Facility Name: **Lower River Road MSW Landfill**
City: Covington
County: Newton
AIRS #: 04-13-217-00070

Application #: TV-559322
Date Application Received: May 12, 2021
Permit No: 4953-217-0070-V-01-0

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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.

I. Facility Description

A. Facility Identification

1. Facility Name:

Lower River Road MSW Landfill

2. Parent/Holding Company Name

Newton County

3. Previous and/or Other Name(s)

None

4. Facility Location

205 Lower River Road
Covington, Georgia 30016

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

The landfill is located in Newton County which is in attainment for all criteria pollutants.

B. Site Determination

There are no 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-Permit Change	Date of Issuance/ Effectiveness	Purpose of Issuance
None		

D. Process Description

1. SIC Codes(s)

   4953

   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)

   No products are produced. Lower River Road MSW Landfill receives, manages and disposes of solid waste.

3. Overall Facility Process Description

   The Lower River Road MSW Landfill received a solid waste permit modification in 2014 to expand capacity to 10,795,000 cubic yards (8,253,270 cubic meters). Construction of the expansion was expected to begin in May 2021.

   In May 2017, the landfill received a “no permit required” letter for the construction and operation of a flare. The flare was exempt from permitting per Georgia Rule 391-3-1-.03(6)(i)1.

   Municipal solid waste and other wastes are received at the facility from collection and transport vehicles. Wastes are unloaded at the active working face and compacted into place. At the end of the day, cover material of soil or alternative cover material is placed over the compacted wastes. When the landfill reaches permitted capacity, it will be capped in accordance with the facility's solid waste disposal permit.

   The waste deposited in the landfill decomposes over time and produces gases termed “landfill gas” (LFG). The LFG is composed primarily of methane and carbon dioxide with small amounts of Nonmethane Organic Compounds (NMOC). Because the NMOC emitted from the landfill is currently less than 34 megagrams per year, the landfill is not required to have a gas collection and control system (GCCS). When the NMOC emissions exceed 34 Mg/yr, calculated in accordance with federal rules, the landfill will be required to install a GCCS which meets the requirements of NSPS Subpart XXX.

4. Overall Process Flow Diagram

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

E. Regulatory Status

1. PSD/NSR

Landfills are not included in the list of 28 listed source categories that have a 100 tpy PSD major source threshold, per 40 CFR 52.21. It is a minor source with respect to PSD/NSR regulations. Potential emissions of each PSD regulated pollutant is less than the major source threshold of 250 tons per year (tpy). The source has never undergone any PSD review.

2. Title V Major Source Status by Pollutant

Table 2: Title V Major Source Status

Pollutant	Is the Pollutant Emitted?	If emitted, what is the facility's Title V status for the pollutant?		
		Major Source Status	Major Source Requesting SM Status	Non-Major Source Status
PM	Yes			✓
PM_{10}	Yes			✓
$PM_{2.5}$	Yes			✓
SO_2	Yes			✓
VOC	Yes			✓
NO_x	Yes			✓
CO	Yes			✓
TRS	N/A			
H_2S	N/A			
Individual HAP	Yes			✓
Total HAPs	Yes			✓

3. MACT Standards

40 CFR Part 63 Subpart AAAA – National Emission Standards for 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 (m^3) and having estimated uncontrolled NMOC emissions exceeding 50 megagrams per year (Mg/yr) or if the landfill is a bioreactor. The MACT standard is not applicable to this landfill site at present because the NMOC emissions are less than the 50 Mg/yr threshold and the landfill is not a bioreactor. Because the landfill's

design capacity is greater than 2.5 million Mg and 2.5 million m^3, the MACT is potentially applicable in the future if the uncontrolled NMOC emissions ever exceed 50 Mg/yr.

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	Yes
Program Code M – Part 63 NESHAP	No
Program Code V – Title V	Yes

Regulatory Analysis

II. Facility Wide Requirements

A. Emission and Operating Caps:

None applicable.

B. Applicable Rules and Regulations

40 CFR 60 Subpart XXX – Standards of Performance for Municipal Solid Waste Landfills That Commenced Construction, Reconstruction, or Modification After July 17, 2014

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 (m^3), if the landfill commenced construction, reconstruction or modification on or after July 17, 2014. Since the Lower River Road MSW Landfill was modified in 2021 and has a design capacity of 8.3 million cubic meters, the facility is currently subject to 40 CFR 60 Subpart XXX – "Standards of Performance for Municipal Solid Waste Landfills That Commenced Construction, Reconstruction, or Modification After July 17, 2014."

40 CFR Part 61 Subpart M – NESHAP for Asbestos

Lower River Road MSW 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 XXX. This landfill is currently not subject to this rule because the landfill is not currently required by 40 CFR 60 Subpart XXX to install and operate a landfill gas collection and control system (GCCS). When the control requirements of Subpart XXX become applicable, the landfill will become subject to Subpart AAAA. The facility must then comply with the requirements of this NESHAP by the date on which the landfill is required to install a GCCS. If the facility begins adding liquids, other than leachate, in a controlled fashion to the waste mass, that would trigger the Subpart AAAA provisions for a bioreactor. If the facility becomes subject to Subpart AAAA, it will be also be subject to Subpart A, the NESHAP General Provisions.

C. Compliance Status

No noncompliance issues have been identified by the facility.

D. Permit Conditions

Condition 2.2.1 establishes the applicability of 40 CFR 60 Subparts A and XXX to the landfill.

Condition 2.2.2 establishes the applicability of 40 CFR 61 Subparts A and M to the landfill.

Condition 2.2.3 establishes the potential applicability of 40 CFR 63 Subparts A and AAAA to the landfill.

III. Regulated Equipment Requirements

A. Equipment List for the Process

Emission Units		Applicable Requirements/Standards	Air Pollution Control Devices	
ID No.	Description		ID No.	Description
LF	Landfill	40 CFR 60 Subpart A 40 CFR 60 Subpart XXX 40 CFR 61 Subpart A 40 CFR 61 Subpart M 40 CFR 63 Subpart A* 40 CFR 63 Subpart AAAA* 391-3-1-.02(2)(n)	None	None

* 40 CFR Part 63 requirements are not currently applicable, but could become applicable during the permit term if the facility is required to install a GCCS or becomes a bioreactor.

B. Equipment & Rule Applicability

Emission and Operating Caps:

None applicable.

Rules and Regulations Assessment:

40 CFR 60 Subpart XXX – Standards of Performance for Municipal Solid Waste Landfills That Commenced Construction, Reconstruction, or Modification After July 17, 2014

Since this landfill was modified after the NSPS Subpart XXX effective date (July 17, 2014) and it has a design capacity greater than 2.5 million cubic meters, it is subject to the New Source Performance Standards (NSPS) 40 CFR 60 Subpart XXX – Standards of Performance for MSW Landfills that Commenced Construction, Reconstruction, or Modification After July 17, 2014. This rule requires that the landfill calculate annual nonmethane organic compound (NMOC) emissions estimates.

When the annual NMOC emission estimate exceeds 34 Mg, a gas control and collection system (GCCS) must be designed and installed per the requirements of Subpart XXX or the landfill can use Tier 4 to show that surface methane concentrations are less than 500 ppm above background. If the calculation of the NMOC emission rate is ever equal to or greater than 50 megagrams/year, the landfill will then be required to install a GCCS regardless of the surface methane concentration.

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

Condition 3.3.1 is a standard condition for uncontrolled landfills and establishes bioreactor requirements according to 40 CFR 63 Subpart AAAA.

Conditions 3.4.1 and 3.4.2 limit fugitive dust and its opacity, in accordance with Rule (n).

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

Subpart XXX specifies in 40 CFR 60.764 the procedures for an uncontrolled landfill to determine annual NMOC emissions. These procedures require a calculation based on the landfill's recorded waste acceptance rates, NMOC concentration, and methane generation rate constant in a three tiered approach using equations specified in Subpart XXX.

The landfill will use Tier 1 to determine NMOC emissions. If NMOC emissions exceed 34 Mg/yr, the landfill may determine the site-specific NMOC concentration and use Tier 2. If the Tier 2 NMOC emission rate exceeds 34 Mg/yr, the landfill may choose to use Tier 3 which is to determine the site-specific methane generation rate constant.

If the Tier 2 NMOC emission rate is between 34 and 50 Mg/yr, the landfill has the option to use Tier 4 and show that surface methane concentrations are less than 500 ppm above background

The requirements of the NMOC emission calculation are included as Conditions 4.2.1 through 4.2.5. The Tier 4 surface methane measurement is included in Conditions 4.2.6 and 4.2.7.

Condition 4.2.1 states that the facility must determine the NMOC emission rate using the equations in Condition 4.2.2 and constants in Condition 4.2.3.

Condition 4.2.4 states the sampling procedures to be followed for collecting samples to determine NMOC concentration when using Tier 2 or Tier 3 values for calculating NMOC emissions.

Condition 4.2.5 establishes that Tier 2 sampling test (if applicable) is required at 60 month intervals.

Condition 4.2.6 contains the detailed procedures for conducting the surface methane measurements. Condition 4.2.7 contains the requirements for the measurement device.

V. Monitoring Requirements

A. General Monitoring Requirements

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

This landfill is uncontrolled and is subject to Subpart XXX. Subpart XXX and this permit do not contain any specific monitoring requirements for an uncontrolled landfill.

C. Compliance Assurance Monitoring (CAM)

Not Applicable

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

The Landfill NSPS, 40 CFR 60 Subpart XXX requires uncontrolled landfills to determine their NMOC emission rate annually. If the NMOC emissions exceed 34 megagrams per year, the landfill must either calculate emissions at a higher tier (e.g., move from Tier 1 to Tier 2 or Tier 2 to Tier 3) or submit a Collection and Control System (GCCS) Design Plan that has been prepared by a Professional Engineer. If the NMOC emissions are between 34 and 50 megagrams per year, the landfill may use Tier 4 and show that the surface methane concentrations are less than 500 ppm above background. The landfill is no longer required to calculate annual NMOC emissions once a landfill gas collection system meeting the requirements of Subpart XXX is being used. Subpart XXX also requires the landfill to keep accessible records of design capacity and waste in place and may exclude areas containing nondegradable waste from the GCCS if sufficient records are kept. Subpart XXX also requires that a report be made if any liquid, including leachate, has been added to the landfill surface in a controlled manner.

Landfills that accept asbestos-containing waste are subject to 40 CFR 61 Subpart M. These landfills are required to comply with 40 CFR 61.154 and, upon closure, submit records of asbestos disposal locations and quantities.

The Landfill MACT, 40 CFR 63 Subpart AAAA is triggered if the landfill becomes a bioreactor (as defined in Subpart AAAA). The landfill becomes a bioreactor if any liquid other than leachate is added in a controlled fashion to the waste unless the moisture in the waste remains less than 40 percent.

Conditions 6.2.1 through 6.2.3 include the requirements for submitting annual NMOC emission rate reports and the procedures to be taken when a NMOC emission rate report exceeds 34 megagrams per year (i.e., calculate emissions by a higher tier or submit a GCCS design plan).

Condition 6.2.4 states that a NMOC emission report is not required after a GCCS, which meets the requirements of Subpart XXX, has been installed.

Condition 6.2.5 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.

Conditions 6.2.6 and 6.2.7 contain requirements from 40 CFR 61 Subpart M which are applicable if the landfill accepts asbestos-containing waste.

Conditions 6.2.8 and 6.2.9 contains requirements for excluding areas of the landfill from the GCCS design, when it is required, which contain nondegradable waste or are nonproductive.

Condition 6.2.10 requires implementing their dust suppression plan to ensure that the landfill complies with Georgia Rule (n).

Conditions 6.2.11 through 6.2.13 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.

Condition 6.2.14 requires a report when the landfill stops accepting waste in order to close the landfill.

Condition 6.2.15 requires a liquid additions report if any liquid (including leachate) has been added to the landfill surface in the last ten years. Condition 6.2.16 requires certain records be kept if a report is required by Condition 6.2.15.

Conditions 6.2.17 and 6.2.18 contain reporting requirements pertaining to Tier 4 surface methane measurements. Condition 6.2.19 contains record keeping requirements pertaining to Tier 4 surface methane measurements.

Condition 6.2.20 contains requirements for electronic reports made to the U.S. EPA.

VII. Specific Requirements

A. Operational Flexibility

Not applicable.

B. Alternative Requirements

Not applicable.

C. Insignificant Activities

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

D. Temporary Sources

Not applicable.

E. Short-Term Activities

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

F. Compliance Schedule/Progress Reports

Not applicable.

G. Emissions Trading

Not applicable.

H. Acid Rain Requirements

Not applicable.

I. Stratospheric Ozone Protection Requirements

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. The Permittee has indicated that the landfill has air conditioners or refrigeration equipment that uses CFCs, HFCs, or other ozone-depleting substances.

J. Pollution Prevention

Not applicable.

K. Specific Conditions

Not applicable.

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.

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.//