

5. OPERATION PLAN

OPERATION PLAN

HUFFAKER ROAD LANDFILL

PLANT HAMMOND FLOYD COUNTY, GEORGIA

FOR



Georgia Power

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1. INTRODUCTION

Georgia Power Company (GPC) owns and operates Huffaker Road Landfill in Floyd County, Georgia. The landfill is currently operating under Solid Waste Handling Permit No. 057-022D(LI) issued by Georgia Environmental Protection Division (EPD) in 2006. The EPD adopted a new Solid Waste Regulation entitled “Rule 391-3-4-.10 Coal Combustion Residuals” (State CCR Rule). This rule, effective November 22, 2016, applies to owners and operators of new and existing coal combustion residuals (CCR) disposal facilities that dispose or otherwise engage in solid waste management of CCR generated from the combustion of coal at electric utilities and independent power producers. The State CCR Rule incorporates by reference the provisions contained in the United States Environmental Protection Agency (USEPA) Title 40 of the Code of Federal Regulations (CFR) §257 (40 CFR §257) (Federal CCR Rule). Per State CCR Rule 391-3-4.10(2)(a), which incorporates the definitions of the different CCR units under the Federal CCR Rule (40 CFR § 257.53), Huffaker Road Landfill Parcels A, B, and E meet the definition of an existing CCR landfill and Parcels C and D meet the definition of a lateral expansion. The Operation Plan requirements for each of these classifications under the State CCR Rule are provided for existing landfills in State CCR Rule 391-3-4-.10(9)(c)3.(ii) and for lateral expansions of existing landfills in State CCR Rule 391-3-4-.10(9)(c)1.(vi), respectively.

2. GENERAL SITE INFORMATION

A. VOLUMES AND LIFE ESTIMATE

The CCR landfill will receive CCR from coal-burning activities at Plant Hammond. An estimated 327,000 tons of CCR will be produced a year and placed in the landfill. One ton is approximately one cubic yard for CCR produced at Plant Hammond.

Active stacking is occurring in Parcels A & B Phases 1 & 2 and Parcel E Phase 1 has previously received CCR under the existing solid waste permit. The quantities of CCR in the parcels is provided in Table 1. The life span shown for each phase is the future life span based on remaining airspace capacity of 3,622,116 cubic yards. The actual site life may differ depending on the amount of CCR disposal and the amount of CCR removal from the site for beneficial use.

Table 1: Summary of Volumes and Estimated Life Span

	Estimated Life (years)	CCR (CY)	"Temp." Cover - CY (12" Top)	Final Cover - CY	
				6" Topsoil	18" Barrier
PARCELS A & B EXISTING CCR	--	138,660	--	--	--
PARCELS A & B, PHASE 1& 2	2.2	729,838	37,406	5,422	16,266
PARCELS A & B, PHASE 3	1.1	362,141	26,417	4,468	13,405
PARCELS A & B, PHASE 4	1.3	416,106	15,761	5,176	15,526
PARCELS A & B, PHASE 5	0.7	232,811	7,683	3,979	11,938
PARCELS A & B, PHASE 6	0.3	99,406	2,248	2,632	7,896
PARCELS A & B, PHASE 7	0.1	13,065	--	1,075	3,226
PARCEL C & D, PHASE 1 & 2	1.1	350,101	27,027	4,359	13,077
PARCELS C & D, PHASE 3	1.2	404,807	15,430	5,012	15,037
PARCELS C & D, PHASE 4	0.7	228,054	7,578	3,789	11,368
PARCELS C & D, PHASE 5	0.3	102,308	--	3,700	11,101
PARCEL E EXISTING CCR	--	470,000	--	--	--
PARCEL E, PHASE 1	0.3	97,378	23,650	4,982	14,947
PARCEL E, PHASE 2	0.9	302,064	14,327	4,501	13,502
PARCEL E, PHASE 3	0.6	208,489	6,412	3,862	11,585
PARCEL E, PHASE 4	0.2	75,548	--	3,108	9,323
TOTAL	11.0	4,230,776	183,939	56,067	168,200

B. DESCRIPTION OF WASTES

The facility will receive solid waste produced from the generation of electricity from coal (CCRs) as defined in State CCR Rule 391-3-4-.01, and materials in contact with or used to contain or absorb CCR (truck liners, truck wash sediments containing ash, etc.) generated by GPC. Allowable wastes include:

- i.) CCR (fly ash, bottom ash, flue gas desulfurization materials, and boiler slag);
- ii.) Materials that have come in contact with CCR, or used to collect or absorb CCR, that were generated by GPC;
- iii.) Other wastes generated from milling coal in preparation for the combustion process; and
- iv.) CCR water treatment filter cake material.

Prior to the receipt of CCR water treatment filter cake material, an evaluation will be performed on the CCR water treatment filter cake material to confirm the handling and placement of this material will not result in unstable conditions or increased pore water pressures of the waste mass and that the in-place strength requirements for long-term stability of this Operations Plan will be achieved. A report will be prepared by a Professional Engineer registered in Georgia that will include the results of the testing of the CCR water treatment filter cake materials. Additionally, this Operations Plan will be revised as necessary to specify any material-specific required handling, processing, and placement procedures for the CCR water treatment filter cake material. The revised Operations Plan will be submitted to EPD for approval prior to receipt of the CCR water treatment filter cake material.

As required by the State CCR Rules, CCRs do not include putrescible or hazardous materials regulated under Subtitle C of the Resource Conservation Recovery Act (RCRA).

C. ZONING

Verification of zoning approval is included within Part A of the permit application.

D. BUFFERS

The Huffaker Road Landfill is located entirely on GPC property. A 200-foot undisturbed buffer zone is provided along property lines with a 50-foot buffer along the railroad as shown in the Permit Drawings in Part A of the permit application.

Disturbance of wetland areas is prohibited, except as permitted by the United States Army Corps of Engineers. Otherwise, a minimum 50-foot buffer will be maintained between the CCR disposal boundary (limits of waste) and the jurisdictional wetland area depicted on the permit drawings in Part A of the permit application. See the Site Acceptability Report and Site Acceptability Report Addendum 1 in Part B of the Permit Application for the wetland determination documentation.

A minimum 500-foot buffer shall be maintained between the landfill and any adjacent residential structures and/or waste supply wells.

E. SITE SURVEY CONTROL

The Permitted Site Boundary is shown on the Permit Drawings in Part A of the Permit Application. Boundary markers of ¾-inch reinforcing bars, with 4-inch by 4-inch marker posts, were established to delineate the disposal site's CCR management boundaries. Permanent survey control monuments were established at locations indicated on the drawings for vertical and horizontal control during the life of this facility. The limits of CCR fill are delineated prior to placement by 2-inch by 4-inch or 4-inch by 4-inch survey stakes. During filling, standard survey practices will be used to establish vertical and horizontal control of the filling operations.

F. LIMITED ACCESS

The CCR landfill is dedicated for use by GPC only. Access to the site is controlled by a double-gated entrance from Huffaker Road. A chain link fence is constructed around the entire site.

G. POSTED INFORMATION

The daily hours of operation, the name, and owners of the facility are displayed on a sign erected at the entrance to the site. A permanent identification marker for the CCR unit was installed on August 6, 2015.

H. COMMUNICATION

Communications are by cell phone or two-way radio with Plant Hammond. Telephone communications are maintained at the site maintenance shop.

I. FIRST AID

First aid equipment is available at the site.

J. EMPLOYEE FACILITIES

Employee facilities are maintained at the maintenance shop building located at the site.

3. OPERATIONAL PROCEDURES

A. SUPERVISION

The CCR landfill is under the supervision of an operator who is present at all times during operation and who is properly trained in the operation of landfills and the implementation of the landfill's permit.

Training in the operation of CCR landfills and the implementation of the approved permit is provided by GPC with documentation of training maintained in the facility's operating record.

B. EXCLUSION OF PROHIBITED WASTES

No hazardous, putrescible wastes, or other non-approved wastes are to be deposited at this site. To ensure the exclusion of prohibited wastes, random inspections by the supervisor and/or operator are performed of incoming loads and of the working face of the CCR landfill. The results of each inspection are recorded and maintained as part of the operating record. Facility personnel have received training to recognize prohibited wastes. If any prohibited wastes are detected, GPC will remove it and ensure it is transported to a properly-permitted solid waste handling facility. Any incident of prohibited waste will be described in a report and placed in the facility's operating record.

C. PROHIBITED ACTS

The CCR landfill is operated and maintained in such a manner, as described herein, to prevent open burning, scavenging, and the open dumping of waste.

D. EROSION AND SEDIMENT CONTROL

Prior to parcel development, any necessary erosion and sediment control measures will be put into place and any required diversion berms, ditches and other storm water management features will be constructed. Run-off from the disposal areas is routed to the sedimentation basins designed to pass a 100-year, 24 hours storm with no basin overflow. The plans and details of permanent erosion and sediment control structures are included in the Permit Drawings included within Part A of the Permit Application. All erosion and sediment control at the site will be performed in accordance with the Manual for Erosion and Sediment Control in Georgia, latest edition.

E. ACCESS ROADS

Temporary access consisting of roads covered with bottom ash or gravel will be provided for ease of access inside of the disposal parcel to the working area of each parcel, including during inclement weather. Final access roads are designed to provide continued access for maintenance and inspection. Permanent access road details are included on the Permit Drawings included within Part A of the Permit Application.

F. FIRE PROTECTION

Since CCR is an inorganic by-product of the combustion of coal at temperatures in excess of 2,500 degrees or the by-product of the flue gas desulfurization process, and since litter and other putrescible wastes are not permitted at this facility, the occurrence of fire related to waste disposal will not occur. Therefore, fire protection measures are not required.

G. SITE EQUIPMENT

Typical equipment to be used during operation of this site includes, at a minimum:

- CAT D5H-5S dozer or equivalent
- Smooth drum vibratory roller
- Water truck with spray attachment backup and/or specialized equipment will be leased or subcontracted on an as needed basis.

H. RECOVERED MATERIALS PROCESSING OPERATIONS

CCR may be recovered (removed) from the CCR landfill for beneficial re-use in construction, manufacturing, agriculture, or other industries.

When recovered materials are removed by truck, the truck tires will be cleaned to avoid tracking of recovered materials offsite.

By letter dated October 8, 2008, Georgia EPD has approved recovery of gypsum from this facility. GPC will maintain a record of the volume of CCR material that is recovered for beneficial re-use and will report it to EPD in accordance with State CCR Rule 391-3-4-.17(5).

I. CONTROLLED UNLOADING OF WASTE

The CCR will be unloaded from dump trucks at the working face within the disposal site. The CCR will be in a moistened condition to prevent dusting and to permit optimum compaction at the working face. See Section 3.L. for spreading and compaction procedures and Section 3.P. for dust control.

J. SOLID WASTE PROCESSING OPERATIONS

No on-site waste processing will be performed at this facility.

K. WASTE REQUIRING SPECIAL HANDLING

No special solid wastes will be handled at this facility.

L. SPREADING, COMPACTION, AND STABILITY

Conditioned CCR is uniformly spread in approximately 12-inch lifts (nominal loose thickness) and compacted with a minimum of four passes of a CAT D5H-5S dozer, smooth drum roller, or equivalent, to achieve a minimum 90% of its maximum dry density as determined by ASTM D698. Proper placement of CCR includes stabilization of wet materials by mixing with dry materials or by drying, no downhill pushing and/or compaction of CCR, and benching lifts of CCR material when placing against existing CCR slopes.

The surface of the compacted CCR is compacted with a smooth drum roller to seal the surface to reduce infiltration and to prevent ponding of precipitation. Efforts will be made to achieve conditioning at a moisture content suitable for ease of handling, transporting, placement, compaction, and testing.

CCR placement operations should be conducted in a manner to minimize water infiltration into the waste. The landfill will be regularly monitored for standing water, leachate outbreaks, pumping and rutting of CCR under traffic loading, or other signs that may indicate that liquids are not draining properly. Additionally, CCR placement procedures should not be modified in a manner that may create impermeable zones of CCR. If CCR permeabilities change or signs of saturated CCR conditions are observed, the stability of the landfill slopes will be re-evaluated based on the new conditions.

Additionally, CCR will be placed and compacted in uniform and continuous lifts beginning in the bottom of the cell with CCRs abutting the perimeter berm. Intermediate CCR slopes are not to be formed in the bottom of the parcel, i.e. the slopes must toe-out and/or abut the exterior berm of the cell to maintain intermediate stability conditions. CCR for intermediate benches above the perimeter berm elevation will also be placed and compacted in uniform and continuous lifts beginning at the down-slope extent of the bench, progressing up-slope.

M. DAILY AND INTERMEDIATE COVER

Since CCRs are inorganic by-products of the combustion of coal at temperatures in excess of 2,500 degrees and since litter and other putrescible wastes are not permitted at this facility, a daily and intermediate cover is not necessary for the control of disease vectors, odor, fires, scavenging, and litter. The CCR is compacted in a moistened condition, thus reducing the possibility of dusting. The possibility of fugitive dust from this facility is further controlled by water spray from either the sedimentation basins or water trucks. Any CCR fill areas that have reached final grade and will not receive additional CCR fill will be covered with temporary cover or with final cover in accordance with the Construction Quality Assurance Plan included in Part A of this Permit Application.

N. DISEASE VECTOR CONTROL

The landfill will be used only to dispose of CCR materials as described in Section 2.B. of this Operation Plan. Disease vector controls will not be required at this facility since no litter or putrescible wastes will be allowed.

O. LITTER CONTROL

The CCR landfill will be used exclusively for disposal of CCR materials as described in Section 2.B. of this Operation Plan. The CCR will not contain litter or contribute to blowing refuse. Routine inspection of the entire site is performed regularly, and any litter and/or wind-blown waste is removed.

P. FUGITIVE DUST

The purpose of this fugitive dust control plan is to demonstrate compliance with the fugitive dust requirements in State CCR Rule 391-3-4.10(5)(a).

This fugitive dust plan identifies and describes the CCR fugitive dust control measures that GPC will use to minimize CCR from becoming airborne at the facility, including CCR fugitive dust originating from CCR units, roads, and other CCR management and material handling activities

Fugitive dust is defined in State CCR Rule 391-3-4.10(2)(a) as “solid airborne particulate matter that contains or is derived from CCR, emitted from any source other than through a stack, or chimney.”

Fugitive dust originating from activities the Huffaker Road Landfill will be controlled using water suppression and compaction.

The fugitive dust control measures identified and described in this plan were adopted and implemented based upon an evaluation of site-specific conditions and are determined to be applicable and appropriate for Huffaker Road Landfill. Evaluation included assessing the effectiveness of the fugitive dust control measures for the facility, taking into consideration various factors such as site conditions, weather conditions, and operating conditions.

CCR that is transported via truck will be conditioned to appropriate moisture content to reduce the potential for fugitive dust.

Water suppression will be used as needed to control fugitive dust on facility roads used to transport CCR and other CCR management areas.

Speed limits will be utilized to reduce the potential for fugitive dust.

Trucks used to transport CCR are filled to or under capacity to reduce the potential for material spillage.

Plant personnel shall assess the effectiveness of the control measures by performing visual observations of all CCR units and surrounding areas and implementing appropriate corrective actions for fugitive dust, as necessary. Logs will be used to record the utilization of water-spray equipment.

When a complaint is received from a citizen regarding a CCR fugitive dust event at the facility, the complaint shall be documented and investigated. Appropriate steps will be taken, including any corrective action, if needed

Q. EXPLOSIVE GAS CONTROL (METHANE)

Since the wastes to be disposed of are an inorganic by-product of the combustion of coal, and since litter and other putrescible wastes will not be allowed at this facility, methane gas would not be generated.

R. RUN-ON/RUN-OFF CONTROL

An earthen drainage berm and ditch are provided to prevent stormwater from the surrounding area from entering the disposal parcels. CCR disposal, soil excavation and/or placement are confined to within this berm. Run-off from active parcels, as well as any disturbed areas, is routed into the sedimentation basins designed to collect and handle the flow resulting from a 100-year storm event. The plans and details for erosion and sedimentation control structures are included in the Permit Drawings included within Part A of this Permit Application. The calculations for the run-on/run-off control are presented in the Engineering Report included within Part B of this permit application.

The current version of the Initial Run-On and Run-Off Control Plan that GPC developed to meet the requirements of the self-implementing Federal CCR Rule is in the GPC website under Environmental Compliance. This Run-On and Run-Off Control Plan will be reviewed and updated every 5 years.

S. SURFACE WATER REQUIREMENTS

The only discharge from the site is stormwater runoff from the sedimentation ponds and clear pools. This discharge will be monitored during construction in accordance with the NPDES general permit GAR100001 for stand-alone construction projects. During operations, the discharge from the clear pools will be monitored under an industrial storm water permit.

T. FINAL GRADING

The final slopes are designed to ensure permanent slope stability, control erosion, allow placement, compaction, and seeding of cover material, minimize percolation of precipitation into the final cover, and provide diversion of surface runoff from the disposal area. The final surface slopes are between 3% and 33% (3H:1V). Final site grading is shown on the Permit Drawings included within Part A of this Permit Application. The final grading will meet the closure requirements as indicated in the Closure Plan included within Part A of this Permit Application.

U. VEGETATION

All disturbed exposed soil areas that are not a part of the CCR disposal area or that will remain exposed for more than three months will be seeded, mulched and fertilized. Seeding will occur within two weeks after completion of final cover placement. Areas of structural fill, such as the sedimentation basin dikes, will be grassed above the marker layer. The following schedule indicates the recommended species, planting dates, and fertilization requirements during the operating life of the landfill. If different, the latest edition of the Manual for Erosion and Sediment Control in Georgia supersedes these recommendations. The Closure Plan in Part A of this Permit Application contains the vegetation schedule to be followed once operations have ceased.

Table 2: Vegetation Schedule

Broadcast Species	Rate/ Acre (lbs)	Planting dates											
		J	F	M	A	M	J	J	A	S	O	N	D
Bahia	60	P	P	P	P	P	P	P	P	P	P	P	P
Bermuda	10		P	P	P	P	P						
Centipede	Sod Only				P	P	P						
Lespedeza	75	P	P	P	P	P	P	P	P	P	P	P	P
Weeping Love Grass	4		P	P	P	P	P						
Switch Grass	40			P	P	P							

Table 3: Fertilization Rates

Fertilization (Warm Season Grasses)			
Year	N-P-K	Rate	Top Dressing RateN
First	6-12-12	1500 lbs/ac	50-100 lbs/ac
Second	6-12-12	800 lbs/ac	50-100 lbs/ac
Maintenance	10-10-10	400 lbs/ac	30 lbs/ac

V. CONTINUITY OF OPERATION

Access roads and ramps will be provided to the working face of the active parcels. This will allow access to the parcels, if required, during inclement weather for disposal, inspection, and maintenance or replacement of equipment.

W. TIRE WASH

The tire wash system is primarily used to clean the undercarriage of service vehicles exiting the disposal area prior to entering onto county roads. The system includes a water reclamation tank which recycles used water runoff from the vehicles and separates the solids as they enter the reclamation tank. County water is only used to replenish the water tank at low levels, which eliminates the need for draining the reclamation tank. Solids are cleaned out periodically using a front-end loader and the solids are disposed of in the landfill.

X. ABOVE GROUND FUEL TANK

The above ground fuel tank consists of a dual compartment fuel tank for regular gasoline and diesel. The tank is a horizontal double wall steel tank primarily used to fuel service vehicles for the landfill. This tank has an integral spill basin and is also equipped with a rain guard that sheds rainwater while containing any fuel spill at the tank. A containment pad for fueling service vehicles and supplying fuel for the above ground tank is also installed. The containment pad is equipped with a catch basin. The catch basin is a semi-below ground pit designed to catch and contain any fuel from the storage tank and loading pad if a spill, leak, or rupture should occur. This prevents any fuel from coming in contact with the surrounding soil and halts the contamination or impacts to surface water or groundwater. A manually-operated sump pump system handles any excess water that may accumulate in the catch basin. When a visible amount of petroleum products can be seen floating on top of the water, it is skimmed and disposed of properly.



Y. LEACHATE MANAGEMENT

Leachate management is applicable to Parcels A, B, C, and D.

- a) A leachate pond is provided to capture leachate from the CCR disposal stacks in Parcels A and B. Leachate tanks are provided to contain leachate from Parcels C and D.
- b) Water which migrates through the CCR and enters the underlying geocomposite drainage material and the leachate removal collection system piping is routed to the leachate pond or tanks via a leachate collection sump.
- c) The leachate pond for Parcels A and B is designed and sized to hold a 100-year storm event plus 10 days of leachate storage. There is an additional 2 feet of freeboard in the pond for Parcels A and B.
- d) The leachate tanks for Parcels C and D are designed and sized to hold a 100-year storm event plus 7 to 10 days of leachate storage. A concrete structure around the base of the tanks provides secondary containment.
- e) Pumps are provided to pump water to water trucks for use inside the parcels for dust control and ash conditioning water in the active working area only. The working area shall be clearly designated by easily identifiable markers.
- f) The leachate sumps are equipped with self-priming electric motor-driven pumps. A control panel provides power to the sump level float switches. The pond and tanks are equipped with a level alarm, as well as visible pond level indicators. The leachate sump and pond instrumentation energize a wireless transmitter when a high set point is reached, sending a signal to the on-site maintenance shop's communication system and to the Plant Hammond control room.

4. ENVIRONMENTAL PROTECTION

A. INSPECTIONS

The following inspections will be performed in accordance with State CCR Rule 391-3-4-.10(5)(a).

1. 7-Day Inspections

GPC will inspect the CCR landfill and discharge of all hydraulic structure outlets at intervals not exceeding seven (7) days. The 7-day inspections will be made by a Qualified Person and include observation and documentation of any appearance of actual or potential structural weakness and other conditions which are disrupting or have the potential to disrupt the operation or safety of the facility.

GPC will record the results of these inspections on a self-generated form that will be filed in the facility's operating record. If a potential deficiency or release is identified during an inspection, GPC will remedy the deficiency or release as soon as feasible. GPC will prepare documentation detailing corrective measures taken and place it in the facility's operating record.

2. Annual Inspections

A Professional Engineer registered in Georgia will inspect the facility on an annual basis. The inspection includes, at a minimum:

- a. A visual inspection of the CCR landfill to identify signs of distress or malfunction of the CCR landfill;
- b. A review of available information regarding the status and condition of the landfill including, but not limited to, files available in the facility's operating record such as:
 - i. The results of weekly inspections and the results of previous annual inspections;
 - ii. Files available in the operating record and other conditions which have disrupted or have the potential to disrupt the operation or safety of the CCR landfill.

At the completion of each annual inspection, the Professional Engineer who completed the inspection will prepare an annual report that will be placed in the facility's operating record. The report will include the following:

- a. Any changes in geometry of the landfill components since the previous annual inspection;
- b. The approximate volume of CCR contained in the unit at the time of the inspection;
- c. Any appearances of an actual or potential structural weakness of the CCR within the landfill, or any existing conditions that are disrupting or have the potential to disrupt the operation and safety of the CCR landfill; and
- d. Any other change(s) which may have affected the stability or operation of the CCR landfill since the previous annual inspection.

B. LINERS AND LEACHATE COLLECTION AND REMOVAL SYSTEMS

1. Parcels A, B, C, D

A geomembrane bottom liner and leachate collection system has been designed for Parcels A, B, C, and D meeting the requirements of State CCR Rule 391-3-4-.10(4)(a). GPC will maintain permanent pumps in the leachate collection and removal system and will operate them as needed to maintain liquids below 30 cm (1 foot).

2. Parcel E

Parcel E is underlain by a minimum 24-inch compacted clay liner with a maximum hydraulic conductivity of 1×10^{-6} cm/s. There is not a leachate collection and removal system installed in Parcel E.

C. GROUNDWATER MONITORING PLAN

Groundwater quality monitoring will be performed in accordance with the schedule and requirements indicated in the Groundwater Monitoring Plan included within Part A of the Permit Application. The Groundwater Monitoring Plan meets the requirements of State CCR Rule 391-3-4.10(6).

5. RECORDKEEPING

The Huffaker Road Landfill complies, and will continue to comply, with the recordkeeping, notification, and publicly-accessible internet site requirements set forth in State CCR Rule 391-3-4-.10(8).

A. RECORDKEEPING

GPC will maintain the facility's operational records at all times during the life of facility, including throughout the closure and post closure period. These records will be maintained by the Office of Environmental Compliance and will be located at Plant Hammond. The following records will be maintained as part of the operating record of the facility:

- a. A copy of the permit and any operating conditions, including location restrictions;
- b. Inspection records, training procedures, and notification procedures required by State CCR Rule 391-3-4-.10(9)(c)1(vi) and State CCR Rule 391-3-4.10(9)(c)3.(ii);
- c. Any demonstration, certification, finding, monitoring, testing, or analytical data pertaining to groundwater monitoring and as required by State CCR Rule 391-3-4-.10(6);
- d. Closure and Post Closure Care Plans and any monitoring, testing, or analytical data required by those plans and State CCR Rule 391-3-4-.10(7);
- e. Any cost estimates and financial assurance documentation;
- f. Unless otherwise specified by the State CCR Rules, GPC will provide notifications to EPD within 30 days of placing documents in the facility's operating record. The notifications will be sent before the close of business on the day the notification is required to be completed. The notifications will be postmarked or sent by electronic mail. If a notification deadline falls on a weekend or federal holiday, the notification deadline will be extended to the next business day. GPC will also state in the notification to the EPD if the relevant information was also placed on the GPC compliance website;
- g. A copy of the CCR Permit Application for the facility, which includes the Groundwater Monitoring Plan;
- h. A copy of construction certifications, closure certifications, and post-closure certifications.
- i. All information contained in the facility's operating record will be furnished to EPD or be made available at all reasonable times for inspection by EPD staff.

B. NOTIFICATION AND INTERNET POSTING REQUIREMENTS

Unless otherwise specified by the State CCR Rules, GPC will provide notifications to EPD within 30 days of placing documents in the facility's operating record. The notifications will be sent before the close of business on the day the notification is required to be completed. The notifications will be postmarked or sent by electronic mail. If a notification deadline falls on a weekend or federal holiday, the notification deadline will be extended to the next business day. GPC will also state in the notification to the EPD if the relevant information was also placed on the GPC compliance website.

C. MEASURING AND REPORTING REQUIREMENTS

In accordance with State CCR Rule 391-3-4-.17(5), on July 1 of each year after the first full year that the CCR landfill permit is issued, GPC will report to EPD the total volume of the CCR waste disposed in the landfill, and the CCR removed, recovered, or diverted for beneficial use. The required data will be submitted to EPD on forms issued by EPD.

6. SITE LIMITATIONS

This plan incorporates the following site limitations based on the site acceptability letter from EPD dated February 11, 2004, as modified on July 29, 2004.

1. The areas proposed for coal combustion by-products disposal include only those areas enclosed by the lines labeled “Permitted Site Boundary – North Parcel” and “Permitted Site Boundary – South Parcel” on Drawing H-628-11 as revised on August 21, 2003. This drawing is included in Southern Company Services, Inc.’s correspondence entitled “Huffaker Road Ash Monofill, Site Acceptability Report – Additional Information, Dated September 26, 2003”.

The northern boundary of the north parcel has been further revised to reflect the potential widening of Huffaker Road. This boundary and buffer zone have been moved inward from the original disposal site boundary and, thusly, remains within the area covered by site acceptability. Per the September 1, 2005 conversation between representatives of EPD and Southern Company Generation, this boundary is reflected on Drawing H9131, and subsequent drawings, in this plan.

2. A liner system consisting of at least 2 feet of clayey soil with permeability no greater than 1×10^{-6} cm/sec shall be installed beneath all waste disposal areas, including all surface water impoundments.

The disposal site shall be graded and drained such that no surface water will pond on any portion of the landfill, and all surface water from the landfill shall be routed through a sedimentation pond prior to release from the site.

3. The bottom of waste shall be kept a minimum of 5 feet above the potentiometric surface depicted on Southern Company Services, Inc.’s drawing number HR GW 3-11-04: Plant Hammond, Huffaker Road CCB Disposal Facility, Topographic Map, Groundwater Flow, March 11, 2004, signed and stamped by David R. Asti on June 8, 2004. If, during construction of the site, bedrock is encountered at an elevation above groundwater, a minimum of 5 feet of clean, compacted, rubble-free soil with a permeability no less than the surrounding in-situ soils shall be installed to separate bedrock rock from the bottom of waste.
4. No waste shall be placed within 50 feet of the Central of Georgia right-of-way.
5. No waste shall be placed within 50 feet of the jurisdictional wetland areas depicted on Southern Company Services, Inc.’s Figure 1-3: Wetland Boundaries (included within the above-referenced report), unless otherwise permitted by the United States Army Corps of Engineers. A minimum 500-foot buffer shall be maintained between the waste disposal area and any adjacent residential structures and/or waste supply wells.
6. A minimum 200-foot undisturbed buffer shall be maintained between the waste disposal area and the permitted site boundaries referenced in the above Limitation 1.
7. If, during excavation of the site, any springs or seeps are discovered, the EPD shall be notified immediately, and protective designs will be incorporated into the facility’s design and operational plans such that the spring or seep can be incorporated into the facility’s groundwater monitoring system.

8. All borings/piezometers located in the proposed waste footprint shall be abandoned in accordance with the Water Well Standards Act. The well casing shall be removed, and the borings shall be overdrilled and filled with a non-shrinking cement/bentonite mixture via tremie pipe to within 10 feet of the maximum depth of waste. Within 10 feet of the maximum depth of waste, the boring can be filled with bentonite. Any remaining annular space can be backfilled with soil cuttings. The abandonment of all wells shall be supervised by a professional geologist (PG) or professional engineer (PE) registered to practice in Georgia. The supervising PG/PE shall submit a report of the abandonment to EPD and certify that the borings/piezometers were abandoned in accordance with the Water Well Standards Act.

Per the telephone conversation on September 1, 2005 between representatives of the Georgia EPD and Southern Company Generation, Georgia Power Company proposes the amended abandonment procedures for borings, piezometers, and/or, wells indicated on Drawings H9160. These proposed procedures follow the abandonment procedures discussed in a March 31, 2005 meeting with representatives of the Georgia EPD, Georgia Power Company, and Southern Company Generation and documented in the June 24, 2005 submittal entitled: "Georgia Power-Site Limitations; Solid Waste Disposal Operation Known as Bartow County-Georgia Power, Plant Bowen Proposed Private Industry Landfill, Dated December 8, 2004".

9. A groundwater monitoring system, conforming to EPD's Rules of Solid Waste Management and current guidance, shall be installed at the site.
10. All erosion control measures and/or diversion ditches shall conform to the Erosion and Sedimentation Control Act and to be protective of Smith Creek and any associated perennial or intermittent tributaries.
11. As the proposed site is located with a seismic impact zone, all plan sheets in the Design and Operations Plans that detail surface water containment structures shall specify that the structures are engineered to withstand a maximum horizontal acceleration of 0.22g