

Facility Name: **Decatur County Solid Waste Facility**
City: Attapulgis
County: Decatur
AIRS #: 04-13-087-00058

Application #: TV-22541
Date Application Received: April 14, 2014
Date Application Deemed
Administratively Complete: NA
Permit No: 4953-087-0058-V-02-0

Program	Review Engineers	Review Managers
SSPP	Alaa-Eldin A. Afifi	Dika Kuoh
ISMP	Dave Sheffield	Daniel McCain
SSCP	Do Hyong Kim	Michael Odom
Toxics	NA	NA
Permitting Program Manager		Eric Cornwell

Introduction

This narrative is being provided to assist the reader in understanding the content of the attached draft Part 70 operating permit. Complex issues and unusual items are explained in simpler terms and/or greater detail than is sometimes possible in the actual permit. This 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 Amendments of 1990. Section 391-3-1-.03(10) of the Georgia Rules for Air Quality Control incorporates requirements of Part 70 of Chapter I of Title 40 of the Code of Federal Regulations promulgated pursuant to the Federal Clean Air Act. The primary purpose of this permit is to consolidate and identify existing state and federal air requirements applicable to **Decatur County Solid Waste Facility** and to provide practical methods for determining compliance with these requirements. The following narrative is designed to accompany the draft permit and is presented in the same general order as the permit. It initially describes the facility receiving the permit, the applicable requirements and their significance, and the methods for determining compliance with those applicable requirements. This 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:**

Decatur County Solid Waste Facility

2. Parent/Holding Company Name

Decatur County Board of Commissioners

3. Previous and/or Other Name(s)

This facility is commonly known and referred to as Decatur County Solid Waste Facility. No other names were identified.

4. Facility Location

104 Mine Loop Road
Attapulgus, Georgia 39815
Decatur County

5. Attainment or Non-attainment Area Location

The facility is located in Decatur County which is an attainment area for all pollutants regulated under the National Ambient Air Quality Standards (NAAQS).

B. Site Determination

There are no other facilities which could possibly be contiguous, adjacent and under common control.

C. Existing Permits

Table 1 below lists all current permits (including Part 71 permits), as amended, issued to the facility.

Table 1: List of Current Permits as Amended

Permit Number and/or Purpose of Issuance	Date of Issuance and Date of Amendments (if any)	Comments	
		Yes	No
4953-087-0058-E-01-0	November 14, 2013	X	

Table 2: Comments on Specific Permits

Permit Number	Comments
4953-087-0058-E-01-0	Construction and operation of a municipal solid waste landfill with a design capacity of approximately 4.3 million megagrams (4.7 million tons).

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)

This facility does not have a final product. Decatur County Solid Waste Facility processes municipal solid waste and disposes of it in a landfill.

3. Overall Facility Process Description

The Decatur County Solid Waste facility is a non-hazardous municipal solid waste (MSW) located in Attapulgus, Georgia. The facility is owned by the Decatur County Board of Commissioners. The facility currently consists of Phase 1, Phase 2 and Phase 3 MSW areas, and an inert waste area. The waste expansion project involves the construction of four additional MSW cells (Cells 4 through 7) and the conversion of the inert waste area into a construction and demolition (C&D) landfill (C&D cell 1). With the waste expansion, the total area available for disposal of MSW will be approximately 75.3 acres. The total area available for C&D disposal will be approximately 4.7 acres. According to data provided by the County the expanded MSW landfill will have a total maximum waste design capacity of approximately 5,573,000 cubic yards (4,260,864 meters), which equates to about 4,737,050 tons.

4. Overall Process Flow Diagram (optional)

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

E. Regulatory Status

1. PSD/NSR

Decatur County Solid Waste Facility is a minor source with respect to PSD/NSR regulations. Emissions of each PSD regulated pollutant is less than the major source threshold of 250 tons per year. Landfills are not included in the list of 28 source categories that have a 100 tpy threshold to be subject to PSD regulations.

2. Title V Major Source Status by Pollutant

Table 3: 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	Yes			✓
H ₂ S	No			✓
Individual HAP	Yes			✓
Total HAPs	Yes			✓
Total GHGs	Yes			✓

3. MACT Standards

40 CFR 63, Subpart AAAA – “National Emission Standards for Hazardous Air Pollutants: Municipal Solid Waste Landfills”

Subpart AAAA was promulgated on January 16, 2003, and is effective for existing landfills as of January 16, 2004. This rule applies to each landfill that received waste after November 6, 1987 that is a major source of HAPS, is co-located with a major source of HAPS, or is subject to the control requirements of 40 CFR 60 Subpart WWW. Decatur County Solid Waste Facility is not a major source of HAPS, co-located with a major source of HAPS, nor is it required to install a gas collection and control system (GCCS) to comply with 40 CFR 60 Subpart WWW. This landfill, therefore, is not subject to Subpart AAAA.

Please note that a landfill becomes subject to the GCCS requirements of 40 CFR 60 Subpart WWW when the nonmethane organic compounds (NMOC) emissions from the landfill exceed 50 Mg per year. The facility must then comply with the requirements of this MACT Standard by the date on which the landfill is required to install a GCCS. If the landfill 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.

4. Program Applicability

Program Code	Applicable (y/n)
Program Code 6 - PSD	N
Program Code 8 – Part 61 NESHAP	N
Program Code 9 - NSPS	Y
Program Code M – Part 63 NESHAP	N
Program Code V – Title V	Y

Regulatory Analysis**II. Facility Wide Requirements****A. Emission and Operating Caps:**

None applicable.

B. Applicable Rules and Regulations**40 CFR 60 Subpart WWW – Standards of Performance for 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 on or after May 30, 1991. Decatur County Solid Waste Facility has a design capacity of approximately 5.6 million cubic meters, and construction began in 2005. The landfill is, therefore, subject to the Landfill NSPS, 40 CFR 60 Subpart WWW - Standards of Performance for Municipal Solid Waste Landfills.

As long as the NMOC emission rate calculation using Tier 2 or 3 remains below the Subpart WWW threshold of 50 Mg per year, a landfill gas collection and control system (GCCS) is not required to be installed (Tier 2 testing at the facility on December 12, 2013 indicates that the NMOC emission rate is 15.13 megagrams per year for 2014). Therefore, the facility does not need a GCCS.

40 CFR 61 Subpart M – NESHAP for Asbestos

Decatur County Solid Waste Facility is allowed to accept asbestos-containing waste. If the facility 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 MSW 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 61.150 – “Standard for waste disposal for manufacturing, fabricating, demolition, renovation, and spraying operations,” if construction and demolition waste has been accepted.

C. Compliance Status

The facility is operating in compliance with their Air Quality Permit.

D. Operational Flexibility

No request for operational flexibility has been requested from the facility.

E. Permit Conditions

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

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

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

III. Regulated Equipment Requirements

A. Brief Process Description

Decatur County Solid Waste Facility receives, manages, and disposes of solid waste including, but not limited to, municipal solid waste, commercial waste, and industrial waste.

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 50 megagrams per year, the landfill is not required to have a gas collection and control system (GCCS). When the NMOC emissions exceed 50 Mg/yr, calculated in accordance with federal rules, the landfill will be required to install a GCCS which meets the requirements of NSPS Subpart WWW.

B. Equipment List for the Process

Emission Units		Specific Limitations/Requirements		Air Pollution Control Devices	
ID No.	Description	Applicable Requirements/Standards	Corresponding Permit Conditions	ID No.	Description
ES1	Landfill*	40 CFR 60, Subpart A 40 CFR 60, Subpart WWW 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)	2.2.1, 2.2.2, 2.2.3, 3.3.1, 3.4.1, 3.4.2, 4.2.1, 4.2.2, 4.2.3, 4.2.4, 4.2.5, 6.1.7, 6.2.1, 6.2.2, 6.2.3, 6.2.4, 6.2.5, 6.2.6, 6.2.7, 6.2.8, 6.2.9, 6.2.10, 6.2.11, 6.2.12, 6.2.13, 6.2.14, 6.2.15	None	None

Generally applicable requirements contained in this permit may also apply to emission units listed above.

* Emission unit “Landfill” includes landfill fugitive emissions from sources identified by the Permittee in the application.

** 40 CFR 61 requirements are potentially applicable, if the facility accepted asbestos containing industrial waste.

*** 40 CFR 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.

C. Equipment & Rule Applicability

Emission and Operating Caps –

None applicable.

Applicable Rules and Regulations –

40 CFR 60 Subpart WWW – Standards of Performance for Municipal Solid Waste Landfills

Since this landfill was constructed and modified after 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 New Source Performance Standards (NSPS) 40 CFR 60, Subpart WWW – Standards of Performance for MSW Landfills. This rule requires that the facility calculate annual emissions estimates.

When the annual emission estimate exceeds 50 Mg of NMOC, then a gas control and collection system (GCCS) must be put into place. However, the facility also has the option instead to conduct Tier 2 testing to determine the NMOC concentration and recalculate the NMOC emission rate. If this Tier 2 emission rate ever exceeds 50 megagrams per year, the facility must install a GCCS; it also has the option instead to conduct Tier 3 testing to determine a site-specific methane generation constant and recalculate the NMOC emission rate. If a recalculation of the NMOC emission rate using Tier 3 variables is equal to or greater than 50 megagrams/year, then the Permittee will be required to install a GCCS.

Note: the facility had conducted a Tier 2 testing to determine the NMOC concentration and to calculate the NMOC emission rate on December 12, 2013, the NMOC emission rate was 15.13 megagrams per year for 2014 so the facility does not need a GCCS.

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.

D. Compliance Status

The facility is operating in compliance with all applicable air quality regulations.

E. Operational Flexibility

No request for operational flexibility has been requested from the facility.

F. Permit Conditions

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

Permit Conditions 3.4.1 and 3.4.2 limit fugitive dust and its opacity, in accordance with Georgia 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 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**1. Individual Equipment**

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

Permit 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.

Permit Condition 4.2.5 requires the facility to conduct testing to determine the site-specific NMOC concentration using the procedures specified in Condition 4.2.4 no later than December 12, 2018.

2. Equipment Groups (all subject to the same test requirements):

None applicable.

V. Monitoring Requirements (with Associated Record Keeping and Reporting)**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**1. Individual Equipment:**

Decatur County Solid Waste Facility is uncontrolled and is subject to Subpart WWW. Subpart WWW and this permit do not contain any specific monitoring requirements for an uncontrolled landfill.

2. Equipment Groups (all subject to the same monitoring requirements):

None applicable.

VI. Other 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.

Template Conditions 6.1.3 and 6.1.4 were updated in September 2011 to allow ~60 days to submit periodic reports. Alternative reporting deadlines are allowed per 40 CFR 70.6, 40 CFR 60.19(f) and 40 CFR 63.10(a).

Condition 6.1.7b.i defines excursions any failure to follow the procedures of the Dust Suppression Plan required in Condition 6.2.10.

B. Specific Record Keeping and Reporting Requirements

The Landfill NSPS, 40 CFR 60 Subpart WWW requires uncontrolled landfills to determine their NMOC emission rate annually. If the NMOC emissions exceed 50 megagrams per year, the landfill must either calculate emissions at a higher tier (e.g., move from Tier 2 to Tier 3) or submit a Collection and Control System (GCCS) Design Plan that has been prepared by a Professional Engineer. The landfill is no longer required to calculate annual NMOC emissions once a landfill gas collection system meeting the requirements of Subpart WWW is being used. Subpart WWW 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.

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 AAAAA is triggered if the landfill becomes a bioreactor (as defined in Subpart AAAAA). 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.

Permit 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 50 megagrams per year (i.e., calculate emissions by a higher tier or submit a GCCS design plan).

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

Permit 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.

Permit 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.

Permit Condition 6.2.8 contains requirements for excluding areas of the landfill from the GCCS design when it is required, which contain nondegradable waste.

Permit Condition 6.2.9 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 6.2.10 requires implementing their dust suppression plan to ensure that the landfill complies with Georgia Rule (n).

Permit 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.

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

Permit Condition 6.2.15 requires the facility to keep record of the design capacity reports.

VII. Specific Requirements

A. Operational Flexibility

Other than the standard conditions (7.1.1, 7.2.1, and 7.2.2), operational flexibility provisions have not been incorporated into this Title V Permit. The applicant did not include any alternative operating scenarios in their Title V Application or request any specific operational flexibility conditions.

B. Alternative Requirements

There are no alternative requirements that need to be incorporated into the Title V Permit.

C. Insignificant Activities

Refer to <http://airpermit.dnr.state.ga.us/GATV/default.asp> for the Online Title V Application.

Refer to the following forms in the Title V permit application:

- Form D.1 (Insignificant Activities Checklist)
- Form D.2 (Generic Emissions Groups)
- Form D.3 (Generic Fuel Burning Equipment)
- Form D.6 (Insignificant Activities Based on Emission Levels of the Title V permit application)

D. Temporary Sources

The facility did not apply for a permit for any temporary sources.

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

The facility is in compliance with all Air Quality Regulations. Therefore, no compliance schedule or progress reports are necessary.

G. Emissions Trading

The facility is not involved in any emissions trading programs.

H. Acid Rain Requirements

None applicable.

I. Prevention of Accidental Releases

There is no pollution prevention requirements in this Title V permit.

J. Stratospheric Ozone Protection Requirements

The facility is subject to the Stratospheric Ozone Protection Requirements under Title VI of the CAAA of 1990. The facility has stated in their application that they are not subject to 40 CFR 82, Subpart A, Appendices A and B - Servicing of Motor Vehicle Air conditioners.

K. Pollution Prevention

There is no pollution prevention requirements in this Title V permit.

L. Specific Conditions

None 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.