**PERMIT NO. 4953-089-0299-V-05-0**
**ISSUANCE DATE:**

GEORGIA
DEPARTMENT OF NATURAL RESOURCES

ENVIRONMENTAL PROTECTION DIVISION

# Air Quality - Part 70 Operating Permit

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|---|---|
| **Facility Name:** | **Seminole Road Municipal Solid Waste Landfill** |
| **Facility Address:** | **4203 Clevemont Road**<br>**Ellenwood, Georgia 30294, DeKalb County** |
| **Mailing Address:** | **3720 Leroy Scott Drive**<br>**Decatur, Georgia 30032** |
| **Parent/Holding Company:** | **DeKalb County** |
| **Facility AIRS Number:** | **04-13-089-00299** |

In accordance with the provisions of the Georgia Air Quality Act, O.C.G.A. Section 12-9-1, et seq and the Georgia Rules for Air Quality Control, Chapter 391-3-1, adopted pursuant to and in effect under the Act, the Permittee described above is issued a Part 70 Permit for:

**The operation of a municipal solid waste landfill facility with co-located composting facility, landfill gas to energy facility, and renewable natural gas processing facility**

This Permit is conditioned upon compliance with all provisions of The Georgia Air Quality Act, O.C.G.A. Section 12-9-1, et seq, the Rules, Chapter 391-3-1, adopted and in effect under that Act, or any other condition of this Permit. Unless modified or revoked, this Permit expires five years after the issuance date indicated above.

This Permit may be subject to revocation, suspension, modification or amendment by the Director for cause including evidence of noncompliance with any of the above, for any misrepresentation made in Title V Application TV-633785 signed on January 27, 2023, any other applications upon which this Permit is based, supporting data entered therein or attached thereto, or any subsequent submittal of supporting data, or for any alterations affecting the emissions from this source.

This Permit is further subject to and conditioned upon the terms, conditions, limitations, standards, or schedules contained in or specified on the attached **57** pages.

STATE OF GEORGIA
CONSTITUTION
WISDOM JUSTICE MODERATION
1776

DRAFT

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Jeffrey W. Cown, Director
Environmental Protection Division

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# PART 1.0 FACILITY DESCRIPTION

## 1.1 Site Determination

Seminole Road Municipal Solid Waste (MSW) Landfill operates a co-located composting, landfill gas to energy facility, and renewable natural gas processing facility at the landfill. The landfill and co-located operation are considered one site for Title V because they are contiguous and under common control. This Title V permit will cover all operations at the landfill.

## 1.2 Previous and/or Other Names

None.

## 1.3 Overall Facility Process Description

Seminole Road Municipal Solid Waste (MSW) Landfill receives municipal and industrial solid waste. The waste is deposited into the landfill, compacted, and covered with fill dirt or other suitable cover, on a daily basis. Landfill gas (LFG) is produced from the decomposition of the buried waste. LFG, which is composed primarily of methane and carbon dioxide, also includes non-methane organic compounds (NMOC). A composting operation is also located at the landfill. The landfill and composting operation are considered one site for Title V because they are contiguous and under common control.

The landfill operates a regulated gas collection and control system (GCCS), two LFG treatment systems (TS1 and TS2), and two open flares (F1 and F3). Treatment system TS1 treats gas for a landfill gas to energy (LFGTE) power station known as the Green Energy Facility. Treatment System TS2 also known as the Renewable Fuels Facility (RFF) produces pipeline quality gas also known as renewable natural gas (RNG). Open Flares F1 and F3 are each rated at 2,100 standard cubic feet per minute (scfm). The flares serve as the backup control devices.

The Green Energy Facility is permitted for three LFG-fired internal combustion (IC) engines (E1, E2, and E3), each capable of generating 1.6 megawatts (MW) of electricity. Note that engine E3 has not yet been constructed.

Tub grinder (GRIN5) is used to grind waste wood in support of the composting operation at the landfill. The tub grinder uses a 950 hp diesel-fired engine.

# PART 2.0 REQUIREMENTS PERTAINING TO THE ENTIRE FACILITY

## 2.1 Facility Wide Emission Caps and Operating Limits

None applicable.

## 2.2 Facility Wide Federal Rule Standards

2.2.1 The Permittee shall comply with all applicable requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAPs), 40 CFR 61, Subpart A "General Provisions" and Subpart M – "National Emission Standard for Asbestos."
[40 CFR 61 Subpart A and Subpart M]

2.2.2 The Permittee shall comply with all applicable requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAPs), 40 CFR 63, Subpart A "General Provisions", as specified in Table 1 of 40 CFR 63 Subpart AAAA, and Subpart AAAA – "National Emission Standards for Hazardous Air Pollutants: Municipal Solid Waste Landfills."
[40 CFR 63 Subpart A and Subpart AAAA]

2.2.3 The Permittee shall comply with all applicable provisions of the Approval and Promulgation of State Plans for Designated Facilities and Pollutants, 40 CFR 62 Subpart A, "General Provisions" and Subpart OOO, "Federal Plan Requirements for Municipal Solid Waste Landfills That Commenced Construction On or Before July 17, 2014 and Have Not Been Modified or Reconstructed Since July 17, 2014," until Georgia Rule 391-3-1-.02(2)(ggg), "Existing Municipal Solid Waste Landfills," becomes an EPA-approved and currently effective state plan implementing 40 CFR 60 Subpart Cf.
[40 CFR 62 Subpart A and Subpart OOO]

## 2.3 Facility Wide SIP Rule Standards

2.3.1 The Permittee shall comply with all applicable provisions of Georgia Rule 391-3-1-.02(2)(ggg) – "Existing Municipal Solid Waste Landfills." Georgia Rule 391-3-1-.02(2)(ggg) incorporates most parts of 40 CFR 60 Subpart Cf (40 CFR 60.30f through 60.40f) by reference. All references to 40 CFR 60.30f through 60.40f used in this permit have been incorporated by reference in 391-3-1-.02(2)(ggg), and all references to 40 CFR 60 Subpart Cf should be understood as meaning Georgia Rule 391-3-1-.02(2)(ggg).
[391-3-1-.02(2)(ggg)]

## 2.4 Facility Wide Standards Not Covered by a Federal or SIP Rule and Not Instituted as an Emission Cap or Operating Limit

None applicable.

## PART 3.0 REQUIREMENTS FOR EMISSION UNITS

Note: Except where an applicable requirement specifically states otherwise, the averaging times of any of the Emissions Limitations or Standards included in this permit are tied to or based on the run time(s) specified for the applicable reference test method(s) or procedures required for demonstrating compliance.

### 3.1 Emission Units

| Emission Units | | Applicable Requirements/Standards | Air Pollution Control Devices | |
|---|---|---|---|---|
| **ID No.** | **Description** | | **ID No.** | **Description** |
| SRLF | Landfill | 40 CFR 61 Subpart A<br>40 CFR 61 Subpart M<br>40 CFR 63 Subpart A<br>40 CFR 63 Subpart AAAA<br>40 CFR 62 Subpart A<br>40 CFR 62 Subpart OOO<br>391-3-1-.02(2)(n)<br>391-3-1-0.2(2)(ggg) | LGS<br><br>F1<br>F3<br>TS1<br><br>TS2 | Landfill Gas Collection and Control System (GCCS)<br>Open Flare 1 (2,100 cfm)<br>Open Flare 3 (2,100 cfm)<br>Treatment System 1 (Green Energy Facility)<br>Treatment System 2 (Renewable Fuels Facility) |
| GRIN5 | Tub Grinder | 40 CFR 60 Subpart A<br>40 CFR 60 Subpart IIII<br>40 CFR 63 Subpart A<br>40 CFR 63 Subpart ZZZZ<br>391-3-1-.02(2)(b)<br>391-3-1-.02(2)(g) | None | None |
| E1 | Caterpillar G3520 Engines used to power a 1.6 MW generator | 40 CFR 63 Subpart A<br>40 CFR 63 Subpart ZZZZ<br>391-3-1-.02(2)(b)<br>391-3-1-.02(2)(g)<br>391-3-1-.02(2)(mmm)<br>NSR Avoidance | None | None |
| E2 | Caterpillar G3520 Engines used to power a 1.6 MW generator | 40 CFR 63 Subpart A<br>40 CFR 63 Subpart ZZZZ<br>391-3-1-.02(2)(b)<br>391-3-1-.02(2)(g)<br>391-3-1-.02(2)(mmm)<br>NSR Avoidance | None | None |
| E3** | Caterpillar G3520 Engines used to power a 1.6 MW generator | 40 CFR 60 Subpart A<br>40 CFR 60 Subpart JJJJ<br>40 CFR 63 Subpart A<br>40 CFR 63 Subpart ZZZZ<br>391-3-1-.02(2)(b)<br>391-3-1-.02(2)(g)<br>391-3-1-.02(2)(mmm)<br>NSR Avoidance | None | None |

* Generally applicable requirements contained in this permit may also apply to emission units listed above. The lists of applicable requirements/standards are intended as a compliance tool and may not be definitive.

** Engine E3 has not yet been constructed

### 3.2 Equipment Emission Caps and Operating Limits

3.2.1 The Permittee shall limit the operating hours of the tub grinder with ID No. GRIN5 to 7,400 hours during any 12 consecutive month period.
[391-3-1-.02(2)(yy) avoidance]

## 3.3 Equipment Federal Rule Standards

### Landfill

3.3.1 The Permittee shall comply with the following requirements specified in 40 CFR 63.1958 "Operational Standards for Collection and Control Systems" for the operation of the landfill. In lieu of these requirements, the Permittee may comply with the alternative requirements in the Division-approved GCCS Plan.

a. Operate the Landfill Gas Collection and Control System (GCCS) such that gas is collected from each area, cell, or group of cells in the landfill, within 60 days after the date on which the initial solid waste has been in place for a period of:
[40 CFR 63.1958(a) and 40 CFR 63.1960(b)]

i. 5 years or more if active or

ii. 2 years or more if closed or at final grade.

b. Operate the GCCS with negative pressure at each wellhead, except under the following conditions:
[40 CFR 63.1958(b)]

i. A fire or increased well temperature. The Permittee shall record instances when positive pressure occurs in efforts to avoid fire. These records shall be submitted with the reports required by Condition 6.1.4, as provided in 40 CFR 63.1981(h).

ii. Use of a geomembrane or synthetic cover. The Permittee shall develop acceptable pressure limits in the GCCS plan.

iii. A decommissioned well. A well may experience a static positive pressure after shut down to accommodate for declining flows. All design changes shall be approved by the Division as specified in 40 CFR 63.1981(d)(2).

c. Operate each interior wellhead in the GCCS with a landfill gas temperature less than 62.8°C (145ºF). The Permittee may establish a higher operating temperature value at a particular well. A higher operating value demonstration shall include data demonstrating that the elevated parameter neither causes fires nor significantly inhibits anaerobic decomposition by killing methanogens. The demonstration must satisfy both criteria in order to be approved (i.e., neither causing fires nor killing methanogens).
[40 CFR 63.1958(c)]

d. Operate the GCCS so that the methane concentration is less than 500 parts per million (ppm) above background at the surface of the landfill.
[40 CFR 63.1958(d)]

e. Operate the GCCS such that all collected gases are vented to a control system designed and operated in compliance with 40 CFR 63.1955(c). If any control system is inoperable, the gas mover system shall be shut down and all valves in the GCCS contributing to venting of the gas to the atmosphere shall be closed within one hour. Efforts to repair the GCCS shall be initiated and completed in a manner such that downtime is kept to a minimum, and the GCCS is returned to operation.
[40 CFR 63.1958(e)]

f. Operate the open flare(s) and treatment system(s) at all times when the collected gas is routed to the control system(s).
[40 CFR 63.1958(f)]

3.3.2 At all times that open flare(s) are being used to control LFG, the Permittee shall operate the flare(s) in accordance with 40 CFR 63.11(b).
[40 CFR 63.1959(b)(2)(iii)(A)]

3.3.3 The Permittee shall operate the landfill gas treatment system(s) at all times that landfill gas is being supplied for subsequent sale or beneficial use. Venting of treated landfill gas to the atmosphere is not allowed. If treated landfill gas cannot be routed for subsequent sale or beneficial use, the treated landfill gas must be routed to an open flare.
[63.1959(b)(2)(iii)(C)]]

3.3.4 If the Permittee adds any liquids other than leachate (leachate includes landfill gas condensate) in a controlled fashion to the waste mass, the Permittee shall either:
[40 CFR 63.1947]

a. Comply with the bioreactor requirements in 40 CFR 63.1947, 63.1955(b), and 63.1982 (a) and (b); or

b. Maintain the percent moisture by weight in the waste mass below 40 percent as required by 40 CFR 63.1982(c).

**NSPS Subpart JJJJ – Engine E3**

3.3.5 The Permittee shall comply with all applicable provisions of the New Source Performance Standards (NSPS), 40 CFR 60 Subpart A – "General Provisions," and Subpart JJJJ – "Standards of Performance for Stationary Spark Ignition Internal Combustion Engines," for the operation of the engine with ID No. E3.
[40 CFR 60 Subpart A, 40 CFR 60 Subpart JJJJ, and 40 CFR 60.4246]

3.3.6 The Permittee shall not discharge or cause the discharge into the atmosphere from the engine with ID No. E3, any gases which contain emissions in excess of the following:

a. NOx emissions in excess of 2.0 g/HP-hr or 150 ppmvd at 15 percent Oxygen.

b. CO emissions in excess of 5.0 g/HP-hr or 610 ppmvd at 15 percent Oxygen.

c. VOC (minus formaldehyde) emissions in excess of 1.0 g/HP-hr or 80 ppmvd at 15 percent Oxygen.

The Permittee may choose to comply with the emission standards in units of either g/HP-hr or ppmvd at 15 percent $O_2$.
[40 CFR 60.4233(e) and Table 1 of 40 CFR 60 Subpart JJJJ]

3.3.7 The Permittee shall keep a maintenance plan and records of conducted maintenance and must, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions from the engine with ID No. E3.
[40 CFR 60.4243(b)(2)(ii)]

**NSPS Subpart IIII – Tub Grinder GRIN5**

3.3.8 The Permittee shall comply with all applicable provisions of the New Source Performance Standards (NSPS) as found in 40 CFR 60 Subpart A – "General Provisions" and 40 CFR 60 Subpart IIII – "Standards of Performance for Stationary Compression Ignition Internal Combustion Engines," for operation of the tub grinder with ID No. GRIN5.
[40 CFR 60.4200]

3.3.9 The Permittee shall not discharge or cause the discharge into the atmosphere from the tub grinder with ID No. GRIN5, any gases which contain emissions in excess of the following:
[40 CFR 60.4204(b), 40 CFR 60.4201(a), and 40 CFR 1039]

a. Contain particulate matter (PM) in excess of 0.04 g/kW-hr.

b. Contain nitrogen oxides (NOx) in excess of 3.5 g/kW-hr.

c. Contain nonmethane hydrocarbons (NMHC) in excess of 0.19 g/kW-hr.

d. Contain carbon monoxide (CO) in excess of 3.5 g/kW-hr.

3.3.10 The Permittee shall only use diesel fuel that has a maximum sulfur content of 15 ppm (0.0015 percent by weight) and either a minimum cetane index of 40 or maximum aromatic content of 35 volume percent in the tub grinder with ID No. GRIN5.
[40 CFR 60.4207 and 391-3-1-.02(2)(g) (subsumed)]

3.3.11 The Permittee shall not discharge into or cause the discharge into the atmosphere from the tub grinder with ID No. GRIN5, any visible emissions the opacity of which is equal to or greater than 20 percent during the acceleration mode, 15 percent during the lugging mode; and 50 percent during the peaks in either the acceleration or lugging modes.
[40 CFR 60.4204(b), 40 CFR 60.4201(a), 40 CFR 1039.105(b), and 391-3-1-.02(2)(b) (subsumed)]

3.3.12 The Permittee shall operate and maintain the tub grinder with ID No. GRIN5 according to the manufacturer's emission-related written instructions or procedures developed by the Permittee that are approved by the engine manufacturer. In addition, the Permittee shall only change those emission-related settings that are permitted by the manufacturer. The Permittee shall also meet the requirements of 40 CFR 1068 as they apply.
[40 CFR 60.4211(a)]

**NESHAP Subpart ZZZZ – Engines E1, E2, and E3 and Tub Grinder GRIN5**

3.3.13 The Permittee shall comply with all applicable provisions of 40 CFR 63 Subpart A – "General Provisions" and 40 CFR 63 Subpart ZZZZ – "National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines," for the operation of the engines with ID Nos. E1, E2, and E3 and the tub grinder with ID No. GRIN5.
[40 CFR 63 Subpart A and 40 CFR 63 Subpart ZZZZ]

3.3.14 The Permittee shall operate and maintain the engines with ID Nos. E1, E2, and E3 and the tub grinder with ID No. GRIN5, including associated air pollution control equipment and monitoring equipment, in a manner consistent with good air pollution control practices for minimizing emissions at all times, including during startup, shutdown, and malfunction. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Division which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.
[40 CFR 63.6605]

3.3.15 The Permittee shall comply with the following emissions limitations and operating limitations for the operation of the tub grinder with ID No. GRIN5, except during periods of startup:
[40 CFR 63.6600(b), Item 3 of Table 2a to 40 CFR 63 Subpart ZZZZ, and Items 1 and 3 of Table 2b to 40 CFR 63 Subpart ZZZZ]

a. Reduce CO emissions by 70 percent or more; or

b. Limit concentration of formaldehyde in the stationary RICE exhaust to 580 ppbvd or less at 15 percent O2.

c. If using an oxidation catalyst, maintain the catalyst so that the pressure drop across the catalyst does not change by more than 2 inches of water at 100 percent load plus or minus 10 percent from the pressure drop across the catalyst that was measured during the initial performance test; and maintain the temperature of your stationary RICE exhaust so that the catalyst inlet temperature is greater than or equal to 450 °F and less than or equal to 1350 °F or Division approved temperature range.

d. If not using an oxidation catalyst, comply with any operating limitations approved by the Division.

3.3.16 The Permittee shall comply with the following operating limitations for the operation of the tub grinder with ID No. GRIN5, during periods of startup:
[40 CFR 63.6600(b), 40 CFR 63.6625(h), and Item 3 of Table 2a to 40 CFR 63 Subpart ZZZZ]

a. Minimize the engine's time spent at idle and minimize the engine's startup time at startup to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the non-startup emission limitations apply.

3.3.17 The Permittee shall not fire any fuel other than treated landfill gas (LFG) in the engines with ID Nos. E1, E2, and E3.
[40 CFR 63.6600(c), 391-3-1-.03(2)(c), and 391-3-1-.02(g)(2) (subsumed)]

## 3.4 Equipment SIP Rule Standards

3.4.1 The Permittee shall not combust, in the engines with ID Nos. E1, E2, and E3, any fuel that contains sulfur in amounts exceeding 2.5 percent by weight
[391-3-1-.02(2)(g)]

3.4.2 The Permittee shall not cause, let, suffer, permit or allow the emissions into the atmosphere from the engines with ID Nos. E1, E2, and E3, any gases the opacity of which is equal to or greater than forty (40) percent.
[391-3-1-.02(2)(b)]

3.4.3 The Permittee shall not discharge or cause the discharge into the atmosphere from the engines with ID Nos. E1, E2, or E3, any gases which contain nitrogen oxides (NOx) in excess of 0.5 grams per bhp-hour.
[NAA NSR-Avoidance for NOx Emissions and 391-3-1-.02(2)(mmm) (subsumed)]

3.4.4 The Permittee shall take all reasonable precautions to prevent dust from the landfills, plant roads, heavy equipment operations, or any operation, process, handling, transportation or storage facility from becoming airborne. Reasonable precautions that could be taken to prevent dust from becoming airborne include, but are not limited to, the following:
[391-3-1-.02(2)(n)]

a. Use, where possible, of water or chemicals for control of dust in the demolition of existing building or structures, construction operations, the grading or roads or the clearing of land;

b. Application of asphalt, water, or suitable chemicals on dirt roads, materials, stockpiles, and other surfaces that can give rise to airborne dusts;

c. Installation and use of hoods, fans and fabric filters to enclose and vent the handling of dusty materials. Adequate containment methods can be employed during sandblasting or other similar operations;

d. Covering, at all times when in motion, open bodied trucks that are transporting materials likely to give rise to airborne dusts; and

e. The prompt removal of earth or other material from paved streets onto which earth or other material has been deposited.

3.4.5 The Permittee shall not discharge or cause the discharge into the atmosphere from the landfill, plant roads, heavy equipment operations, or any other dust source, any fugitive dust, which exhibits opacity equal to or greater than 20 percent.
[391-3-1-.02(2)(n)]

## 3.5 Equipment Standards Not Covered by a Federal or SIP Rule and Not Instituted as an Emission Cap or Operating Limit

None Applicable.

# PART 4.0 REQUIREMENTS FOR TESTING

## 4.1 General Testing Requirements

4.1.1 The Permittee shall cause to be conducted a performance test at any specified emission unit when so directed by the Environmental Protection Division ("Division"). The test results shall be submitted to the Division within 60 days of the completion of the testing. Any tests shall be performed and conducted using methods and procedures that have been previously specified or approved by the Division.
[391-3-1-.02(6)(b)1(i)]

4.1.2 The Permittee shall provide the Division thirty (30) days (or sixty (60) days for tests required by 40 CFR Part 63) prior written notice of the date of any performance test(s) to afford the Division the opportunity to witness and/or audit the test, and shall provide with the notification a test plan in accordance with Division guidelines.
[391-3-1-.02(3)(a) and 40 CFR 63.7(b)(1)]

4.1.3 Performance and compliance tests shall be conducted and data reduced in accordance with applicable procedures and methods specified in the Division's Procedures for Testing and Monitoring Sources of Air Pollutants. The methods for the determination of compliance with emission limits listed under Sections 3.2, 3.3, 3.4 and 3.5 are as follows:

a. Method 1 or 1A shall be used for the determination of sample point locations.

b. Method 2, 2A, 2C or 2D, as appropriate, for determination of velocity and volumetric flow rate to each of the open flares.

c. Method 3A for the determination of oxygen concentration.

d. Method 3C for the determination of nitrogen concentration.

e. Method 3B for the determination of the emissions rate correction factor or excess air. Method 3A may be used as an alternative to Method 3B.

f. Method 4 shall be used for the determination of stack gas moisture.

g. Method 7 or 7E for the determination of nitrogen oxides concentration. The minimum sample time shall be one hour per run.

h. Method 9 and the procedures contained in Section 1.3 of the above reference document for the determination of opacity from sources other than flares.

i. Method 10 or ASTM D6522 shall be used to determine carbon monoxide concentration.

j. Method 18 for the determination of organic component concentration in the gas stream to the flare(s).

k. Method 21 for the determination of surface methane concentration.

l. Method 22 for the determination of visible emissions from each open flare. This observation period shall be 2 hours.

m. Method 25A for the determination of volatile organic compounds. The minimum sample time shall be one hour per run.

n. Method 320 shall be used for the determination of formaldehyde concentration.

o. ASTM D1946 for the determination of hydrogen and carbon monoxide concentrations in the gas stream to an open flare(s).

p. ASTM D2382 for the determination of the net heat of combustion of each component in the gas stream to an open flare if published values are not available or cannot be calculated.

Minor changes in methodology may be specified or approved by the Director or his designee when necessitated by process variables, changes in facility design, or improvement or corrections that, in his opinion, render those methods or procedures, or portions thereof, more reliable.
[391-3-1-.02(3)(a)]

4.1.4 The Permittee shall submit performance test results to the US EPA's Central Data Exchange (CDX) using the Compliance and Emissions Data Reporting Interface (CEDRI) in accordance with any applicable NSPS or NESHAP standards (40 CFR 60 or 40 CFR 63) that contain Electronic Data Reporting Requirements. This Condition is only applicable if required by an applicable standard and for the pollutant(s) subject to said standard.
[391-3-1-.02(8)(a) and 391-3-1-.02(9)(a)]

## 4.2 Specific Testing Requirements

4.2.1 Within 60 days after achieving the maximum flow rate at which a new open flare will be operated, but no later than 180 days after initial startup of the open flare, the Permittee shall conduct an initial performance test for visible emissions, determine the heating value of the landfill gas venting to the flare, and calculate the exit velocity from the flare using the procedures in 40 CFR 63.11(b).
[40 CFR 63.1959(e)]

4.2.2 The Permittee shall use the methods and procedures listed in 40 CFR 63.1959(c) to determine the NMOC emission rate for the purpose of determining when the collection and control system may be removed as provided in 40 CFR 63.1957(b).
[40 CFR 63.1959(c)]

**Engines E1, E2, and E3**

4.2.3 Any time an engine with ID Nos. E1 or E2 is rebuilt, the Permittee shall conduct a performance test, within 120 days after startup for nitrogen oxides emissions to demonstrate compliance with the emission limitation in Permit Condition 3.4.3. Performance tests shall be conducted on the engine at the maximum achievable operating load point. Additionally, a performance test shall be conducted on the engine at the minimum expected operating load point. During each test run the Permittee shall, using the devices required by Permit Condition 5.2.1, measure and record the following engine operating parameters:

a. Manifold temperature

b. Manifold pressure

c. Ignition timing

d. Engine load (generator output, megawatts).

Data for the engine parameters shall be recorded at least once every 10 minutes during each test run and all data shall be included in the test report.
[391-3-1-.02(6)(b)1(i)]

4.2.4 The Permittee shall, using the engine operating data required to be obtained by Permit Conditions 4.2.3 and 4.2.5, establish the maximum manifold temperature and the acceptable range (that which indicates compliance) for the manifold pressure, ignition timing, and engine load for the IC engines with ID Nos. E1, E2, and E3. The maximum manifold temperature and the ranges for the manifold pressure, ignition timing, and engine load shall be included in the emissions test report and shall be used for reporting excursions as specified in Permit Condition 6.1.7.
[391-3-1-.02(6)(b)1(i)]

4.2.5 Within 180 days of startup of the engine with ID No. E3, the Permittee shall conduct initial performance testing to demonstrate compliance with the carbon monoxide (CO), nitrogen oxides (NOx), and volatile organic compound (VOC) emissions limits in Permit Conditions 3.3.6 and 3.4.3. Performance tests shall be conducted on the engine operating within 10 percent of the maximum (or the highest achievable) operating load point and at the minimum expected operating load point. Any time the engine is either rebuilt or swapped out, the engine must be retested within 120 days after startup. During each test run the Permittee shall, using the devices required by Permit Condition 5.2.1, measure and record the following engine operating parameters:

a. Manifold temperature

b. Manifold pressure

c. Ignition timing

d. Engine load (generator output, megawatts).

Data for the engine parameters shall be recorded at least once every 10 minutes during each test run and all data shall be included in the test report.
[391-3-1-.02(6)(b)1(i), 40 CFR 60.4243(b)(2)(ii), 40 CFR 60.4244, and 40 CFR 70.6(a)(3)(i)]

4.2.6 Following any test required by Permit Condition 4.2.5, the Permittee shall conduct subsequent performance testing on the engine with ID No. E3 for NOx, CO, and VOC every 8,760 operating hours or 3 calendar years, whichever comes first, to demonstrate compliance with emission limits in Permit Conditions 3.3.6.
[40 CFR 60.4243(b)(2)(ii)]

4.2.7 The Permittee shall conduct performance testing on the engine with ID No. E3, as specified in 40 CFR 60.4243(b)(2), in order to demonstrate compliance with the emission limits in Permit Condition 3.3.6, by following the procedures in 40 CFR 60.4244, which include the following:
[40 CFR 60.4244]

a. Each performance test must be conducted according to the requirements in 40 CFR 60.8 and under the specific conditions that are specified by Table 2 of 40 CFR 60 Subpart JJJJ. Each of the three test runs must last at least an hour.

b. The performance tests must not be conducted during periods of startup, shutdown, or malfunction, as specified in 40 CFR 60.8(c). If the engine is non-operational, the engine need not be started up solely to conduct a performance test; however, the performance test must be conducted immediately upon startup of the engine.

c. To determine compliance with the NOx emission limitation, in units of mass per unit output, the concentration of NOx in the engine exhaust must be converted using the following equation:

$$ER = \frac{C_d \times 1.912 \times 10^{-3} \times Q \times T}{HP - hr}$$

Where:
ER = Emission rate of NOx in g/HP-hr.
$C_d$ = Measured NOx concentration in parts per million by volume (ppmv).
$1.912 \times 10^{-3}$ = Conversion constant for ppm NOx to grams per standard cubic meter at 20 degrees Celsius.
Q = Stack gas volumetric flow rate, in standard cubic meter per hour, dry basis.
T = Time of test run, in hours.
HP-hr = Brake work of the engine, horsepower-hour (HP-hr).

d. To determine compliance with the CO emission limitation, in units of mass per unit output, the concentration of CO in the engine exhaust must be converted using the following equation:

$$ER = \frac{C_d \times 1.164 \times 10^{-3} \times Q \times T}{HP - hr}$$

Where:
ER = Emission rate of CO in g/HP-hr.
$C_d$ = Measured CO concentration in ppmv.
$1.164 \times 10^{-3}$ = Conversion constant for ppm CO to grams per standard cubic meter at 20 degrees Celsius.
Q = Stack gas volumetric flow rate, in standard cubic meters per hour, dry basis.
T = Time of test run, in hours.
HP-hr = Brake work of the engine, in HP-hr.

e. For the purposes of this permit, when calculating emissions of VOC, emissions of formaldehyde should not be included. To determine compliance with the VOC emission limitation, in terms of mass unit output, the concentration of VOC in the engine exhaust must be converted using the following equation:

$$ER = \frac{C_d \times 1.833 \times 10^{-3} \times Q \times T}{HP - hr}$$

Where:
ER = Emission rate of VOC in g/HP-hr.
$C_d$ = VOC concentration measured as propane in ppmv.
$1.833 \times 10^{-3}$ = Conversion constant for ppm VOC measured as propane, to grams per standard cubic meter at 20 degrees Celsius.
Q = Stack gas volumetric flow rate, in standard cubic meters per hour, dry basis.
T = Time of test run, in hours.
HP-hr = Brake work of the engine, in HP-hr.

4.2.8 Within 90 days of the date of issuance of this permit, the Permittee shall conduct an emissions test for formaldehyde from one of the engines with ID Nos. E1 or E2 chosen at random. Formaldehyde concentration shall be determined using Methods 320 or 323 or ASTM Method D6348-03. The test shall determine formaldehyde emissions in units of pounds per hour (lb/hr) and grams per horsepower-hour (g/hp-hr). In accordance with Condition 4.1.1, the test results shall be submitted to the Division within 60 days of the completion of the testing.
[391-3-1-.02(6)(b)1]

**Tub Grinder GRIN5**

4.2.9 The Permittee shall conduct the initial performance test or other initial compliance demonstrations in Table 4 of 40 CFR 63 Subpart ZZZZ that apply to the tub grinder with ID No. GRIN5.
[40 CFR 63.6610, and Table 3 to 40 CFR 63 Subpart ZZZZ]

4.2.10 The Permittee shall conduct subsequent performance tests in accordance with Items 1 and 3 of Table 3 to 40 CFR 63 Subpart ZZZZ for the tub grinder with ID No. GRIN5.
[40 CFR 63.6615]

4.2.11 Each performance test must be conducted according to the requirements in 40 CFR 63.7(e)(1) and under the specified conditions in Table 4 of 40 CFR 63 Subpart ZZZZ. If stationary RICE is non-operational and is subject to performance testing, the Permittee does not need to start up the engine solely to conduct the performance test. Owners and operators of a non-operational engine can conduct the performance test when the engine is started up again. The test must be conducted at any load condition within plus or minus 10 percent of 100 percent load for the stationary RICE listed in paragraphs (b)(1) through (4) of this section. You must conduct three separate test runs for each performance test required in this section, as specified in 40 CFR 63.7(e)(3). Each test run must last at least 1 hour, unless otherwise specified in this subpart.
[40 CFR 63.6620(b) and (d)]

4.2.12 If the Permittee complies with the emission limitation to reduce CO and is not using an oxidation catalyst, complies with the emission limitation to reduce formaldehyde and is not using NSCR, or complies with the emission limitation to limit the concentration of formaldehyde in the stationary RICE exhaust and is not using an oxidation catalyst or NSCR, the Permittee shall petition the Administrator for operating limitations to be established during the initial performance test and continuously monitored thereafter; or for approval of no operating limitations. The Permittee shall not conduct the initial performance test until after the petition has been approved by the Administrator.
[40 CFR 63.6620(f), (g), and (h)]

4.2.13 The Permittee shall use the following equation to determine compliance with the percent reduction requirement for the tub grinder with ID No. GRIN5:
[40 CFR 63.6620(e)(1)]

$$\frac{(C_i - C_o)}{C_i} \times 100 = R$$

Where:
$C_i$ = concentration of carbon monoxide (CO), total hydrocarbons (THC), or formaldehyde at the control device inlet,
$C_o$ = concentration of CO, THC, or formaldehyde at the control device outlet, and
R = percent reduction of CO, THC, or formaldehyde emissions.

4.2.14 The Permittee shall normalize the CO, THC, or formaldehyde concentrations at the inlet and outlet of the control device for the tub grinder with ID No. GRIN5 to a dry basis and to 15 percent oxygen, or an equivalent percent carbon dioxide (CO2). If pollutant concentrations are to be corrected to 15 percent oxygen and CO2 concentration is measured in lieu of oxygen concentration measurement, a CO2 correction factor is needed. The Permittee shall calculate the CO2 correction factor as described in paragraphs (e)(2)(i) through (iii) of 40 CFR 63.6620.
[40 CFR 63.6620(e)(2)]

4.2.15 The engine percent load for the tub grinder with ID No. GRIN5 during a performance test must be determined by documenting the calculations, assumptions, and measurement devices used to measure or estimate the percent load in a specific application. A written report of the average percent load determination must be included in the notification of compliance status. The following information must be included in the written report: the engine model number, the engine manufacturer, the year of purchase, the manufacturer's site-rated brake horsepower, the ambient temperature, pressure, and humidity during the performance test, and all assumptions that were made to estimate or calculate percent load during the performance test must be clearly explained. If measurement devices such as flow meters, kilowatt meters, beta analyzers, stain gauges, etc. are used, the model number of the measurement device, and an estimate of its accuracy in percentage of true value must be provided.
[40 CFR 63.6620(i)]

4.2.16 In the event the Permittee changes the catalyst in the control device for the tub grinder with ID No. GRIN5, the Permittee must reestablish the values of the operating parameters measured during the initial performance test. When the Permittee re-establishes the values of operating parameters, the Permittee must also conduct a performance test to demonstrate that the required emission limitations applicable to the tub grinder are met.
[40 CFR 63.6640(b)]

# PART 5.0 REQUIREMENTS FOR MONITORING (Related to Data Collection)

## 5.1 General Monitoring Requirements

5.1.1 Any continuous monitoring system required by the Division and installed by the Permittee shall be in continuous operation and data recorded during all periods of operation of the affected facility except for continuous monitoring system breakdowns and repairs. Monitoring system response, relating only to calibration checks and zero and span adjustments, shall be measured and recorded during such periods. Maintenance or repair shall be conducted in the most expedient manner to minimize the period during which the system is out of service.
[391-3-1-.02(6)(b)1]

## 5.2 Specific Monitoring Requirements

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 40 CFR 63.1961(c)]

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 each open flare. Data must be recorded at least once every 15 minutes. [Note: This system need not be operating when LFG is not flowing to the associate flare.]
[40 CFR 63.1961(c)(1)]

b. A device to measure the gas flow rates to each open flare at least once every 15 minutes.
[40 CFR 63.1961(c)(2)(i)]

c. If a bypass line is present on an open flare, the Permittee shall secure the 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. The Permittee shall keep a record of each monthly inspection.
[40 CFR 63.1951(c)(2)(ii)]

d. A device to measure the gas flow rates to each landfill gas treatment system at least once every 15 minutes.
[40 CFR 63.1961(g)(1)]

e. If a bypass line is present on the pipe to the landfill gas treatment system, the Permittee shall secure the 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. The Permittee shall keep a record of each monthly inspection.
[40 CFR 63.1961(g)(2)]

f. A device, on each engine with ID Nos. E1, E2, and E3, to measure the manifold temperature. Data shall be recorded at the frequency specified in Condition 5.2.14.

g. A device, on each engine with ID Nos. E1, E2, and E3, to measure the manifold pressure. Data shall be recorded at the frequency specified in Permit Condition 5.2.14.

h. A device, on each engine with ID Nos. E1, E2, and E3, to measure the ignition timing. Data shall be recorded at the frequency specified in Permit Condition 5.2.14.

i. A device, on each engine with ID Nos. E1, E2, and E3, to measure the engine load. Data shall be recorded at the frequency specified in Permit Condition 5.2.14.

j. A non-resettable hour meter on each the engine with ID Nos. E1, E2, and E3 and tub grinder with ID No. GRIN5. Data shall also be recorded each month.

k. A device on each engine with ID Nos. E1, E2, and E3, to monitor and record the daily volumetric flow rate of each fuel fired.
[40 CFR 63.6625(c)]

**Landfill**

5.2.2 The Permittee shall install a sampling port and a thermometer, other temperature measuring device, or an access port for temperature measurements at each wellhead.
[391-3-1-.02(6)(b)1, 40 CFR 70.6(a)(3)(i), and 40 CFR 63.1961(a)]

5.2.3 Once per month, the Permittee shall measure and record the gauge pressure in the gas collection header at each individual wellhead in the active collection system. The Permittee shall record instances when positive pressure occurs during efforts to avoid a fire.
[391-3-1-.02(6)(b)1, 40 CFR 70.6(a)(3)(i), 40 CFR 63.1961(a), and 40 CFR 63.1958(b)(1)]

5.2.4 For each exceedance of the wellhead gauge pressure, as specified in Condition 3.3.1b., except for the three conditions allowed under Condition 3.3.1b, the Permittee shall initiate action within 5 calendar days to correct the exceedance. Any attempted corrective actions shall not cause exceedances of other operational or performance standards.
[391-3-1-.02(6)(b)1, 40 CFR 70.6(a)(3)(i), 40 CFR 63.1960(a)(3)]

a. If exceedance cannot be corrected without excess air infiltration within 15 calendar days of the first measurement of the exceedance, the owner or operator must conduct a root cause analysis and correct the exceedance as soon as practicable, but no later than 60 days after exceedance was first measured. The owner or operator must keep records according to Condition 6.2.6c and 40 CFR 63.1983(e)(3).

b. If corrective actions cannot be fully implemented within 60 days following the exceedance measurement for which the root cause analysis was required, the owner or operator must also conduct a corrective action analysis and develop an implementation schedule to complete the corrective action(s) as soon as practicable, but no more than 120 days following the exceedance measurement. The owner or operator must submit the items listed in Condition 6.1.7d.vi. as part of the next semiannual report. The owner or operator must keep records according to Condition 6.2.6d and 40 CFR 63.1983(e)(4).

c. If corrective action is expected to take longer than 120 days to complete after the initial exceedance, the owner or operator must submit the root cause analysis, corrective action analysis, and corresponding implementation timeline to the Administrator, according to Conditions 6.1.7d.vi. and 6.2.7. The owner or operator must keep records according to Condition 6.2.6e and 40 CFR 63.1983(e)(5).

5.2.5 Once per month, the Permittee shall measure and record the temperature in each wellhead in the active collection systems. The temperature measuring device shall be calibrated annually using the procedure in Method 2, Section 10.3, in the Division's Procedures for Testing and Monitoring Sources of Air Pollutants.
[391-3-1-.02(6)(b)1, 40 CFR 70.6(a)(3)(i), and 40 CFR 63.1961(a)(3)]

5.2.6 For each exceedance of the wellhead temperature, as specified in Condition 3.3.1c., the Permittee shall initiate action within 5 calendar days to correct the exceedance. Any attempted corrective actions shall not cause exceedances of other operational or performance standards.
[391-3-1-.02(6)(b)1, 40 CFR 70.6(a)(3)(i), and 40 CFR 63.1960(a)(4)]

a. If a landfill gas temperature exceedance cannot be corrected within 15 calendar days of the first measurement of landfill gas temperature exceedance, the owner or operator must conduct a root cause analysis and correct the exceedance as soon as practicable, but no later than 60 days after a landfill gas temperature exceedance was first measured. The owner or operator must keep records according to Condition 6.2.6c and 40 CFR 63.1983(e)(3).

b. If corrective actions cannot be fully implemented within 60 days following the landfill gas temperature exceedance for which the root cause analysis was required, the owner or operator must also conduct a corrective action analysis and develop an implementation schedule to complete the corrective action(s) as soon as practicable, but no more than 120 days following the measurement of landfill gas temperature exceedance. The owner or operator must submit the items listed in Condition 6.1.7d.vi. as part of the next semiannual report. The owner or operator must keep records according to Condition 6.2.6d and 40 CFR 63.1983(e)(4).

c. If corrective action is expected to take longer than 120 days to complete after the initial exceedance, the owner or operator must submit the root cause analysis, corrective action analysis, and corresponding implementation timeline to the Division, according to 6.1.7d.vi. and 6.2.7. The owner or operator must keep records according to Condition 6.2.6e and 40 CFR 63.1983(e)(5).

d. If a landfill gas temperature measured at either the wellhead or at any point in the well is greater than or equal to 76.7 degrees Celsius (170 degrees Fahrenheit) and the carbon monoxide concentration measured, according to the procedures in Condition 5.2.11f. and 40 CFR 63.1961(a)(5)(vi) is greater than or equal to 1,000 ppmv the corrective action(s) for the wellhead temperature standard (62.8 degrees Celsius or 145 degrees Fahrenheit) must be completed within 15 days.

5.2.7 Once per month, the Permittee shall measure and record the oxygen or nitrogen concentration in each wellhead in the active collection systems. Unless an alternative test method is in the Division-approved GCCS Plan, the oxygen concentration shall be determined using Method 3A in the Division's Procedures for Testing and Monitoring Sources of Air Pollutants with the exceptions listed in 40 CFR 63.1961(a)(2)(ii) or using a portable gas analyzer meeting the requirements of 40 CFR 63.1961(a)(2)(iii), and the nitrogen concentration shall be determined using Method 3C in the Division's Procedures for Testing and Monitoring Sources of Air Pollutants.
[391-3-1-.02(6)(b)1, 40 CFR 70.6(a)(3)(i), 40 CFR 63.1961(a)(2)]

5.2.8 The Permittee shall monitor the concentrations of methane on the surface of the landfill each calendar quarter. The monitoring shall be conducted during typical meteorological conditions. The monitoring locations and procedures to be used are as follows:
[391-3-1-.02(6)(b)1, 40 CFR 70.6(a)(3)(i), 40 CFR 63.1958(d), 40 CFR 63.1960(c), and 40 CFR 63.1961(f)]

a. The Permittee shall monitor surface methane concentrations along the entire perimeter of the collection area and along a pattern that traverses the landfill at no more than 30-meter intervals and where visual observations indicate elevated concentrations of landfill gas, such as distressed vegetation and cracks or seeps in the cover. All cover penetrations that are within the area where waste has been placed and a gas collection system is required must be checked. An alternative traversing pattern that ensures equivalent coverage may be established. Areas with steep slopes or other dangerous areas may be excluded from the surface testing. A surface monitoring design plan shall be developed that includes a topographical map with the monitoring route and the rationale for any site-specific deviations from the 30-meter interval requirement.

b. The background methane concentration shall be determined by moving the probe inlet upwind and downwind outside the boundary of the landfill at least 30 meters from the perimeter wells.

c. The surface methane monitoring shall be performed in accordance with section 8.3.1 of Method 21 in the Division's Procedures for Testing and Monitoring Sources of Air Pollutants, except that the probe inlet shall be 5 to 10 centimeters (2 to 4 inches) from the ground.

d. For each location on the landfill that surface monitoring indicates methane concentrations 500 ppm above background concentration (surface methane exceedance), the following actions shall be taken:

i. Mark and record the location and concentration of the exceedance. The location (latitude and longitude) must be recorded using an instrument with an accuracy of at least 4 meters. The coordinates must be in decimal degrees with at least five decimal places.

ii. Perform corrective action (i.e., carry out cover maintenance or make adjustments to the vacuum of adjacent wells) and re-monitor the location within 10 calendar days of detecting the exceedance.

iii. If the re-monitoring indicates a second exceedance, additional corrective action shall be performed and the location monitored a third time within 10 calendar days of the second exceedance. If re-monitoring shows a third exceedance for a location, the collection systems shall be expanded or upgraded as specified in 40 CFR 63.1960(c)(4)(v). Until the collection system expansion or upgrade is completed, no further monitoring is required for this location.

iv. Any location that initially shows a surface methane exceedance but re-monitoring in accordance with paragraph ii. or iii. shows methane concentrations below the exceedance level (500 ppm above background) shall be re-monitored 1 month after the initial exceedance. If the 1-month re-monitoring shows concentrations below the exceedance level, no further monitoring is required for that location until the next quarterly monitoring period. If the 1-month re-monitoring shows an exceedance, re-monitoring as specified in paragraph iii. shall be conducted or the collection system shall be expanded or upgraded as specified in 40 CFR 63.1960(c)(4)(v).

v. For any location where three surface methane exceedances have been measured during one quarterly period, the collection system shall be expanded or upgraded as specified in 40 CFR 63.1960(c)(4)(v).

vi. Upon closure of the landfill, if there are no monitoring exceedances of the surface methane operational standard in three consecutive quarterly monitoring periods, the Permittee may skip to annual monitoring as specified in 40 CFR 63.1961(f). If a methane reading of 500 ppm or more above background is detected during the annual monitoring, the Permittee shall return to quarterly monitoring.

5.2.9 For the purposes of conducting surface methane monitoring as required in Condition 5.2.8, the Permittee shall comply with the following instrumentation specifications and procedures for surface emission monitoring devices:
[391-3-1-.02(6)(b)1, 40 CFR 70.6(a)(3)(i), and 40 CFR 63.1960(d)]

a. The portable analyzer shall meet the instrument specifications provided in section 6 of Method 21 in the Division's Procedures for Testing and Monitoring Sources of Air Pollutants, except that "methane" shall replace all references to "VOC".

b. The calibration gas shall be methane, diluted to a nominal concentration of 500 parts per million in air.

c. To meet the performance evaluation requirements in Section 8.1 of Method 21 in the Division's Procedures for Testing and Monitoring Sources of Air Pollutants, the instrument evaluation procedures of Sections 8.1 of Method 21 in the Division's Procedures for Testing and Monitoring Sources of Air Pollutants shall be used.

d. The calibration procedures provided in Sections 8 and 10 of Method 21 in the Division's Procedures for Testing and Monitoring Sources of Air Pollutants shall be followed immediately before commencing a surface monitoring survey.

5.2.10 The Permittee shall implement a program to monitor for cover integrity and implement cover repairs as necessary on a monthly basis. The Permittee shall maintain a document describing the monitoring program and shall maintain records of monthly inspections of the cover. The monthly records shall include a description of any needed cover repairs and the corrective actions taken. These records shall be maintained in a form suitable for inspection or submittal to the Division.
[391-3-1-.02(6)(b)1, 40 CFR 70.6(a)(3)(i), and 40 CFR 63.1960(c)(5)]

5.2.11 For each well with a landfill gas temperature greater than 62.8 degrees Celsius (145 degrees Fahrenheit) or approved higher operating temperature measured in accordance with Condition 5.2.5, the Permittee shall initiate enhanced monitoring at the well. The enhance monitoring shall consist of the following:
[40 CFR 63.1961(a)(5)]

a. Visual observations for subsurface oxidation events (smoke, smoldering ash, damage to well) within the radius of influence of the well.

b. Monitor oxygen concentration as provided in Condition 5.2.7.

c. Monitor temperature of the landfill gas at the wellhead.

d. Monitor temperature of the landfill gas every 10 vertical feet of the well as provided in Condition 5.2.12.

e. Monitor the methane concentration with a methane meter using Method 3C, Method 18, or a portable gas composition analyzer to monitor the methane levels provided that the analyzer is calibrated, and the analyzer meets all quality assurance and quality control requirements for Method 3C or Method 18.

f. Monitor and determine carbon monoxide concentrations, as follows:

i. Collect the sample from the wellhead sampling port in a passivated canister or multi-layer foil gas sampling bag (such as the Cali-5-Bond Bag) and analyze that sample using Method 10, or an equivalent method with a detection limit of at least 100 ppmv of carbon monoxide in high concentrations of methane; or

ii. Collect and analyze the sample from the wellhead using Method 10 to measure carbon monoxide concentrations.

iii. When sampling directly from the wellhead, you must sample for 5 minutes plus twice the response time of the analyzer. These values must be recorded. The five 1-minute averages are then averaged to give you the carbon monoxide reading at the wellhead.

iv. When collecting samples in a passivated canister or multi-layer foil sampling bag, you must sample for the period of time needed to assure that enough sample is collected to provide five (5) consecutive, 1-minute samples during the analysis of the canister or bag contents, but no less than 5 minutes plus twice the response time of the analyzer. The five (5) consecutive, 1-minute averages are then averaged together to give you a carbon monoxide value from the wellhead.

g. The enhanced monitoring must begin 7 calendar days after the first measurement of landfill gas temperature greater than 62.8 degrees Celsius (145 degrees Fahrenheit) or approved higher operating temperature; and

h. The enhanced monitoring must be conducted on a weekly basis. If four consecutive weekly carbon monoxide readings are under 100 ppmv, then enhanced monitoring may be decreased to monthly. However, if carbon monoxide readings exceed 100 ppmv again, the landfill must return to weekly monitoring.

i. The enhanced monitoring can be stopped once a higher operating value is approved, at which time the monitoring provisions issued with the higher operating value should be followed, or once the measurement of landfill gas temperature at the wellhead is less than or equal to 62.8 degrees Celsius (145 degrees Fahrenheit) or approved higher operating temperature.

5.2.12 For each wellhead with a measurement of landfill gas temperature greater than or equal to 73.9 degrees Celsius (165 degrees Fahrenheit), the Permittee shall annually monitor temperature of the landfill gas every 10 vertical feet of the well. This temperature can be monitored either with a removable thermometer or using temporary or permanent thermocouples installed in the well.
[40 CFR 63.1961(a)(6)]

5.2.13 The Permittee shall develop a treatment system monitoring plan for each landfill gas treatment system. The Permittee shall maintain and operate all monitoring systems associated with the treatment system in accordance with this plan. The treatment system monitoring plan must include:
[40 CFR 63.1983(b)(5)(ii)]

a. Monitoring records of parameters that are identified in the treatment system monitoring plan and that ensure the treatment system is operating properly for each intended end use of the treated landfill gas. At a minimum, records should include records of filtration, de-watering, and compression parameters that ensure the treatment system is operating properly for each intended end use of the treated landfill gas.

b. Monitoring methods, frequencies, and operating ranges for each monitored operating parameter based on manufacturer's recommendations or engineering analysis for each intended end use of the treated landfill gas.

c. Documentation of the monitoring methods and ranges, along with justification for their use.

d. List of responsible staff (by job title) for data collection.

e. Processes and methods used to collect the necessary data.

f. Description of the procedures and methods that are used for quality assurance, maintenance, and repair of all continuous monitoring systems (CMS).

**Engines E1, E2, and E3**

5.2.14 Within 120 days after startup of any new or rebuilt engine with ID Nos. E1, E2, and E3, the Permittee shall, using the devices required by Permit Condition 5.2.1, monitor their operation, according to the following plan:
[391-3-1-.02(6)(b)1 and 40 CFR 70.6(a)(3)(i)]

a. On a weekly basis, the manifold temperature, manifold pressure, ignition timing, and engine load of each IC engine shall be measured and recorded. The duration of the measurement period shall be a minimum of 15 minutes. Data for each parameter shall be recorded at one (1) minute intervals and an arithmetic average determined for each engine parameter.

b. Weekly measurements shall be continued on an engine until the average value for each engine parameter is within the range established for each parameter for three (3) consecutive weekly measurements, at which time the measurements may be conducted on a monthly basis. Measurement period duration, data recording frequency, and parametric average shall be as specified in a. of this condition.

c. Following any monthly measurement for an engine parameter, which is outside the range for the parameter, the Permittee shall conduct measurements on the engine according to the schedule described in b. of this condition.

5.2.15 The Permittee shall monitor the emissions of NOx from each engine with ID Nos. E1, E2, and E3, during the period from May 1 through September 30 each year by performing a test measurement to demonstrate that the NOx concentrations corrected to 15 percent oxygen are below the applicable standard. The test measurements shall use the following procedures:
[391-3-1-.02(6)(b)1 and PTM Section 2.120]

a. The measurements shall be performed no earlier than March 1 and no later than May 1 of each calendar year. Should an affected source become operational during the period from May 1 to September 20, a measurement shall be performed within the first 120 hours of operation.

b. The measurement shall be performed using the manufacturer recommended settings for reduced NOx emissions. In the event an SCR is also used to achieve the NOx emissions standard, the settings for reagent (e.g., urea or ammonia) injection rate at each load level shall be recorded and maintained. Should a change in the reagent injection rate be required at any load, a new measurement at that load range shall be conducted to demonstrate that the NOx concentrations of the emissions are below the applicable standard. The operation and maintenance of the SCR shall be conducted in a manner consistent with good operation practices and in a manner to minimize excess emissions of ammonia.

c. The Permittee shall carry out a measurement consisting of a minimum of three test measurements to demonstrate that the average emissions are less than or equal to the applicable standards. Each test measurement shall be a minimum of 30 minutes in length. One test measurement shall be conducted at the minimum load during the past 12 months, one test measurement at the highest load operated during the past 12 months, and one test measurement at the average load operated during the past 12 months.

d. All measurements of NOx emissions and oxygen concentrations shall be conducted using the procedures of the American Society for Testing and Materials Standard (ASTM) Test Method for Determination of NOx, Carbon Monoxide (CO), and Oxygen Concentrations in emissions from Natural Gas-Fired Reciprocating Engines, Combustion Turbines, Boilers, and Process Heaters Using Portable Analyzers, ASTM D 6522; or procedures of Gas Research Institute Method GRI-96-0008, EPA/EMC Conditional Test Method (CTM-30) Determination of NOx, Carbon Monoxide (CO), and Oxygen Concentrations in emissions from Natural Gas-Fired Reciprocating Engines, Combustion Turbines, Boilers, and Process Heaters Using Portable Analyzers or the Procedures of EPA Reference Methods 7E and 3A.

e. The Permittee shall maintain records of all measurements performed in accordance with this section. These records shall indicate the date and time the measurements were performed, the NOx and oxygen values determined during the measurements, the reagent injection rate settings of the SCR (at 10 percent - 100 percent load as tested), if applicable, the average inlet temperature to the catalyst bed during the measurements, and the pressure drop across the catalyst bed at the beginning of the measurement.

f. Following the measurements, from the period May 1 through September 30 of each year, the Permittee shall operate the affected facility using the settings determined during the annual measurement. The Permittee shall certify that no adjustments have been made to the affected facility by the owner, operator and/or any third party since the measurements in paragraph c. of this condition were conducted. This certification shall be made in writing no later than October 15 of each year and shall be maintained with the records required to be maintained in paragraph e. of this condition.

**Tub Grinder GRIN5**

5.2.16 If the Permittee elects to install a CEMS as specified in Table 5 of 40 CFR 63 Subpart ZZZZ, the CEMS shall be install, operate, and maintain to monitor CO and either O2 or CO2 according to the requirements in paragraphs (a)(1) through (4) of 40 CFR 63.6625(a). If you are meeting a requirement to reduce CO emissions, the CEMS must be installed at both the inlet and outlet of the control device. If you are meeting a requirement to limit the concentration of CO, the CEMS must be installed at the outlet of the control device.
[40 CFR 63.6625(a)]

5.2.17 If the Permittee is required to install a continuous parameter monitoring system (CPMS) as specified in Table 5 of 40 CFR 63 Subpart ZZZZ, you must install, operate, and maintain each CPMS according to the requirements in paragraphs (b)(1) through (8) of 40 CFR 63.6625(b).
[40 CFR 63.6625(b)]

5.2.18 The Permittee shall demonstrate initial compliance with each emission limitation, operating limitation, and other requirement that applies according to Table 5 of 40 CFR 63 Subpart ZZZZ. You must submit the Notification of Compliance Status containing the results of the initial compliance demonstration according to the requirements in 40 CFR 63.6645.
[40 CFR 63.6630(a) and (c)]

# PART 6.0 RECORD KEEPING AND REPORTING REQUIREMENTS

## 6.1 General Record Keeping and Reporting Requirements

6.1.1 Unless otherwise specified, all records required to be maintained by this Permit shall be recorded in a permanent form suitable for inspection and submission to the Division and to the EPA. The records shall be retained for at least five (5) years following the date of entry. [391-3-1-.02(6)(b)1(i) and 40 CFR 70.6(a)(3)]

6.1.2 In addition to any other reporting requirements of this Permit, the Permittee shall report to the Division in writing, within seven (7) days, any deviations from applicable requirements associated with any malfunction or breakdown of process, fuel burning, or emissions control equipment for a period of four hours or more which results in excessive emissions.

The Permittee shall submit a written report that shall contain the probable cause of the deviation(s), duration of the deviation(s), and any corrective actions or preventive measures taken.
[391-3-1-.02(6)(b)1(iv), 391-3-1-.03(10)(d)1(i) and 40 CFR 70.6(a)(3)(iii)(B)]

6.1.3 The Permittee shall submit written reports of any failure to meet an applicable emission limitation or standard contained in this permit and/or any failure to comply with or complete a work practice standard or requirement contained in this permit which are not otherwise reported in accordance with Conditions 6.1.4 or 6.1.2. Such failures shall be determined through observation, data from any monitoring protocol, or by any other monitoring which is required by this permit. The reports shall cover each semiannual period ending June 30 and December 31 of each year, shall be postmarked by August 29 and February 28, respectively following each reporting period, and shall contain the probable cause of the failure(s), duration of the failure(s), and any corrective actions or preventive measures taken. [391-3-1-.03(10)(d)1.(i) and 40 CFR 70.6(a)(3)(iii)(B)]

6.1.4 The Permittee shall submit a written report containing any excess emissions, exceedances, and/or excursions as described in this permit and any monitor malfunctions for each semiannual period ending June 30 and December 31 of each year. All reports shall be postmarked by August 29 and February 28, respectively following each reporting period. In the event that there have not been any excess emissions, exceedances, excursions or malfunctions during a reporting period, the report should so state. Otherwise, the contents of each report shall be as specified by the Division's Procedures for Testing and Monitoring Sources of Air Pollutants and shall contain the following:
[391-3-1-.02(6)(b)1 and 40 CFR 70.6(a)(3)(iii)(A)]

a. A summary report of excess emissions, exceedances and excursions, and monitor downtime, in accordance with Section 1.5(c) and (d) of the above referenced document, including any failure to follow required work practice procedures.

b. Total process operating time during each reporting period.

c. The magnitude of all excess emissions, exceedances and excursions computed in accordance with the applicable definitions as determined by the Director, and any conversion factors used, and the date and time of the commencement and completion of each time period of occurrence.

d. Specific identification of each period of such excess emissions, exceedances, and excursions that occur during startups, shutdowns, or malfunctions of the affected facility. Include the nature and cause of any malfunction (if known), the corrective action taken or preventive measures adopted.

e. The date and time identifying each period during which any required monitoring system or device was inoperative (including periods of malfunction) except for zero and span checks, and the nature of the repairs, adjustments, or replacement. When the monitoring system or device has not been inoperative, repaired, or adjusted, such information shall be stated in the report.

f. Certification by a Responsible Official that, based on information and belief formed after reasonable inquiry, the statements and information in the report are true, accurate, and complete.

6.1.5 Where applicable, the Permittee shall keep the following records:
[391-3-1-.03(10)(d)1(i) and 40 CFR 70.6(a)(3)(ii)(A)]

a. The date, place, and time of sampling or measurement;

b. The date(s) analyses were performed;

c. The company or entity that performed the analyses;

d. The analytical techniques or methods used;

e. The results of such analyses; and

f. The operating conditions as existing at the time of sampling or measurement.

6.1.6 The Permittee shall maintain files of all required measurements, including continuous monitoring systems, monitoring devices, and performance testing measurements; all continuous monitoring system or monitoring device calibration checks; and adjustments and maintenance performed on these systems or devices. These files shall be kept in a permanent form suitable for inspection and shall be maintained for a period of at least five (5) years following the date of such measurements, reports, maintenance and records.
[391-3-1-.03(10)(d)1(i) and 40 CFR 70.6 (a)(3)(ii)(B)]

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), 40 CFR 63.1958(b), 40 CFR 63.1958(c), 40 CFR 63.1958(d), and 40 CFR 63.1981(h)]

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 gas collection well, any reading of gauge pressure that does not comply with the limit specified in Condition 3.3.1b.
[40 CFR 63.1981(h)(1)]

ii. On any gas collection well, any reading of temperature that does not comply with an applicable limit specified in Condition 3.3.1c.
[40 CFR 63.1981(h)(1)]

iii. Any reading of surface methane concentration that exceeds 500 ppm above background concentration and the concentration recorded at each location for which an exceedance was recorded in the previous month. The latitude and longitude coordinates of each exceedance must be reported in decimal degrees with at least five decimal places.
[40 CFR 63.1981(h) (1) and (5)]

iv. Any period and the total length of time, as determined in accordance with Condition 5.2.1a, that there is no presence of flame in an open flare when landfill gas is sent to that flare. The report shall identify each exceedance that last for more than one hour.
[40 CFR 63.1981(h)(3)

v. Any time the parameters for the landfill gas treatment system plan required in Condition 5.2.13 are exceeded.
[40 CFR 63.1981(h)(1)(iii)]

vi. Operating hours greater than 7,400 hours for the tub grinder with ID No. GRIN5 for any 12 consecutive month period.

vii. Anytime fuel oil sulfur content of fuel fired in the tub grinder with ID No. GRIN5 exceeds 0.0015 percent sulfur by weight.
[391-3-1-.02(6)(b)1 and 40 CFR 60.4207]

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 by Condition 6.2.18.

ii. Any measurement of manifold temperature for any IC engine, which is greater than the maximum temperature established in accordance with the requirements of Permit Condition 4.2.4.

iii. Any measurement of manifold pressure for any IC engine, which is outside the range established in accordance with the requirements of Permit Condition 4.2.4.

iv. Any measurement of ignition timing for any IC engine, which is outside the range established in accordance with the requirements of Permit Condition 4.2.4.

v. Any measurement of engine load (generator output, megawatts) for any IC engine, which is outside the range established in accordance with the requirements of Permit Condition 4.2.4.

d. In addition to the excess emissions, exceedances and excursions specified above, the following should also be included with the report required in Condition 6.1.4:

i. Description and duration of all periods when the gas stream was diverted from the open flare(s) or landfill gas treatment system through a bypass line or the indication of bypass flow.
[40 CFR 63.1981(h)(2)

ii. Description and duration of all periods when the open flares or landfill gas treatment system was not operating and the length of time that no control device was operating.
[40 CFR 63.1981(h)(3)]

iii. All periods when the collection system was not operating.
[40 CFR 63.1981(h)(4)]

iv. The location of each exceedance of the 500-ppm surface methane concentration and the concentration recorded at each location for which an exceedance was recorded in the previous month. For location, the latitude and longitude coordinates of each exceedance using an instrument with an accuracy of at least 4 meters must be recorded. The coordinates must be in decimal degrees with at least five decimal places.
[40 CFR 63.1981(h)(5)]

v. The date of installation and the location of each well or collection system expansion added pursuant to Conditions 5.2.4, 5.2.6, and 5.2.8, and new wells installed per Condition 3.3.1a.
[40 CFR 63.1981(h)(6)]

vi. For any corrective action analysis for which corrective actions are required in Conditions 5.2.4 or 5.2.6 and that take more than 60 days to correct the exceedance, the root cause analysis conducted, including a description of the recommended corrective action(s), the date for corrective action(s) already completed following the exceedance, and, for action(s) not already completed, a schedule for implementation, including proposed commencement and completion dates.
[40 CFR 63.1981(h)(7)]

vii. For the enhanced well monitoring required by Condition 5.2.11 and 5.2.12, the results of all monitoring activities conducted during the semiannual period. For each monitoring point, report the date, time, and well identifier along with the value and units of measure for oxygen, temperature (wellhead and downwell), methane, and carbon monoxide. Include a summary trend analysis for each well subject to the enhanced monitoring requirements to chart the weekly readings over time for oxygen, wellhead temperature, methane, and weekly or monthly readings over time, as applicable for carbon monoxide. Include the date, time, staff person name, and description of findings for each visual observation for subsurface oxidation event.
[40 CFR 63.1981(h)(8)]

6.1.8 If monitoring demonstrates that the operational requirements are not met in Condition 3.3.1, corrective action must be taken as specified in § 63.1960(a)(3) and (5) or (c). If corrective actions are taken as specified in § 63.1960, the monitored exceedance outlined in Condition 6.1.7b is not a deviation of the operational requirements in this section.
[40 CFR 63.1958(g)]

## 6.2 Specific Record Keeping and Reporting Requirements

### Landfill

6.2.1 The Permittee, at the time of preparing to permanently close the landfill, shall submit a closure report to the Division within 30 days of waste acceptance cessation.
[40 CFR 63.1981(f)]

6.2.2 A gas collection and control equipment removal report shall be submitted to the Division 30 days prior to removal or cessation of operation of the control equipment and shall include the information specified in 40 CFR 63.1981(g).
[40 CFR 63.1981(g)]

6.2.3 The Permittee shall keep up-to-date, readily accessible, on-site records of the maximum design capacity of the landfill, the current amount of solid waste in-place, and the year-by-year waste acceptance rate. Off-site records may be maintained if they are retrievable within 4 hours. Either paper copy or electronic formats are acceptable.
[40 CFR 63.1983(a)]

6.2.4 The Permittee shall keep, up-to-date, readily accessible records of LFG control equipment as specified by 40 CFR 63.1983(b) (1) through (5) as measured during the initial performance test or compliance determination for the life of the LFG control equipment. Records of subsequent tests or monitoring shall be maintained for a minimum of 5 years. Records of the control device vendor specifications shall be maintained until removal.
[40 CFR 63.1983(b)]

6.2.5 The Permittee shall keep, for the life of the collection system, an up-to-date and accessible plot map showing each existing and planned collector in the system and providing a unique identification location label for each collector. The Permittee shall also keep up-to-date, and readily accessible:
[40 CFR 63.1983(d)]

a. Records of the installation date and location of all newly installed collectors as specified under 40 CFR 63.1960(b).

b. Documentation of the nature, date of deposition, amount, and location of asbestos-containing or nondegradable waste excluded from collection as provided in 40 CFR 63.1962(a)(3)(i) as well as any nonproductive areas excluded from collection as provided in 40 CFR 63.1962(a)(3)(ii).

6.2.6 The Permittee shall keep for at least 5 years up-to-date, readily accessible records of the following:
[40 CFR 63.1983(e)]

a. All collection and control system exceedances of the operational standards in 40 CFR 63.1958, which are found 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.

b. Each owner or operator subject to the provisions of this subpart must also keep records of each wellhead temperature exceedance as specified in Condition 3.3.1c, each wellhead nitrogen level at or above 20 percent, and each wellhead oxygen level at or above 5 percent.

c. For any root cause analysis for which corrective actions are required in Conditions 5.2.4a or 5.2.6a and 40 CFR 63.1960(a)(3)(i) or (a)(4)(i), keep a record of the root cause analysis conducted, including a description of the recommended corrective action(s) taken, and the date(s) the corrective action(s) were completed.

d. For any root cause analysis for which corrective actions are required in Conditions 5.2.4b or 5.2.6b and 40 CFR 63.1960(a)(3)(ii) or (a)(4)(ii), keep a record of the root cause analysis conducted, the corrective action analysis, the date for corrective action(s) already completed following the positive pressure reading or high temperature reading, and, for action(s) not already completed, a schedule for implementation, including proposed commencement and completion dates.

e. For any root cause analysis for which corrective actions are required in Conditions 5.2.4c or 5.2.6c and 40 CFR 63.1960(a)(3)(iii) or (a)(4)(iii), keep a record of the root cause analysis conducted, the corrective action analysis, the date for corrective action(s) already completed following the positive pressure reading or high temperature reading, for action(s) not already completed, a schedule for implementation, including proposed commencement and completion dates, and a copy of any comments or final approval on the corrective action analysis or schedule from the regulatory agency.

6.2.7 For corrective actions required according to Conditions 5.2.4c or 5.2.6c and 40 CFR 63.1960(a)(3)(iii) or (a)(4)(iii), the Permittee shall submit the following reports:
[40 CFR 63.1981(j)]

a. For corrective actions that are not completed within 60 days after the initial exceedance, the Permittee shall submit a notification as soon as practicable but no later than 75 days after the first measurement of positive pressure or temperature exceedance.

b. For corrective actions that are expected to take longer than 120 days after the initial exceedance to complete, the Permittee shall submit the root cause analysis, corrective action analysis, and corresponding implementation timeline as soon as practicable but no later than 75 days after the first measurement of positive pressure or temperature monitoring value of 62.8 degrees Celsius (145 degrees Fahrenheit) or approved higher operating temperature.

6.2.8 The Permittee shall keep, up-to-date, readily accessible continuous records of the flame or pilot monitoring specified under 40 CFR 63.1961(c), as specified in Condition 5.2.1a., for each open flare, and up-to-date, readily accessible records of all periods of operation in which flame or pilot flame is absent.
[40 CFR 63.1983(c)(4)]

6.2.9 The Permittee shall keep records of periods when the GCCS or control devices are not operating.
[40 CFR 63.1983(c)(5)]

6.2.10 In order to be authorized to exclude any nonproductive area of the landfill from being part of a required 40 CFR 63 Subpart AAAA GCCS (now or in the future), the Permittee shall keep, and have accessible, documentation of the calculations demonstrating that the total of all excluded areas contributes less than 1 percent of the total NMOC emissions from the landfill.
[40 CFR 63.1962(a)(3) (ii) and (iii)]

6.2.11 In order to be authorized to exclude an area of deposited asbestos or other nondegradable waste from being part of a required 40 CFR 63 Subpart AAAA GCCS, if one is required, the Permittee shall keep, for the life of the collection system, an up-to-date and accessible, documentation of the nature, date of deposition, amount, and location of this waste.
[40 CFR 63.1983(d)(2)]

6.2.12 If the facility has an active waste disposal site that receives asbestos-containing waste materials, the Permittee shall comply with all the provisions and reporting requirements in 40 CFR 61.154 – "Standard for Active Waste Disposal Sites," which is found within 40 CFR 61 Subpart M – "National Emission Standard of Asbestos." These include:
[40 CFR 61.154]

a. The Permittee shall maintain, until closure, records of the location, depth and area, and quantity in cubic meters (cubic yards) of asbestos-containing waste material within the disposal site on a map or diagram of the disposal area.

b. The Permittee shall, upon closure of an active waste disposal site that has received asbestos-containing waste, submit records denoting asbestos disposal locations and quantities.

6.2.13 If the facility has a closed waste disposal site that has received asbestos waste, the Permittee must comply with the provisions in 40 CFR 61.151 – "Standard for Inactive Waste Disposal Sites for Asbestos Mills and Manufacturing and Fabricating Operations," which is found within 40 CFR 61 Subpart M – "National Emission Standard of Asbestos."
[40 CFR 61.154(g) and (h)]

6.2.14 The Permittee shall notify the Division in writing within 30 days after the landfill begins adding liquids, other than leachate (leachate includes landfill gas condensate), in a controlled fashion, to the waste mass.
[391-3-1-.02(6)(b)1]

6.2.15 If the Permittee adds any liquids other than leachate (leachate includes landfill gas condensate) in a controlled fashion to the waste mass and does not comply with the bioreactor requirements in 40 CFR 63.1947, 63.1955(b) and 63.1982 (a) and (b) of this subpart, the Permittee must keep a record of calculations showing that the percent moisture by weight expected in the waste mass to which liquid is added is less than 40 percent. The calculation must consider the waste mass, moisture content of the incoming waste, mass of water added to the waste including leachate recirculation and other liquids addition and precipitation, and the mass of water removed as leachate and other water losses. Moisture level sampling or mass balance calculations can be used. The Permittee must document the calculations and the basis of any assumptions. Calculations must be updated every calendar quarter. Records of the calculations shall be kept until the cessation of liquids addition.
[40 CFR 63.1982(c)]

6.2.16 If the Permittee calculates moisture content to establish the date a bioreactor is required to begin operating the collection and control system under 40 CFR 63.1947 (a)(2) or (c)(2), the Permittee shall keep a record of the calculations including the information specified in Condition 6.2.15 for 5 years. Within 90 days after the landfill achieves 40 percent moisture content, and is therefore, by definition, a bioreactor, the Permittee shall report the results of the calculation, the date the landfill achieved 40 percent moisture content by weight, and the date the Permittee plans to begin collection and control system operation in areas not already controlled.
[40 CFR 63.1982(d)]

6.2.17 If the Permittee has employed leachate recirculation or added liquids based on a Research, Development, and Demonstration permit (issued through Resource Conservation and Recovery Act, subtitle D, part 258) within the last 10 years, the Permittee shall submit a Liquids Addition Report to the Division annually. The report shall include the information specified in 40 CFR 60.38f(l) and 40 CFR 62.16724(l). The Permittee shall also keep the records specified in 40 CFR 60.39f(j) and 40 CFR 62.16726(j).
[391-3-1-.02(2)(ggg), 40 CFR 60.38f(l), 40 CFR 60.39f(j), 40 CFR 62.16724(l), and 40 CFR 62.16726(j)]

6.2.18 The Permittee shall implement the dust suppression plan developed to assure that the provisions of Condition 3.4.4 and 3.4.5 are met. Records sufficient to show that the plan is being followed must be maintained. In particular, any deviations from the plan, or failure to follow plan procedures, shall be noted. When such actions taken by the owner or operator are consistent with the procedures specified in the plan, the owner or operator must keep records for that event, which demonstrate that the procedures specified in the plan were followed. The records may take the form of a checklist.
[391-3-1-.02(6)(b)1 and 40 CFR 70.6(a)(3)(i)]

6.2.19 The Permittee shall keep the following well temperature records:
[40 CFR 63.1983(h)]

a. Records of the landfill gas temperature on a monthly basis as monitored Condition 5.2.5.

b. Records of enhanced monitoring data at each well with a measurement of landfill gas temperature greater than 62.8 degrees Celsius (145 degrees Fahrenheit) as recorded in Condition 5.2.11 and 5.2.12.

6.2.20 If a landfill gas temperature measured at either the wellhead or at any point in the well is greater than or equal to 76.7 degrees Celsius (170 degrees Fahrenheit) and the carbon monoxide concentration measured is greater than or equal to 1,000 ppmv, the Permittee shall report the date, time, well identifier, temperature and carbon monoxide reading via email to the Division within 24 hours of the measurement unless a higher operating temperature value has been approved for the well.
[40 CFR 63.1981(k)]

6.2.21 The Permittee shall keep the date, time, and duration of each startup and/or shutdown period, recording the periods when the affected source was subject to the standard applicable to startup and shutdown. The Permittee shall keep a record of each failure to meet an applicable standard, recording the date, time, and duration of each failure, the cause of each failure, a list of the affected sources or equipment for each failure, any actions taken to minimize emissions for each failure, and any corrective actions taken for each failure to return to normal operation.
[40 CFR 63.1983(c)(6) and 40 CFR 63.1983(c)(7)]

**Tub Grinder GRIN5**

6.2.22 The Permittee shall record the operational time of the tub grinder with ID No. GRIN5 when operated. A logbook containing the records shall be maintained at the facility in a permanent form suitable and available for inspection by the Division. The records shall be retained for at least five years following the date of such records.
[391-3-1-.02(2)(yy) avoidance]

6.2.23 For each shipment of diesel fuel oil received, the Permittee shall obtain from the supplier of the fuel oil, a statement certifying that the oil complies with the specifications of ultra low sulfur diesel fuel oil contained in ASTM D975. As an alternative to the procedure described above, the Permittee may, for each shipment of diesel fuel oil received, obtain a sample for analysis of the sulfur content. The procedures of ASTM D4057 shall be used to acquire the sample. Sulfur content shall be determined using the procedures of Test Method ASTM D129 or by some other test method approved by the US EPA and acceptable to the Division. These records shall be maintained in a format suitable for inspection or submittal.
[391-3-1-.02(6)(b)1]

6.2.24 The Permittee shall demonstrate compliance with the emission limits as specified in Permit Condition 3.3.9 by purchasing an engine certified to the emission standards in 60.4205(b), for the same model year and maximum engine power. The engine must be installed and configured according to the manufacturer’s specifications. These records shall be maintained in a format suitable for inspection or submittal.
[40 CFR 60.4211(c)]

6.2.25 The Permittee shall maintain a copy of the manufacturer's written operating and maintenance instructions or operating and maintenance procedures developed by the Permittee that are approved by the engine manufacturer. These records shall be maintained in a format suitable for inspection or submittal.
[391-3-1-.02(6)(b)1(i) and 40 CFR 70.6(a)(3)(i)]

**Engines E1, E2, and E3**

6.2.26 The Permittee shall submit the following written notifications to the Division:
[391-3-1-.02(6)(b)1, 40 CFR 70.6 (a)(3)(i), 40 CFR 60.7(a)(1), and 40 CFR 60.4245(c)]

a. An initial notification within 30 days after the date of construction of the engine with ID No. E3 as required in 40 CFR 60.7(a)(1). The notification must include:

i. Name and address of the owner or operator.

ii. Address where the engines are located.

iii. Engine information including make, model, engine family, serial number, model year, maximum engine power, and engine displacement.

iv. Emission control equipment.

v. Fuel used.

b. The actual date of initial startup that engine E3 becomes operational, within 15 days after such date(s).

6.2.27 The Permittee shall keep the records of the following for engine with ID No. E3. These records shall be maintained in a format suitable for inspection or submittal.
[40 CFR 60.4245(a) and 40 CFR 63.6655(c)]

a. All notifications submitted to comply with Subpart JJJJ and all documentation supporting any notification.

b. Maintenance conducted on the engine.

c. If the engine is a certified engine, documentation from the manufacturer that the engine is certified to meet the emission standards and information as required in 40 CFR parts 90, 1048, 1054, and 1060, as applicable.

d. If the engine is not a certified engine or is a certified engine operating in a non-certified manner and subject to 40 CFR 60.4243(a)(2), documentation that the engine meets the emission standards.

6.2.28 For the operation of the engines with ID Nos. E1 and E2, the Permittee shall keep and maintain records of the maintenance conducted on the engines, in order to demonstrate compliance with the requirements specified in Permit Condition 3.3.13.
[391-3-1-.02(6)(b)1(i), 40 CFR 63.6655(e)(3), and 40 CFR 70.6(a)(3)(i)]

# PART 7.0 OTHER SPECIFIC REQUIREMENTS

## 7.1 Operational Flexibility

7.1.1 The Permittee may make Section 502(b)(10) changes as defined in 40 CFR 70.2 without requiring a Permit revision, if the changes are not modifications under any provisions of Title I of the Federal Act and the changes do not exceed the emissions allowable under the Permit (whether expressed therein as a rate of emissions or in terms of total emissions). For each such change, the Permittee shall provide the Division and the EPA with written notification as required below in advance of the proposed changes and shall obtain any Permits required under Rules 391-3-1-.03(1) and (2). The Permittee and the Division shall attach each such notice to their copy of this Permit.
[391-3-1-.03(10)(b)5 and 40 CFR 70.4(b)(12)(i)]

a. For each such change, the Permittee's written notification and application for a construction Permit shall be submitted well in advance of any critical date (typically at least 3 months in advance of any commencement of construction, Permit issuance date, etc.) involved in the change, but no less than seven (7) days in advance of such change and shall include a brief description of the change within the Permitted facility, the date on which the change is proposed to occur, any change in emissions, and any Permit term or condition that is no longer applicable as a result of the change.

b. The Permit shield described in Condition 8.16.1 shall not apply to any change made pursuant to this condition.

## 7.2 Off-Permit Changes

7.2.1 The Permittee may make changes that are not addressed or prohibited by this Permit, other than those described in Condition 7.2.2 below, without a Permit revision, provided the following requirements are met:
[391-3-1-.03(10)(b)6 and 40 CFR 70.4(b)(14)]

a. Each such change shall meet all applicable requirements and shall not violate any existing Permit term or condition.

b. The Permittee must provide contemporaneous written notice to the Division and to the EPA of each such change, except for changes that qualify as insignificant under Rule 391-3-1-.03(10)(g). Such written notice shall describe each such change, including the date, any change in emissions, pollutants emitted, and any applicable requirement that would apply as a result of the change.

c. The change shall not qualify for the Permit shield in Condition 8.16.1.

d. The Permittee shall keep a record describing changes made at the source that result in emissions of a regulated air pollutant subject to an applicable requirement, but not otherwise regulated under the Permit, and the emissions resulting from those changes.

7.2.2 The Permittee shall not make, without a Permit revision, any changes that are not addressed or prohibited by this Permit, if such changes are subject to any requirements under Title IV of the Federal Act or are modifications under any provision of Title I of the Federal Act. [Rule 391-3-1-.03(10)(b)7 and 40 CFR 70.4(b)(15)]

**7.3 Alternative Requirements**
[White Paper #2]

Not Applicable

**7.4 Insignificant Activities**
(see Attachment B for the list of Insignificant Activities in existence at the facility at the time of permit issuance)

**7.5 Temporary Sources**
[391-3-1-.03(10)(d)5 and 40 CFR 70.6(e)]

Not Applicable

**7.6 Short-term Activities**

7.6.1 The Permittee shall maintain records of the duration and frequency of the following Short-term Activities:

a. Construction of Landfill Cell

b. Capping (Closure) of Landfill Cell

c. Installation of Landfill Gas Collection and Control System (GCCS) components

These activities shall be conducted in such a manner to not equal or exceed 20 percent opacity from any fugitive dust source.
[391-3-1-.02(2)(n)2.]

**7.7 Compliance Schedule/Progress Reports**
[391-3-1-.03(10)(d)3 and 40 CFR 70.6(c)(4)]

None Applicable

**7.8 Emissions Trading**
[391-3-1-.03(10)(d)1(ii) and 40 CFR 70.6(a)(10)]

Not Applicable

**7.9 Acid Rain Requirements**

Not Applicable

## 7.10 Prevention of Accidental Releases (Section 112(r) of the 1990 CAAA)

[391-3-1-.02(10)]

7.10.1 When and if the requirements of 40 CFR Part 68 become applicable, the Permittee shall comply with all applicable requirements of 40 CFR Part 68, including the following.

a. The Permittee shall submit a Risk Management Plan (RMP) as provided in 40 CFR 68.150 through 68.185. The RMP shall include a registration that reflects all covered processes.

b. For processes eligible for Program 1, as provided in 40 CFR 68.10, the Permittee shall comply with 7.10.1.a. and the following additional requirements:

i. Analyze the worst-case release scenario for the process(es), as provided in 40 CFR 68.25; document that the nearest public receptor is beyond the distance to a toxic or flammable endpoint defined in 40 CFR 68.22(a); and submit in the RMP the worst-case release scenario as provided in 40 CFR 68.165.
ii. Complete the five-year accident history for the process as provided in 40 CFR 68.42 and submit in the RMP as provided in 40 CFR 68.168
iii. Ensure that response actions have been coordinated with local emergency planning and response agencies
iv. Include a certification in the RMP as specified in 40 CFR 68.12(b)(4)

c. For processes subject to Program 2, as provided in 40 CFR 68.10, the Permittee shall comply with 7.10.1.a., 7.10.1.b. and the following additional requirements:

i. Develop and implement a management system as provided in 40 CFR 68.15
ii. Conduct a hazard assessment as provided in 40 CFR 68.20 through 68.42
iii. Implement the Program 2 prevention steps provided in 40 CFR 68.48 through 68.60 or implement the Program 3 prevention steps provided in 40 CFR 68.65 through 68.87
iv. Develop and implement an emergency response program as provided in 40 CFR 68.90 through 68.95
v. Submit as part of the RMP the data on prevention program elements for Program 2 processes as provided in 40 CFR 68.170

d. For processes subject to Program 3, as provided in 40 CFR 68.10, the Permittee shall comply with 7.10.1.a., 7.10.1.b. and the following additional requirements:

i. Develop and implement a management system as provided in 40 CFR 68.15
ii. Conduct a hazard assessment as provided in 40 CFR 68.20 through 68.42
iii. Implement the prevention requirements of 40 CFR 68.65 through 68.87
iv. Develop and implement an emergency response program as provided in 40 CFR 68.90 through 68.95
v. Submit as part of the RMP the data on prevention program elements for Program 3 as provided in 40 CFR 68.175

e. All reports and notification required by 40 CFR Part 68 must be submitted electronically using RMP*eSubmit (information for establishing an account can be found at www.epa.gov/rmp/rmpesubmit). Electronic Signature Agreements should be mailed to:

MAIL

**Risk Management Program (RMP) Reporting Center**
**P.O. Box 10162**
**Fairfax, VA 22038**

COURIER & FEDEX

**Risk Management Program (RMP) Reporting Center**
**CGI Federal**
**12601 Fair Lakes Circle**
**Fairfax, VA 22033**

Compliance with all requirements of this condition, including the registration and submission of the RMP, shall be included as part of the compliance certification submitted in accordance with Condition 8.14.1.

## 7.11 Stratospheric Ozone Protection Requirements (Title VI of the CAAA of 1990)

7.11.1 If the Permittee performs any of the activities described below or as otherwise defined in 40 CFR Part 82, the Permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 CFR Part 82, Subpart F, except as provided for motor vehicle air conditioners (MVACs) in Subpart B:

a. Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to 40 CFR 82.156.

b. Equipment used during the maintenance, service, repair, or disposal of appliance must comply with the standards for recycling and recovery equipment pursuant to 40 CFR 82.158.

c. Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to 40 CFR 82.161.

d. Persons disposing of small appliances, MVACs, and MVAC-like appliances must comply with record keeping requirements pursuant to 40 CFR 82.166.
[Note: “MVAC-like appliance” is defined in 40 CFR 82.152.]

e. Persons owning commercial or industrial process refrigeration equipment must comply with the leak repair requirements pursuant to 40 CFR 82.156.

f. Owners/operators of appliances normally containing 50 or more pounds of refrigerant must keep records of refrigerant purchased and added to such appliances pursuant to 40 CFR 82.166.

7.11.2 If the Permittee performs a service on motor (fleet) vehicles and if this service involves an ozone-depleting substance (refrigerant) in the MVAC, the Permittee is subject to all the applicable requirements as specified in 40 CFR Part 82, Subpart B, Servicing of Motor Vehicle Air Conditioners.

The term "motor vehicle" as used in Subpart B does not include a vehicle in which final assembly of the vehicle has not been completed. The term "MVAC" as used in Subpart B does not include air-tight sealed refrigeration systems used for refrigerated cargo, or air conditioning systems on passenger buses using HCFC-22 refrigerant.

## 7.12 Revocation of Existing Permits and Amendments

The following Air Quality Permits, Amendments, and 502(b)10 are subsumed by this permit and are hereby revoked:

| Air Quality Permit and Amendment Number(s) | Dates of Original Permit or Amendment Issuance |
|---|---|
| 4953-089-0299-V-04-0 | July 31, 2018 |
| 4953-089-0299-V-04-1 | May 8, 2019 |
| 4953-089-0299-V-04-2 | September 26, 2022 |

## 7.13 Pollution Prevention

Not Applicable

## 7.14 Specific Conditions

Not Applicable

# PART 8.0 GENERAL PROVISIONS

## 8.1 Terms and References

8.1.1 Terms not otherwise defined in the Permit shall have the meaning assigned to such terms in the referenced regulation.

8.1.2 Where more than one condition in this Permit applies to an emission unit and/or the entire facility, each condition shall apply and the most stringent condition shall take precedence. [391-3-1-.02(2)(a)2]

## 8.2 EPA Authorities

8.2.1 Except as identified as "State-only enforceable" requirements in this Permit, all terms and conditions contained herein shall be enforceable by the EPA and citizens under the Clean Air Act, as amended, 42 U.S.C. 7401, et seq.
[40 CFR 70.6(b)(1)]

8.2.2 Nothing in this Permit shall alter or affect the authority of the EPA to obtain information pursuant to 42 U.S.C. 7414, "Inspections, Monitoring, and Entry."
[40 CFR 70.6(f)(3)(iv)]

8.2.3 Nothing in this Permit shall alter or affect the authority of the EPA to impose emergency orders pursuant to 42 U.S.C. 7603, "Emergency Powers."
[40 CFR 70.6(f)(3)(i)]

## 8.3 Duty to Comply

8.3.1 The Permittee shall comply with all conditions of this operating Permit. Any Permit noncompliance constitutes a violation of the Federal Clean Air Act and the Georgia Air Quality Act and/or State rules and is grounds for enforcement action; for Permit termination, revocation and reissuance, or modification; or for denial of a Permit renewal application. Any noncompliance with a Permit condition specifically designated as enforceable only by the State constitutes a violation of the Georgia Air Quality Act and/or State rules only and is grounds for enforcement action; for Permit termination, revocation and reissuance, or modification; or for denial of a Permit renewal application.
[391-3-1-.03(10)(d)1(i) and 40 CFR 70.6(a)(6)(i)]

8.3.2 The Permittee shall not use as a defense in an enforcement action the contention that it would have been necessary to halt or reduce the Permitted activity in order to maintain compliance with the conditions of this Permit.
[391-3-1-.03(10)(d)1(i) and 40 CFR 70.6(a)(6)(ii)]

8.3.3 Nothing in this Permit shall alter or affect the liability of the Permittee for any violation of applicable requirements prior to or at the time of Permit issuance.
[391-3-1-.03(10)(d)1(i) and 40 CFR 70.6(f)(3)(ii)]

8.3.4 Issuance of this Permit does not relieve the Permittee from the responsibility of obtaining any other permits, licenses, or approvals required by the Director or any other federal, state, or local agency.
[391-3-1-.03(10)(e)1(iv) and 40 CFR 70.7(a)(6)]

## 8.4 Fee Assessment and Payment

8.4.1 The Permittee shall calculate and pay an annual Permit fee to the Division. The amount of fee shall be determined each year in accordance with the "Procedures for Calculating Air Permit Fees."
[391-3-1-.03(9)]

## 8.5 Permit Renewal and Expiration

8.5.1 This Permit shall remain in effect for five (5) years from the issuance date. The Permit shall become null and void after the expiration date unless a timely and complete renewal application has been submitted to the Division at least six (6) months, but no more than eighteen (18) months prior to the expiration date of the Permit.
[391-3-1-.03(10)(d)1(i), (e)2, and (e)3(ii) and 40 CFR 70.5(a)(1)(iii)]

8.5.2 Permits being renewed are subject to the same procedural requirements, including those for public participation and affected State and EPA review, that apply to initial Permit issuance.
[391-3-1-.03(10)(e)3(i)]

8.5.3 Notwithstanding the provisions in 8.5.1 above, if the Division has received a timely and complete application for renewal, deemed it administratively complete, and failed to reissue the Permit for reasons other than cause, authorization to operate shall continue beyond the expiration date to the point of Permit modification, reissuance, or revocation.
[391-3-1-.03(10)(e)3(iii)]

## 8.6 Transfer of Ownership or Operation

8.6.1 This Permit is not transferable by the Permittee. Future owners and operators shall obtain a new Permit from the Director. The new Permit may be processed as an administrative amendment if no other change in this Permit is necessary, and provided that a written agreement containing a specific date for transfer of Permit responsibility coverage and liability between the current and new Permittee has been submitted to the Division at least thirty (30) days in advance of the transfer.
[391-3-1-.03(4)]

## 8.7 Property Rights

8.7.1 This Permit shall not convey property rights of any sort, or any exclusive privileges.
[391-3-1-.03(10)(d)1(i) and 40 CFR 70.6(a)(6)(iv)]

## 8.8 Submissions

8.8.1 Reports, test data, monitoring data, notifications, annual certifications, and requests for revision and renewal shall be submitted to:

**Georgia Department of Natural Resources**
**Environmental Protection Division**
**Air Protection Branch**
**Atlanta Tradeport, Suite 120**
**4244 International Parkway**
**Atlanta, Georgia 30354-3908**

8.8.2 Any records, compliance certifications, and monitoring data required by the provisions in this Permit to be submitted to the EPA shall be sent to:

**Air and Radiation Division**
**Air Planning and Implementation Branch**
**U. S. EPA Region 4**
**Sam Nunn Atlanta Federal Center**
**61 Forsyth Street, SW**
**Atlanta, Georgia 30303-3104**

8.8.3 Any application form, report, or compliance certification submitted pursuant to this Permit shall contain a certification by a responsible official of its truth, accuracy, and completeness. This certification shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete. [391-3-1-.03(10)(c)2, 40 CFR 70.5(d) and 40 CFR 70.6(c)(1)]

8.8.4 Unless otherwise specified, all submissions under this permit shall be submitted to the Division only.

## 8.9 Duty to Provide Information

8.9.1 The Permittee, upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the Permit application, shall promptly submit such supplementary facts or corrected information to the Division. [391-3-1-.03(10)(c)5]

8.9.2 The Permittee shall furnish to the Division, in writing, information that the Division may request to determine whether cause exists for modifying, revoking and reissuing, or terminating the Permit, or to determine compliance with the Permit. Upon request, the Permittee shall also furnish to the Division copies of records that the Permittee is required to keep by this Permit or, for information claimed to be confidential, the Permittee may furnish such records directly to the EPA, if necessary, along with a claim of confidentiality. [391-3-1-.03(10)(d)1(i) and 40 CFR 70.6(a)(6)(v)]

## 8.10 Modifications

8.10.1 Prior to any source commencing a modification as defined in 391-3-1-.01(pp) that may result in air pollution and not exempted by 391-3-1-.03(6), the Permittee shall submit a Permit application to the Division. The application shall be submitted sufficiently in advance of any critical date involved to allow adequate time for review, discussion, or revision of plans, if necessary. Such application shall include, but not be limited to, information describing the precise nature of the change, modifications to any emission control system, production capacity of the plant before and after the change, and the anticipated completion date of the change. The application shall be in the form of a Georgia air quality Permit application to construct or modify (otherwise known as a SIP application) and shall be submitted on forms supplied by the Division, unless otherwise notified by the Division.
[391-3-1-.03(1) through (8)]

## 8.11 Permit Revision, Revocation, Reopening and Termination

8.11.1 This Permit may be revised, revoked, reopened and reissued, or terminated for cause by the Director. The Permit will be reopened for cause and revised accordingly under the following circumstances:
[391-3-1-.03(10)(d)1(i)]

a. If additional applicable requirements become applicable to the source and the remaining Permit term is three (3) or more years. In this case, the reopening shall be completed no later than eighteen (18) months after promulgation of the applicable requirement. A reopening shall not be required if the effective date of the requirement is later than the date on which the Permit is due to expire, unless the original permit or any of its terms and conditions has been extended under Condition 8.5.3;
[391-3-1-.03(10)(e)6(i)(I)]

b. If any additional applicable requirements of the Acid Rain Program become applicable to the source;
[391-3-1-.03(10)(e)6(i)(II)] (Acid Rain sources only)

c. The Director determines that the Permit contains a material mistake or inaccurate statements were made in establishing the emissions standards or other terms or conditions of the Permit; or
[391-3-1-.03(10)(e)6(i)(III) and 40 CFR 70.7(f)(1)(iii)]

d. The Director determines that the Permit must be revised or revoked to assure compliance with the applicable requirements.
[391-3-1-.03(10)(e)6(i)(IV) and 40 CFR 70.7(f)(1)(iv)]

8.11.2 Proceedings to reopen and reissue a Permit shall follow the same procedures as applicable to initial Permit issuance and shall affect only those parts of the Permit for which cause to reopen exists. Reopenings shall be made as expeditiously as practicable.
[391-3-1-.03(10)(e)6(ii)]

8.11.3 Reopenings shall not be initiated before a notice of intent to reopen is provided to the source by the Director at least thirty (30) days in advance of the date the Permit is to be reopened, except that the Director may provide a shorter time period in the case of an emergency.
[391-3-1-.03(10)(e)6(iii)]

8.11.4 All Permit conditions remain in effect until such time as the Director takes final action. The filing of a request by the Permittee for any Permit revision, revocation, reissuance, or termination, or of a notification of planned changes or anticipated noncompliance, shall not stay any Permit condition.
[391-3-1-.03(10)(d)1(i) and 40 CFR 70.6(a)(6)(iii)]

8.11.5 A Permit revision shall not be required for changes that are explicitly authorized by the conditions of this Permit.

8.11.6 A Permit revision shall not be required for changes that are part of an approved economic incentive, marketable Permit, emission trading, or other similar program or process for change which is specifically provided for in this Permit.
[391-3-1-.03(10)(d)1(i) and 40 CFR 70.6(a)(8)]

## 8.12 Severability

8.12.1 Any condition or portion of this Permit which is challenged, becomes suspended or is ruled invalid as a result of any legal or other action shall not invalidate any other portion or condition of this Permit.
[391-3-1-.03(10)(d)1(i) and 40 CFR 70.6(a)(5)]

## 8.13 Excess Emissions Due to an Emergency

8.13.1 An "emergency" means any situation arising from sudden and reasonably unforeseeable events beyond the control of the source, including acts of God, which situation requires immediate corrective action to restore normal operation, and that causes the source to exceed a technology-based emission limitation under the Permit, due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent caused by improperly designed equipment, lack of preventative maintenance, careless or improper operation, or operator error.
[391-3-1-.03(10)(d)7 and 40 CFR 70.6(g)(1)]

8.13.2 An emergency shall constitute an affirmative defense to an action brought for noncompliance with the technology-based emission limitations if the Permittee demonstrates, through properly signed contemporaneous operating logs or other relevant evidence, that:
[391-3-1-.03(10)(d)7 and 40 CFR 70.6(g)(2) and (3)]

a. An emergency occurred and the Permittee can identify the cause(s) of the emergency;

b. The Permitted facility was at the time of the emergency being properly operated;

c. During the period of the emergency, the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emissions standards, or other requirements in the Permit; and

d. The Permittee promptly notified the Division and submitted written notice of the emergency to the Division within two (2) working days of the time when emission limitations were exceeded due to the emergency. This notice must contain a description of the emergency, any steps taken to mitigate emissions, and corrective actions taken.

8.13.3 In an enforcement proceeding, the Permittee seeking to establish the occurrence of an emergency shall have the burden of proof.
[391-3-1-.03(10)(d)7 and 40 CFR 70.6(g)(4)]

8.13.4 The emergency conditions listed above are in addition to any emergency or upset provisions contained in any applicable requirement.
[391-3-1-.03(10)(d)7 and 40 CFR 70.6(g)(5)]

## 8.14 Compliance Requirements

8.14.1 Compliance Certification

The Permittee shall provide written certification to the Division and to the EPA, at least annually, of compliance with the conditions of this Permit. The annual written certification shall be postmarked no later than February 28 of each year and shall be submitted to the Division and to the EPA. The certification shall include, but not be limited to, the following elements:
[391-3-1-.03(10)(d)3 and 40 CFR 70.6(c)(5)]

a. The identification of each term or condition of the Permit that is the basis of the certification;

b. The status of compliance with the terms and conditions of the permit for the period covered by the certification, including whether compliance during the period was continuous or intermittent, based on the method or means designated in paragraph c below. The certification shall identify each deviation and take it into account in the compliance certification. The certification shall also identify as possible exceptions to compliance any periods during which compliance is required and in which an excursion or exceedance as defined under 40 CFR Part 64 occurred;

c. The identification of the method(s) or other means used by the owner or operator for determining the compliance status with each term and condition during the certification period;

d. Any other information that must be included to comply with section 113(c)(2) of the Act, which prohibits knowingly making a false certification or omitting material information; and

e. Any additional requirements specified by the Division.

8.14.2 Inspection and Entry

a. Upon presentation of credentials and other documents as may be required by law, the Permittee shall allow authorized representatives of the Division to perform the following:
[391-3-1-.03(10)(d)3 and 40 CFR 70.6(c)(2)]

i. Enter upon the Permittee's premises where a Part 70 source is located or an emissions-related activity is conducted, or where records must be kept under the conditions of this Permit;
ii. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this Permit;
iii. Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this Permit; and
iv. Sample or monitor any substances or parameters at any location during operating hours for the purpose of assuring Permit compliance or compliance with applicable requirements as authorized by the Georgia Air Quality Act.

b. No person shall obstruct, hamper, or interfere with any such authorized representative while in the process of carrying out his official duties. Refusal of entry or access may constitute grounds for Permit revocation and assessment of civil penalties.
[391-3-1-.07 and 40 CFR 70.11(a)(3)(i)]

8.14.3 Schedule of Compliance

a. For applicable requirements with which the Permittee is in compliance, the Permittee shall continue to comply with those requirements.
[391-3-1-.03(10)(c)2 and 40 CFR 70.5(c)(8)(iii)(A)]

b. For applicable requirements that become effective during the Permit term, the Permittee shall meet such requirements on a timely basis unless a more detailed schedule is expressly required by the applicable requirement.
[391-3-1-.03(10)(c)2 and 40 CFR 70.5(c)(8)(iii)(B)]

c. Any schedule of compliance for applicable requirements with which the source is not in compliance at the time of Permit issuance shall be supplemental to, and shall not sanction noncompliance with, the applicable requirements on which it is based.
[391-3-1-.03(10)(c)2 and 40 CFR 70.5(c)(8)(iii)(C)]

8.14.4 Excess Emissions

a. Excess emissions resulting from startup, shutdown, or malfunction of any source which occur though ordinary diligence is employed shall be allowed provided that:
[391-3-1-.02(2)(a)7(i)]

i. The best operational practices to minimize emissions are adhered to;

ii. All associated air pollution control equipment is operated in a manner consistent with good air pollution control practice for minimizing emissions; and

iii. The duration of excess emissions is minimized.

b. Excess emissions which are caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure which may reasonably be prevented during startup, shutdown or malfunction are prohibited and are violations of Chapter 391-3-1 of the Georgia Rules for Air Quality Control.
[391-3-1-.02(2)(a)7(ii)]

c. The provisions of this condition and Georgia Rule 391-3-1-.02(2)(a)7 shall apply only to those sources which are not subject to any requirement under Georgia Rule 391-3-1-.02(8) – New Source Performance Standards or any requirement of 40 CFR, Part 60, as amended concerning New Source Performance Standards.
[391-3-1-.02(2)(a)7(iii)]

## 8.15 Circumvention

**State Only Enforceable Condition.**

8.15.1 The Permittee shall not build, erect, install, or use any article, machine, equipment or process the use of which conceals an emission which would otherwise constitute a violation of an applicable emission standard. Such concealment includes, but is not limited to, the use of gaseous diluents to achieve compliance with an opacity standard or with a standard which is based on the concentration of the pollutants in the gases discharged into the atmosphere.
[391-3-1-.03(2)(c)]

## 8.16 Permit Shield

8.16.1 Compliance with the terms of this Permit shall be deemed compliance with all applicable requirements as of the date of Permit issuance provided that all applicable requirements are included and specifically identified in the Permit.
[391-3-1-.03(10)(d)6]

8.16.2 Any Permit condition identified as "State only enforceable" does not have a Permit shield.

## 8.17 Operational Practices

8.17.1 At all times, including periods of startup, shutdown, and malfunction, the Permittee shall maintain and operate the source, including associated air pollution control equipment, in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on any information available to the Division that may include, but is not limited to, monitoring results, observations of the opacity or other characteristics of emissions, review of operating and maintenance procedures or records, and inspection or surveillance of the source.
[391-3-1-.02(2)(a)10]

**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]

## 8.18 Visible Emissions

8.18.1 Except as may be provided in other provisions of this Permit, the Permittee shall not cause, let, suffer, permit or allow emissions from any air contaminant source the opacity of which is equal to or greater than forty (40) percent.
[391-3-1-.02(2)(b)1]

## 8.19 Fuel-burning Equipment

8.19.1 The Permittee shall not cause, let, suffer, permit, or allow the emission of fly ash and/or other particulate matter from any fuel-burning equipment with rated heat input capacity of less than 10 million Btu per hour, in operation or under construction on or before January 1, 1972 in amounts equal to or exceeding 0.7 pounds per million BTU heat input.
[391-3-1-.02(2)(d)]

8.19.2 The Permittee shall not cause, let, suffer, permit, or allow the emission of fly ash and/or other particulate matter from any fuel-burning equipment with rated heat input capacity of less than 10 million Btu per hour, constructed after January 1, 1972 in amounts equal to or exceeding 0.5 pounds per million BTU heat input.
[391-3-1-.02(2)(d)]

8.19.3 The Permittee shall not cause, let, suffer, permit, or allow the emission from any fuel-burning equipment constructed or extensively modified after January 1, 1972, visible emissions the opacity of which is equal to or greater than twenty (20) percent except for one six minute period per hour of not more than twenty-seven (27) percent opacity.
[391-3-1-.02(2)(d)]

## 8.20 Sulfur Dioxide

8.20.1 Except as may be specified in other provisions of this Permit, the Permittee shall not burn fuel containing more than 2.5 percent sulfur, by weight, in any fuel burning source that has a heat input capacity below 100 million Btu's per hour.
[391-3-1-.02(2)(g)]

## 8.21 Particulate Emissions

8.21.1 Except as may be specified in other provisions of this Permit, the Permittee shall not cause, let, permit, suffer, or allow the rate of emission from any source, particulate matter in total quantities equal to or exceeding the allowable rates shown below. Equipment in operation, or under construction contract, on or before July 2, 1968, shall be considered existing equipment. All other equipment put in operation or extensively altered after said date is to be considered new equipment.
[391-3-1-.02(2)(e)]

a. The following equations shall be used to calculate the allowable rates of emission from new equipment:

$E = 4.1P^{0.67}$; for process input weight rate up to and including 30 tons per hour.
$E = 55P^{0.11} - 40$; for process input weight rate above 30 tons per hour.

b. The following equation shall be used to calculate the allowable rates of emission from existing equipment:

$E = 4.1P^{0.67}$

In the above equations, E = emission rate in pounds per hour, and
P = process input weight rate in tons per hour.

## 8.22 Fugitive Dust
[391-3-1-.02(2)(n)]

8.22.1 Except as may be specified in other provisions of this Permit, the Permittee shall take all reasonable precautions to prevent dust from any operation, process, handling, transportation or storage facility from becoming airborne. Reasonable precautions that could be taken to prevent dust from becoming airborne include, but are not limited to, the following:

a. Use, where possible, of water or chemicals for control of dust in the demolition of existing buildings or structures, construction operations, the grading of roads or the clearing of land;

b. Application of asphalt, water, or suitable chemicals on dirt roads, materials, stockpiles, and other surfaces that can give rise to airborne dusts;

c. Installation and use of hoods, fans, and fabric filters to enclose and vent the handling of dusty materials. Adequate containment methods can be employed during sandblasting or other similar operations;

d. Covering, at all times when in motion, open bodied trucks transporting materials likely to give rise to airborne dusts; and

e. The prompt removal of earth or other material from paved streets onto which earth or other material has been deposited.

8.22.2 The opacity from any fugitive dust source shall not equal or exceed 20 percent.

## 8.23 Solvent Metal Cleaning

8.23.1 Except as may be specified in other provisions of this Permit, the Permittee shall not cause, suffer, allow, or permit the operation of a cold cleaner degreaser subject to the requirements of Georgia Rule 391-3-1-.02(2)(ff) "Solvent Metal Cleaning" unless the following requirements for control of emissions of the volatile organic compounds are satisfied: [391-3-1-.02(2)(ff)1]

a. The degreaser shall be equipped with a cover to prevent escape of VOC during periods of non-use,

b. The degreaser shall be equipped with a device to drain cleaned parts before removal from the unit,

c. If the solvent volatility is 0.60 psi or greater measured at 100 ºF, or if the solvent is heated above 120 ºF, then one of the following control devices must be used:

i. The degreaser shall be equipped with a freeboard that gives a freeboard ratio of 0.7 or greater, or

ii. The degreaser shall be equipped with a water cover (solvent must be insoluble in and heavier than water), or

iii. The degreaser shall be equipped with a system of equivalent control, including but not limited to, a refrigerated chiller or carbon adsorption system.

d. Any solvent spray utilized by the degreaser must be in the form of a solid, fluid stream (not a fine, atomized or shower type spray) and at a pressure which will not cause excessive splashing, and

e. All waste solvent from the degreaser shall be stored in covered containers and shall not be disposed of by such a method as to allow excessive evaporation into the atmosphere.

## 8.24 Incinerators

8.24.1 Except as specified in the section dealing with conical burners, no person shall cause, let, suffer, permit, or allow the emissions of fly ash and/or other particulate matter from any incinerator subject to the requirements of Georgia Rule 391-3-1-.02(2)(c) "Incinerators", in amounts equal to or exceeding the following:
[391-3-1-.02(2)(c)1-4]

a. Units with charging rates of 500 pounds per hour or less of combustible waste, including water, shall not emit fly ash and/or particulate matter in quantities exceeding 1.0 pound per hour.

b. Units with charging rates in excess of 500 pounds per hour of combustible waste, including water, shall not emit fly ash and/or particulate matter in excess of 0.20 pounds per 100 pounds of charge.

8.24.2 No person shall cause, let, suffer, permit, or allow from any incinerator subject to the requirements of Georgia Rule 391-3-1-.02(2)(c) "Incinerators", visible emissions the opacity of which is equal to or greater than twenty (20) percent except for one six minute period per hour of not more than twenty-seven (27) percent opacity.

8.24.3 No person shall cause or allow particles to be emitted from an incinerator subject to the requirements of Georgia Rule 391-3-1-.02(2)(c) "Incinerators" which are individually large enough to be visible to the unaided eye.

8.24.4 No person shall operate an existing incinerator subject to the requirements of Georgia Rule 391-3-1-.02(2)(c) "Incinerators" unless:

a. It is a multiple chamber incinerator;

b. It is equipped with an auxiliary burner in the primary chamber for the purpose of creating a pre-ignition temperature of 800$^{o}$F; and

c. It has a secondary burner to control smoke and/or odors and maintain a temperature of at least 1500$^{o}$F in the secondary chamber.

## 8.25 Volatile Organic Liquid Handling and Storage

8.25.1 The Permittee shall ensure that each storage tank subject to the requirements of Georgia Rule 391-3-1-.02(2)(vv) "Volatile Organic Liquid Handling and Storage" is equipped with submerged fill pipes. For the purposes of this condition and the permit, a submerged fill pipe is defined as any fill pipe with a discharge opening which is within six inches of the tank bottom.
[391-3-1-.02(2)(vv)(1)]

## 8.26 Use of Any Credible Evidence or Information

8.26.1 Notwithstanding any other provisions of any applicable rule or regulation or requirement of this permit, for the purpose of submission of compliance certifications or establishing whether or not a person has violated or is in violation of any emissions limitation or standard, nothing in this permit or any Emission Limitation or Standard to which it pertains, shall preclude the use, including the exclusive use, of any credible evidence or information, relevant to whether a source would have been in compliance with applicable requirements if the appropriate performance or compliance test or procedure had been performed.
[391-3-1-.02(3)(a)]

## 8.27 Internal Combustion Engines

8.27.1 For diesel-fired internal combustion engine(s) manufactured after April 1, 2006 or modified/reconstructed after July 11, 2005, the Permittee shall comply with all applicable provisions of New Source Performance Standards (NSPS) as found in 40 CFR 60 Subpart A – "General Provisions" and 40 CFR 60 Subpart IIII – "Standards of Performance for Stationary Compression Ignition Internal Combustion Engines." Such requirements include but are not limited to:
[40 CFR 60.4200]

a. Equip all emergency generator engines with non-resettable hour meters in accordance with Subpart IIII.

b. Purchase only diesel fuel with a maximum sulfur content of 15 ppm unless otherwise specified by the Division in accordance with Subpart IIII.

c. Conduct engine maintenance prescribed by the engine manufacturer in accordance with Subpart IIII.

d. Limit non-emergency operation of each emergency generator to 100 hours per year in accordance with Subpart IIII. Non-emergency operation other than maintenance and readiness testing is prohibited for engines qualifying as "emergency generators" for the purposes of Ga Rule 391-3-1-.02(2)(mmm).

e. Maintain any records in accordance with Subpart IIII

f. Maintain a list of engines subject to 40 CFR 60 Subpart IIII, including the date of manufacture.[391-3-1-.02(6)(b)]

8.27.2 The Permittee shall comply with all applicable provisions of New Source Performance Standards (NSPS) as found in 40 CFR 60 Subpart A – "General Provisions" and 40 CFR 60 Subpart JJJJ – "Standards of Performance for Stationary Spark Ignition Internal Combustion Engines," for spark ignition internal combustion engine(s) (gasoline, natural gas, liquefied petroleum gas or propane-fired) manufactured after July 1, 2007 or modified/reconstructed after June 12, 2006.
[40 CFR 60.4230]

8.27.3 The Permittee shall comply with all applicable provisions of National Emission Standards for Hazardous Air Pollutants (NESHAP) as found in 40 CFR 63 Subpart A – "General Provisions" and 40 CFR 63 Subpart ZZZZ – "National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines."

For diesel-fired emergency generator engines defined as "existing" in 40 CFR 63 Subpart ZZZZ (constructed prior to June 12, 2006 for area sources of HAP, constructed prior to June 12, 2006 for ≤500hp engines at major sources, and constructed prior to December 19, 2002 for >500hp engines at major sources of HAP), such requirements (if applicable) include but are not limited to:
[40 CFR 63.6580]

a. Equip all emergency generator engines with non-resettable hour meters in accordance with Subpart ZZZZ.

b. Purchase only diesel fuel with a maximum sulfur content of 15 ppm unless otherwise specified by the Division in accordance with Subpart ZZZZ.

c. Conduct the following in accordance with Subpart ZZZZ.

i. Change oil and filter every 500 hours of operation or annually, whichever comes first

ii. Inspect air cleaner every 1000 hours of operation or annually, whichever comes first and replace as necessary

iii. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first and replace as necessary.

d. Limit non-emergency operation of each emergency generator to 100 hours per year in accordance with Subpart ZZZZ. Non-emergency operation other than maintenance and readiness testing is prohibited for engines qualifying as "emergency generators" for the purposes of Ga Rule 391-3-1-.02(2)(mmm).

e. Maintain any records in accordance with Subpart ZZZZ

f. Maintain a list of engines subject to 40 CFR 63 Subpart ZZZZ, including the date of manufacture.[391-3-1-.02(6)(b)]

## 8.28 Boilers and Process Heaters

8.28.1 If the facility/site is an area source of Hazardous Air Pollutants, the Permittee shall comply with all applicable provisions of National Emission Standards for Hazardous Air Pollutants (NESHAP) 40 CFR Part 63 Subpart A - "General Provisions" and 40 CFR 63 Subpart JJJJJJ – "National Emission Standards for Hazardous Air Pollutants for Area Sources: Industrial, Commercial, and Institutional Boilers."
[40 CFR 63.11193]

8.28.2 If the facility/site is a major source of Hazardous Air Pollutants, the Permittee shall comply with all applicable provisions of National Emission Standards for Hazardous Air Pollutants (NESHAP) 40 CFR Part 63 Subpart A – "General Provisions" and 40 CFR 63 Subpart DDDDD – "National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters."
[40 CFR 63.7480]

## Attachments

A. List of Standard Abbreviations and List of Permit Specific Abbreviations
B. Insignificant Activities Checklist, Insignificant Activities Based on Emission Levels and Generic Emission Groups
C. List of References

## ATTACHMENT A

### List Of Standard Abbreviations

| | |
|---|---|
| AIRS | Aerometric Information Retrieval System |
| APCD | Air Pollution Control Device |
| ASTM | American Society for Testing and Materials |
| BACT | Best Available Control Technology |
| BTU | British Thermal Unit |
| CAAA | Clean Air Act Amendments |
| CEMS | Continuous Emission Monitoring System |
| CERMS | Continuous Emission Rate Monitoring System |
| CFR | Code of Federal Regulations |
| CMS | Continuous Monitoring System(s) |
| CO | Carbon Monoxide |
| COMS | Continuous Opacity Monitoring System |
| dscf/dscm | Dry Standard Cubic Foot / Dry Standard Cubic Meter |
| EPA | United States Environmental Protection Agency |
| EPCRA | Emergency Planning and Community Right to Know Act |
| gr | Grain(s) |
| GPM (gpm) | Gallons per minute |
| $H_2O$ (H2O) | Water |
| HAP | Hazardous Air Pollutant |
| HCFC | Hydro-chloro-fluorocarbon |
| MACT | Maximum Achievable Control Technology |
| MMBtu | Million British Thermal Units |
| MMBtu/hr | Million British Thermal Units per hour |
| MVAC | Motor Vehicle Air Conditioner |
| MW | Megawatt |
| NESHAP | National Emission Standards for Hazardous Air Pollutants |
| $NO_x$ (NOx) | Nitrogen Oxides |
| NSPS | New Source Performance Standards |
| OCGA | Official Code of Georgia Annotated |

| | |
|---|---|
| PM | Particulate Matter |
| $PM_{10}$ (PM10) | Particulate Matter less than 10 micrometers in diameter |
| PPM (ppm) | Parts per Million |
| PSD | Prevention of Significant Deterioration |
| RACT | Reasonably Available Control Technology |
| RMP | Risk Management Plan |
| SIC | Standard Industrial Classification |
| SIP | State Implementation Plan |
| $SO_2$ (SO2) | Sulfur Dioxide |
| USC | United States Code |
| VE | Visible Emissions |
| VOC | Volatile Organic Compound |

### List of Permit Specific Abbreviations

| | |
|---|---|
| GCCS | Gas Collection and Control System |
| LFG | Landfill Gas |
| MSW | Municipal Solid Waste |

| | |
|---|---|
| NMOC | Nonmethane Organic Compounds |

# ATTACHMENT B

**NOTE:** Attachment B contains information regarding insignificant emission units/activities and groups of generic emission units/activities in existence at the facility at the time of Permit issuance. Future modifications or additions of insignificant emission units/activities and equipment that are part of generic emissions groups may not necessarily cause this attachment to be updated.

## INSIGNIFICANT ACTIVITIES CHECKLIST

| Category | Description of Insignificant Activity/Unit | Quantity |
|---|---|---|
| **Mobile Sources** | 1. Cleaning and sweeping of streets and paved surfaces | 1 |
| **Combustion Equipment** | 1. Fire fighting and similar safety equipment used to train fire fighters or other emergency personnel. | |
| | 2. Small incinerators that are not subject to any standard, limitation or other requirement under Section 111 or 112 (excluding 112(r)) of the Federal Act and are not considered a "designated facility" as specified in 40 CFR 60.32e of the Federal emissions guidelines for Hospital/Medical/Infectious Waste Incinerators, that are operating as follows:<br>i) Less than 8 million BTU/hr heat input, firing types 0, 1, 2, and/or 3 waste. | |
| | ii) Less than 8 million BTU/hr heat input with no more than 10% pathological (type 4) waste by weight combined with types 0, 1, 2, and/or 3 waste. | |
| | iii) Less than 4 million BTU/hr heat input firing type 4 waste.<br>(Refer to 391-3-1-.03(10)(g)2.(ii) for descriptions of waste types) | |
| | 3. Open burning in compliance with Georgia Rule 391-3-1-.02 (5). | |
| | 4. Stationary engines burning:<br>i) Natural gas, LPG, gasoline, dual fuel, or diesel fuel which are used exclusively as emergency generators shall not exceed 500 hours per year or 200 hours per year if subject to Georgia Rule 391-3-1-.02(2)(mmm).7 | |
| | ii) Natural gas, LPG, and/or diesel fueled generators used for emergency, peaking, and/or standby power generation, where the combined peaking and standby power generation do not exceed 200 hours per year. | |
| | iii) Natural gas, LPG, and/or diesel fuel used for other purposes, provided that the output of each engine does not exceed 400 horsepower and that no individual engine operates for more than 2,000 hours per year. | |
| | iv) Gasoline used for other purposes, provided that the output of each engine does not exceed 100 horsepower and that no individual engine operates for more than 500 hours per year. | |
| **Trade Operations** | 1. Brazing, soldering, and welding equipment, and cutting torches related to manufacturing and construction activities whose emissions of hazardous air pollutants (HAPs) fall below 1,000 pounds per year. | 1 |
| **Maintenance, Cleaning, and Housekeeping** | 1. Blast-cleaning equipment using a suspension of abrasive in water and any exhaust system (or collector) serving them exclusively. | |
| | 2. Portable blast-cleaning equipment. | |
| | 3. Non-Perchloroethylene Dry-cleaning equipment with a capacity of 100 pounds per hour or less of clothes. | |
| | 4. Cold cleaners having an air/vapor interface of not more than 10 square feet and that do not use a halogenated solvent. | 1 |
| | 5. Non-routine clean out of tanks and equipment for the purposes of worker entry or in preparation for maintenance or decommissioning. | |
| | 6. Devices used exclusively for cleaning metal parts or surfaces by burning off residual amounts of paint, varnish, or other foreign material, provided that such devices are equipped with afterburners. | |
| | 7. Cleaning operations: Alkaline phosphate cleaners and associated cleaners and burners. | |

## INSIGNIFICANT ACTIVITIES CHECKLIST

| Category | Description of Insignificant Activity/Unit | Quantity |
|---|---|---|
| **Laboratories and Testing** | 1. Laboratory fume hoods and vents associated with bench-scale laboratory equipment used for physical or chemical analysis. | |
| | 2. Research and development facilities, quality control testing facilities and/or small pilot projects, where combined daily emissions from all operations are not individually major or are support facilities not making significant contributions to the product of a collocated major manufacturing facility. | |
| **Pollution Control** | 1. Sanitary waste water collection and treatment systems, except incineration equipment or equipment subject to any standard, limitation or other requirement under Section 111 or 112 (excluding 112(r)) of the Federal Act. | |
| | 2. On site soil or groundwater decontamination units that are not subject to any standard, limitation or other requirement under Section 111 or 112 (excluding 112(r)) of the Federal Act. | |
| | 3. Bioremediation operations units that are not subject to any standard, limitation or other requirement under Section 111 or 112 (excluding 112(r)) of the Federal Act. | |
| | 4. Landfills that are not subject to any standard, limitation or other requirement under Section 111 or 112 (excluding 112(r)) of the Federal Act. | |
| **Industrial Operations** | 1. Concrete block and brick plants, concrete products plants, and ready mix concrete plants producing less than 125,000 tons per year. | |
| | 2. Any of the following processes or process equipment which are electrically heated or which fire natural gas, LPG or distillate fuel oil at a maximum total heat input rate of not more than 5 million BTU's per hour:<br>i) Furnaces for heat treating glass or metals, the use of which do not involve molten materials or oil-coated parts. | |
| | ii) Porcelain enameling furnaces or porcelain enameling drying ovens. | |
| | iii) Kilns for firing ceramic ware. | |
| | iv) Crucible furnaces, pot furnaces, or induction melting and holding furnaces with a capacity of 1,000 pounds or less each, in which sweating or distilling is not conducted and in which fluxing is not conducted utilizing free chlorine, chloride or fluoride derivatives, or ammonium compounds. | |
| | v) Bakery ovens and confection cookers. | |
| | vi) Feed mill ovens. | |
| | vii) Surface coating drying ovens | |
| | 3. Carving, cutting, routing, turning, drilling, machining, sawing, surface grinding, sanding, planing, buffing, shot blasting, shot peening, or polishing; ceramics, glass, leather, metals, plastics, rubber, concrete, paper stock or wood, also including roll grinding and ground wood pulping stone sharpening, provided that:<br>i) Activity is performed indoors; &<br>ii) No significant fugitive particulate emissions enter the environment; &<br>iii) No visible emissions enter the outdoor atmosphere. | |
| | 4. Photographic process equipment by which an image is reproduced upon material sensitized to radiant energy (e.g., blueprint activity, photographic developing and microfiche). | |
| | 5. Grain, food, or mineral extrusion processes | |
| | 6. Equipment used exclusively for sintering of glass or metals, but not including equipment used for sintering metal-bearing ores, metal scale, clay, fly ash, or metal compounds. | |
| | 7. Equipment for the mining and screening of uncrushed native sand and gravel. | |
| | 8. Ozonization process or process equipment. | |
| | 9. Electrostatic powder coating booths with an appropriately designed and operated particulate control system. | |
| | 10. Activities involving the application of hot melt adhesives where VOC emissions are less than 5 tons per year and HAP emissions are less than 1,000 pounds per year. | |
| | 11. Equipment used exclusively for the mixing and blending water-based adhesives and coatings at ambient temperatures. | |
| | 12. Equipment used for compression, molding and injection of plastics where VOC emissions are less than 5 tons per year and HAP emissions are less than 1,000 pounds per year. | |
| | 13. Ultraviolet curing processes where VOC emissions are less than 5 tons per year and HAP emissions are less than 1,000 pounds per year. | |

## INSIGNIFICANT ACTIVITIES CHECKLIST

| Category | Description of Insignificant Activity/Unit | Quantity |
|---|---|---|
| **Storage Tanks and Equipment** | 1. All petroleum liquid storage tanks storing a liquid with a true vapor pressure of equal to or less than 0.50 psia as stored. | |
| | 2. All petroleum liquid storage tanks with a capacity of less than 40,000 gallons storing a liquid with a true vapor pressure of equal to or less than 2.0 psia as stored that are not subject to any standard, limitation or other requirement under Section 111 or 112 (excluding 112(r)) of the Federal Act. | |
| | 3. All petroleum liquid storage tanks with a capacity of less than 10,000 gallons storing a petroleum liquid. | 3 |
| | 4. All pressurized vessels designed to operate in excess of 30 psig storing petroleum fuels that are not subject to any standard, limitation or other requirement under Section 111 or 112 (excluding 112(r)) of the Federal Act. | |
| | 5. Gasoline storage and handling equipment at loading facilities handling less than 20,000 gallons per day or at vehicle dispensing facilities that are not subject to any standard, limitation or other requirement under Section 111 or 112 (excluding 112(r)) of the Federal Act. | |
| | 6. Portable drums, barrels, and totes provided that the volume of each container does not exceed 550 gallons. | 15 |
| | 7. All chemical storage tanks used to store a chemical with a true vapor pressure of less than or equal to 10 millimeters of mercury (0.19 psia). | |

## INSIGNIFICANT ACTIVITIES BASED ON EMISSION LEVELS

| Description of Emission Units / Activities | Quantity |
|---|---|
| Leachate Working Face | 1 |
| Leachate Collection and Storage Tanks | 2 |
| LFG Condensate Collection System | 1 |
| LFG to RNG Conversion Plant | 1 |
| Transfer Station Operations | 1 |
| Uncontrolled Fugitive Dust | 1 |
| Emergency Generator | 1 |

## ATTACHMENT B (continued)

## GENERIC EMISSION GROUPS

Emission units/activities appearing in the following table are subject only to one or more of Georgia Rules 391-3-1-.02 (2) (b), (e) &/or (n). Potential emissions of particulate matter, from these sources based on TSP, are less than 25 tons per year per process line or unit in each group. Any emissions unit subject to a NESHAP, NSPS, or any specific Air Quality Permit Condition(s) are not included in this table.

| Description of Emissions Units / Activities | Number of Units (if appropriate) | Applicable Rules | | |
|---|---|---|---|---|
| | | Opacity Rule (b) | PM from Mfg Process Rule (e) | Fugitive Dust Rule (n) |
| N/A | 0 | | | |

The following table includes groups of fuel burning equipment subject only to Georgia Rules 391-3-1-.02 (2) (b) & (d).Any emissions unit subject to a NESHAP, NSPS, or any specific Air Quality Permit Condition(s) are not included in this table.

| Description of Fuel Burning Equipment | Number of Units |
|---|---|
| Fuel burning equipment with a rated heat input capacity of less than 10 million BTU/hr burning only natural gas and/or LPG. | 0 |
| Fuel burning equipment with a rated heat input capacity of less than 5 million BTU/hr, burning only distillate fuel oil, natural gas and/or LPG. | 0 |
| Any fuel burning equipment with a rated heat input capacity of 1 million BTU/hr or less. | 0 |

## ATTACHMENT C

## LIST OF REFERENCES

1. The Georgia Rules for Air Quality Control Chapter 391-3-1. All Rules cited herein which begin with 391-3-1 are State Air Quality Rules.

2. Title 40 of the Code of Federal Regulations; specifically 40 CFR Parts 50, 51, 52, 60, 61, 63, 64, 68, 70, 72, 73, 75, 76 and 82. All rules cited with these parts are Federal Air Quality Rules.

3. ***Georgia Department of Natural Resources, Environmental Protection Division, Air Protection Branch, Procedures for Testing and Monitoring Sources of Air Pollutants.***

4. ***Georgia Department of Natural Resources, Environmental Protection Division, Air Protection Branch, Procedures for Calculating Air Permit Fees***.

5. Compilation of Air Pollutant Emission Factors, AP-42, Fifth Edition, Volume I: Stationary Point and Area Sources. This information may be obtained from EPA's TTN web site at *www.epa.gov/ttn/chief/ap42/index.html*.

6. The latest properly functioning version of EPA's **TANKS** emission estimation software. The software may be obtained from EPA's TTN web site at *www.epa.gov/ttn/chief/software/tanks/index.html*.

7. The Clean Air Act (42 U.S.C. 7401 et seq).

8. White Paper for Streamlined Development of Part 70 Permit Applications, July 10, 1995 (White Paper #1).

9. White Paper Number 2 for Improved Implementation of the Part 70 Operating Permits Program, March 5, 1996 (White Paper #2).