

TITLE V APPLICATION REVIEW

Facility Name: **SR 247 Klondike Municipal Solid Waste Landfill**

City: **Perry**

County: **Houston**

AIRS #: **04-13-153-00048**

Application #: **TV- 10040**

Date Application Received: **June 13, 1997**

Date Application Deemed

Administratively Complete: **July 10, 1997**

Date of Draft Permit:

Permit No: **4953-153-0048-V-01-0**

| Program | Review Engineers | Review Managers |
|-----------------|-------------------------|------------------------|
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| TOXICS | n/a | n/a |

Introduction

This narrative is being provided to assist the reader in understanding the content of the attached draft Title V 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 **SR 247 Klondike Municipal Solid Waste 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: SR 247 Klondike Municipal Solid Waste Landfill
2. Parent/Holding: Houston County Board of Commissioners
3. Previous and/or Other Name(s): Houston County Municipal Solid Waste Landfill
4. Facility Location: Highway 247 South
Perry, Georgia 31069
5. Attainment or Non-attainment Area Location

Area is designated 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 |
| n/a | n/a | n/a | n/a |

Table 2: Comments on Specific Permits

| Permit Number | Comments |
|---------------|----------|
| n/a | n/a |

D. Process Description

1. SIC Code(s): Major- 4953 (Operation of a Sanitary landfill)
Minor- None

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2. Description of Product(s): This facility does not have final products.
Klondike Landfill processes general waste.

3. Overall Facility Process Description

Klondike Landfill receives municipal and industrial solid waste. The solid waste is deposited directly into the landfill and then covered with fill dirt. The Klondike Landfill does not accept asbestos waste for deposition.

4. Overall Process Flow Diagram (optional)

An overall process flow diagram was not provided with the Klondike Landfill Title V Application.

E. Regulatory Status

1. PSD/NSR:

The facility is considered a minor source with respect to PSD rules.
The Klondike Landfill is located in an attainment area.

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 |

* Based on the Tier 1 landfill gas emission estimations for NMOC.

3. MACT Standards

Klondike 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 | no |
| Program Code 9 - NSPS | yes |
| Program Code M - Part 63 NESHAP | no |
| 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 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 Klondike Landfill was constructed before the May 30, 1991 Rule (ggg) effective date with a design capacity of 7.0 MMyrd³. Using Tier 1, the facility calculated their NMOC emissions rate to be 148.4 Mg/year (calculated using NSPS factors). This exceeds the 50 Mg NMOC threshold limit which has been adopted by reference within Rule (ggg). After the Klondike Landfill’s NMOC concentration was tested, the Tier 2 NMOC emission rate calculation was submitted as 10 Mg per year. The Tier 2 calculated value is below the Rule (ggg) threshold and therefore a landfill gas collection and control system (GCCS) is not required to be installed. However, the Klondike Landfill must submit an estimate of the emission rate report annually and retest the site-specific NMOC concentration every 5 years.

Once the facility is required by the Rule to install a GCCS, then the facility must submit a new Title V application. At that point, a Title V Permit will be issued with conditions that ensure the collection system can meet the requirements of Rule (ggg) and that it is operating in accordance with Rule (ggg) requirements.

Although the Klondike Landfill Title V application did not denote that they accept asbestos, the facility is allowed by federal and state rules to dispose of asbestos-containing waste. If the facility ever accepts asbestos waste for disposal, the facility will be subject to the 40 CFR Part 61, Subpart M NESHAP. As long as the Klondike 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 waste had been accepted. The facility’s leachate storage tank (vessel) is possibly subject to 40 CFR Part 60, Subpart Kb for Volatile Organic Liquid Storage Vessels. The tank is not subject to the entire rule due to the low vapor pressure of leachate; however, if the tank is greater than 40 m³ and was constructed, reconstructed, or modified after July 23, 1984 it is 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 the tank. The Permit contains the above mentioned record keeping requirements associated with Subpart Kb.

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

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

Georgia Rule 391-3-1-.02(9) Emission Standards for Hazardous Air Pollutants

! Emission and Operating Standards -

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 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 suppression 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 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.

Georgia Rule 391-3-1-.02(9) Emission Standards for Hazardous Air Pollutants

The facility is subject to the following NESHAP that the State of Georgia adopted, by reference: 40 CFR Part 61, Subpart M-National Emission Standard for Asbestos (inc. work practices).

C. Compliance Status

The facility did not submit any Section 11.10 forms.

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 from the local are 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. Asbestos waste is not excepted at this facility.

B. Equipment List for the Process

The facility has a landfill that is represented by Emission Unit No. 0001 and a leachate storage tank that is represented by Emission Unit No. 0002.

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 Klondike Landfill was constructed before the Subpart WWW May 30, 1991 effective 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 report an annual emissions estimate and, one the emission estimate exceeds 50 Mg of NMOC, then a GCCS must be put into place. The Klondike Landfill exceeded the 50 Mg of NMOC threshold with their Tier 1 emission estimate calculation. However, based on the results of the site-specific NMOC concentrations for Tier 2 emissions (10 Mg/year), The facility is required only to annually submit an estimate of the emission rate report as provided in 40 CFR 60.757(b)(1) and retest the site-specific NMOC concentration every 5 years.

The facility is also subject to NSPS Subpart Kb for storage vessels containing volatile organic liquids (VOL). The tank is 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.

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 emission or must be covered by the end of the day, and what kind of signage and barriers must be placed around the area.

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 to meet the requirements of the Georgia Air Quality Rules, the adopted by reference Rule (ggg). There is not an existing permit to incorporate into this section.

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 in 4.1.3. A general condition to require notification of any test and for the submission of a test plan is included.

B. Specific Testing Requirements

The Klondike Landfill is subject to Rule (ggg). Rule (ggg) requires that uncontrolled landfills submit annual Nonmethane Organic Compounds (NMOC) emission rate estimate reports. The landfill is not required to submit the annual emission rate estimate if the landfill is controlled and the control system is operating properly. Conditions 4.2.1 through 4.2.4 of this permit contain the procedures for calculating the NMOC emission rate. These procedures are identical to the procedures in Subpart WWW.

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 SR 247 Klondike MSW Landfill is uncontrolled and is subject to Rule (ggg). Rule (ggg) and this permit do not contain any specific monitoring requirements for an uncontrolled landfill.

C. Record Keeping and Reporting Requirements:

As per Title V 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 by the Permittee. This permit does not require a periodic report of deviations since the landfill is uncontrolled and monitoring is necessary.

VI. Other Record Keeping and Reporting Requirements

A. General Record Keeping and Reporting Requirements

The Permit contains general requirements for the maintenance of all records for a period of five years following the date of entry and requires the prompt reporting of all information related to deviations from applicable requirements.

B. Specific Record Keeping and Reporting Requirements

Rule (ggg) requires that uncontrolled landfills submit an annual NMOC emission rate estimate. The permit requires that this emission rate estimate be submitted by January 31 of each year. If the emission rate estimate submitted to the Division 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.

There are two exceptions where the landfill may not be required to submit the Collection and Control Plan. (1) If the emission rate was calculated using Tier 1 and the landfill chooses to recalculate the emission rate using Tier 2. (2) If the emission rate was calculated using Tier 2 and the landfill chooses to recalculate the emission rate using Tier 3. If the landfill chooses either of these options and the recalculated emission rate less than 50 megagrams per year, the landfill will resume submitting annual emission rate estimates. The deadlines for submitting the recalculated emission rates are 180 days for the first exception and a total of one year for the second exception. Regardless of the option used to recalculate the emission rate, if the recalculated emission rate is greater than or equal to 50 megagrams per year, the landfill must submit a Collection and Control Plan within one year of the date of the original emission rate calculation, not the date of the recalculated emission rate.

The Klondike Landfill chose to conduct site-specific testing to determine the Klondike Landfill's NMOC concentration for Tier 2 after the Tier 1 emission rate calculation was determined to be above the NSPS Subpart WWW threshold limit of 50 Mg of NMOC. The NSPS Subpart WWW NMOC threshold limit was adopted by reference within Rule (ggg). The Tier 2 calculations determined showed that the NMOC emissions from the landfill are below the 50 Mg/year threshold and therefore the landfill is only required to continue submitting a periodic estimate of the emission rate report as provided in 40 CFR 60.757(b)(1) and retest the site-specific NMOC concentration every 5 years.

The VOL Storage Vessel NSPS has two record keeping requirements for vessels greater than 40 m³ and 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.

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 Klondike 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.

VII. Specific Requirements

A. Operational Flexibility

Not Applicable

B. Alternative Requirements

Application did not specify any alternative operating scenarios.

C. Insignificant Activities

The Klondike Landfill has included several insignificant sources of air pollutants, "Pollution Control," in Section 4.10 of the Title V application. In Section 4.50-Insignificant Activities based on Emission Levels, Klondike Landfill indicated that there are Mobile Sources, Combustion Sources, Trade Operations, and Storage Tanks and Equipment. These source appear to be appropriate for the insignificant list.

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 Klondike Landfill listed that they have 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 Klondike Landfill is also subject to 40 CFR Part 82, Subpart B-"Servicing Motor Vehicle Air Conditioners", Subpart E-"The Labeling of Products Using Ozone-Depleting Substances", and Subpart F-"Recycling and Emission 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.

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Closing Block: We have reviewed and recommend issuance of draft Permit No. 4953-153-0048-V-01-0

| Program | Review Engineers | Dates | Review Managers | Dates |
|----------|------------------|-------|-----------------|-------|
| SSPP/ASU | | | | |
| SSCP/ASU | | | | |
| ISMP | | | | |
| TOXICS | | | | |

Stationary Source Permitting Program Manager

Date