

SIP CONSTRUCTION & OPERATING PERMIT AND TITLE V 502(b)10 CHANGE APPLICATION REVIEW

Facility Name: **Oak Grove Sanitary/Speedway Landfill**

City: Winder

County: Barrow

AIRS #: 04-13-013-00068

Application #: 18027

Date SIP Application Received: N/A

Date Title V Application Received: March 4, 2008

Permit No: 4953-013-0068-V-02-1

Program	Review Engineers	Review Managers
SSPP	Bradley Belflower	John Yntema
SSCP	Sean Taylor	Karen Hays
ISMP	Frank Nederhand	DeAnna Oser
TOXICS	Sean Taylor	Karen Hays

Introduction

This narrative is being provided to assist the reader in understanding the content of the referenced SIP permit to construct and operate and Section 502(b)(10) change to the Part 70 source. 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) Sections 391-3-1-.03(1), 391-3-1-.03(2), and 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 following narrative is designed to accompany the permit and is presented in the same general order as the permit amendment. This narrative is intended only as an adjunct for the reviewer and has no legal standing.

I. Facility Description

A. Existing Permits

Table 1 below lists the current Title V permit, all administrative amendments and minor and significant modifications to that permit, and any 502(b)(10) changes. Comments are listed in Table 2 below.

Table 1: Current Title V Permit and Amendments

Permit/Amendment Number	Date of Issuance	Comments	
		Yes	No
4953-013-0068-V-02-0	May 5, 2007	✓	

Table 2: Comments on Specific Permits

Permit Number	Comments
4953-013-0068-V-02-0	First Title V renewal

B. Regulatory Status

1. PSD/NSR/RACT

The facility is a non-major source under PSD/NSR 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	✓			✓
PM ₁₀	✓			✓
SO ₂	✓			✓
VOC	✓			✓
NO _x	✓			✓
CO	✓			✓
TRS	✓			✓
H ₂ S	✓			✓
Individual	✓			✓
Total HAPs	✓			✓

II. Proposed Modification

A. Description of Modification

The landfill gas (LFG) from Oak Grove Landfill is currently controlled by Flares No. 1 and No. 2. The LFG from Speedway Landfill is controlled by Flare No. 3. Flares No. 1 and No. 2 will be relocated near a proposed third party LFG treatment facility (Winder Renewable Methane, LLC), and Flare No. 2 will be upgraded by the replacement of its blower. A Title V construction/draft operating permit (Permit No. 4932-013-0076-V-01-0) was issued to Winder Renewable Methane on February 26, 2008. The Title V operating permit was finalized on June 10, 2008.

Winder Renewable Methane will be located at the landfill and, once constructed, will use the LFG from Oak Grove Landfill as its raw material to produce pipeline quality gas. The LFG, produced by the decomposition of waste material deposited in the landfill, is collected by an active gas collection and control system (GCCS). Winder Renewable Methane will compress the landfill gas as well as remove water and trace impurities from the LFG. The LFG will then be separated into two streams. The first stream consists primarily of methane and will be injected into a natural gas pipeline. The second stream is a waste stream consisting primarily of carbon dioxide with lesser quantities of methane and NMOC. The waste stream will be burned in a thermal oxidizer owned and operated by Winder Renewable Methane.

Winder Renewable Methane will serve as the primary control device for NMOC from the landfill. Flares No. 1 and No. 2 will be used when the LFG generation exceeds the capacity of the treatment facility and as backup control devices. No changes will be made to Flare No. 3 or the Speedway Landfill gas collection system.

B. Emissions Change

Table 4: Emissions Change Due to Modification

Pollutant	Is the Pollutant Emitted?	Net Actual Emissions Increase (Decrease) (tpy)	Net Potential Emissions Increase (Decrease) (tpy)
PM	✓	0	0
PM ₁₀	✓	0	0
SO ₂	✓	0	0
VOC	✓	0	0
NO _x	✓	0	0
CO	✓	0	0
TRS	✓	0	0
H ₂ S	✓	0	0
Individual	✓	0	0
Total HAPs	✓	0	0

C. Title I Modification

1. PSD/NSR Applicability

This modification is not subject to PSD or non-attainment NSR.

2. NSPS Modification

This modification is not an NSPS modification.

3. NESHAP Modification

This modification is not a modification under Part 61.

III. Facility Wide Requirements

A. Emission and Operating Caps

No Changes

B. Applicable Rules and Regulations

No Changes

C. Compliance Status

No Changes

D. Operational Flexibility

No Changes

E. Permit Conditions

None

IV. Regulated Equipment Requirements

A. Brief Process Description

The landfill gas (LFG) collected from the Oak Grove Landfill gas collection system will be routed to the proposed third-party LFG treatment facility (Winder Renewable Methane, LLC) or to the landfill's existing relocated flares (Flares No. 1 and No. 2).

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B. Equipment List for the New or Modified Process(es)

Emission Units		Specific Limitations/Requirements		Air Pollution Control Devices	
ID No.	Description	Applicable Requirements/Standards	Corresponding Permit Conditions	ID No.	Description
LF01	Oak Grove Landfill (Active site)	40 CFR Part 60, Subpart A 40 CFR Part 60, Subpart WWW 40 CFR Part 61, Subpart A 40 CFR Part 61, Subpart M 40 CFR Part 63, Subpart A 40 CFR Part 63, Subpart AAAA	2.2.1, 2.2.2, 2.2.3, 3.3.1, 3.3.2, 3.3.3, 3.3.4, 4.2.1, 4.2.2, 5.2.1-5.2.9, 6.1.7, 6.2.1 through 6.2.20	FL01 FL02 01	Oak Grove Flare # 1 and associated GCCS Oak Grove Flare # 2 and associated GCCS Third-party LFG treatment system

C. Equipment & Rule Applicability

None

D. Compliance Status

No noncompliance issues are known.

E. Operational Flexibility

No Changes

F. Permit Conditions

None

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

No new testing requirements.

VI. Monitoring Requirements (with Associated Record Keeping and Reporting)

No new monitoring requirements

VII. Other Record Keeping and Reporting Requirements

No new record keeping and reporting requirements.

VIII. Specific Requirements

No changes.