

Facility Name: **Taylor County Landfill**
 City: Mauk
 County: Taylor
 AIRS #: 04-13-269-00014

Application #: TV- 10520
 Date Application Received: February 17, 1998
 Date Application Deemed
 Administratively Complete: April 24, 1998
 Date of Draft Permit:
 Permit No: 4953-269-0014-V-01-0

Program	Review Engineers	Review Managers
SSPP/ASU	Michael Roy	John Yntema
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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 proposed pursuant to: (1) Section 391-3-1-.03(10) of the Georgia Rules for Air Quality Control, (2) Part 70 of Chapter I of Title 40 of the Code of Federal Regulations, and (3) Title V of the Clean Air Act Amendments of 1990. The primary purpose of this permit is to consolidate and identify existing state and federal air requirements applicable to Taylor County Landfill 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, then the applicable requirements and their significance, and finally the methods for determining compliance with those applicable requirements. This narrative is intended only as an adjunct for the reviewer and has no legal standing. Any revisions made to the permit in response to comments received during the public participation process will be described in an addendum to this narrative.

I. Facility Description

A. Facility Identification

1. Facility Name: Taylor County Landfill

2. Parent/Holding Company Name

Allied Services, LLC

3. Previous and/or Other Name(s)

None

4. Facility Location

County Road 33/Stewart Road
Mauk, Georgia 31058

5. Attainment or Non-attainment Area Location

The facility is located in an attainment area.

6. Class I Area Impacts

The facility is not located within 100 km of a Class I area.

B. Site Determination

There are no applicable issues with regard to the site determination. There are no other facilities which could possibly be contiguous or adjacent and under common control.

C. Existing Permits

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
4953-269-0014-B-01-0	October 20, 1999	x	

Table 2: Comments on Specific Permits

Permit Number	Comments
4953-269-0014-B-01-0	Construction and operation permit for an enclosed flare equipped with a leachate vaporator system.

D. Process Description

1. SIC Code(s): Major- 4953 (Operation of a Sanitary landfill)
Minor- None
2. Description of Product(s): This facility does not have final products.
Taylor County Landfill processes general waste.
3. Overall Facility Process Description

Taylor County landfill receives municipal and industrial solid waste. The solid waste is deposited directly into the landfill and then covered with fill dirt.

4. Overall Process Flow Diagram (optional)

An overall process flow diagram is located in Appendix A of the Taylor County Landfill Title V Application.

E. Regulatory Status

1. PSD/NSR:

The facility is considered a minor source with respect to PSD rules.

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	U			U
PM ₁₀	U			U
SO ₂	U			U
VOC	U			U
NO _x	U			U
CO	U	U		
TRS	U			U
H ₂ S	U			U
Individual HAP	U			U
Total HAPs	U	U		

3. MACT Standards

Taylor County Landfill is not currently subject to any MACT standards.

4. Program Applicability

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

Regulatory Analysis

II. Facility Wide Requirements

A. Emission and Operating Caps: The facility currently does not have any emission or operating limits.

B. Applicable Rules and Regulations

- ! Rules and Regulations Assessment - The facility was constructed before the Subpart WWW May 30, 1991 applicability date. It is currently subject to the State of Georgia's Rule for Air Quality Control, 391-3-1.02(2)(ggg)-Existing Municipal Solid Waste Landfills. The Taylor County Landfill has a design capacity of 50.0 MMyrd³. Using Tier 1, the facility calculated their NMOC emissions rate to be greater than 50 Mg/year. This exceeds the Rule (ggg) 50 Mg NMOC threshold limit. Rather than recalculating the NMOC emissions using Tier 2 or Tier 3, the Taylor County Landfill proceeded with the installation of a landfill gas collection and control system.

The facility's leachate storage tanks (vessels) are possibly subject to 40 CFR Part 60, Subpart Kb for Volatile Organic Liquid Storage Vessels. The tanks are not subject to the entire rule due to the low vapor pressure of leachate; however, if the tanks are greater than 40 m³ and were constructed, reconstructed, or modified after July 23, 1984, they are subject to 60.116b (a) and (b). 60.116b (a) and (b) require the Permittee to keep readily accessible records showing the dimensions and an analysis showing the capacity of each tank. The Permit contains the above mentioned record keeping requirements associated with Subpart Kb.

Because the Taylor County Landfill accepts asbestos-containing waste for disposal, the facility is subject to 40 CFR Part 61, Subpart M NESHAP. As long as the Taylor County Landfill remains active, it is 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 will be required to comply with 40 CFR 61.151 - "Standard for Inactive Waste Disposal Sites for Asbestos Mills and Manufacturing and Fabricating Operations".

Also, the facility is subject to the following Georgia Air Quality Rules:

Georgia Rule 391-3-1-.02(2)(b) Visible Emissions

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

Georgia Rule 391-3-1-.02(3) Sampling

Georgia Rule 391-3-1-.02(5) Open Burning

Georgia Rule 391-3-1-.02(6) Source Monitoring

- ! Emission and Operating Standards -

Georgia Rule 391-3-1-.02(2)(b) Visible Emissions

The facility shall not allow emissions from any air contaminant source the opacity of which is equal to or greater than forty (40) percent.

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 dust suppressing material to dirt roads, materials, stockpiles, and other similar surfaces.

Georgia Rule 391-3-1-.02(3) Sampling

Any sampling, computation, and analysis to determine the compliance with any emission limit or standards must be in accordance with the Georgia-DNR, Procedures for Testing and Monitoring Sources of Air Pollutants, or by methods or procedures approved by the Director. The facility must provide safe and adequate sampling ports, and the facility must operate at maximum capacity during test periods.

Georgia Rule 391-3-1-.02(5) Open Burning

This regulation sets the requirements for open burning of vegetative matter that is generated from the site, and defines the rules necessary for any ground clearing operations. Open burning operations must also be conducted in accordance with any local regulations.

Georgia Rule 391-3-1-.02(6) Source Monitoring

The facility must comply with monitoring and related requirements specified in the applicable standard, unless the Director specifies additional or more stringent requirements, in which case all requirements must be met. Also, this section gives EPD the authority to require a company to install, maintain, and use emission monitoring devices to sample emissions.

C. Compliance Status

The facility did not submit any Section 11.10 forms and so is presumed to be in compliance with all applicable air quality rules.

D. Operational Flexibility

There were no operational flexibility requests in the Title V application.

E. Permit Conditions

All of the permit conditions for the facility will be facility wide conditions.

III. Regulated Equipment Requirements

A. Brief Process Description

The facility accepts municipal solid waste and deposits it into the ground. This waste is then covered with a medium to reduce the chance of any particulates becoming airborne. Once the waste is covered, the material starts a natural process of decomposition. The emissions generated from this decomposition process are regulated by 391-3-1-.02(2)(ggg)-Existing Municipal Solid Waste Landfills.

B. Equipment List for the Process

The facility has a landfill that is represented by Emission Unit No. LF-01 and a landfill gas collection and control system represented by Air Pollution Control Device No. VV-01.

C. Equipment & Rule Applicability

! Emission and Operating Caps - The facility is not subject to any emission or operating caps.

! Applicable Rules and Regulations - Since the Taylor County Landfill was constructed before the Subpart WWW applicability date and it has a design capacity greater than 3.2 MMyrd³, it is subject to the Georgia Air Quality Rule 391-3-1-.01(2)(ggg). The regulation requires that the facility calculate and report an annual emissions estimate and, once the emission estimate exceeds 50 Mg of NMOC, then a control and collection system must be put into place. The Taylor County Landfill exceeded the 50 Mg of NMOC threshold with their Tier 1 emission estimate calculation and now operates a landfill gas collection and control system (GCCS). The regulation contains requirements for installation, operation, monitoring, record keeping, reporting, and closure of the landfill gas collection and control system. Taylor County Landfill did not perform Tier 2 calculations.

Emission and Operating Standards: The facility is subject to State Rule (ggg) for existing municipal solid waste landfills. The gas control system (enclosed flare) must be operated to reduce NMOC by 98 percent by weight or reduce the the outlet concentration to less than 20 parts per million by volume, dry basis as hexane at 3 percent oxygen.

The facility is subject to the Asbestos NESHAP because they can accept this type of waste at the landfill. The Asbestos NESHAP is a work practice standard that contains reporting and record keeping requirements. The NESHAP also denotes how areas that accept asbestos must not emit visible emissions or must be covered by the end of the day, and what kind of signage and barriers must be placed around the area.

The facility is also subject to the NSPS Subpart Kb for storage vessels containing volatile organic liquids (VOL). The two tanks are exempt from all parts of this rule except 60.116b(a) and (b) which require record keeping of the dimensions and capacity of the storage vessel.

D. Compliance Status

According to their Title V application, the facility is currently operating in compliance.

E. Operational Flexibility

Not Applicable

F. Permit Conditions

The permit conditions that were incorporated in Section 3 of the Title V application have been developed out of the requirements of Rule (ggg).

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

A. General Testing Requirements

Condition 4.1.1 specifies that a performance test may be required at any specified emission point. The test methods to be used to determine compliance are listed. A general condition to require notification of any test and for the submission of a test plan is included.

B. Specific Testing Requirements

Taylor County Landfill uses an enclosed flare to control NMOC emissions from the landfill. Georgia Rule (ggg) considers an enclosed flare to be an enclosed combustor. The Permittee is required to conduct an initial performance test on an enclosed combustor to demonstrate compliance with the NMOC destruction efficiency or outlet concentration requirements. During this test, the Permittee is required to determine the average temperature in the combustion zone of the control device.

Before the removal of the collection and control system, the Permittee is required to meet several tests. One of these tests is that the uncontrolled NMOC emission rate be less than 50 megagrams per year. The methods and procedures for determining the NMOC emission rate are included in the permit.

V. Monitoring Requirements (with Associated Record Keeping and Reporting)**A. General Monitoring Requirements**

This permit specifies that any monitoring systems installed should be in continuous operation and that downtime due to maintenance should be minimized.

B. Specific Monitoring Requirements

The Taylor County Landfill is subject to Georgia Rule (ggg). Rule (ggg) implements the emission guidelines in 40 CFR Part 60 Subpart Cc. Rule (ggg) and Subpart Cc reference Subpart WWW for monitoring requirements. Subpart WWW was promulgated in March 1996 and therefore presumably contains monitoring sufficient to comply with Title V periodic monitoring requirements.

The landfill uses an enclosed flare to control NMOC emissions. Rule (ggg) requires that the combustion zone temperature of an enclosed flare be continuously monitored. The landfill is also required to monitor for the bypass flow of the control device by either installing a continuous (at least one reading every 15 minutes) flow monitor or by securing the bypass line valve and conducting a monthly inspection. The Permittee is required to report any three-hour average combustion zone temperature more than 50 °F below the average temperature during a performance test as an exceedance and report any indication of bypass flow.

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 remonitorings 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 remonitoring on a prescribed schedule. A program to monitor for cover integrity and making repairs, on a monthly basis, is also required.

C. Record Keeping and Reporting Requirements:

Records, including identification of any deviations from applicable monitoring triggers, the cause of such occurrence, and the corrective action taken, are required to be kept and reported by the Permittee. The Permittee is also required to report excessive periods of control device (1 hour) and collection system (5 days) downtime, expansions of the collection system, and surface methane remonitoring results. Rule (ggg) requires most reporting on an annual basis, but 40 CFR Part 70 specifies, "Submittal of reports of any required monitoring at least every 6 months." All reports generated due to monitoring activities are, therefore, required to be submitted on a semiannual basis in this permit.

VI. Other Record Keeping and Reporting Requirements

A. General Record Keeping and Reporting Requirements

General conditions requiring the maintenance of all records for a period of five years following the date of entry and the prompt reporting of all related information to deviations from applicable requirements are in the permit. Also included is a general condition to submit a written report of any failure to meet an applicable emissions limitation or standard and/or the failure to comply with or complete a work practice standard or requirement contained in the permit.

Semiannual reports that include the identification of any excess emissions, excursions, and exceedances from applicable monitoring triggers, the cause of such occurrence, and the corrective action taken are required.

B. Specific Record Keeping and Reporting Requirements

Rule (ggg) requires that uncontrolled landfills submit an annual NMOC emission rate estimate. If the emission rate estimate submitted is greater than or equal to 50 Megagrams per year, a Collection and Control Plan is required to be submitted within one year of the initial exceedance determination. After that, the requirement to submit an annual NMOC emission rate is removed.

The Taylor County Road Landfill chose to install a landfill gas control and collection system after the Tier 1 emission rate calculation was determined to be above the Rule (ggg) threshold limit of 50 Mg of NMOC. Rule (ggg) requires that a facility operating an active collection system shall submit an annual report within 180 days of the installation and start-up of the collection and control system and shall include the initial performance test report. The annual report shall include the required information listed in 40 CFR 60.757(f).

The Asbestos NESHAP has several record keeping and recording requirements. These require that the facility maintain waste records from the generators and transporters. The landfill facility must also maintain records containing the quantity and location of all the asbestos placed in the landfill. The landfill is responsible for reporting any discrepancies in quantity of waste received. The Taylor County Road Landfill is responsible for maintaining these records for two years. Once the facility is closed, the records should be submitted to the administrator of the asbestos NESHAP program.

The VOL Storage Vessel NSPS (Subpart Kb) has two record keeping requirements for vessels greater than 40 m³ which were constructed, reconstructed, or modified after July 23, 1984. These require the facility to maintain a record containing each vessel's dimensions and an analysis of the vessel's capacity. These records shall be maintained for the life of the vessel.

VII. Specific Requirements

A. Operational Flexibility

Not Applicable

B. Alternative Requirements

Application did not specify any alternative operating scenerios.

C. Insignificant Activities

The Taylor County Landfill has included several insignificant sources of air pollutants notes in Section 4.10 of the Title V application. These included "Mobile Sources", "Maintenance, Cleaning, and Housekeeping", "Pollution Control", and "Storage Tanks and Equipment". In Section 4.50-Insignificant Activities based on Emission Levels, Taylor County Landfill indicated that there is one leachate tank, one heated pressure washer, one portable compressor, one portable generator, one diesel/oil service truck, two diesel powered light plants, and they conduct leachate recirculation activities. All of these sources appear to be appropriate for the insignificant list. The Taylor County Landfill is subject to requirements under Section 111 or 112 of the Federal Act and therefore should not be on the list of landfill pollution control insignificant activities/units.

D. Temporary Sources

Not Applicable

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. Prevention of Accidental Releases

Not Applicable

J. Stratospheric Ozone Protection Requirements

The Taylor County Landfill has air conditioners or refrigeration equipment that uses CBC's, HCFC's, or other stratospheric ozone depleting substances as listed in 40 CFR Part 82, Subpart A, Appendices A and B. The facility is also subject to 40 CFR Part 82, Subpart F-Recycling and Emissions Reduction.

K. Pollution Prevention

Not Applicable

L. 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.

Addendum to Narrative

//Place addendum text starting here//

Draft Permit Review		
Reviewing Program	Comments Received? (y/n)	Comments Taken Into Consideration In Draft Permit? (y/n)
ISMP	no	n/a
SSCP	no	n/a

SSPP Unit Manager:

_____ Date
 //SSPP Unit Manager//

SSPP Program Manager:

_____ Date
 SSPP Program Manager