



WASTE MANAGEMENT OF GEORGIA, INC.
3001 LITTLE NECK ROAD | SAVANNAH, GEORGIA 31419

**SUPERIOR LANDFILL & RECYCLING CENTER SITE NO.2 MSWLF
COAL COMBUSTION RESIDUALS (CCR)
MANAGEMENT PLAN ANNUAL UPDATE
PERMIT #: 025-070D(MSWLF)**



7/25/20

**ANNUAL CCR MANAGEMENT PLAN AND
DUST CONTROL REPORT**



Annual CCR Management Plan and Dust Control Report



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This annual CCR management and dust control report was prepared in accordance with OCGA Solid Waste Management Rule 391-3-4-.07(5) and the Annual Coal Combustion Residuals (CCR) Management Plan and Dust Control Report Guidance Document provided by Georgia Department of Natural Resources, Environmental Protection Division (EPD) dated May 2018.

SUMMARY:

The Superior Landfill and Recycling Center is comprised of an active Municipal Solid Waste (MSW) Landfill (LF) unit designated Site No. 2 and a closed Municipal Solid Waste Landfill unit designated Site No. 1. The facility's current CCR Management Plan was established through a minor modification approved by Georgia's Environmental Protection Division (EPD) on May 22, 2017.

FACILITY LOCATION AND DESCRIPTION:

The existing landfill is located west of the intersection of Interstate 95 and Little Neck Road in Chatham County, Georgia. It is comprised of an active Municipal Solid Waste Landfill unit designated Site No. 2, Phase 1 (89 acres) and a closed Municipal Solid Waste Landfill unit designated Site No. 1 (26 acres). Site No. 2 was expanded in 2011 to form a contiguous 156 acre MSW landfill.

CCR MANAGEMENT ACTIVITIES:

CCR and Non-CCR Waste Volumes:

Superior is currently permitted to receive CCR and non-CCR waste materials. The non-CCR waste materials may contain waste streams from municipal, industrial, commercial, and other special waste stream sources. Waste streams accepted at this facility are in accordance with OCGA Solid Waste Management Rule 391-3-4.

The facility is permitted to receive a maximum CCR to non-CCR waste ratio (by weight) of 1 to 5. This translates into an estimated annual weight of 150,000 tons of CCR material with an estimated daily maximum of 565 tons. These limits are defined in Section 1 of the current Operational Narrative shown on Sheet 22 of the Design and Operation (D&O) Plans. The CCR to non-CCR waste ratio limits were established by verifying that the facility's design is capable of withstanding the additional loads presented by the higher density CCR material. The basis of the design provided in the May 22, 2017 CCR Management Minor Modification was an overall waste mass density of 79 lb/CF (2,133 lb/CY). This density takes into account the elevated waste mass density with the introduction of the permitted upper limit of CCR into the waste stream.

There was no CCR material received at this facility between January 1, 2019 and December 31, 2019. During this same period, the facility received 503,240 tons of non-CCR material. Since the facility only accepted non-CCR during this reporting period and previous periods demonstrate less than permitted levels of CCR disposal (by weight), the presence of the previously interned CCR material will not adversely affect the LF's global stability, base liner stability, leachate collection system capabilities or cause excessive base grade settlement.

CCR Source:

When received, the approved source of CCR material is from Southern Company facilities as required in Section 2 of the facility's Operational Narrative on Sheet 22 of the current Design and Operation Plan.

CCR Characterization and Compatibility:

Section 2 of the Operational Narrative on Sheet 22 requires CCR waste streams entering the facility to be tested for compatibility using the Toxicity Characteristic Leaching Procedure (TCLP) 8 RCRA Metals by SW-846 Method 1311 and a Paint Filter Test by SW-845 Method 9095.

As noted above, there was no CCR material during this reporting period and previous reports have documented that the general physical characteristics of previously interned material had remained consistent since the CCR Management permit's initial issue date. Therefore, additional testing to verify characterization and compatibility have not been required.

CCR Placement, Compaction and Cover:

The facility is permitted to operate two independent working faces for the purpose of disposing CCR and non-CCR wastes in separate areas. These individual working faces are restricted to a maximum combined area of 40,000 square feet. Although disposal of CCR and non-CCR waste streams is an option, the facility co-mingled the CCR material received during previous reporting periods and only operated one working face for disposal of non-CCR material during this period. The maximum area of the working face and its management was conducted in accordance with Section 2 of the Operational Narrative on Sheet 22.

No leachate outbreaks were observed in previously interned layers of waste containing co-mingled CCR/non-CCR.

Additionally, none of the previously placed CCR material was harvested for beneficial re-use nor was it harvested for use in the facility's solidification process.

Record Keeping:

Records of all waste transported to the site along with daily logs and operational records are retained at the facility's site office building. Record keeping is in accordance with the Georgia Rules for Solid Waste Management 391-3-4-.07(3)(u).

Fugitive Dust Control:

CCR material disposed at the facility during previous periods was spread and compacted into the incoming waste stream as it was received. These layers/lifts of co-mingled material have remained covered during the current period by additional non-CCR layers as well daily and intermediate cover as required by the facility's Operational Procedures. This has prevented CCR material from exposure to the elements and has been successful in preventing the generation of fugitive dust.

The facility did not receive complaints related to dust between January 1, 2019 and December 31, 2019 and has remained compliant with requirements established by Air Quality Rule 391-3-1-.02(2)(n)1.

Leachate Collection and Removal System:

The facility's leachate collection, removal and storage system is in good working order with no known issues related to the disposal of previously interned co-mingled CCR/non-CCR wastes.

Stormwater Management System:

During disposal of co-mingled CCR and non-CCR material during previous reporting periods, the working face(s) were managed to ensure that surface water contacting CCR and non-CCR waste was not discharged into the stormwater management system. This was accomplished by placing and compacting material away from the side slopes, using soil diversion berms near side slopes and by sloping the working face into the waste mass. Additionally and as noted above, the previously disposed co-mingled material have remained covered with non-CCR layers/lifts as well as daily and intermediate cover. Therefore, it has not been exposed to stormwater runoff nor has it discharged into the stormwater management system during the current reporting period.

Environmental Monitoring:

The environmental monitoring program for the facility was modified during development of the CCR Management Plan to include appropriate Appendix III/IV analytical parameters in accordance with United States Environmental Protection Agency recommendations and Georgia Environmental Protection Division Regulations. The monitoring network (consisting of groundwater wells, surface water, underdrain, and leachate monitoring points) and extended parameter list, based on data collected to date, remains suitable for detection of CCR related constituents. Current data does not suggest confirmed impacts at these monitoring points as a result of handling CCR material. The facility will continue implementing the CCR monitoring program and documenting results to EPD in semi-annual monitoring reports.

Emergencies:

The facility did not experience any events or circumstances that represented an operational or environmental emergency during this reporting period.

Documentation of Notification to Local Governments:

Since no CCR material was received at the facility for this reporting period, the operation of CCR disposal activities during this reporting period have been in compliance with the currently approved CCR management plans and design parameters. Therefore, no plan modifications or local government notifications are required at this time

CONCLUSION:

The current CCR Management routines required by the facility's Design and Operation Plan has proven to be effective in governing the proper handling and placement of CCR material as required by OCGA's Solid Waste Management Rule 391-3-4-.07(5) and the Guidance Document for Coal Combustion Residuals (CCR) Management Plans dated December 22, 2016.