Facility Name: Macon Walker Road MSW Landfill

City: Macon County: Bibb

AIRS #: 04-13-021-00195

Application #: TV-466528 Date Application Received: April 9, 2020

Permit No: 4953-021-0195-V-04-0

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Introduction

This narrative is being provided to assist the reader in understanding the content of referenced operating permit. Complex issues and unusual items are explained here in simpler terms and/or greater detail than is sometimes possible in the actual permit. The permit is being issued pursuant to: (1) Georgia Air Quality Act, O.C.G.A § 12-9-1, et seq. and (2) Georgia Rules for Air Quality Control, Chapter 391-3-1, and (3) Title V of the Clean Air Act. Section 391-3-1-.03(10) of the Georgia Rules for Air Quality Control incorporates requirements of Part 70 of Title 40 of the Code of Federal Regulations promulgated pursuant to the Federal Clean Air Act. The narrative is intended as an adjunct for the reviewer and to provide information only. It has no legal standing. Any revisions made to the permit in response to comments received during the public participation and EPA review process will be described in an addendum to this narrative.

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I. Facility Description

A. Facility Identification

1. Facility Name: Macon Walker Road MSW Landfill

2. Parent/Holding Company Name

City of Macon

3. Previous and/or Other Name(s)

Also known as: Walker Swamp Road Landfill

4. Facility Location

920 11th Street Macon, Georgia 31201, Bibb County

5. Attainment, Non-attainment Area Location, or Contributing Area

The facility is located in an area designated as nonattainment for PM_{2.5} (Macon).

B. Site Determination

The Cherokee Brick and Tile Company (AIRS No. 021-00167) is located adjacent to the landfill and uses treated landfill gas (LFG) as fuel in its kilns. The landfill and Cherokee Brick and Tile Company are not under common control. Each facility is a separate Title V site. There are no other site determination issues regarding this facility.

C. Existing Permits

Table 1 below lists all current Title V permits, all amendments, 502(b)(10) changes, and off-permit changes, issued to the facility, based on a comparative review of form A.6, Current Permits, of the Title V application and the "Permit" file(s) on the facility found in the Air Branch office.

Table 1: List of Current Permits, Amendments, and Off-Permit Changes

Permit Number and/or Off-	Date of Issuance/	Purpose of Issuance
Permit Change	Effectiveness	
4953-021-0195-V-03-0	December 30, 2015	Title V Renewal

D. Process Description

1. SIC Codes(s)

4953

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The SIC Code(s) identified above were assigned by EPD's Air Protection Branch for purposes pursuant to the Georgia Air Quality Act and related administrative purposes only and are not intended to be used for any other purpose. Assignment of SIC Codes by EPD's Air Protection Branch for these purposes does not prohibit the facility from using these or different SIC Codes for other regulatory and non-regulatory purposes.

Should the reference(s) to SIC Code(s) in any narratives or narrative addendum previously issued for the Title V permit for this facility conflict with the revised language herein, the language herein shall control; provided, however, language in previously issued narratives that does not expressly reference SIC Code(s) shall not be affected.

2. Description of Product(s)

This facility does not have final products. The Macon Walker Road MSW Landfill processes general waste.

3. Overall Facility Process Description

The Macon Walker Road MSW Landfill receives, manages, and disposes of solid waste. The waste is deposited directly into the landfill, compacted, and covered with dirt. Landfill gas (LFG) is produced from the decomposition of the deposited waste. The landfill is required to operate a Gas Collection and Control System (GCCS) that complies with Georgia Rule 391-3-1-.02(2)(ggg). The landfill currently leases its LFG rights to the Cherokee Brick and Tile Company which is located next to the landfill. Cherokee Brick and Tile owns, operates, and maintains the control system associated with the required GCCS located on the landfill property. The City of Macon is responsible for maintaining the collection system (wells, piping, valves, condensate collection sumps, etc.) associated with the GCCS system. The LFG is treated in accordance with the approved Operation & Monitoring Plan prior to being burned in the kilns at Cherokee Brick and Tile. All of the LFG is routed to the treatment system which serves as the only Rule (ggg) control device at the landfill. There are no flares used as backup control devices. The Cherokee Brick and Tile facility normally operates 24 hours per day, 7 days per week and utilizes 100 percent of the LFG extracted from the landfill. If, however, the treatment system is down for 5 days or more, the landfill has a Division-approved plan to install and operate a flare to control NMOC emissions from the landfill.

4. Overall Process Flow Diagram

The facility provided a process flow diagram in their Title V permit application.

E. Regulatory Status

1. PSD/NSR

The facility is considered a minor source with respect to PSD/NSR regulations.

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2. Title V Major Source Status by Pollutant

Table 2: Title V Major Source Status

	Is the Pollutant Emitted?	If emitted, what is the facility's Title V status for the pollutant?			
Pollutant		Major Source Status	Major Source Requesting SM Status	Non-Major Source Status	
PM	✓			✓	
PM ₁₀	✓			✓	
PM _{2.5}	✓			✓	
SO_2	N/A				
VOC	✓			✓	
NO _x	N/A				
CO	N/A				
TRS	N/A				
H ₂ S	N/A				
Individual HAP	✓			✓	
Total HAPs	✓			✓	

3. MACT Standards

<u>40 CFR 63, Subpart AAAA – "National Emission Standards for Hazardous Air Pollutants:</u> Municipal Solid Waste Landfills"

The Landfill MACT, 40 CFR Part 63 Subpart AAAA, is applicable to each area source MSW landfill with a design capacity greater than or equal to 2.5 million megagrams (Mg) and 2.5 million cubic meters (m³) and having estimated uncontrolled NMOC emissions exceeding 50 megagrams per year (Mg/yr) or if the landfill is a bioreactor. This landfill has uncontrolled NMOC emissions of greater than 50 Mg/yr and a design capacity greater than 2.5 million Mg. Therefore, this MACT standard is applicable to the landfill.

Note that the U.S. EPA proposed changes to Subpart AAAA on July 29, 2019, that will significantly change Subpart AAAA. When finalized, most of the requirements of 40 CFR 60 Subparts WWW and XXX will be included in the text of Subpart AAAA. The applicability for Subpart AAAA, however, is not expected to change.

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4. Program Applicability (AIRS Program Codes)

Program Code	Applicable (y/n)
Program Code 6 - PSD	No
Program Code 8 – Part 61 NESHAP	Yes
Program Code 9 - NSPS	No
Program Code M – Part 63 NESHAP	Yes
Program Code V – Title V	Yes

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Regulatory Analysis

II. Facility Wide Requirements

A. Emission and Operating Caps:

None applicable.

B. Applicable Rules and Regulations

Georgia Rule 391-3-1-.02(2)(ggg) – Existing Municipal Solid Waste Landfills

This rule is applicable to each municipal solid waste landfill that has a design capacity greater than 2.5 million megagrams (Mg) or 2.5 million cubic meters (m³), if the landfill commenced construction, reconstruction or modification before May 30, 1991. Since the Macon Walker Road Landfill was constructed in 1971 and has a design capacity of 4.7 million cubic yards (3.6 million cubic meters), the facility is currently subject to Georgia Rule (ggg). Georgia Rule (ggg) includes many of the same requirements as 40 CFR 60 Subpart WWW. If the landfill ever increases its design capacity, the entire landfill will become subject to Subpart WWW.

40 CFR Part 61 Subpart M – NESHAP for Asbestos

Macon Walker Road Landfill indicated that they are permitted to accept asbestos-containing waste. If the facility ever accepts asbestos waste for disposal, the facility will be subject to the asbestos NESHAP in 40 CFR 61 Subpart M. If so, as long as this landfill remains active, it would be required to comply with the provisions of 40 CFR 61.154 – "Standard for Active Waste Disposal Sites", including all reporting and record keeping requirements. Upon closure, the facility would be required to comply with 40 CFR 61.151 – "Standard for Inactive Waste Disposal Sites for Asbestos Mills and Manufacturing and Fabricating Operations," if asbestos waste has been accepted.

40 CFR Part 63 Subpart AAAA – National Emission Standards for Municipal Solid Waste Landfills

This rule applies to each landfill that received waste after November 6, 1987, that is a major source, is co-located with a major source, or is subject to the control requirements of 40 CFR 60 Subpart WWW (requirements are incorporated by reference by Georgia Rule (ggg)). This landfill is subject to this rule because the landfill is required by Georgia Rule (ggg) to install and operate a landfill gas collection and control system (GCCS).

C. Compliance Status

No noncompliance issues have been identified by the facility.

D. Permit Conditions

The requirements of Permit Conditions 2.2.1, 2.2.2, 2.3.1, and 2.2.4 of Permit No. 4953-021-0195-V-03-0 have been carried over to this permit. The language of these conditions has been updated to the most recent version of these conditions used by the Division.

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The requirements of Permit Condition 2.2.1 establish the applicability of 40 CFR 61 Subparts A and M to the landfill.

The requirements of Permit Condition 2.2.2 establish the applicability of 40 CFR 63 Subparts A and AAAA to the landfill.

The requirements of Permit Condition 2.3.1 establish the applicability of Georgia Rule (ggg) to the landfill.

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III. Regulated Equipment Requirements

A. Equipment List for the Process

Emission Units		Applicable	Applicable Air Pollution Con	
ID No.	Description	Requirements/Standards	ID No.	Description
0001	Landfill with gas collection and	40CFR 61 Subpart A	0002	Third-party landfill gas treatment
	control system	40CFR 61 Subpart M		system
		40 CFR 63 Subpart A		
		40 CFR 63 Subpart AAAA		
		391-3-102(2)(ggg)	F01**	Contingency open flare**
		391-3-102(2)(n)		

B. Equipment & Rule Applicability

Emission and Operating Caps:

None applicable.

Rules and Regulations Assessment:

Georgia Rule 391-3-1-.02(2)(ggg) – Existing Municipal Solid Waste Landfills

Since this landfill was constructed before the NSPS Subpart WWW effective date (May 30, 1991) and it has a design capacity greater than 2.5 million cubic meters, it is subject to the Georgia Rule (ggg). This rule required the installation of a gas collection and control system (GCCS). Landfill gases collected by the GCCS are routed to a third party (Cherokee Brick and Tile Company) where it is used as a fuel in Cherokee Brick and Tile's furnaces.

Georgia Rule 391-3-1-.02(2)(n) – Fugitive Emissions

This rule requires the facility to minimize fugitive dust from the facility. This includes using water or chemicals for controlling dust on construction operations, grading of roads, and the clearing of land; covering at all times, when in motion, open bodied trucks transporting material likely to give rise to airborne dust; application of suitable material on dirt roads, materials, stockpiles, and other similar surfaces. Also, per this rule, a landfill may not discharge fugitive dust, which exhibits opacity equal to or greater than 20 percent.

C. Permit Conditions

Permit Conditions 3.3.1, 3.3.2, 3.4.1, 3.4.2 and 3.4.3 have been carried from the existing permit. In some cases, the language of these conditions has been updated to the most recent version of these conditions used by the Division.

Permit Condition 3.3.1 includes the bioreactor requirements from 40 CFR 63 Subpart AAAA if liquid (other than leachate) is added to the landfill in a controlled fashion.

Permit Condition 3.3.2 is carried over from Permit No. 4953-021-0195-V-03-0. It includes the requirement to implement a startup, shutdown, and malfunction plan per 40 CFR 63 Subpart AAAA.

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Permit Condition 3.4.1 includes the Georgia Rule (ggg) requirements for a GCCS.

Permit Conditions 3.4.2 and 3.4.3 includes the fugitive dust requirements per Georgia Rule (n).

Permit Condition 3.4.1 f. and g and Permit Condition 3.4.4 are only applicable if the Permittee is operating under the Contingency Plan required by Condition 7.3.1. These conditions contain requirements for the contingency open flare per Rule (ggg).

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IV. Testing Requirements (with Associated Record Keeping and Reporting)

A. General Testing Requirements

The permit includes a requirement that the Permittee conduct performance testing on any specified emission unit when directed by the Division. Additionally, a written notification of any performance test(s) is required 30 days (or sixty (60) days for tests required by 40 CFR Part 63) prior to the date of the test(s) and a test plan is required to be submitted with the test notification. Test methods and procedures for determining compliance with applicable emission limitations are listed and test results are required to be submitted to the Division within 60 days of completion of the testing.

B. Specific Testing Requirements

Macon Walker Road Landfill does not have any NMOC control devices. All of the collected landfill gas is routed to a third party for use as a fuel. This permit, therefore, does not need any of the typical testing conditions for a landfill.

The landfill, however, is not allowed to remove its GCCS until the landfill ceases to accept waste and the NMOC emission rate falls below 50 megagrams per year. The exact procedures for demonstrating that the NMOC emission rate has fallen to a sufficiently low level are found in 40 CFR 60.754(b) and required by Condition 4.2.1.

Permit Condition 4.2.2 requires an initial test for the contingency open flare if it is in place for more than 180 days.

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V. Monitoring Requirements

A. General Monitoring Requirements

Permit Condition 5.1.1 requires that all continuous monitoring systems required by the Division be operated continuously except during monitoring system breakdowns and repairs. Monitoring system response during quality assurance activities is required to be measured and recorded. Maintenance or repair is required to be conducted in an expeditious manner.

B. Specific Monitoring Requirements

Macon Walker Road Landfill is subject to Georgia Rule (ggg). The landfill routes collected landfill gases to a third party for use as a fuel. Rule (ggg) requires the monitoring of flow to the control devices (i.e., third party user) by installing a flow device and recording flow at least every 15 minutes.

For each wellhead in the collection system, the landfill is required to install a sample port and a temperature measuring device or access port. Once each month, the landfill is required to determine the gauge pressure, the temperature, and oxygen or nitrogen concentration in each wellhead. Excessive pressure, temperature, or gas concentration must be reported as an exceedance. For each exceedance, corrective action and re-monitoring must be conducted on a prescribed schedule.

Once per quarter, the landfill is required to monitor methane concentrations on the surface of the landfill. Excessive concentrations (more than 500 ppm above background concentration) will require reporting of an exceedance, corrective action, and re-monitoring on a prescribed schedule. A program to monitor for cover integrity and making repairs, on a monthly basis, is also required.

Permit Conditions 5.2.1 through 5.2.9 have been carried from the existing permit. In some cases, the language of these conditions has been updated to the most recent version of these conditions used by the Division.

Permit Condition 5.2.1 contains the requirements to monitor landfill gas flow.

Permit Conditions 5.2.2 through 5.2.6 contain the requirements for wellhead monitoring for temperature, pressure, and oxygen or nitrogen.

Permit Conditions 5.2.7 and 5.2.8 contain the requirements for surface methane monitoring.

Permit Condition 5.2.9 contains a requirement to monitor landfill cover integrity.

Permit Condition 5.2.1 b. and c. are only applicable if the Permittee is operating under the Contingency Plan required by Permit Condition 7.3.1. These paragraphs require monitoring of flow to the contingency open flare and for continuous presence of a flame.

C. Compliance Assurance Monitoring (CAM)

Not Applicable

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VI. Record Keeping and Reporting Requirements

A. General Record Keeping and Reporting Requirements

The Permit contains general requirements for the maintenance of all records for a period of five years following the date of entry and requires the prompt reporting of all information related to deviations from the applicable requirements. Records, including identification of any excess emissions, exceedances, or excursions from the applicable monitoring triggers, the cause of such occurrence, and the corrective action taken, are required to be kept by the Permittee and reporting is required on a semiannual basis.

B. Specific Record Keeping and Reporting Requirements

Macon Walker Road Landfill is subject to Georgia Rule (ggg) which requires the landfill to keep accessible records of design capacity and waste in place and may exclude areas containing non-degradable waste from the GCCS if sufficient records are kept. The landfill accepts asbestos-containing waste and is, therefore, subject to 40 CFR 61 Subpart M. The landfill is required to comply with 40 CFR 61.154 and, upon closure, submit records of asbestos disposal locations and quantities. The landfill is also subject to 40 CFR 63 Subpart AAAA which requires the implementation of a startup, shutdown, and malfunction (SSM) plan.

The requirements of Permit Conditions 6.2.1 through 6.2.15 of the existing permit have been carried over to this permit. The language of these conditions has been updated to the most recent version of these conditions used by the Division.

Permit Condition 6.2.1 requires a report when the landfill stops accepting waste in order to close the landfill.

Permit Condition 6.2.2 requires a report when the landfill removes or ceases to operate control equipment.

Permit Condition 6.2.3 requires that the facility keep records of the maximum design capacity of the landfill, the current amount of solid waste in place, and the year-by-year waste acceptance rate.

Permit Condition 6.2.4 requires records of the GCCS components.

Permit Condition 6.2.5 requires records of existing and planned collectors in the GCCS.

Permit Condition 6.2.6 requires records of GCCS exceedances.

Permit Condition 6.2.7 contains requirements for excluding areas of the landfill from the GCCS design, when it is required, due to the area being nonproductive of LFG.

Permit Condition 6.2.8 contains requirements for excluding areas of the landfill from the GCCS design, which contain non-degradable waste.

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Permit Conditions 6.2.9 and 6.2.10 contain requirements from 40 CFR 61 Subpart M which are applicable if the landfill accepts asbestos-containing waste.

Permit Condition 6.2.11 contains requirements for the SSM Plan.

Permit Conditions 6.2.12 through 6.2.14 contain requirements, which are applicable, if the landfill adds any liquid (other than leachate) to the landfill. The landfill may become subject to the bioreactor requirements in 40 CFR 63 Subpart AAAA if liquids (other than leachate) are added.

Permit Condition 6.2.15 requires implementing their dust suppression plan to ensure that the landfill complies with Georgia Rule (n).

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VII. Specific Requirements

A. Operational Flexibility

Not applicable.

B. Alternative Requirements

In April 2012, the Permittee submitted a Contingency Plan to the Division for approval in response to a consent order. The Contingency Plan is to ensure that landfill gas from Macon Walker Road Landfill is controlled if the third-party (Cherokee Brick & Tile) treatment system is down for five or more days. Condition 7.3.1 requires that the landfill follow the requirements of the Contingency Plan.

C. Insignificant Activities

See Permit Application on GEOS website. See Attachment B of the permit

D. Temporary Sources

The following has been included in the permit.

When the following activities occur, the Permittee is required to maintain records relating to these activities:

- a) Construction of Landfill Cell
- b) Capping (Closure) of Landfill Cell

E. Short-Term Activities

Not applicable.

F. Compliance Schedule/Progress Reports

Not applicable.

G. Emissions Trading

Not applicable.

H. Acid Rain Requirements

Not applicable.

I. Stratospheric Ozone Protection Requirements

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The standard permit condition pursuant to 40 CFR 82 Subpart F has been included in the Title V Permit. These Title VI requirements apply to all air conditioning and refrigeration units containing ozone-depleting substances regardless of the size of the unit or of the source.

J. Pollution Prevention

Not applicable.

K. Specific Conditions

Not applicable.

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VIII. General Provisions

Generic provisions have been included in this permit to address the requirements in 40 CFR Part 70 that apply to all Title V sources, and the requirements in Chapter 391-3-1 of the Georgia Rules for Air Quality Control that apply to all stationary sources of air pollution.

Template Condition 8.14.1 was updated in September 2011 to change the default submittal deadline for Annual Compliance Certifications to February 28.

Template Condition Section 8.27 was updated in August 2014 to include more detailed, clear requirements for emergency generator engines currently exempt from SIP permitting and considered insignificant sources in the Title V permit.

Template Condition Section 8.28 was updated in August 2014 to more clearly define the applicability of the Boiler MACT or GACT for major or minor sources of HAP.

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Addendum to Narrative

The 30-day public review started on month day, year and ended on month day, year. Comments were/were not received by the Division.

//If comments were received, state the commenter, the date the comments were received in the above paragraph. All explanations of any changes should be addressed below.//

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