

Facility Name: **Pine Grove Landfill**
 City: Columbus
 County: Muscogee
 AIRS #: 04-13-215-00181

Application #: TV-14701
 Date Application Received: 7/14/98
 Date Application Deemed
 Administratively Complete: 12/8/99
 Date of Draft Permit:
 Permit No: 4953-215-0181-V-01-0

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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 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 the Pine Grove 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:
Pine Grove Landfill
2. Parent/Holding Company Name:
Columbus Consolidated Government
3. Previous and/or Other Name(s):
None
4. Facility Location:
7160 Scacerdote Lane
Columbus, GA 31907
Muscogee County
5. Attainment or Non-attainment Area Location:
This facility is located in an area currently deemed in attainment for all pollutants.
6. Class I Area Impacts:
This facility is not located within 100 km of a Class 1 area.

B. Site Determination

The Pine Grove Landfill is owned and operated by Columbus Consolidated Government, which also owns and operates the nearby Schatulga Road Landfill. The landfills are located approximately 1 mile apart. The property between the landfills is owned by various agencies, including the State of Georgia, the Georgia Building Authority, Muscogee Hospital Authority, and the Columbus Development Authority. Columbus Consolidated Government owns no land that abuts against both landfills and thus these landfills are not contiguous. Given this, the Schatulga Road landfill and Pine Grove landfills are considered separate sites for the purposes of Title V and the applicability of landfill rules 40 CFR 60 Subpart W and Ga. Rule (ggg).

Prior to 2003, Columbus Consolidated Government owned a parcel of land connecting the Schatulga Road and Pine Grove landfills. Based on this information, EPD had previously determined that the landfills were contiguous and under the same ownership, and thus considered one site for the purposes of Title V and the landfill rules. In a letter dated June 21, 1999, EPD informed Columbus Consolidated Government of this fact. Because the landfills were considered one site, and the Pine Grove landfill was constructed in 1998, both landfills were deemed subject to 40 CFR 60 Subpart W which regulates new landfills.

In 2003, the parcel of land connecting the two landfills was transferred to the Columbus Development Authority, and thus the two landfills are no longer contiguous. In light of this information, the landfills are now considered separate sites for the purposes of the landfill rules, and each landfill will receive its own Title V permit. Pine Grove landfill is subject to Subpart WWW because it was constructed after the Subpart WWW applicability date of 5/30/91.

Title V application No. TV-10775, received 7/14/98, was for both the Pine Grove Landfill and Schatulga Road Landfill, under the assumption (at the time correct) that the two landfills were one Title V site. Since the document covers both landfills, it is used as the basis for the Title V permits for both landfills. However, since the landfills are considered separate Title V sites, the initial application number (TV-10775) will only be used in reference to the Schatulga Road Landfill. Application number TV-14701 is to be used with regard to the Pine Grove Landfill.

C. Existing Permits

No air quality permits exist for this landfill.

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
N/A	N/A	Y	

Table 2: Comments on Specific Permits

Permit Number	Comments
N/A	No Air Quality Permit has been issued to this landfill

D. Process Description

1. SIC Codes(s):
4953 (Operation of a municipal solid waste landfill)
2. Description of Product(s)
None; this landfill accepts and disposes of municipal solid waste.
3. Overall Facility Process Description:
Pine Grove Landfill began accepting waste in May 1998. Solid waste is brought in by truck, and disposed of in the landfill.

E. Regulatory Status

1. PSD/NSR
This facility is a minor source in respect to PSD. Potential emissions of each criteria pollutant is below 250 tons per year. Nonattainment NSR does not apply because the source is located in an area deemed to be in attainment for all pollutants.

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	y	n	n	y
PM ₁₀	y	n	n	y
SO ₂	y	n	n	y
VOC	y	n	n	y
NO _x	y	n	n	y
CO	y	n	n	y
TRS	n	n/a	n/a	n/a
H ₂ S	n	n/a	n/a	n/a
Individual HAP	y	n	n	y
Total HAPs	y	n	n	y

3. MACT Standards

The landfill is also subject to 40 CFR Part 61 Subpart M "Asbestos" because the landfill has disposed of asbestos-containing materials.

40 CFR 63 Subpart AAAA "Municipal Solid Waste Landfills" does not currently apply to the Pine Grove landfill because Subpart AAAA only applies to landfills that are required to operate a landfill gas collection and control system.

4. Program Applicability

Program Code	Applicable (y/n)
Program Code 6 – PSD	n
Program Code 8 – Part 61 NESHAP	y
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 “Municipal Solid Waste Landfills”

This facility is subject to 40 CFR Part 60 Subpart WWW “Municipal Solid Waste Landfills.” The landfill has a design capacity of 8.7 MMyd³, and first accepted waste in 1998. Subpart WWW applies to landfills that were constructed, reconstructed or modified after 5/30/91 and have a design capacity exceeding both 2.75 million tons and 3.3 MMyd³.

Subpart WWW requires submittal of annual NMOC (non-methane organic compounds) emissions estimates based on the amount of waste in place. Upon exceeding 50 Mg/yr NMOC using Tier 1 calculations, landfills must either re-conduct the calculations using Tier 2 (site-specific NMOC concentrations) within 180 days, or install an approved GCCS within 30 months.

Tier 2 testing was conducted at Pine Grove landfill on 4/15/02. The resulting NMOC generation rate using the site-specific NMOC concentrations and waste input rates was 10.13 Mg for the year 2002. Because the NMOC generation rate is less than 50 Mg/yr, no GCCS is required at the time of this permit. Pine Grove must continue to submit annual NMOC emission rate estimates and must conduct Tier 2 re-testing by 4/15/07 (provided that the NMOC emission rate does not exceed 50 Mg prior to that date).

40 CFR 61 Subpart M “Asbestos”

Because the Pine Grove landfill Title V application denotes that the landfill accepts asbestos, the facility is subject to 40 CFR Part 61 Subpart M. As long as the Pine Grove landfill remains active it is required to comply with the provisions of 40 CFR 61.154 – “Standards for Active Waste Disposal Sites” including all reporting and record keeping requirements applicable to facilities which accept asbestos waste. Upon closure, the facility will be required to comply with 40 CFR 61.151-“Standards for Inactive Waste Disposal Sites for Asbestos Mills and Manufacturing and Fabricating Operations,” if asbestos had been accepted.

40 CFR 63 Subpart AAAA “Municipal Solid Waste Landfills”

It should be noted that this landfill is currently not subject to 40 CFR Part 63 Subpart AAAA “Municipal Solid Waste Landfills” because the landfill is not currently required by 40 CFR 60 Subpart WWW to install and operate a landfill gas collection and control system (GCCS). When the control requirements of Subpart WWW become applicable, the landfill will become subject to Subpart AAAA.

C. Compliance Status

The Title V permit application does not include a Section 11.10 form regarding noncompliance issues, and the Certification of Compliance in Section 13.00 is signed by the responsible official.

D. Operational Flexibility

The facility has not requested any operational flexibility.

E. Permit Conditions

2.2.1 – Establishes 40 CFR Part 61 Subpart A – “General Provisions” for NESHAP as applicable. The facility is subject to the General Provisions of Part 61 because it is subject to Part 61 Subpart M.

2.2.2 – Establishes 40 CFR Part 61 Subpart M “Asbestos” as applicable.

2.2.3 – Establishes 40 CFR Part 60 Subpart A “General Provisions” for NSPS as applicable. This facility is subject to the General Provisions of Part 60 because it is subject to Part 60 Subpart WWW.

2.2.4 – Establishes 40 CFR Part 60 Subpart WWW “Municipal Solid Waste Landfills” as applicable.

III. Regulated Equipment Requirements

A. Brief Process Description

The landfill accepts, manages, and disposes of municipal solid waste.

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
LF02	Pine Grove Landfill	391-3-1-.02(2)(n) 40CFR 61 Subpart A 40CFR 61 Subpart M 40 CFR 60 Subpart A 40 CFR 60 Subpart WWW	3.4.1, 3.4.2, 4.2.1, 4.2.2, 4.2.3, 4.2.4, 6.1.7, 6.2.1 through 6.2.9, 7.6.1	N/A	None

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

C. Equipment & Rule Applicability

Emission and Operating Caps –

No emission or operating caps apply.

Applicable Rules and Regulations -

40 CFR Part 60 Subpart WWW “Municipal Solid Waste Landfills”

The landfill is subject to 40 CFR Part 60 Subpart WWW “Performance Standards for Municipal Solid Waste Landfills.” The explanation of the applicability is located in Part B of the Facility Wide Requirements Section above. The Pine Grove landfill NMOC emissions were calculated using Tier 2 NMOC site-specific concentrations from testing performed 4/15/02. The calculated NMOC emission rate is 10.2 Mg/yr for the year 2002. Because the NMOC emission rate is less than 50 Mg/yr, the landfill is currently not required by to install a GCCS. Until a GCCS is required, no emission limits or operational standards apply. At present, only certain record keeping and reporting requirements of Subpart WWW are applicable.

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

The Title V permit application does not include a Section 11.10 form regarding noncompliance issues, and the Certification of Compliance in Section 13.00 is signed by the responsible official.

E. Operational Flexibility

No operational flexibility has been requested by the facility.

F. Permit Conditions

The Pine Grove landfill does not currently operate under an Air Quality Permit. Therefore, all Conditions of the Title V permit are new.

Conditions Nos. 3.4.1 and 3.4.2 establish the requirements of Georgia Rule (n) "Fugitive Emissions." The dust suppression plan required in Condition 6.2.9 will ensure compliance with this rule.

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

The standard general requirements are included in the permit. Condition 4.1.3 details the test methods applicable to the landfill for the determination of site-specific parameters used in NMOC emissions calculations.

B. Specific Testing Requirements

40 CFR 60 Subpart WWW specifies (in Section 60.754) the appropriate equations to use to calculate the NMOC emission rate from the landfill.

Condition 4.2.1 requires the landfill operator to determine the NMOC emission rate using the appropriate equations identified in Condition 4.2.2 and parameters identified in Condition 4.2.3. This requirement originates from 40 CFR 60.754.

Condition 4.2.2 specifies the appropriate equations to use to calculate NMOC emissions, depending on whether the year-to-year waste acceptance rate is known. The equations originate from 40 CFR 60.754.

Condition 4.2.3 specifies the appropriate parameters (methane generation rate constant, NMOC concentration, methane generation potential) to use to calculate NMOC emissions, depending on whether the landfill operator has conducted Tier 2 or Tier 3 sampling. The parameters originate from 40 CFR 60.754. As stated above, Pine Grove conducted Tier 2 sampling on 4/15/02.

Condition 4.2.4 details the procedures for conducting Tier 2 and Tier 3 site-specific parameter sampling. These procedures originate in 40 CFR 60.754.

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

A. General Monitoring Requirements

The standard general requirements are included in the permit.

B. Specific Monitoring Requirements

No specific monitoring conditions currently apply.

VI. Other Record Keeping and Reporting Requirements

A. General Record Keeping and Reporting Requirements

The standard general requirements are included in the permit. Condition 6.1.7 details reportable excursions. The only excursion is failure to follow the dust suppression plan required in Condition 6.2.9.

B. Specific Record Keeping and Reporting Requirements

Section 6.2 of the Title V permit details the specific record keeping and recording requirements of Subpart WWW, and applicable record keeping and recording requirements of Subpart M "Asbestos."

Condition 6.2.1 requires the submittal of a annual NMOC emission rate estimate for the landfill as per Subpart WWW.

Condition 6.2.2 requires the submittal of a GCCS plan for controlling landfill gas once the estimated NMOC emissions rates exceed 50 Mg/yr, as per Subpart WWW. The plan must be prepared by a professional engineer.

Condition 6.2.3 requires that records of asbestos and nondegradable waste be kept as per Subpart WWW.

Condition 6.2.3 requires that landfill design capacity records be kept on site as per Subpart WWW.

Condition 6.2.4 states that the requirements of Condition 6.2.1 to submit an annual NMOC emission rate estimate are no longer applicable after an approved GCCS has been installed.

Condition 6.2.5 requires that the landfill submit a closure report within 30 days of waste acceptance cessation, as per Subpart WWW.

Condition 6.2.6 requires that the landfill kept records of the design capacity report, current waste-in-place, and year-by-year waste acceptance rate, as per Subpart WWW.

Condition 6.2.7 requires that the landfill satisfy the reporting and record keeping requirements in regard to 40 CFR Part 61 Subpart M "Asbestos."

Condition 6.2.8 requires records of asbestos disposal locations be kept as per Subpart M.

Condition 6.2.9 requires that the landfill develop and implement a dust suppression plan to assure compliance with Rule (n).

VII. Specific Requirements

A. Operational Flexibility

Not Applicable.

B. Alternative Requirements

Not Applicable.

C. Insignificant Activities

See Section 4.10 of the Title V permit application and Attachment B of the Title V Permit.

D. Temporary Sources

Not Applicable.

E. Short-Term Activities

The earth-clearing to form new landfill cells is subject to Georgia Rule (n).

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 Title V application indicates that the landfill does have air conditioning or refrigeration equipment that uses ozone-depleting substances. (Item 2 on form). All other items are checked "No."

K. Pollution Prevention

Not Applicable.

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.

Addendum to Narrative

The public notice for Title V Permit No. 4953-215-0181-V-01-0 was published in the Columbus Ledger-Enquirer on September 21, 2003. No comments were received from the public or from the Permittee during the public comment period which expired on October 21, 2003.