berms and drainage ditches also route the stormwater run-off from the landfill through the system of sedimentation/clarifying ponds designed to handle the run-off from a 25-yr, 24-hr storm.

Stormwater runoff from the landfill is collected in a series of side slope tack-on drainage berms along the outer slope of the landfill which conveys the stormwater by gravity to downchute flumes. These downchute flumes convey the stormwater through downchute drop inlets to the perimeter drainage ditches which route the stormwater by gravity to the North and South Sediment Ponds. The North and South sediment ponds are interconnected to the clear water pond, which is located between the two. Pumps located in the clear water pond are utilized to send water back to the Plant area before discharging in accordance with the facility's NPDES wastewater permit. Calculations indicate that the existing sediment ponds are properly designed and constructed to handle the stormwater run-off from the expanded landfill for a 25-yr, 24-hr storm event. This plan is supported by appropriate engineering calculations included in Appendix H of the Engineering Report (Stormwater Management System Design Calculations) submitted with the Georgia Environmental Protection Division CCR Landfill Expansion permit.

4. Methodology

Storm water flows used for the development of the run-on and run-off control plan were calculated using the Natural Resources Conservation Service (NRCS) method (also known as the Soil Conservation Service (SCS) method) for a 25-yr, 24-hr storm event. The stormwater detention system has been designed in accordance with the Georgia Soil and Water Conservation Commission requirements and Technical Release 55 (TR55) as well as other local, city, and government codes.

For areas outside of the final closure system (ClosureTurf®), the runoff curve number data was determined using Table 2-2A from the Urban Hydrology for Small Watersheds (TR-55). The manufacturer of ClosureTurf®, WatershedGeo, has assessed the curve number for the ClosureTurf® system to be between 92 and 95 depending on the storm intensity. The supporting calculations of this plan assume a curve number of 95 for areas lined with ClosureTurf® to be conservative. The time of concentration for each drainage basin was calculated based on TR-55. The rainfall distribution for Plant Wansley (Type II) was determined from Appendix B from TR-55. Precipitation values were determined from National Oceanic and Atmospheric Administration (NOAA) Atlas 14, Volume 9, Version 2.

The NRCS provided information on the soil characteristics and hydrologic groups present at the site. It was determined that hydrologic group "B" best reflects the characteristics of the soils on site and was used to generate inputs for the calculations. This information was placed into Hydraflow Hydrographs 2022 and used to generate appropriate precipitation curves, runoff curve numbers and storm basin runoff values.

5. References and Assumptions

See Appendix H of the Engineering Report (Stormwater Management System Design Calculations) submitted with the Georgia Environmental Protection Division CCR Landfill Expansion permit for the comprehensive stormwater management calculations for the facility.