

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

Application #: TV-16312
 Date Application Received: July 27, 2005
 Permit No: 4953-269-0014-V-02-0

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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 herein 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. 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 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, 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: Taylor County Landfill
2. Parent/Holding Company Name
Allied Services, LLC dba Southern States Environmental Services, Inc.
3. Previous and/or Other Name(s)
No previous names identified
4. Facility Location
County Road 33 / Stewart Road
Mauk, GA 31058
5. Attainment, Non-attainment Area Location, or Contributing Area
The facility is located in an attainment area.
6. Class I Area Impacts
The facility is not located within 200 km of a Class I area.

B. Site Determination

The Bio Energy (Georgia) LLC – Taylor County LFGTE Power Station is located at the Taylor County Landfill. The power station operates under Title V permit No. 4911-269-0016-V-01-0. A site determination was carried out to determine if the landfill and the generating plant were going to be one site under Title V. The following is a summary of the results.

1. Contiguous/adjacency: The Taylor County LFGTE Power Station is located on the Taylor County Landfill. The facilities are clearly contiguous.
2. Common control: The ownership and management of the two companies appear to not be related in any way other than by contract(s) which provide that the generation plant will buy the LFG and maintain the GCCS. There is no other common financial interest or management relationship. Therefore, it might normally be concluded that there is not “common control” and the facilities are separate Title V sites. However, because the only fuel available to the power station is supplied by the landfill, it was determined that the landfill and the power station are effectively under common control and are therefore one site per Title V.

This conclusion is supported by an EPA determination from Region 3. This is found in the May 1, 2002 letter to the Commonwealth of Virginia DEQ regarding the Maplewood Landfill, owned

by USA Waste of Virginia, and Industrial Power Generating Corporation (“INGENCO”), a power generating company. This is regarding a proposal by Maplewood to sell LFG to INGENCO, which would use it to fuel IC engines to drive generators. According to the determination, the “overarching question” raised by a letter from VADEQ was “whether Maplewood and INGENCO are under ‘common control’ for purposes of determining whether Maplewood and INGENCO are a single stationary source under PSD and Title V.” An important aspect raised by VADEQ was that “landfill gas will comprise up to 70 percent of the INGENCO’s fuel.”

The Region 3 determination letter concluded that the facilities were not the same Title V site because “INGENCO’s facility does not need landfill gas to operate; the engines at use at the facility can run exclusively on liquid fuels such as diesel. In addition, Maplewood owns and controls its gas collection system and will continue to maintain its own flare. Maplewood accordingly does not need INGENCO to destroy the landfill gas as required by 40 CFR part 60, subpart WWW.”

In contrast to that, the determination cites an EPA February 11, 1998 letter “to Terry Godar, VADEQ that addressed common control for another Virginia landfill. In its letter to EPA, VADEQ noted that ‘The gas collection and the control system ... [landfill gas energy recovery]... will be located on the landfill property and will be used exclusively to collect emissions from the landfill and to control those emissions through energy recovery.’ (emphasis added). EPA cited this interdependence between the landfill and the gas collection and control system as an indication that the two facilities were under common control.”

This Title V Permit will cover only Taylor County Landfill (AFS No. 04-13-269-00014). Taylor County LFGTE Power Station (AFS No. 04-13-269-00016) operates under Title V Permit No. 4911-269-0016-V-01-0.

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 |
|--|--------------------------------|--|
| 4953-269-0014-V-01-0 | January 29, 2001 | Initial Title V permit. |
| 4953-269-0014-V-01-1 | July 23, 2003 | The transfer of landfill gas to a third-party user and the use of an open flare as a back-up control device. |
| 4953-269-0014-V-01-2 | August 4, 2004 | To update the number of engines at the third-party power station from four to eight engines. |

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. Taylor County Landfill processes general waste.

3. Overall Facility Process Description

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

The landfill has installed a gas collection and control system (GCCS) and an open flare, which serves as a backup for the internal combustion (IC) engines. Landfill gas is transferred to the Taylor County LFGTE Power Station with eight IC engines, which serve as the main control device.

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 Title V site consisting of the landfill and the power station is a major source under the PSD regulations of 40 CFR 52.21. Potential emissions of carbon monoxide (CO) exceed the 250 ton per year PSD major source threshold. Potential emissions of all other pollutants are below 250 tons per year. Neither the landfill nor the power station is included as one of the 28 listed source categories that have a 100 tpy PSD major source threshold as per 52.21. Fugitive emissions are not counted toward the PSD major source threshold.

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 | | | ✓ |
| SO ₂ | yes | | | ✓ |
| VOC | yes | | | ✓ |
| NO _x | yes | | | ✓ |
| CO | yes | ✓ | | |
| TRS | yes | | | ✓ |
| H ₂ S | yes | | | ✓ |
| Individual HAP | yes | | | ✓ |
| Total HAPs | yes | | | ✓ |

3. MACT Standards

The facility is subject to 40 CFR Part 63 Subpart AAAA - "Municipal Solid Waste Landfills." This NESHAP requires landfills to abide by the requirements of 40 CFR Part 60 Subpart WWW, and also requires the development of a Startup, Shutdown, and Malfunction Plan for the GCCS. The landfill is also subject to 40 CFR Part 61 Subpart M – NESHAP for Asbestos because the landfill may dispose of asbestos-containing materials.

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 | Yes |
| Program Code V – Title V | Yes |

Regulatory Analysis

II. Facility Wide Requirements

A. Emission and Operating Caps:

None applicable.

B. Applicable Rules and Regulations

Applicable rules and regulations specified in initial Title V Permit No. 4953-269-0014-V-01-0 are discussed in the initial Title V permit narrative for this facility. Please refer to that narrative.

40 CFR 63 Subpart AAAA

40 CFR Part 63 Subpart AAAA – “National Emission Standards for Hazardous Air Pollutants: Municipal Solid Waste Landfills.” This rule applies to each landfill that received waste after 11/6/87 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 or Subpart Cc (the EG on which Georgia Rule (ggg) is based). The Taylor County Landfill meets these criteria so it is subject to Subpart AAAA. It has a permitted capacity of over 3.3 million cubic yards; using Tier 1, its emissions have been previously calculated to exceed 50 Mg per year of NMOCs and the landfill elected to comply with the GCCS requirements of the rules rather than conduct testing which would have allowed a Tier 2 calculation.

There are not many requirements in Subpart AAAA, since EPA determined that the NSPS and EG already required a MACT level of controls. The only additional requirement is that the site must develop and implement a written SSM (startup, shutdown and malfunction) plan in accordance with § 63.6(e)(3) and maintain a copy of its SSM plan on site. Subpart AAAA also specifies the requirements for landfills that own or operate a bioreactor.

40 CFR 63 Subpart A

The NESHAP general provisions apply because Subpart AAAA applies.

C. Compliance Status

The Title V renewal application submitted by this facility contains a compliance certification, which was signed by the company's responsible official, certifying that “that this facility is in compliance with all applicable requirements effective as of the date of this certification and will continue to comply with such requirements.” The Title V permit application contained no indication of any non-compliance known by the company.

D. Operational Flexibility

None applicable.

E. Permit Conditions

Permit Conditions from the initial Title V permit and Permit Amendment No. 4953-269-0014-V-01-1 have been incorporated into the Title V renewal permit as follows:

Condition 2.2.1 establishes 40 CFR 61 Subpart A as applicable to the landfill. This was Condition 2.2.2 in the initial Title V permit; it has been renumbered in the renewal permit.

Condition 2.2.2 establishes 40 CFR 61 Subpart M as applicable to the landfill. This was Condition 2.2.3 in the initial Title V permit; it has been renumbered in the renewal permit.

Condition 2.2.3 establishes 40 CFR 63 Subpart A as applicable to the landfill. This Condition was added in Permit Amendment No. 4953-269-0014-V-01-1 as Condition 2.2.4. The Condition is unchanged but it has been renumbered in the renewal permit.

Condition 2.2.4 establishes 40 CFR 63 Subpart AAAA as applicable to the landfill. This Condition was added in Permit Amendment No. 4953-269-0014-V-01-1 as Condition 2.2.5. The Condition is unchanged but it has been renumbered in the renewal permit.

Condition 2.3.1 establishes GA Rule 391-3-1-.02(2)(ggg), as applicable to the existing MSW landfill. This was Condition 2.3.2 in the initial Title V permit; it has been renumbered in the renewal permit.

Federal Rule 40 CFR Part 60 Subpart Kb – “NSPS for Volatile Organic Liquid Storage Vessels” was in the initial Title V permit. It has been removed because this rule has been amended. As per the amended rule, this subpart does not apply to storage vessels with a capacity greater than or equal to 151 m³ storing a liquid with a maximum true vapor pressure less than 3.5 kilopascals (kPa) or with a capacity greater than or equal to 75 m³ but less than 151 m³ storing a liquid with maximum true vapor pressure less than 15.0 kPa. The leachate vapor pressure is normally less than the threshold of 3.5 kPa (equivalent to 0.5076 psi); therefore, NSPS 40 CFR 60 Subpart Kb is no longer applicable.

Condition 2.3.1, Georgia Rule 391-3-1-.02(2)(a)1, a standard template condition for operational practices, has been moved and renumbered as Condition 8.17.2.

III. Regulated Equipment Requirements

A. Brief Process Description

Taylor County Landfill accepts, manages, and disposes of municipal solid waste. Landfill gas from the landfill is collected in an active GCCS and destroyed in the IC engines owned by the Bio-Energy Taylor County LFGTE power station.

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 |
| LF01 | Landfill | 391-3-1-.02(2)(ggg) 40 CFR Part 61 Subpart A 40 CFR Part 61 Subpart M 40 CFR Part 63 Subpart A 40 CFR Part 63 Subpart AAAA 391-3-1-.02(2)(n) | 2.2.1 through 2.2.4, 2.3.1, 3.3.1 through 3.3.4, 3.4.1, 3.4.2, 4.2.1, 5.2.1 through 5.2.9, 6.1.7, 6.2.1 through 6.2.19 | GC01 OF01 | Landfill Gas Collection and Control System; Third-party IC Engines; Open Flare (backup to IC engines) |

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

Note that the leachate storage tanks have been removed from the equipment list. These tanks are no longer subject to 40 CFR Part 60 Subpart Kb.

C. Equipment & Rule Applicability

Equipment and Rule Applicability specified in initial Title V Permit No. 4953-269-0014-V-01-0 is discussed in the initial Title V permit narrative for this permit. Please refer to this narrative.

Emission and Operating Caps: None applicable

Rules and Regulations Assessment:

The landfill is subject to Georgia Rule (ggg) "Municipal Solid Waste Landfills," which dictates that the requirements of 40 CFR Part 60 Subpart WWW be met. The initial Title V permit contains the standards and requirements that are applicable; however, several conditions were modified in Permit Amendment No. 4953-269-0014-V-01-1 to provide for the switching from the use of an enclosed flare as the only control device to use of third-party IC engines as the main control "device", with the open flare as a backup control device.

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

The landfill is subject to Georgia Rule (n) "Fugitive Emissions." This rule requires that the facility minimize fugitive dust from the facility. For landfills 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, material, stockpiles, and other similar sources.

D. Compliance Status

See Section II.C. above.

E. Operational Flexibility

None applicable.

F. Permit Conditions

Section 3.1, the Emission Units table, was updated in Permit Amendment No. 4953-269-0014-V-01-1 to include 40 CFR 63 Subpart A and 40 CFR 63 Subpart AAAA, and the corresponding permit conditions. The leachate storage tanks have been removed from the equipment list in the Title V renewal because the tanks are no longer subject to 40 CFR Part 60 Subpart Kb.

Condition 3.3.1 establishes the control requirements and operating standards for the GCCS. State Rule 391-3-1-.02(2)(ggg)3(ii) incorporates the requirements of 40 CFR 60.753 in this condition. This Condition was modified in Permit Amendment No. 4953-269-0014-V-01-1 to remove the term “flare” and replace it with the term “flare or other approved incineration device.” The Condition is unchanged in the Title V renewal permit.

Condition 3.3.2 requires that the flare be designed and operated in accordance with 40 CFR 60.18. State Rule 391-3-1-.02(2)(ggg)3(i) incorporates the requirements of 40 CFR 60.752(b)(2)(iii)(A) in this condition. This Condition was modified in Permit Amendment No. 4953-269-0014-V-01-1 to remove the Subpart WWW standard for enclosed flares, and replace it with the Subpart WWW standard for open flares. The Condition is unchanged in the Title V renewal permit.

Condition 3.3.3, establishing the bioreactor avoidance requirements of 40 CFR 63 Subpart AAAA, is a new condition that has been added in the Title V renewal permit.

Condition 3.3.4, requiring the facility to develop a written startup, shutdown, and malfunction (SSM) plan, was added in Permit Amendment No. 4953-269-0014-V-01-1 as Condition 6.2.16. In the Title V renewal permit, existing Condition 6.2.16 has been modified to reflect the amendment to 40 CFR 63 Subpart A. New Condition 3.3.4 requires a written SSM plan and Condition 6.2.16 contains the recordkeeping and reporting requirements of the SSM plan.

Conditions 3.4.1 and 3.4.2 re-state the Rule (n) fugitive dust rule to assure that the landfill operators understand that they must take all reasonable precautions when moving dirt. Condition 3.4.2 also establishes the Georgia Rule (n) 20% opacity limit for fugitive dust. These are new conditions that have been added in the Title V renewal permit.

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 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

Testing requirements specified in initial Title V Permit No. 4953-269-0014-V-01-0 and Permit Amendment No. 4953-269-0014-V-01-1 are discussed in the initial Title V permit narrative and the Amendment narrative. Please refer to those narratives.

Condition 4.1.3, listing the applicable test methods, was modified in Permit Amendment No. 4953-269-0014-V-01-1. The Condition in the initial Title V permit detailed the testing methods as they apply to enclosed flares subject to Rule (ggg). Since an open flare replaced the enclosed flare, Condition 4.1.3 was modified to include the test methods applicable to open flares. This Condition is unchanged in the Title V renewal permit.

Conditions 4.2.1 and 4.2.2 from the initial Title V permit, which applied to the enclosed flare, were deleted in Permit Amendment No. 4953-269-0014-V-01-1.

Condition 4.2.3, in the initial Title V permit, requires the landfill to use testing and calculation methods specified in Subpart WWW for the purposes of determining when the GCCS can be removed after landfill closure. The Condition is unchanged but it has been renumbered as Condition 4.2.1 in the Title V renewal permit.

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

None applicable.

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

1. Individual Equipment:

Subpart WWW details specific monitoring of the landfill, GCCS, and the backup control device (flare) to ensure compliance with the standards of the subpart. Conditions in Section 5.2 of the Title V permit contain the monitoring requirements of State Rule (ggg), which are identical to those in Subpart WWW.

Condition 5.2.1, in the initial Title V permit, detailed the monitoring requirements for the enclosed flare, consisting of continuous temperature recording, flare bypass flow monitoring, and leachate vaporizer temperature and flow rate monitoring. In Permit Amendment No. 4953-269-0014-V-01-1, Condition 5.2.1 was modified to detail the monitoring requirements that apply to open flares. The modified Condition required a device to indicate the continuous presence of flame at the open flare. Because the open flare only operates as backup during periods when the third-party IC engines are not controlling all the landfill gas, the condition is worded to contain the caveat that this device need only operate when the landfill gas is routed to the open flare. Modified Condition 5.2.1 also required flare bypass flow monitoring. Conditions 5.2.1c and 5.2.1d regarding the leachate vaporizer were deleted because the landfill ceased conducting this operation. These conditions are based on State Rule 391-3-1-.02(2)(ggg)3(v), which incorporates the requirements of 40 CFR 60.756(c). This Condition remains unchanged in the Title V renewal permit.

Condition 5.2.2 requires sampling or access ports on each wellhead in order to perform required monthly wellhead monitoring. This condition is based on State Rule 391-3-1-.02(2)(ggg)3(v), which incorporates the requirements of 40 CFR 60.756(a). This Condition remains unchanged in the Title V renewal permit.

Condition 5.2.3 requires monthly monitoring and recording of each GCCS wellhead gas pressure to ensure that the pressure is negative. This does not apply to wellheads that are attached only to passive flares because passive flares, by nature, operate under positive pressure. Excessive pressure must be reported as an exceedance as per Condition 6.1.7. This condition is based on State Rule 391-3-1-.02(2)(ggg)3(ii) and (v), which incorporates the requirements of 40 CFR 60.753(b)(1) and 40 CFR 60.756(a)(1). This Condition remains unchanged in the Title V renewal permit.

Condition 5.2.4 details the procedures that must be followed if the GCCS wellhead gas pressure is not negative. This condition is based on State Rule 391-3-1-.02(2)(ggg)3(iv), which incorporates the requirements of 40 CFR 60.755(a)(3) and 40 CFR 60.755(a)(4). This Condition remains unchanged in the Title V renewal permit.

Condition 5.2.5 requires monthly monitoring and recording of each GCCS wellhead temperature and nitrogen or oxygen level. Excessive temperature and oxygen or nitrogen levels must be reported as an exceedance as per Condition 6.1.7. This condition is based on State Rule 391-3-1-.02(2)(ggg)3(ii) and (v), which incorporates the requirements of 40 CFR 60.753(c), 40 CFR 60.756(a)(2), and 40 CFR 60.756(a)(3). This Condition remains unchanged in the Title V renewal permit.

Condition 5.2.6 details the procedures that must be followed if the GCCS wellhead gas temperature, nitrogen content, or oxygen content exceeds the allowable values. This condition is based on State Rule 391-3-1-.02(2)(ggg)3(iv), which incorporates the requirements of 40 CFR 60.755(a)(5). This Condition remains unchanged in the Title V renewal permit.

Condition 5.2.7 requires quarterly surface methane concentration monitoring on the landfill, and describes the procedures that must be followed if any methane concentrations exceed the allowable values. Excessive methane concentrations must be reported as an exceedance as per Condition 6.1.7. This condition is based on State Rule 391-3-1-.02(2)(ggg)3(ii) and (iv), which incorporates the requirements of 40 CFR 60.753(d) and 40 CFR 60.755(c). This Condition remains unchanged in the Title V renewal permit.

Condition 5.2.8 details the methods for conducting the surface methane concentration monitoring. This condition is based on State Rule 391-3-1-.02(2)(ggg)3(iv), which incorporates the requirements of 40 CFR 60.755(d). This Condition remains unchanged in the Title V renewal permit.

Condition 5.2.9 was modified in Permit Amendment No. 4953-269-0014-V-01-1 to update the requirement for a landfill cover integrity program. The condition was modified to spell out the State Rule 391-3-1-.02(2)(ggg)3(iv) requirement, which incorporates the requirements of 40 CFR 60.755(c)(5) to maintain records of each monthly inspection. This Condition remains unchanged in the Title V renewal permit.

The initial Title V permit and the Amendment include Conditions 5.3.1 and 5.3.2. Section 5.3 is not included in Title V permits anymore. Please see explanations in the next section, which indicate where the Conditions can be found in Sections 6.1 or 6.2.

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

Record keeping and reporting requirements specified in initial Title V Permit No. 4953-269-0014-V-01-0 and Amendment No. 4953-269-0014-V-01-1 are discussed in the permit narratives for those permits. Please refer to those narratives. [Note that this landfill is subject to State Rule (ggg) and not Subpart WWW. However, many of the active requirements of State Rule (ggg) are found in Subpart WWW.

Conditions 6.1.1 through 6.1.3 that specify the general record keeping and reporting requirements have been carried over from the initial Title V Permit.

Condition 6.1.4, requiring semiannual reports of excess emissions, exceedances, and excursions, has been carried over into the Title V renewal permit.

Conditions 6.1.5 and 6.1.6, for standard record keeping requirements, have been carried over from the initial Title V Permit.

Condition 6.1.7 details the excess emissions, exceedances, excursions, and other information that must be reported for each period. In Permit Amendment No. 4953-269-0014-V-01-1, exceedance item (v.) for the enclosed flare, was replaced with the exceedance for failure to develop, implement, or maintain the SSM plan as per 40 CFR 63 Subpart AAAA. In the Title V renewal permit, excursion item (i.) was added to report any failure to follow the dust suppression plan as required by Condition 6.2.11. This condition is based on State Rule 391-3-1-.02(2)(ggg)3(ii), which incorporates the requirements of 40 CFR 60.753(b), 40 CFR 60.753(c), and 40 CFR 60.753(d).

Condition 6.2.1 from the initial Title V permit contains annual NMOC emission rate reporting as a requirement for uncontrolled landfills. Since the landfill is controlled by a GCCS and subject to the control requirements of State Rule 391-3-1-.02(2)(ggg)3(vi)(ll), which incorporates the requirements of 40 CFR 60.757(b), this emission rate reporting is no longer required. However, there is no need to delete Condition 6.2.1 because Condition 6.2.2 states that landfills are exempt from this requirement after the GCCS is installed and operating in accordance with Subpart WWW. The subparagraphs are removed since they are no longer applicable.

Condition 6.2.3 requires the submittal of a landfill closure report as per State Rule 391-3-1-.02(2)(ggg)3(vi), which incorporates the requirements of 40 CFR 60.757(d). The Condition is unchanged in the Title V renewal permit.

Condition 6.2.4 requires the submittal of a GCCS equipment removal report, when appropriate, as per State Rule 391-3-1-.02(2)(ggg)3(vi), which incorporates the requirements of 40 CFR 60.757(e). The Condition is unchanged in the Title V renewal permit.

Old Condition 6.2.5, required the submission of a report within 180 days of the installation and start-up of the GCCS including the initial performance test. Because this one-time requirement has been satisfied, the Condition is deleted.

New Condition 6.2.5 details the reporting requirements of State Rule 391-3-1-.02(2)(ggg)3(vi), which incorporates the requirements of 40 CFR 60.757(f), that must be followed if any monitoring reveals an exceedance of its allowable under the rule. This was Condition 5.3.2 in the initial Title V permit. This Condition was modified in Permit Amendment No. 4953-269-0014-V-01-1 to replace the text “enclosed flare” with “open flare or IC engines.” This condition remains unchanged in the Title V renewal permit. It has been moved to Section 6 and renumbered as part of the Title V renewal permit.

Condition 6.2.6 requires keeping on-site records of the design capacity report, amount of solid waste in place, and the year-by-year acceptance rate. This is based on State Rule 391-3-1-.02(2)(ggg)3(vii), which incorporates the requirements of 40 CFR 60.758(a). It has been carried over into the Title V renewal permit.

Condition 6.2.7 requires that all records made during performance testing be kept on site for a minimum of 5 years as per State Rule 391-3-1-.02(2)(ggg)3(vii), which incorporates the requirements of 40 CFR 60.758(b). The Condition is unchanged in the Title V renewal permit.

Condition 6.2.8 requires that records and maps of the GCCS system be kept on site for the lifetime of the system as per State Rule 391-3-1-.02(2)(ggg)3(vii), which incorporates the requirements of 40 CFR 60.758(d). It has been carried over into the Title V renewal permit and updated with current permitting language in the Title V renewal permit.

Condition 6.2.9 authorizes the facility to exclude any areas of deposited asbestos or other nondegradable waste from being part of a required State Rule 391-3-1-.02(2)(ggg) GCCS. This is based on State Rule 391-3-1-.02(2)(ggg)3(vii), which incorporates the requirements of 40 CFR 60.758(d)(2). It has been carried over into the Title V renewal permit and updated with current permitting language in the Title V renewal permit.

Condition 6.2.10 requires that records of all exceedances be kept on site as per State Rule 391-3-1-.02(2)(ggg)3(vii), which incorporates the requirements of 40 CFR 60.758(e). This Condition from the initial Title V permit has been updated with current permitting language in the Title V renewal permit.

Old Condition 6.2.11, from the initial Title V permit, is deleted in the Title V renewal permit. This condition required record keeping for the leachate storage vessel per 40 CFR 60 Subpart Kb. Subpart Kb is no longer applicable.

New Condition 6.2.11 concerning the Dust Suppression Plan was Condition 5.3.1 in the initial Title V permit. This condition has been moved to Section 6 and renumbered as part of the Title V renewal permit. It has been modified to reference Georgia Rule (n) in Conditions 3.4.1 and 3.4.2.

Conditions 6.2.12 and 6.2.13, from the initial Title V permit, detail the asbestos requirements of 40 CFR 61 Subpart M as they apply to the landfill. These conditions have been carried over into the Title V renewal permit.

Condition 6.2.14 was included in Permit Amendment No. 4953-269-0014-V-01-1 to require that the landfill record each date and time that landfill gas is switched away from the IC engines and to the open flare. The Condition is unchanged in the Title V renewal permit.

Condition 6.2.15 was included in Permit Amendment No. 4953-269-0014-V-01-1 to require that the landfill submit a notice to the gas transferee (in this case Bio Energy Taylor County LFGTE power station) informing them that they must comply with the provisions of Subpart WWW. The Condition is unchanged in the Title V renewal permit.

Condition 6.2.16 was included in Permit Amendment No. 4953-269-0014-V-01-1 to require that the landfill develop, implement, and maintain on site a Startup, Shutdown, and Malfunction Plan in accordance with 40 CFR Part 63 Subparts A and AAAA. In the Title V renewal permit, existing Condition 6.2.16 has been modified to reflect the amendment to 40 CFR 63 Subpart A. Condition 6.2.16 contains the recordkeeping and reporting requirements of the SSM plan and New Condition 3.3.4 requires the facility to develop a written SSM plan.

New Condition 6.2.17 requires that the landfill keep calculations of the waste mass moisture content if the landfill adds liquids other than leachate to the landfill. These calculations are used to demonstrate that the landfill is not a bioreactor. If so, it would be subject to the bioreactor control requirements of Subpart AAAA. The requirement, in the condition, to update the calculations quarterly was added by EPD since Subpart AAAA did not provide guidance on how often this should be updated.

New Condition 6.2.18 requires that the landfill notify the Division if the moisture content of the waste mass exceeds 40 percent by weight. If the moisture content exceeds 40%, the landfill becomes subject to the bioreactor requirements of Subpart AAAA.

New Condition 6.2.19 requires that the landfill notify the Division if the landfill begins adding liquids, other than leachate, to the landfill waste mass. This requirement is not part of Subpart AAAA but it will give the Division an indication that the landfill may become a bioreactor at some point.

VII. Specific Requirements

A. Operational Flexibility

- Not applicable

B. Alternative Requirements

- Not applicable

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

- Not applicable

E. Short-Term Activities

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

a) Construction of Landfill Cell

b) Capping (Closure) of Landfill Cell

This has been included in the permit.

F. Compliance Schedule/Progress Reports

- Not applicable

G. Emissions Trading

- Not applicable

H. Acid Rain Requirements

- Not applicable

I. Stratospheric Ozone Protection Requirements

Taylor County Landfill has air conditioners or refrigeration equipment that uses CFC's, HFC's, or other stratospheric ozone depleting substances as listed in 40 CFR Part 82, Subpart A, Appendices A and B.

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.

Addendum to Narrative

The 30 day public comment period ended on July 14, 2006. The Division received written comments, dated July 14, 2006, from Allied Services, LLC d/b/a Southern States Environmental Services, Inc. ("Southern States") for the Taylor County Landfill. The comments are outlined below, followed by the Division's response. The strike-through and underline system is used to show the permit changes. Words to be removed have been struck-through and words to be inserted have been underlined.

Comment 1: The mailing address should be changed from P.O. Box 222 to P.O. Box 199.

Response: The Division has made the correction in the permit.

Mailing Address: P.O. Box ~~222~~ 199
Mauk, GA 31058

Comment 2: Condition 5.2.1(b) – Southern States requests that EPD modify this condition by adding the phrase “when gas is directed to the flare,” following the term “flare” in the condition.

Response: The Division accepts the suggested change. As shown below, the permit has been changed accordingly.

5.2.1 The Permittee shall install, calibrate, maintain, and operate monitoring devices for the measurement of the indicated parameters on the following equipment. Data shall be recorded at the frequency specified below. Where such performance specification(s) exist, each system shall meet the applicable performance specification(s) of the Division's monitoring requirements. [391-3-1-.02(6)(b)1, 40 CFR 70.6(a)(3)(i), and 391-3-1-.02(2)(ggg)3(v)]

- a. A heat sensing device, such as an ultraviolet beam sensor or thermocouple, at the pilot light or the flame itself, to indicate the continuous presence of a flame within the flare. [Note: This system need not be operating when LFG is routed to third-party IC engines and not flowing to the flare.]
- b. A device to measure the gas flow rate to the flare, when gas is directed to the flare, at least once every 15 minutes.

In lieu of installing a continuous flow rate monitor, the Permittee may secure the control device bypass line valve in the closed position with a car seal or lock and key type configuration. At least once per month, the Permittee shall visually inspect the seal or closure mechanism to ensure that the valve is maintained in the closed position and that the gas flow is not diverted through the bypass line. The Permittee shall keep a record of each monthly inspection. This requirement does not apply to flares that do not have a bypass system.

Comment 3: Condition 6.1.7(b)(i) - In order to be consistent with the requirements in Condition 3.3.1(b), we request that EPD revise this definition of exceedance to read, “On any GCCS gas collection well (excluding passive flare wells), any reading of gauge pressure that is not negative, unless it meets any of the conditions of 3.3.1(b)(i) through (iii).”

Response: The Division accepts the suggested change. As shown below, the permit has been changed accordingly.

6.1.7 For the purpose of reporting excess emissions, exceedances or excursions in the report required in Condition 6.1.4, the following excess emissions, exceedances, and excursions shall be reported:

[391-3-1-.02(6)(b)1, 40 CFR 70.6(a)(3)(i), and 391-3-1-.02(2)(ggg)3(ii)]

- a. Excess emissions: (means for the purpose of this Condition and Condition 6.1.4, any condition that is detected by monitoring or record keeping which is specifically defined, or stated to be, excess emissions by an applicable requirement)

None required to be reported in accordance with Condition 6.1.4.

- b. Exceedances: (means for the purpose of this Condition and Condition 6.1.4, any condition that is detected by monitoring or record keeping that provides data in terms of an emission limitation or standard and that indicates that emissions (or opacity) do not meet the applicable emission limitation or standard consistent with the averaging period specified for averaging the results of the monitoring)

i. On any GCCS gas collection well (excluding passive flare wells), any reading of gauge pressure that is not negative, unless it meets any of the conditions of 3.3.1(b)(i) through (iii).

ii. On any gas collection well, any reading of temperature that exceeds 55 °C (131 °F).

iii. On any gas collection well, any reading of nitrogen concentration that equals or exceeds 20 percent or oxygen concentration that equals or exceeds 5 percent.

iv. Any reading of surface methane concentration that exceeds 500 ppm above background concentration.

v. Any failure to develop, implement, or maintain on site the Startup, Shutdown and Malfunction Plan required in Condition 6.2.16.

- c. Excursions: (means for the purpose of this Condition and Condition 6.1.4, any departure from an indicator range or value established for monitoring consistent with any averaging period specified for averaging the results of the monitoring)

i. Any failure to follow the procedures of the Dust Suppression Plan required in Condition 6.2.11.

Comment 4: Condition 6.2.5(a) – Typically, the major portion of landfill gas is combusted in the IC engines and a small portion of the landfill gas is combusted in the open flare. The open flare normally operates year round at a reduced gas flow rate, but the flare has the capacity to flare all of the landfill gas. Therefore, when the IC engines are not operating, the flare serves as a backup control device. We suggest that this condition be revised to read, “Description and duration of all periods when the gas

stream is diverted from both control devices (third-party IC engines and open flare) through a line bypassing both control devices, ...”

Response: The Division accepts the suggested change. As shown below, the permit has been changed accordingly.

6.2.5 The Permittee shall submit a report of the following information for the semiannual periods ending June 30 and December 31 of each year. The report shall be postmarked by the 30th day following the end of the semiannual period (July 30 and January 30, respectively).

[391 3 1 .02(6)(b)1, 391-3-1-.02(2)(ggg)3(vi), 40 CFR 70.6(a)(3)(i) and 40 CFR 70.6(a)(3)(iii)(A)]

- a. Description and duration of all periods when the gas stream is diverted from a both control devices (third-party IC engines ~~or~~ and open flare) through a ~~bypass~~ bypass line bypassing both control devices, as indicated by the flow rate measuring device or monthly inspection of bypass line valve, as applicable.
- b. Description and duration of all periods when both control devices (third-party IC engines and flare) were not operating for a period exceeding 1 hour and total length of time neither control device was operating.
- c. All periods when the collection system was not operating in excess of 5 days.
- d. The location of each exceedance of the 500 parts per million methane concentration limit and the concentration recorded at each location for which an exceedance was recorded in the previous month.
- e. The date of installation and the location of each well or collection system expansion added pursuant to Conditions 5.2.4 and 5.2.6.

Comment 5: Condition 6.2.10 addresses records to be kept for collection and control system exceedances listed in Condition 3.3.1, including the “reading in the subsequent month, whether or not the second reading is an exceedance, ...” The monthly follow up readings are not required unless the required quarterly surface monitoring indicates an exceedance of the 500 ppm concentration. In that case, this requirement (with respect to surface monitoring) is redundant because Condition 6.2.5(d) requires reporting of this data in the semi-annual report.

Response: This condition was taken directly from §60.758(e) of 40 CFR 60 Subpart WWW – Standards of Performance for Municipal Solid Waste Landfills, and is a standard EPD permit condition for landfills with gas collection and control systems. However, EPD acknowledges that monthly follow up readings are only required for exceedances determined during quarterly surface monitoring of the landfill. In order to clarify that, the Division has modified the condition to read:

6.2.10 The Permittee shall keep records of all collection and control system exceedances of the operational standards in §60.753, which are listed in Condition 3.3.1, ~~the reading in the subsequent month, whether or not the second reading is an exceedance, and the location of each exceedance.~~ With regard to any exceedance of 500 parts per million methane, above background at the surface of the landfill, determined during required quarterly monitoring per Condition

5.2.7, the Permittee must also include the reading in the subsequent month, whether or not the second reading is an exceedance, and the location of that exceedance.

[391-3-1-.02(2)(ggg)3(vii)]

Comment 6: Condition 6.2.14 - We suggest deleting the sentence which reads, “This record shall also include the date and time when the landfill gas is directed back to the third party IC engines.” Landfill gas is normally directed to both the IC engines and open flare at all times. We propose to keep a continuous record of all times that landfill gas is directed to the open flare.

Response: The Division accepts the suggested change. As shown below, the permit has been changed accordingly.

6.2.14 The Permittee shall record the date and length of time when LFG is directed to the flare. ~~This record shall also include the date and time when landfill gas is directed back to the third party IC engines.~~

[391-3-1-.02(6)(b)]

Comment 7: Condition 8.17.2 includes a nuisance provision that has been removed from the Georgia State Implementation Plan. Therefore, this condition should be identified as “State-Only Enforceable.”

Response: Condition 8.17.2 has been removed from the Georgia State Implementation Plan. The permit condition has been modified.

State Only Enforceable Condition.

8.17.2 No person owning, leasing, or controlling, the operation of any air contaminant sources shall willfully, negligently or through failure to provide necessary equipment or facilities or to take necessary precautions, cause, permit, or allow the emission from said air contamination source or sources, of such quantities of air contaminants as will cause, or tend to cause, by themselves, or in conjunction with other air contaminants, a condition of air pollution in quantities or characteristics or of a duration which is injurious or which unreasonably interferes with the enjoyment of life or use of property in such area of the State as is affected thereby. Complying with Georgia’s Rules for Air Quality Control Chapter 391-3-1 and Conditions in this Permit, shall in no way exempt a person from this provision.

[391-3-1-.02(2)(a)1]