



Louisville Metro Air Pollution Control District
850 Barret Avenue
Louisville, Kentucky 40204-1745



Title V Operating Permit

Permit No.: 149-97-TV (R1)

Plant ID: 0532

Effective Date: 6/14/2013

Expiration Date: 6/30/2018

Permission is hereby given by the Louisville Metro Air Pollution Control District to operate the process(es) and equipment described herein which are located at:

Outer Loop Recycling & Disposal Facility/WMK-Louisville Hauling
2673 Outer Loop
Louisville, KY 40219

The applicable procedures of District Regulation 2.16 regarding review by the U.S. EPA and public participation have been followed in the issuance of this permit. Based on review of the application on file with the District, permission is given to operate under the conditions stipulated herein. If a renewal permit is not issued prior to the expiration date, the owner or operator may continue to operate in accordance with the terms and conditions of this permit beyond the expiration date, provided that a complete renewal application is submitted to the District no earlier than eighteen (18) months and no later than six (6) months prior to the expiration date.

Application No.: 27870

Permit Writer: Chris Gerstle

Administratively Complete: 6/12/2005

Public Comment Date: 1/17/2013
4/20/2013

Proposed Permit Date: 1/17/2013
4/20/2103


Air Pollution Control Officer
June 14, 2013

Table of Contents

Abbreviations and Acronyms 4

Preamble 5

General Conditions 6

Title V Permit Revisions/Changes 13

Emission Unit U1: Municipal Solid Waste Landfill (MSWL) 14

 U1 Applicable Regulations 14

 U1 Emission Points..... 15

 U1 Control Devices..... 15

 U1 Specific Conditions 16

 U1 Comments 28

Emission Unit U2: Leachate Pre-treatment 29

 U2 Applicable Regulations 29

 U2 Emission Points..... 29

 U2 Control Devices..... 29

 U2 Specific Conditions 30

 U2 Comments 32

Emission Unit U3: Bioremediation of Contaminated Soil..... 33

 U3 Applicable Regulations 33

 U3 Emission Points..... 33

 U3 Control Devices..... 33

 U3 Specific Conditions 34

 U3 Comments 36

Emission Unit U4: Gasoline Storage Tank 37

 U4 Applicable Regulations 37

 U4 Emission Points..... 37

 U4 Control Devices..... 37

 U4 Specific Conditions 38

 U4 Comments 39

Emission Unit U5: Liquid Solidification Process 40

 U5 Applicable Regulations 40

 U5 Emission Points..... 40

 U5 Control Devices..... 40

 U5 Specific Conditions 41

 U5 Comments 44

Emission Unit U6: Truck Traffic 45

 U6 Specific Conditions 45

 U6 Comments 45

Emission Unit U7: Paint Booth..... 47

 U7 Applicable Regulations 47

 U7 Emission Points..... 47

 U7 Specific Conditions 48

U7 Comments 50

Permit Shield..... 51

Off-Permit Documents 51

Alternative Operating Scenario..... 51

Insignificant Activities..... 51

IA Comments 52

Emission Unit IA1: CNG Emergency Generator..... 53

 IA1 Applicable Regulations..... 53

 IA1 Emission Points 53

 IA1 Control Devices 53

 IA1 Specific Conditions..... 53

 IA1 Comments 55

Protocol Checklist for a Performance Test 56

End of Document 56

Abbreviations and Acronyms

AP-42	- AP-42, <i>Compilation of Air Pollutant Emission Factors</i> , published by USEPA
APCD	- Louisville Metro Air Pollution Control District
atm	- Atmosphere
BACT	- Best Available Control Technology
Btu	- British thermal unit
CEMS	- Continuous Emission Monitoring System
CFR	- Code of Federal Regulations
CO	- Carbon monoxide
District	- Louisville Metro Air Pollution Control District
EA	- Environmental Acceptability
HAP	- Hazardous Air Pollutant
hr	- Hour
lb	- Pound
l	- Liter
LMAPCD	- Louisville Metro Air Pollution Control District
MACT	- Maximum Achievable Control Technology
MM	- Million
NAICS	- North American Industry Classification System
NMOC	- Non Methane Organic Compound
NSR	- New Source Review
NO _x	- Nitrogen oxides
NSPS	- New Source Performance Standards
PM	- Particulate Matter
PM ₁₀	- Particulate Matter less than 10 microns
ppm	- Parts per million
PSD	- Prevention of Significant Deterioration
PMP	- Preventive Maintenance Plan
psia	- Pounds per square inch absolute
RACT	- Reasonably Available Control Technology
SIC	- Standard Industrial Classification
SIP	- State Implementation Plan
SO ₂	- Sulfur dioxide
STAR	- Strategic Toxic Air Reduction
TAC	- Toxic Air Contaminant
ton per year	- Tons per year
UTM	- Universal Transverse Mercator
VOC	- Volatile Organic Compound
w.c.	- water column
year	- any period of twelve consecutive months, unless "calendar year" is specified
yr	- year, or any 12 consecutive-month period, as determined by context

Preamble

Title V of the Clean Air Act Amendments of 1990 (the Act) required EPA to create an operating permit program for implementation by state or local air permitting authorities. The purposes of this program are: (1) to require an affected company to assume full responsibility for demonstrating compliance with applicable regulations; (2) to capture all of the regulatory information pertaining to an affected company in a single document; and (3) to make permits more consistent with each other.

A company is subject to the Title V program if it meets any of several criteria related to the nature or amount of its emissions. The Title V operating permit specifies what the affected company is, how it may operate, what its applicable regulations are, how it will demonstrate compliance, and what is required if compliance is not achieved. In Jefferson County, Kentucky, the Louisville Metro Air Pollution Control District (LMAPCD) is responsible for issuing Title V permits to affected companies and enforcing local regulations and delegated federal and state regulations. EPA may enforce federal regulations but not "District Only Enforceable Regulations".

Title V offers the public an opportunity to review and comment on a company's draft permit. It is intended to help the public understand the company's compliance responsibility under the Clean Air Act. Additionally, the Title V process provides a mechanism to incorporate new applicable requirements. Such requirements are available to the public for review and comment before they are adopted.

Title V Permit General Conditions define requirements which are generally applicable to all Title V companies under the jurisdiction of LMAPCD. This avoids repeating these requirements in every section of the company's Title V permit. Company-specific conditions augment the General Conditions as necessary; these appear in the sections of the permit addressing individual emission units or emission points.

The General Conditions include references to regulatory requirements that may not currently apply to the company, but which provide guidance for potential changes at the company or in the regulations during the life of the permit. Such requirements may become applicable if the company makes certain modifications or a new applicable requirement is adopted.

When the applicability of a section or subpart of a regulation is unclear, a clarifying citation will be made in the company's Title V permit at the emission unit/point level. Comments may also be added at the emission unit/point level to give further clarification or explanation.

The owner or operator's Title V permit may include a current table of "insignificant activities."

Insignificant activities are defined in District Regulation 2.16 section 1.23, as of the date the permit was proposed for review by U.S. EPA, Region 4.

Insignificant activities identified in District Regulation 2.02, section 2 may be subject to size or production rate disclosure requirements pursuant to Regulation 2.16 section 3.5.4.1.4.

Insignificant activities identified in District Regulation 2.02, section 2 shall comply with generally applicable requirements as required by Regulation 2.16 section 4.1.9.4.

General Conditions

1. **Compliance** - The owner or operator shall comply with all applicable requirements and with all terms and conditions of this permit. Any noncompliance shall constitute a violation of the Act, State and District regulations and shall cause the source to be subject to enforcement actions including, but not limited to, the termination, revocation and reissuance, or revision of this permit, or denial of a permit application to renew this permit. Notwithstanding any other provision in the Jefferson County portion of the Kentucky SIP approved by EPA, any credible evidence may be used for the purpose of establishing whether the owner or operator is in compliance with, has violated, or is in violation of any such plan.
(Regulation 2.16, sections 4.1.3, 4.1.13.1 and 4.1.13.7)

2. **Compliance Certification** - The owner or operator shall certify, annually, or more frequently if required in applicable regulations, compliance with the terms and conditions contained in this permit, including emission limitations, standards, or work practices. This certification shall meet the requirements of Regulation 2.16, sections 3.5.11 and 4.3.5. The owner or operator shall submit the annual compliance certification (Form 9400-O) directly to the EPA and to the District, as set forth in Regulation 2.16, section 4.3.5.4, at the following addresses:

*US EPA - Region IV
Air Enforcement Branch
Atlanta Federal Center
61 Forsyth Street
Atlanta, GA 30303-8960*

*Air Pollution Control District
Room 205
850 Barret Ave
Louisville, KY 40204-1745*

This certification must be postmarked by 15 April of the year following the year for which the certification is being submitted, or other such due date as required by another applicable regulation.

3. **Compliance Schedule** - The owner or operator shall submit a schedule of compliance for each emission unit that is not in compliance with all applicable requirements. A compliance schedule must meet the requirements of Regulation 2.16, section 3.5.9.5. A schedule of compliance shall be supplemental to, and shall not condone noncompliance with, the applicable requirements on which it is based. For each schedule of compliance, the owner or operator shall submit certified progress reports at least semi-annually, or at a more frequent period if specified in an applicable requirement or by the District in accordance with Regulation 2.16 section 4.3.4. The progress reports shall contain:
- a. Dates for achieving the activities, milestones, or compliance required in the schedule of compliance, and dates when activities, milestones, or compliance were achieved.
 - b. An explanation of why dates in the schedule of compliance were not or will not be met, and preventive or corrective measures adopted.
4. **Duty to Supplement or Correct Application** - If the owner or operator fails to submit relevant facts or has submitted incorrect information in the permit application, they shall, upon discovery of the occurrence, promptly submit the supplementary facts or corrected information in accordance with Regulation 2.16, section 3.4.
5. **Emergency Provision**
- a. An emergency shall constitute an affirmative defense to an enforcement action brought for noncompliance with technology-based emission limitations. The affirmative defense of emergency shall be demonstrated through properly signed, contemporaneous operating logs, or other relevant evidence that:
 - i. An emergency occurred and that the owner or operator can identify the cause of the emergency;

- ii. The permitted facility was at the time being properly operated;
 - iii. During the period of the emergency the owner or operator expeditiously took all reasonable steps, consistent with safe operating practices, to minimize levels of emissions that exceeded the emission standards or other requirements in this permit; and
 - iv. The owner or operator submitted notice meeting the requirements of Regulation 1.07 of the time when emissions limitations were exceeded because of the emergency. This notice must fulfill the requirement of this condition, and must contain a description of the emergency, any steps taken to mitigate emissions, and any corrective actions taken.
- b. In an enforcement proceeding, the owner or operator seeking to establish the occurrence of an emergency has the burden of proof.
 - c. This condition is in addition to any emergency or upset provision contained in an applicable requirement. (Regulation 2.16, sections 4.7.1 through 4.7.4)
6. **Emission Fees Payment Requirements** - The owner or operator shall pay annual emission fees in accordance with Regulation 2.08, section 1.3. Failure to pay the emissions fees when due shall constitute a violation of District Regulations. Such failure is subject to penalties and an increase in the fee of an additional 5% per month up to a maximum of 25% of the original amount due. In addition, failure to pay emissions fees within 60 days of the due date shall automatically suspend this permit to operate until the fee is paid or a schedule for payment acceptable to the District has been established. (Regulation 2.08, section 1.6)
7. **Emission Offset Requirements** - The owner or operator shall comply with the requirements of Regulation 2.04.
8. **Enforceability Requirements** - Except for the conditions that are specifically designated as "District Only Enforceable Conditions", all terms and conditions of this permit, including any provisions designed to limit a source's potential to emit, are enforceable by EPA and citizens as specified under the Act. (Regulation 2.16, sections 4.2.1 and 4.2.2)
9. **Enforcement Action Defense**
- a. It shall not be a defense for the owner or operator in an enforcement action that it would have been necessary for the owner or operator to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.
 - b. The owner or operator's failure to halt or reduce activity may be a mitigating factor in assessing penalties for noncompliance if the health, safety or environmental impacts of halting or reducing operations would be more serious than the impacts of continued operation. (Regulation 2.16, sections 4.1.13.2 and 4.1.13.3)
10. **Hazardous Air Pollutants and Sources Categories** - The owner or operator shall comply with the applicable requirements of Regulations 5.02 and 5.14.
11. **Information Requests** - The owner or operator shall furnish to the District, within a reasonable time, information requested in writing by the District, to determine whether cause exists for revising, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The owner or operator shall also furnish, upon request, copies of records required to be kept by this permit. (Regulation 2.16, section 4.1.13.6)
- If information is submitted to the District under a claim of confidentiality, the source shall submit a copy of the confidential information directly to EPA at the address in General Condition 35.b. (Regulation 2.07, section 10.2)

12. **Insignificant Activities** - The owner or operator shall:
- Notify the District in a timely manner of any proposed change to an insignificant activity that would require a permit revision. (Regulation 2.16, section 5)
 - Submit a current list of insignificant activities by April 15 of each year with the annual compliance certification, including an identification of the additions and removals of insignificant activities that occurred during the preceding year. (Regulation 2.16, section 4.3.5.3.6)
13. **Inspection and Entry** - Upon presentation of credentials and other documents as required by law, the owner or operator shall allow the District or an authorized representative to perform the following during reasonable hours: (Regulation 2.16, section 4.3.2)
- Enter the premises to inspect any emissions-related activity or records required in this permit.
 - Have access to and copy records required by this permit.
 - Inspect facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required by this permit.
 - Sample or monitor substances or parameters to assure compliance with this permit or any applicable requirements.
14. **Monitoring and Related Record Keeping and Reporting Requirement** - The owner or operator shall comply with the requirements of Regulation 2.16, section 4.1.9. Unless specified elsewhere in this permit, the owner or operator shall complete required monthly record keeping within 30 days following the end of each calendar month. The owner or operator shall submit all required monitoring reports at least once every six months, unless more frequent reporting is required by an applicable requirement. The reporting period shall be January 1st through June 30th and July 1st through December 31st of each calendar year. All reports shall be sent to the District at the address in General Condition 2 and must be postmarked by the 60th day following the end of each reporting period. If surrogate operating parameters are monitored and recorded in lieu of emission monitoring, then an exceedance of multiple parameters may be deemed a single violation by the District for enforcement purposes. All reports shall include the company name, plant ID number, and the beginning and ending date of the reporting period. The compliance reports shall clearly identify any deviation from a permit requirement or a declaration that there were no such deviations. All semi-annual compliance reports shall include the statement "Based on information and belief formed after reasonable inquiry, I certify that the statements and information in this document are true, accurate, and complete" and the signature and title of a Responsible Official of the company.

The semi-annual compliance reports are due on or before the following dates of each calendar year:

<u>Reporting Period</u>	<u>Report Due Date</u>
January 1 st through June 30 th	August 29 th
July 1 st through December 31 st	March 1 st ¹

¹Note: The date for leap years is February 29th.

If a change in the "Responsible Official" (RO) occurs during the term of this permit, or if an RO is added, the owner or operator shall provide written notification (Form AP 100-A) to the District within 30 calendar days following the date a change in the designated RO occurs for this facility.

15. **Off-permit Documents** - Any applicable requirements, including emission limitations, control technology requirements, or work practice standards, contained in an off-permit document cannot be changed without undergoing the permit revision procedures in Regulation 2.16, section 5. (Regulation 2.16, section 4.1.5)

16. **Operational Flexibility** - The owner or operator may make changes without permit revision in accordance with Regulation 2.16, section 5.8.
17. **Permit Amendments (Administrative)** - This permit can be administratively amended by the District in accordance with Regulation 2.16, section 5.4.
18. **Permit Application Submittal** - The owner or operator shall submit a timely and complete application for permit renewal or significant revision. If the owner or operator submits a timely and complete application then the owner or operator's failure to have a permit is not a violation until the District takes formal action on this permit application. This protection shall cease to apply if, subsequent to completeness determination, the owner or operator fails to submit, by the deadline specified in writing by the District, additional information required to process the application as required by Regulation 2.16, sections 3 and 5.2.
19. **Permit Duration** - This permit is issued for a fixed term of 5 years, in accordance with Regulation 2.16, section 4.1.8.3.
20. **Permit Renewal, Expiration and Application** - Permit renewal, expiration and application procedural requirements shall be in accordance with Regulation 2.16, sections 4.1.8.2 and 5.3. This permit may only be renewed in accordance with section 5.3.
21. **Permit Revisions** - No permit revision shall be required under any approved economic incentives, marketable permits, emissions trading and other similar programs or processes for changes that are provided for in the permit. (Regulation 2.16, section 4.1.16)
22. **Permit Revision Procedures (Minor)** - Except as provided in 40 CFR Part 72, the Acid Rain Program, this permit may be revised in accordance with Regulation 2.16, section 5.5.
23. **Permit Revision Procedures (Significant)** - A source seeking to make a significant permit revision shall meet all the Title V requirements for permit applications, issuance and Permit renewal, in accordance with Regulation 2.16, section 5.7, and all other applicable District Regulations.
24. **Permit Termination and Revocation by the District** - The District may terminate this permit only upon written request of the owner or operator. The District may revoke a permit for cause, in accordance with Regulation 2.16, section 5.11.1 through 5.11.6. For purposes of section 5.11.1, substantial or unresolved noncompliance includes, but is not limited to:
 - a. Knowingly operating process or air pollution control equipment in a manner not allowed by an applicable requirement or that results in excess emissions of a regulated air pollutant that would endanger the public or the environment.
 - b. Failure or neglect to furnish information, analyses, plans, or specifications required by the District.
 - c. Knowingly making any false statement in any permit application.
 - d. Noncompliance with Regulation 1.07, section 4.2; or
 - e. Noncompliance with KRS Chapter 77.
25. **Permit Shield** - The permit shield shall apply in accordance with Regulation 2.16, section 4.6.1.
26. **Prevention of Significant Deterioration of Air Quality** - The owner or operator shall comply with the requirements of Regulation 2.05.
27. **Property Rights** - This permit shall not convey property rights of any sort or grant exclusive privileges in accordance with Regulation 2.16, section 4.1.13.5.
28. **Public Participation** - Except for modifications qualifying for administrative permit amendments or minor permit revision procedures, all permit proceedings shall meet the requirements of Regulations 2.07, section 1; and 2.16, sections 5.1.1.2 and 5.5.4.

29. **Reopening For Cause** - This permit shall be reopened and revised by the District in accordance with Regulation 2.16 section 5.9.
30. **Reopening for Cause by EPA** - This permit may be revised, revoked and reissued or terminated for cause by EPA in accordance with Regulation 2.16 section 5.10.
31. **Risk Management Plan (112(r))** - For each process subject to section 112(r) of the Act, the owner or operator shall comply with 40 CFR Part 68 and Regulation 5.15.
32. **Severability Clause** - The conditions of this permit are severable. Therefore, if any condition of this permit, or the application of any condition of this permit to any specific circumstance, is determined to be invalid, the application of the condition in question to other circumstances, as well as the remainder of this permit's conditions, shall not be affected.
(Regulation 2.16, section 4.1.12)
33. **Stack Height Considerations** - The owner or operator shall comply with the requirements of Regulation 2.10.
34. **Startups, Shutdowns, and Upset Conditions Requirements** - The owner or operator shall comply with the requirements of Regulation 1.07.
35. **Submittal of Reports, Data, Notifications, and Applications**
- a. Applications, reports, test data, monitoring data, compliance certifications, and any other document required by this permit as set forth in Regulation 2.16 sections 3.1, 3.3, 3.4, 3.5, 4.1.13.6, 5.8.5 and 5.12 shall be submitted to:
- Air Pollution Control District
Room 205
850 Barret Ave
Louisville, KY 40204-1745*
- b. Documents which are specifically required to be submitted to EPA as set forth in Regulation 2.16 sections 3.3, and 5.8.5 shall be mailed to EPA at:
- US EPA - Region IV
APTMD - 12th floor
Atlanta Federal Center
61 Forsyth Street
Atlanta, GA 30303-3104*
36. **Other Applicable Regulations** - The owner or operator shall comply with all applicable requirements of the following:

Regulation	Title
1.01	General Provisions
1.02	Definitions
1.03	Abbreviations And Acronyms
1.04	Performance Tests
1.05	Compliance With Emissions Standards And Maintenance Requirements
1.06	Source Self-Monitoring and Reporting
1.07	Emissions During Shutdowns, Malfunctions, Startups, and Emergencies
1.08	Administrative Procedures
1.09	Prohibition of Air Pollution
1.10	Circumvention
1.11	Control of Open Burning
1.14	Control of Fugitive Particulate Emissions

Regulation	Title
2.01	General Application
2.02	Air Pollution Regulation Requirements and Minor Facility Exemptions
2.03	Permit Requirements - Non-Title V Construction and Operating Permits and Demolition/Renovation Permits
2.07	Public Notification for Title V, PSD, and Other Offset Permits; SIP Revisions; and Use of Emission Reduction Credits
2.09	Causes for Permit Suspension
2.10	Stack Height Considerations
2.11	Air Quality Model Usage
2.16	Title V Operating Permits
4.01	General Provisions for Emergency Episodes
4.02	Episode Criteria
4.03	General Abatement Requirements
4.07	Episode Reporting Requirements
6.01	General Provisions (Existing Affected Facilities)
6.02	Emission Monitoring for Existing Sources
7.01	General Provisions (New Affected Facilities)

District Only Enforceable Regulations:

Regulation	Title
1.12	Control of Nuisances
1.13	Control of Objectionable Odors
2.08	Emission Fee, Permit Fees and Permit Renewal Procedures
5.00	Standards for Toxic Air Contaminants and Hazardous air Pollutants, Definitions
5.01	Standards for Toxic Air Contaminants and Hazardous air Pollutants, General Provisions
5.02	Adoption and Incorporation of National Emission Standards for Hazardous Air Pollutants
5.20	Methodology for Determining Benchmark Ambient Concentration of a Toxic Air Contaminant
5.21	Environmental Acceptability for Toxic Air Contaminants
5.22	Procedures for Determining the Maximum Ambient Concentration of a Toxic Air Contaminant
5.23	Categories of Toxic Air Contaminants

37. **Stratospheric Ozone Protection Requirements** - Any facility having refrigeration equipment, including air conditioning equipment, which uses a Class I or II substance (listed in 40 CFR 82, Subpart A, Appendices A and B), and any facility which maintains, services, or repairs motor vehicles using a Class I or II substance as refrigerant must comply with all requirements of 40 CFR 82, Subparts A, B, and F. Those requirements include the following restrictions:

- a. Any facility having any refrigeration equipment normally containing fifty (50) pounds of refrigerant, or more, must keep servicing records documenting the date and type of all service and the quantity of any refrigerant added according to 40 CFR 82.166;
- b. No person repairing or servicing a motor vehicle may perform any service on a motor vehicle air conditioner (MVAC) involving the refrigerant for such air conditioner unless the person has been properly trained and certified as provided in 40 CFR 82.34 and 40 CFR 82.40, and properly uses equipment approved according to 40 CFR 82.36 and 40 CFR 82.38, and complies with 40 CFR 82.42;

- c. No person may sell or distribute, or offer for sale or distribution, any substance listed as a Class I or II substance in 40 CFR 82, Subpart A, Appendices A and B, except in compliance with 40 CFR 82.34(b), 40 CFR 82.42, and/or 40 CFR 82.166;
- d. No person maintaining, servicing, repairing, or disposing of appliances may knowingly vent or otherwise release into the atmosphere any Class I or II substance used as a refrigerant in such equipment and no other person may open appliances (except MVACs as defined in 40 CFR 82.152) for service, maintenance, or repair unless the person has been properly trained and certified according to 40 CFR 82.161 and unless the person uses equipment certified for that type of appliance according to 40 CFR 82.158 and unless the person observes the practices set forth in 40 CFR 82.156 and 40 CFR 82.166;
- e. No person may dispose of appliances (except small appliances, as defined in 40 CFR 82.152) without using equipment certified for that type of appliance according to 40 CFR 82.158 and without observing the practices set forth in 40 CFR 82.156 and 40 CFR 82.166;
- f. No person may recover refrigerant from small appliances, MVACs and MVAC-like appliances (as defined in 40 CFR 82.152), except in compliance with the requirements of 40 CFR 82 Subpart F;
- g. If the permittee manufactures, transforms, imports, or exports, a Class I or II substance (listed in 40 CFR 82, Subpart A, Appendices A and B), the permittee is subject to all requirements as specified in 40 CFR 82 Subpart A, Production and Consumption Controls. (Regulation 2.16, section 4.1.5)

Title V Permit Revisions/Changes

Revision No.	Issue Date	Public Notice Date	Type	Page No.	Description
N/A	10/10/2000	10/10/2005	Initial	Entire Permit	Initial Permit Issuance
R1	6/14/2013	1/17/2013	Renewal	Entire Permit	Permit Renewal; Change of Responsible Official; Incorporation of Construction Permits: 14-03 (leachate tanks), 422-08 (expansion), 423-08 (two 109.2 MMBtu/hr flares), 212-09 (leachate tanks); Update the Insignificant Activities List; Incorporate 40 CFR 63 Subpart DDDDD (U2)
		4/20/2013	Revision	Entire Permit	Change the STAR TAC limits

Application #	Date	Type
30468	12/19/2002	Two leachate storage tanks designated SBR 200 and SBR 300
27870	4/13/2005	Title V Renewal Application
30469	12/19/2007	One (1) 56,280,000 cubic yard (43,029,147 cubic meter) expansion of the landfill designated as Unit U8 (U1-F).
30470	12/19/2007	Two (2) new industrial flares, each rated at 109.2 MM BTU/hr and 4,000 scfm, by Parnel Biogas, Inc. designated as E-1 and E-2. Flare E-2 replaced the 2,400 scfm flare previously identified as E-2.
28717	7/14/2008	RO Change
28718	11/05/2008	RO Change
28719	3/05/2009	112j part 1 of 2 application (40 CFR 63 Subpart DDDDD)
28720	5/28/2009	112j part 2 of 2 application (40 CFR 63 Subpart DDDDD)
30471	6/01/2009	Two leachate storage tanks designated SBR 400 and SBR 500
27870	6/30/2009	Title V Renewal Supplemental Package
29948	11/18/2010	One (1) landfill gas processing plant consisting of two (2) compressors, one (1) refrigeration dryer, and pipeline for the sole purpose of supplying landfill gas to clients. (Insignificant Activity)
33442	9/02/2011	Compressed Natural gas refueling facility (Insignificant Activity)
33883	11/16/2011	Cardboard and metal sorting process (Insignificant Activity)

Emission Unit U1: Municipal Solid Waste Landfill (MSWL)**U1 Applicable Regulations:**

FEDERALLY ENFORCEABLE REGULATIONS		
Regulation	Title	Applicable Sections
2.05	Prevention of Significant Deterioration of Air Quality	1
6.45	Standards of Performance for Existing Solid Waste Landfills	1, 2, 3.1.2, 3.1.3, 4, 5
40 CFR 60, Subpart WWW	Standards of Performance for Municipal Solid Waste Landfills	60.750 through 60.759
40 CFR 61, Subpart M	National Emission Standard for Asbestos	61.141 and 61.154 (c), (d) and (e)
40 CFR 63, Subpart AAAA	National Emission Standards for Hazardous Air Pollutants: Municipal Solid Waste Landfills	63.1930 through 63.1990

DISTRICT ONLY ENFORCEABLE REGULATIONS		
Regulation	Title	Applicable Sections
5.00	Definitions	All
5.01	General Provisions	1 through 4
5.02	Federal Emission Standards for Hazardous Air Pollutants Incorporated by Reference	1, 2, 3, 4
5.20	Methodology for Determining Benchmark Ambient Concentration of a Toxic Air Contaminant	1 through 6
5.21	Environmental Acceptability for Toxic Air Contaminants	1 through 5
5.22	Procedures for Determining the Maximum Ambient Concentration of a Toxic Air Contaminant	1 through 5
5.23	Categories of Toxic Air Contaminants	1 through 6
7.02	Federal New Source Performance Standards Incorporated by Reference	1, 2, 4

U1 Emission Points		
Emission Point	Description	Control ID
E-1	Open Flare #1; Parnel Biogas, Inc. (109.2 MMBtu/hr, 4000 scfm)	C-1
E-2	Open Flare #2; Parnel Biogas, Inc. (109.2 MMBtu/hr, 4000 scfm)	C-2
E-3	Open Flare #3; LFG Specialties, LLC (128 MMBtu/hr, 4200 scfm)	C-3

U1 Control Devices		
Control ID	Description	Stack ID
C-1	Open flare #1	S1
C-2	Open flare #2	S2
C-3	Open flare #3	S3

U1 Specific Conditions**S1. Standards (Regulation 2.16, section 4.1.1)****a. CO**

- i. The owner or operator shall not allow or cause the pre Unit 8 expansion CO emissions to equal or exceed 234 tons per twelve consecutive month period. (Regulation 2.05) (U1 Comment 1)
- ii. The owner or operator shall not allow or cause the Unit 8 expansion CO emissions to equal or exceed 249 tons per twelve consecutive month period. (Regulation 2.05) (U1 Comment 1)

b. Opacity

Flares shall be operated with no visible emissions, except for periods not to exceed a total of 5 minutes during any 2 consecutive hours. (40 CFR 60.18(c)(1))

c. NMOC

- i. The owner or operator shall not allow or cause the NMOC emissions to equal or exceed 167 tons (150 Mg) per calendar year period. (Regulation 6.45, section 3.1.2.1.3.3) (U1 Comment 2)

GAS COLLECTION SYSTEM

- ii. For the purpose of determining sufficient density of gas collectors, the owner or operator shall design a system of vertical wells, horizontal collectors, or other collection devices, capable of controlling and extracting gas from all portions of the landfill sufficient to meet all operational and performance standards. (40 CFR 60.755(a)(2))
- iii. The owner or operator of a controlled landfill shall place each well or design component as specified in the approved design plan. Each well shall be installed no later than 60 days after the date on which the initial solid waste has been in place for a period of: (40 CFR 60.755(b))
 - 1) 5 years or more if active; or (40 CFR 60.755(b)(1))
 - 2) 2 years or more if closed or at final grade. (40 CFR 60.755(b)(2))
- iv. Install a collection and control system that shall: (40 CFR 60.752(b)(2)(ii)(A))
 - 1) Be designed to handle the maximum expected gas flow rate from the entire area of the landfill that warrants control over the intended use period of the gas control or treatment system equipment; (40 CFR 60.752(b)(2)(ii)(A)(1); Regulation 6.45, section 3.1.2.1.3.1)
 - 2) Collect gas from each area, cell, or group of cells in the landfill in which the initial solid waste has been placed for a period of; (40 CFR 60.752(b)(2)(ii)(A)(2),
 - (a) 5 years or more if active, (40 CFR 60.752(b)(2)(ii)(A)(2)(i), or
 - (b) 2 years or more if closed or at final grade, (40 CFR 60.752(b)(2)(ii)(A)(2)(ii); Regulation 6.45, section 3.1.2.1.3.2)
 - 3) Collect gas at a sufficient extraction rate; (40 CFR 60.752(b)(2)(ii)(A)(3))

- 4) Be designed to minimize off-site migration of subsurface gas; (40 CFR 60.752(b)(2)(ii)(A)(4)).
- v. Operate the collection system such that gas is collected from each area, cell, or group of cells in the MSW landfill in which solid waste has been in place for: (40 CFR 60.753(a))
 - 1) 5 years or more if active, (40 CFR 60.753(a)(1))
 - 2) 2 years or more if closed or at final grade, (40 CFR 60.753(a)(2))
- vi. Operate the collection system with negative pressure at each wellhead except under the following conditions: (40 CFR 60.753(b))
 - 1) A fire or increased well temperature, (40 CFR 60.753(b)(1))
 - 2) Use of a geomembrane or synthetic cover. The owner or operator shall develop acceptable pressure limits in the design plan, (40 CFR 60.753(b)(2))
 - 3) For wells below a geomembrane or synthetic cover, prior to the placement of the select waste layer, the acceptable positive pressure in the gas wells shall be limited to 36.9 in-w.c. After the full select waste layer (8 feet minimum thickness) is in place and compacted the acceptable pressure shall be limited to 86.2 in-w.c. (U1 Comment 8)
 - 4) A decommissioned well. (40 CFR 60.753(b)(3))
- vii. Operate each interior wellhead in the collection system with a landfill gas temperature less than 55 °C (131 °F) and with either a nitrogen level less than 20 percent or an oxygen level less than 5 percent. The owner or operator may establish higher operating temperature, nitrogen, or oxygen value at a particular well. A higher operating value demonstration shall show supporting data that the elevated parameter does not cause fires or significantly inhibit anaerobic decomposition by killing methanogens. (40 CFR 60.753(c))
- viii. Operate the collection system so that the methane concentration is less than 500 parts per million above background at the surface of the landfill. To determine if this level is exceeded, the owner or operator shall conduct surface testing around the perimeter of the collection area and along a pattern that traverses the landfill at 30 meter intervals and where visual observations indicate elevated concentrations of landfill gas, such as distressed vegetation and cracks or seeps in the cover. Areas with steep slopes or other dangerous areas may be excluded from the surface testing. (40 CFR 60.753(d))

GAS CONTROL SYSTEM

- ix. Route all the collected gas to a control system that complies with a combination of the following: (40 CFR 60.752(b)(2)(iii))
 - 1) An open flare designed and operated in accordance with the following; (40 CFR 60.752(b)(2)(iii)(A); Regulation 6.45, section 3.1.2.2.1)
 - (a) Flares shall be operated with a flame present at all times, (40 CFR 60.18(c)(2))
 - (b) Flares shall be operated at all times when emissions may be vented to them. (40 CFR 60.18(e)), or
 - 2) Route the collected gas to a treatment system that processes the collected gas for subsequent sale or use. (40 CFR 60.752(b)(2)(iii)(C); Regulation 6.45, section 3.1.2.2.4)

- x. In the event the collection or control system is inoperable, the gas mover system shall be shut down and all valves in the collection and control system contributing to venting or the gas to the atmosphere shall be closed within 1 hour. (40 CFR 60.753(e))
 - xi. Operate the control or treatment system at all times when the collected gas is routed to the system. (40 CFR 60.753(f))
 - xii. If monitoring demonstrates that the operational requirements are not met, corrective action shall be taken as specified in §60.755(a)(3) through (5) or §60.755(c) of subpart WWW. If corrective actions are taken as specified in §60.755, the monitored exceedance is not a violation of the operational requirements in this section. (40 CFR 60.753(g))
- d. **Asbestos (40 CFR 61 Subpart M)**
- When actively receiving asbestos containing material, the owner or operator shall ensure, at the end of each operating day, or at least once every 24-hour period while the site is in continuous operation, the asbestos-containing waste material that has been deposited at the site during the operating day or previous 24-hour period shall: (40 CFR 61.154(c))
- i. Be covered with at least 15 centimeters (6 inches) of compacted non-asbestos-containing material, (40 CFR 61.154(c)(1)), or
 - ii. Be covered with a resinous or petroleum-based dust suppression agent that effectively binds dust and controls wind erosion. Such an agent shall be used in the manner and frequency recommended for the particular dust by the dust suppression agent manufacturer to achieve and maintain dust control. Other equally effective dust suppression agents may be used upon prior approval by the Administrator. For purposes of this paragraph, any used, spent, or other waste oil is not considered a dust suppression agent. (40 CFR 61.154(c)(2))
 - iii. Upon discovering a discrepancy between the quantity of waste designated on the waste shipment records and the quantity actually received, attempt to reconcile the discrepancy with the waste generator. (40 CFR 61.154(e)(3))
- e. **HAP (40 CFR 63 Subpart AAAA)**
- i. The owner or operator shall install and extend the collection and control system into each new cell or area of the bioreactor prior to initiating liquids addition in that area, instead of the schedule in 40 CFR 60.752(b)(2)(ii)(A)(2). (40 CFR 63.1955(d)(2), 40 CFR 63.1947(a)(1), 40 CFR 63.1947(c)(1))
 - ii. The owner or operator shall begin operating the gas collection and control system within 180 days after initiating liquids addition or within 180 days after achieving a moisture content of 40 percent by weight, whichever is later. If you choose to begin gas collection and control system operation 180 days after achieving a 40 percent moisture content instead of 180 days after liquids addition, use the procedures in § 63.1980(g) and (h) to determine when the bioreactor moisture content reaches 40 percent. (40 CFR 63.1947(a)(2), 40 CFR 63.1947(c)(2))
- f. **TAC**
- i. The owner or operator shall not allow emissions of any TAC to exceed environmentally acceptable (EA) levels, whether specifically established by modeling or determined by the District to be de minimis. (Regulations 5.00 and 5.21)

- ii. The owner or operator shall not exceed a putrescible municipal solid waste disposal rate of 1,000,000 tons of municipal solid waste and the following emission limits per twelve consecutive month period: (Regulation 5.21, section 4.3) (U1 Comment 4)

Pollutant	CAS #	Category	Limit (lb)
Benzene	71-43-2	1	229.75
Dichlorobenzene (1,4-)	106-46-7	1	714.95
Ethyl Benzene	100-41-4	4	2,187
Ethylene Dichloride	107-06-2	3	35.94
Tetrachlorethane (1,1,2,2-)	79-34-5	3	35.56
Trichloroethylene	79-01-6	1	270.82
Vinyl Chloride	75-01-4	1	203.724

S2. **Monitoring and Record Keeping (Regulation 2.16, sections 4.1.9.1 and 4.1.9.2)**

The owner or operator shall maintain the required records for a minimum of 5 years and make the records readily available to the District upon request.

a. **CO**

- i. The owner or operator shall monthly calculate and record the pre-Unit 8 expansion CO emissions from the previous twelve consecutive month period. (U1 Comment 1)
- ii. The owner or operator shall monthly calculate and record the Unit 8 expansion CO emissions from the previous twelve consecutive month period. (U1 Comment 1)
- iii. CO emissions will be calculated using the following equation unless another method is approved by the District:

$$\text{Monthly CO} = \text{Monthly Landfill Gas Generation (MMCF/month)} \times 0.37 \text{ lb/MMBtu} \times 1,012 \text{ MMBtu/MMCF} \times 1 \text{ ton/2000 lb} \times 50\% \text{ methane}$$

b. **Opacity**

- i. The owner or operator shall monthly conduct a one-minute visible emissions survey, during normal operation and daylight hours, of the flares.
- ii. Where visible emissions are observed, the owner or operator shall initiate corrective action within eight hours of the initial visible emission observation.
- iii. The owner or operator shall monthly record the results of all visible emissions surveys and tests. Records of the results of any visible emissions survey shall include the date of the survey, the name of the person conducting the survey, whether or not visible emissions were observed, and what if any corrective action was performed. If an emission point is not being operated during a given month, then no visible emission survey needs to be performed and a negative declaration shall be entered in the record.

c. **NMOC**

- i. The owner or operator shall monthly calculate and record the NMOC year to date emissions using the following equation: (U1 Comment 3)

$$M_{\text{NMOC}} = 1.12 \cdot 10^{-4} \times V_{\text{LFG}} \times C_{\text{NMOC}} \times (1 - \text{CE})$$

where:

$$M_{\text{NMOC}} = \text{mass emission rate of NMOC, ton/month}$$

- V_{LFG} = flowrate of landfill gas, ft³/month
 C_{NMOC} = NMOC concentration, ppmv as hexane
 CE = flare control efficiency

V_{LFG} shall be obtained by measuring the total landfill gas flowrate using an orifice meter as described in Method 2E at the common header pipe that leads to the control devices.

C_{NMOC} shall be determined by collecting and analyzing landfill gas sampled from the common header pipe using EPA Method 25C.

- ii. The owner or operator shall keep on-site records of the design capacity report, 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 copies or electronic formats are acceptable.
(40 CFR 60.758(a))

SURFACE EMISSION MONITORING

- iii. The following procedures shall be used for compliance with the surface methane operational standard: (40 CFR 60.755(c))
- 1) The owner or operator shall monitor surface concentrations of methane along the entire perimeter of the collection area and along a pattern that traverses the landfill at 30 meter intervals for each collection area on a quarterly basis using an organic vapor analyzer, flame ionization detector, or other portable monitor that meets specifications and procedures for surface emission monitoring devices per §60.755(d).
(40 CFR 60.755(c)(1))
 - 2) The background concentration shall be determined by moving the probe inlet upwind and downwind outside the boundary of the landfill at a distance of at least 30 meters from the perimeter wells.
(40 CFR 60.755(c)(2))
 - 3) Surface emission monitoring shall be performed in accordance with section 4.3.1 of Method 21 of appendix A of this part, except that the probe inlet shall be placed within 5 to 10 centimeters of the ground. Monitoring shall be performed during typical meteorological conditions.
(40 CFR 60.755(c)(3))
 - 4) Any reading of 500 parts per million or more above background at any location shall be recorded as a monitored exceedance and the following actions shall be taken. As long as the specified actions are taken, the exceedance is not a violation of the operational requirements of §60.753(d). (40 CFR 60.755(c)(4))
 - (a) The location of each monitored exceedance shall be marked and the location recorded. (40 CFR 60.755(c)(4)(i))
 - (b) Cover maintenance or adjustments to the vacuum of the adjacent wells to increase the gas collection in the vicinity of each exceedance shall be made and the location shall be re-monitored within 10 calendar days of detecting the exceedance.
(40 CFR 60.755(c)(4)(ii))
 - (c) If the re-monitoring of the location shows a second exceedance, additional corrective action shall be taken and the location shall be monitored again within 10 days of the second exceedance. If the re-monitoring shows a third exceedance for the same

location, the action specified in U1 Specific Condition S2.c.iii.4(e) of this section shall be taken, and no further monitoring of that location is required until the action specified in U1 Specific Condition S2.c.iii.4(e) has been taken.

(40 CFR 60.755(c)(4)(iii))

- (d) Any location that initially showed an exceedance but has a methane concentration less than 500 ppm methane above background at the 10-day re-monitoring specified in U1 Specific Condition S2.c.iii.4(b) or S2.c.iii.4(c) of this section shall be re-monitored 1 month from the initial exceedance. If the 1-month re-monitoring shows a concentration less than 500 parts per million above background, no further monitoring of that location is required until the next quarterly monitoring period. If the 1-month re-monitoring shows an exceedance, the actions specified in U1 Specific Condition S2.c.iii.4(c) or S2.c.iii.4(e) shall be taken. (40 CFR 60.755(c)(4)(iv))
 - (e) For any location where monitored methane concentration equals or exceeds 500 parts per million above background three times within a quarterly period, a new well or other collection device shall be installed within 120 calendar days of the initial exceedance. An alternative remedy to the exceedance, such as upgrading the blower, header pipes or control device, and a corresponding timeline for installation may be submitted to the District for approval. (40 CFR 60.755(c)(4)(v))
- 5) The owner or operator shall implement a program to monitor for cover integrity and implement cover repairs as necessary on a monthly basis. (40 CFR 60.755(c)(5))
- iv. Any closed landfill that has no monitored exceedances of the operational standard in three consecutive quarterly monitoring periods may skip to annual monitoring. Any methane reading of 500 ppm or more above background detected during the annual monitoring returns the frequency for that landfill to quarterly monitoring. (40 CFR 60.756(f))
 - v. The owner or operator shall keep a record indicating the areas where a geomembrane is in place to determine which wells may experience positive pressure. The record shall also indicate the wells located below the geomembrane and the presence or absence of a full select layer (8 feet minimum thickness) in place and compacted above the geomembrane. (Regulation 2.16, sections 4.1.9.1 and 4.1.9.2)
 - vi. The owner or operator shall notify the District within ten (10) working days in advance of performing the routine surface emissions monitoring to allow a District representative to be present to witness the surface emission monitoring, including the calibration of the surface monitoring equipment. If the testing date must be changed within the ten working days, the owner or operator shall notify the District of the new proposed date. (Regulation 2.16, sections 4.1.9.1 and 4.1.9.2)

GAS COLLECTION AND CONTROL SYSTEM

- vii. For an active gas collection system, the owner or operator shall install a sampling port and a thermometer, other temperature measuring device, or an access port

for temperature measurements at each wellhead and:
(40 CFR 60.756(a); Regulation 6.45, section 4.1)

- 1) Measure *and record* the gauge pressure in the gas collection header *at each individual well* on a monthly basis; (40 CFR 60.756(a)(1); Regulation 6.45, section 4.1) (U1 Comment 5)
 - (a) If a positive pressure exists, action shall be initiated to correct the exceedance within 5 calendar days, except for the following; (40 CFR 60.755(a)(3))
 - i) A fire or increased well temperature, (40 CFR 60.753(b)(1))
 - ii) Use of a geomembrane or synthetic cover, (40 CFR 60.753(b)(2))
 - iii) A decommissioned well. A well may experience a static positive pressure after shut down to accommodate for declining flows. (40 CFR 60.753(b)(3))
 - (b) If negative pressure cannot be achieved, action shall be initiated to correct the exceedance within 5 calendar days, except for the three conditions allowed under §60.753(b). If negative pressure cannot be achieved without excess air infiltration within 15 calendar days of the first measurement, the gas collection system shall be expanded to correct the exceedance within 120 days of the initial measurement of positive pressure. Any attempted corrective measure shall not cause exceedances of other operational or performance standards. An alternative timeline for correcting the exceedance may be submitted to the District for approval. (40 CFR 60.755(a)(3))
 - (c) The owner or operator is not required to expand the system during the first 180 days after gas collection system startup. (40 CFR 60.755(a)(4))
- 2) Monitor *and record* the nitrogen or oxygen concentration and the temperature in the landfill gas on a monthly basis; (40 CFR 60.756(a)(2), §60.756(a)(3), and §60.758(c)) (U1 Comment 5)

If a well exceeds *the nitrogen or oxygen concentration, or the operating temperature then* action shall be initiated to correct the exceedance within 5 calendar days. If correction of the exceedance cannot be achieved within 15 calendar days of the first measurement, the gas collection system shall be expanded to correct the exceedance within 120 days of the initial exceedance. Any attempted corrective measure shall not cause exceedances of other operational or performance standards. An alternate timeline for correcting the exceedance may be submitted to the District for approval. (40 CFR 60.755(a)(5)) (U1 Comment 5)
- 3) The nitrogen level shall be determined using EPA Method 3C. (40 CFR 60.753(c)(1))
- 4) The oxygen shall be determined by an oxygen meter using EPA Method 3A or 3C except that: (40 CFR 60.753(c)(2))
 - (a) The span shall be set so that the regulatory limit is between 20 and 50 percent of the span; (40 CFR 60.753(c)(2)(i))

- (b) A data recorder is not required; (40 CFR 60.753(c)(2)(ii))
 - (c) Only two calibration gases are required, a zero and span, and ambient air may be used as the span; (40 CFR 60.753(c)(2)(iii))
 - (d) A calibration error check is not required; and (40 CFR 60.753(c)(2)(iv))
 - (e) The allowable sample bias, zero drift, and calibration are ± 10 percent. (40 CFR 60.753(c)(2)(v))
- viii. The owner or operator using an open flare shall install, calibrate, maintain, and operate according to the manufacturer's specifications:
- 1) 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; (40 CFR 60.756(c)(1); Regulation 6.45, section 4.3.1)
 - 2) A gas flow rate measuring device that shall record the *landfill gas* flow to the control device at least every 15 minutes. (Regulation 6.45, section 4.3.2) (U1 Comment 5)
- ix. The owner or operator shall keep records for the life of the control equipment of the following data as measured during the initial performance test or compliance determination. 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 60.758(b))
- 1) The maximum expected gas generation flow rate as calculated in §60.755(a)(1); (40 CFR 60.758(b)(1)(i); Regulation 6.45, section 3.1.3.1)

$$Q_M = \sum_{i=1}^n 2kL_o M_i \left(e^{-kt_i} \right)$$
 - Q_M = maximum expected gas generation flow rate, cubic meters per year
 - k = methane generation rate constant, year⁻¹
 - L_o = methane generation potential, cubic meters per megagram solid waste
 - M_i = mass of solid waste in the i section, megagrams
 - t_i = age of the i section, years
 - 2) The density of wells, horizontal collectors, surface collectors, or other gas extraction devices; (40 CFR 60.758(b)(1)(ii))
 - 3) Maintain continuous records of the flare pilot flame or flare flame monitoring and records of all periods of operations during which the pilot flame of the flare is absent. (40 CFR 60.758(b)(4), §60.758(c)(4), Regulation 6.45, section 3.1.3.2)
- x. The owner or operator shall keep for the life of the collection system an up-to-date, readily accessible plot map showing each existing and planned collector in the system and providing a unique identification location label for each collector and the installation date, and location of all newly installed collectors as specified under §60.755(b). (40 CFR 60.758(d) & 40 CFR 60.758(d)(1))
- xi. The owner or operator shall keep records of all collection and control system exceedances of the operational standards in §60.753, the reading in the

subsequent month whether or not the second reading is an exceedance, and the location of each exceedance. (40 CFR 60.758(e))

- xii. The owner or operator shall perform a monthly visual inspection of the structural and mechanical integrity of the open flares for signs of damage, air leakage, corrosion, etc. and repair as needed.
(Regulation 2.16, sections 4.1.9.1 and 4.1.9.2)
- xiii. The owner or operator shall keep records, monthly, of the visual inspection of the structural and mechanical integrity of the open flares.
(Regulation 2.16, sections 4.1.9.1 and 4.1.9.2)

d. **Asbestos (40 CFR 61 Subpart M)**

- i. For all asbestos-containing waste material received, the owner or operator of the active waste disposal site shall: (40 CFR 61.154(e))
 - 1) Maintain waste shipment records including the following information; (40 CFR 61.154(e)(1))
 - (a) The name, address, and telephone number of the waste generator; (40 CFR 61.154(e)(1)(i))
 - (b) The name, address and telephone number of the transporter(s); (40 CFR 61.154(e)(1)(ii))
 - (c) The quantity of the asbestos-containing waste material in cubic meters (cubic yards); (40 CFR 61.154(e)(1)(iii))
 - (d) The presence of improperly enclosed or uncovered waste, or any asbestos-containing waste material not sealed in leak-tight containers; (40 CFR 61.154(e)(1)(iv))
 - (e) The date of the receipt; (40 CFR 61.154(e)(1)(v))
- ii. As soon as possible and no longer than 30 days after receipt of the waste, send a copy of the signed waste shipment record to the waste generator.
(40 CFR 61.154(e)(2))
- iii. 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. (40 CFR 61.154(f))

e. **HAP (40 CFR 63 Subpart AAAAA)**

- i. Develop and maintain on site a written SSM (Startup, Shutdown, and Malfunction) plan. (40 CFR 63.1960)
- ii. If you add any liquids other than leachate in a controlled fashion to the waste mass and do not comply with the bioreactor requirements in 40 CFR 63.1947, §63.1955(c), and §§63.1980(c) - (f), you 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 through leachate or other water losses. Moisture level sampling or mass balances calculations can be used. You must document the calculations and the basis of any assumptions. Keep the record of the calculations until you cease liquids addition. (40 CFR 63.1980(g))
- iii. If you calculate moisture content to establish the date your bioreactor is required to begin operating the collection and control system under § 63.1947(a)(2) or

(c)(2), keep a record of the calculations including the information specified in paragraph (g) of this section for 5 years. (40 CFR 63.1980(h))

f. **TAC**

- i. The owner or operator shall maintain records sufficient to demonstrate environmental acceptability, including, but not limited to MSDS, analysis of emissions, and/or modeling results.
- ii. The owner or operator shall re-evaluate the environmental acceptability and document the environmentally acceptable emissions if a new TAC is introduced or the content of a TAC in a raw material increases.
- iii. The owner or operator shall monthly calculate and record the putrescible municipal solid waste disposal rate from the previous twelve consecutive month period.
- iv. If the twelve consecutive month period putrescible municipal solid waste disposal rate exceeds 1,000,000 tons, the owner or operator shall monthly calculate and record the TAC emissions from the landfill from the previous twelve consecutive month period using LandGEM and AP-42 section 2.4 unless another method is approved by the District.

S3. **Reporting (Regulation 2.16, section 4.1.9.3)**

The owner or operator shall include, at a minimum, the following information in the semi-annual compliance monitoring reports, unless otherwise noted.

a. **CO**

- i. The pre-Unit 8 expansion CO emissions (in tons) for each twelve consecutive month period in the reporting period in order to demonstrate compliance with the 234 tons per twelve consecutive month period limit. (U1 Comment 1)
- ii. The Unit 8 expansion-CO emissions (in tons) for each twelve consecutive month period in the reporting period in order to demonstrate compliance with the 249 tons per twelve consecutive month period limit. (U1 Comment 1)
- iii. Identification of all periods of exceedances of the twelve consecutive month period CO emission standards, including the quantity of excess emissions or a negative declaration if no excess emissions occurred.

b. **Opacity**

- i. Any deviation from the requirement to perform monthly visible emission (VE) surveys;
- ii. Any deviation from the requirement to record the results of each VE survey;
- iii. The number, date, and time of each VE survey where visible emissions were observed;
- iv. Identification of whether visible emissions (smoke) were observed.
- v. Description of any corrective action taken for each observance of visible emissions (smoke); and
- vi. If no deviations from permit requirements occur during a reporting period, the owner or operator shall submit a negative declaration stating that no permit deviations occurred during the reporting period.

c. **NMOC**

- i. The owner or operator shall report year-to-date NMOC emissions (in tons) in order to demonstrate compliance with the 167 tons per calendar year period limit.
- ii. Identification of all periods of exceedances of the calendar year period NMOC emission standard, including the quantity of excess emissions or a negative declaration if no excess emissions occurred.
- iii. The owner or operator shall report the following information: (U1 Comment 6)
 - 1) Value and length of time for exceedance of applicable parameters monitored for: (§60.757(f)(1))
 - (a) The active gas collection system,
 - i) The pressure in the gas collection header;
 - ii) The nitrogen or oxygen concentration, and
 - iii) The temperature in the landfill gas.
 - (b) The open flare,
 - i) The continuous presence of a flame, and
 - ii) The continuous presence of flow to the flare.
 - 2) Description and duration of all periods when the control device was not operating for a period exceeding 1 hour and length of time the control device was not operating. (§60.757(f)(3))
 - 3) All periods when the collection system was not operating in excess of 5 days. (§60.757(f)(4))
 - 4) The location of each *SEM* exceedance of the 500 parts per million methane concentration and the concentration recorded at each location for which an exceedance was recorded in the previous month. (§60.757(f)(5))
 - 5) The date of installation and the location of each well or collection system expansion added. (§60.757(f)(6))
 - 6) A copy of the up-to-date plot map as required in U1 Specific Condition S2.c.x due April 15th of each year. (Regulation 2.16, section 4.1.9.3)

d. Asbestos

- i. The owner or operator shall include the documentation of the presence of asbestos or nondegradable material for each area from which collection wells have been excluded based on the presence of asbestos or nondegradable materials with the initial performance test report. (40 CFR 60.757(g)(3))
- ii. The owner or operator shall report in writing to the District, by the following working day, the presence of a significant amount of improperly enclosed or uncovered waste. Submit a copy of the waste shipment record along with the report. (40 CFR 61.154(e)(1)(iv))
- iii. If the discrepancy between the quantity of waste designated on the waste shipment records and the quantity actually received is not resolved within 15 days after receiving the waste, immediately report in writing to the District. Describe the discrepancy and attempts to reconcile it, and submit a copy of the waste shipment record along with the report. (40 CFR 61.154(e)(3)) (U1 Comment 7)

- iv. The owner or operator shall notify the District in writing at least 45 days prior to excavating or otherwise disturbing any asbestos-containing waste material that has been deposited at a waste disposal site and is covered. If the excavation will begin on a date other than the one contained in the original notice, notice of the new start date must be provided to the District at least 10 working days before excavation begins and in no event shall excavation begin earlier than the date specified in the original notification. Include the following information in the notice: (40 CFR 61.154(j))
 - 1) Scheduled starting and completion dates.
 - 2) Reason for disturbing the waste.
 - 3) Procedures to be used to control emissions during excavation, storage, transport, and ultimate disposal of the excavated asbestos-containing waste material. If deemed necessary, the District may require changes in the emission control procedures to be used.
 - 4) Location of any temporary storage site and the final disposal site.
 - v. The owner or operator shall include in the semi-annual reports any deviations that may have occurred in the reporting period or a negative declaration if no deviations occurred. (Regulation 2.16, section 4.1.9.3)
- e. **HAP**
- i. Any time an action taken during a startup, shutdown, and malfunction plan is not consistent with the SSM, the source shall report actions taken within 2 working days after commencing such actions, followed by a letter 7 days after the event. (40 CFR 63 Subpart AAAAA, Table 1)
 - ii. Within 90 days after the bioreactor achieves 40 percent moisture content, report the results of the calculation, the date the bioreactor achieved 40 percent moisture content by weight, and the date you plan to begin collection and control system operation. (40 CFR 63.1980(h))
- f. **TAC**
- i. The owner or operator shall report any conditions that were inconsistent with those conditions analyzed in the most recent Environmental Acceptability Demonstration or a negative declaration stating that operations were within the conditions analyzed. This includes, but is not limited to, control device upset conditions.
 - ii. The owner or operator shall re-analyze the Environmental Acceptability Demonstration to determine whether any conditions outside the analysis comply with the STAR program. Changes to the air dispersion modeling program or meteorological data used in the most recent Environmental Acceptability Demonstration do not trigger the requirement to re-analyze. (Regulation 5.21 sections 4.22 – 4.24)
 - iii. The owner or operator shall submit the re-evaluated Environmental Acceptability Demonstration to the District within 6 months of a change that impacts the demonstration of environmental acceptability.
 - iv. The owner or operator shall identify all periods of exceedances of the twelve consecutive month period putrescible municipal solid waste disposal rate, including the quantity of excess TAC emissions or a negative declaration if no exceedance occurred.

U1 Comments

1. The source has the potential to emit in excess of 250 tons per year of CO; therefore, there is a 249 ton per year limit for CO for the Unit 8 expansion to avoid PSD (Permit 422-08-C (R1)). There is also a 234 ton per year limit for CO for the pre-Unit 8 expansion emissions.
2. District Regulation 6.45 requires landfills to design a collection system that shall effectively capture the gas that is generated within the landfill.
3. Appendix B to District Regulation 6.45 contains the NMOC emission rate calculation if controls are required and after the installation of a collection and control system in compliance with section 3.1.2. The equation in the permit has been modified from metric units to standard units.
4. A revised Environmental Acceptability Demonstration was submitted to the District on February 25, 2013. The permit contains a throughput limit to ensure TAC emissions are below the rate modeled which demonstrated environmental acceptability.
5. Specific Conditions containing italicized sections not specifically included in 40 CFR 60 Subpart WWW are granted by District Regulation 2.16, sections 4.1.9.1 and 4.1.9.2.
6. Federal Regulation 40 CFR 63.1980(a) requires the annual report described in 40 CFR 60.757(f) to be submitted semi-annually.
7. The District has determined that “immediately” means the report will be submitted the day after the 15th day post discrepancy.
8. The Non Methane Organic Compounds (NMOC) emission rate report was received by the District on May 30, 1996. The facility’s initial design capacity report was submitted by May 30, 1997. A revised NSPS Landfill Gas Collection and Control Design Plan was received by the District on January 10, 2010 as required. Revision 4 was submitted August 6, 2012. This report also includes the acceptable pressure measurements below the geomembrane.
9. The bioreactor areas in Units 5 and 7 are part of a research and development project between Waste Management and the United States Environmental Protection Agency performed under a Cooperative Research and Development Agreement (CRADA).

Emission Unit U2: Leachate Pre-treatment**U2 Applicable Regulations**

FEDERALLY ENFORCEABLE REGULATIONS		
Regulation	Title	Applicable Sections
7.25	Standard of Performance for New Sources Using Volatile Organic Compounds	1, 2, 3, 4, and 5
40 CFR 63 Subpart DDDDD	National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers and Process Heaters	63.7480 through 63.7575

DISTRICT ONLY ENFORCEABLE REGULATIONS		
Regulation	Title	Applicable Sections
5.00	Definitions	All
5.01	General Provisions	1 through 4
5.02	Federal Emission Standards for Hazardous Air Pollutants Incorporated by Reference	1, 2, 3, 4
5.20	Methodology for Determining Benchmark Ambient Concentration of a Toxic Air Contaminant	1 through 6
5.21	Environmental Acceptability for Toxic Air Contaminants	1 through 5
5.22	Procedures for Determining the Maximum Ambient Concentration of a Toxic Air Contaminant	1 through 5
5.23	Categories of Toxic Air Contaminants	1 through 6

U2 Emission Points		
Emission Point	Description	Control ID
E-4	Leachate process heater	2.0 MMBtu/hr
E-4a	Tank SBR 200	327,800 gallons
E-4b	Tank SBR 300	327,800 gallons
E-4c	Tank SBR 400	288,012 gallons
E-4d	Tank SBR 500	288,012 gallons
E-4e	Tank SBR 600	303,573 gallons
E-4f	Tank SBR 700	303,573 gallons

U2 Control Devices: There are no control devices associated with Emission Unit U2.

U2 Specific Conditions

S1. Standards (Regulation 2.16, section 4.1.1)

a. VOC

The owner or operator shall not allow or cause the combined total plant-wide VOC emissions from Units U2, U3, and U5 to exceed 5 tons per twelve consecutive month period, unless a BACT is submitted and approved by the District. (Regulation 7.25, section 2.1 and 3.1, Permit 14-03-C, dated December 3, 2003; Permit 212-09-C, dated December 1, 2009) (U2 Comment 1)

b. HAP

The owner or operator shall comply with the applicable standards in 40 CFR 63, Subpart DDDDD when the final rule becomes effective for Emission Point E-4. (U2 Comment 2)

c. TAC

- i. The owner or operator shall not allow emissions of any TAC to exceed environmentally acceptable (EA) levels, whether specifically established by modeling or determined by the District to be de minimis. (Regulations 5.00 and 5.21)
- ii. The owner or operator shall not exceed a treated discharge rate of 262,800,000 gallons and the following emission limits per twelve consecutive month period: (Regulation 5.21, section 4.3) (U2 Comment 3)

Pollutant	CAS #	Category	Limit (lb)
1,4-Dichlorobenzene	106-46-7	1	46.05
Acrylonitrile	107-13-1	1	8.77
Ethylbenzene	100-41-4	4	460.51

S2. Monitoring and Record Keeping (Regulation 2.16, sections 4.1.9.1 and 4.1.9.2)

The owner or operator shall maintain the required records for a minimum of 5 years and make the records readily available to the District upon request.

a. VOC

- i. The owner or operator shall maintain monthly records of leachate throughput.
- ii. The owner or operator shall monthly calculate and record the VOC emissions from the previous twelve consecutive month period.
- iii. VOC emissions will be calculated using the following equation unless another method is approved by the District: (U2 Comment 4)

$$\text{Monthly VOC} = \text{Monthly Leachate Generation (gal/month)} \times 3.785 \text{ L/gal} \times 1 \text{ g/1,000,000 } \mu\text{g} \times \text{VOC concentration (}\mu\text{g/L)} \times 1 \text{ lb/453.6 g} \times 1 \text{ ton/2000 lb}$$

b. HAP

The owner or operator shall comply with the applicable monitoring and recordkeeping requirements in 40 CFR 63, Subpart DDDDD when the final rule becomes effective for Emission Point E-4. (U2 Comment 2)

c. TAC

- i. The owner or operator shall maintain records sufficient to demonstrate environmental acceptability, including, but not limited to MSDS, analysis of emissions, and/or modeling results.

- ii. The owner or operator shall re-evaluate the environmental acceptability and document the environmentally acceptable emissions if a new TAC is introduced or the content of a TAC in a raw material increases.
- iii. The owner or operator shall re-evaluate the environmental acceptability and document the environmentally acceptable emissions if the process experiences a condition resulting in greater emissions than the approved demonstration of environmentally acceptable emissions.
- iv. The owner or operator shall monthly calculate and record the treated leachate discharge rate from the previous twelve consecutive month period.
- v. If the twelve consecutive month period treated leachate discharge rate exceeds 262,800,000 gallons TAC emissions will be calculated using the following equation unless another method is approved by the District: (U2 Comment 4)

$$\text{TAC} = \text{Leachate Generation (gal)} \times 3.785 \text{ L/gal} \times 1 \text{ g/1,000,000 } \mu\text{g} \times \text{TAC concentration (}\mu\text{g/L)} \times 1 \text{ lb/453.6 g} \times 1 \text{ ton/2000 lb}$$
- vi. The owner or operator shall analyze the leachate annually using EPA Method 8260B or other approved method to determine if additional TACs or higher concentrations of previously considered TACs are present in the leachate.

S3. Reporting (Regulation 2.16, section 4.1.9.3)

The owner or operator shall include, at a minimum, the following information in the semi-annual compliance monitoring reports.

a. VOC

- i. Emission Units U2, U3, and U5 combined VOC emissions (in tons) for each twelve consecutive month period in the reporting period in order to demonstrate compliance with the 5 tons per twelve consecutive month period limit on non-BACT Regulation 7.25 affected facilities.
- ii. Identification of all periods of exceedances of the twelve consecutive month period VOC emission standard, including the quantity of excess emissions or a negative declaration if no excess emissions occurred.

b. HAP

The owner or operator shall comply with the applicable reporting requirements in 40 CFR 63 Subpart DDDDD when the final rule becomes effective for Emission Point E-4. (U2 Comment 2)

c. TAC

- i. The owner or operator shall report any conditions that were inconsistent with those conditions analyzed in the most recent Environmental Acceptability Demonstration or a negative declaration stating that operations were within the conditions analyzed. This includes, but is not limited to, control device upset conditions.
- ii. The owner or operator shall re-analyze the Environmental Acceptability Demonstration to determine whether any conditions outside the analysis comply with the STAR program. Changes to the air dispersion modeling program or meteorological data used in the most recent Environmental Acceptability Demonstration do not trigger the requirement to re-analyze. (Regulation 5.21 sections 4.22 – 4.24)

- iii. The owner or operator shall submit the re-evaluated Environmental Acceptability Demonstration to the District within 6 months of a change that impacts the demonstration of environmental acceptability.
- iv. The owner or operator shall identify all periods of exceedances of the twelve consecutive month period treated leachate discharge rate limit, including the quantity of excess TAC emissions or a negative declaration if no exceedance occurred.

U2 Comments

1. The following affected facilities are included in the Regulation 7.25 non-BACT plant-wide 5 tons per twelve consecutive month period limit:

Unit	Point	Description	VOC PTE (ton per year)
U2	E-4	Leachate (SBR)	2.15
U3	E-5	Bioremediation	7.62
U5	E-7	Liquid Solidification	1.86

2. The source is major for HAP. Therefore the process heater, Emission Point E-4, is subject to the major source MACT, 40 CFR 63 Subpart DDDDD. However, the US EPA delayed the effective date of the MACT on May 18, 2011. The MACT reconsideration proposal is still under review.
3. A revised Environmental Acceptability Demonstration was submitted to the District on February 25, 2013. The permit contains a throughput limit to ensure TAC emissions are below the rate modeled which demonstrated environmental acceptability.
4. According to information submitted to the District on February 25, 2013, the historical VOC and TAC concentration were determined to be the following:

Pollutant	CAS #	Category	(µg/L)
VOC	NA	NA	1,964
1,4-Dichlorobenzene	106-46-7	1	21
Acrylonitrile	107-13-1	1	4
Ethylbenzene	100-41-4	4	210

Emission Unit U3: Bioremediation of Contaminated Soil**U3 Applicable Regulations**

FEDERALLY ENFORCEABLE REGULATIONS		
Regulation	Title	Applicable Sections
7.25	Standard of Performance for New Sources Using Volatile Organic Compounds	1, 2.1, 3, 4

DISTRICT ONLY ENFORCEABLE REGULATIONS		
Regulation	Title	Applicable Sections
5.00	Definitions	All
5.01	General Provisions	1 through 4
5.20	Methodology for Determining Benchmark Ambient Concentration of a Toxic Air Contaminant	1 through 6
5.21	Environmental Acceptability for Toxic Air Contaminants	1 through 5
5.22	Procedures for Determining the Maximum Ambient Concentration of a Toxic Air Contaminant	1 through 5
5.23	Categories of Toxic Air Contaminants	1 through 6

U3 Emission Points		
Emission Point	Description	Control ID
E-5	Bioremediation soil piles	See Below

U3 Control Devices: The bioremediation process utilizes integrated activated carbon adsorber units.

U3 Specific Conditions

S1. Standards (Regulation 2.16, section 4.1.1)

a. VOC

The owner or operator shall not allow or cause the combined total plant-wide VOC emissions from Units U2, U3, and U5 to exceed 5 tons per twelve consecutive month period, unless a BACT is submitted and approved by the District. (Regulation 7.25, section 2.1 and 3.1) (U3 Comment 1)

b. TAC

- i. The owner or operator shall not allow emissions of any TAC to exceed environmentally acceptable (EA) levels, whether specifically established by modeling or determined by the District to be de minimis. (Regulations 5.00 and 5.21)
- ii. The owner or operator shall not exceed a throughput of 8,000 tons of soil remediated and the following emission limit per twelve consecutive month period: (Regulation 5.21, section 4.3) (U3 Comment 2)

Pollutant	CAS #	Category	Limit (lb)
Benzene	71-43-2	1	784

S2. Monitoring and Record Keeping (Regulation 2.16, sections 4.1.9.1 and 4.1.9.2)

The owner or operator shall maintain the required records for a minimum of 5 years and make the records readily available to the District upon request.

a. VOC

- i. The owner or operator shall yearly collect random samples from the material storage piles to be remediated and test for the total petroleum hydrocarbon concentration.
- ii. The owner or operator shall monthly calculate and record the VOC emissions from the previous twelve consecutive month period.
- iii. VOC emissions will be calculated using the following equation unless another method or other factors are approved by the District.

$$\text{Monthly VOC} = \text{Tons of Soil Processed (ton/month)} \times [\text{TPH}_{\text{before}} \times (1 - \text{Biodegradation efficiency}) - \text{TPH}_{\text{after}} (1 - \text{Control efficiency})] \div 10^6$$

TPH_{before} = Total Petroleum Hydrocarbon Concentration before remediation (ppm)

TPH_{after} = Total Petroleum Hydrocarbon Concentration after remediation (ppm)

Biodegradation efficiency = 80%

Control efficiency = 95% for activated carbon

b. TAC

- i. The owner or operator shall maintain records sufficient to demonstrate environmental acceptability, including, but not limited to MSDS, analysis of emissions, and/or modeling results.
- ii. The owner or operator shall re-evaluate the environmental acceptability and document the environmentally acceptable emissions if a new TAC is introduced or the content of a TAC in a raw material increases.
- iii. The owner or operator shall re-evaluate the environmental acceptability and document the environmentally acceptable emissions if the process experiences a

condition resulting in greater emissions than the approved demonstration of environmentally acceptable emissions.

- iv. The owner or operator shall monthly calculate and record the soil remediated from the previous twelve consecutive month period.
- v. If the twelve consecutive month period remediated soil rate exceeds 8,000 tons TAC emissions will be calculated using the following equation unless another method is approved by the District:

$$\text{Monthly TAC} = \text{Tons of Soil Processed (ton/month)} \times [\text{TAC}_{\text{before}} \times (1 - \text{Biodegradation efficiency}) - \text{TAC}_{\text{after}} (1 - \text{Control efficiency})] \div 10^6$$

$\text{TAC}_{\text{before}}$ = TAC Concentration before remediation (ppm)

$\text{TAC}_{\text{after}}$ = TAC Concentration after remediation (ppm)

Biodegradation efficiency = 80%

Control efficiency = 95% for activated carbon

S3. **Reporting (Regulation 2.16, section 4.1.9.3)**

The owner or operator shall include, at a minimum, the following information in the semi-annual compliance monitoring reports.

a. **VOC**

- i. Emission Units U2, U3, and U5 combined VOC emissions (in tons) for each twelve consecutive month period in the reporting period in order to demonstrate compliance with the 5 tons per twelve consecutive month period limit on non-BACT Regulation 7.25 affected facilities.
- ii. Identification of all periods of exceedances of the twelve consecutive month period VOC emission standard, including the quantity of excess emissions or a negative declaration if no excess emissions occurred.

b. **TAC**

- i. The owner or operator shall report any conditions that were inconsistent with those conditions analyzed in the most recent Environmental Acceptability Demonstration or a negative declaration stating that operations were within the conditions analyzed. This includes, but is not limited to, control device upset conditions.
- ii. The owner or operator shall re-analyze the Environmental Acceptability Demonstration to determine whether any conditions outside the analysis comply with the STAR program. Changes to the air dispersion modeling program or meteorological data used in the most recent Environmental Acceptability Demonstration do not trigger the requirement to re-analyze. (Regulation 5.21 sections 4.22 – 4.24)
- iii. The owner or operator shall submit the re-evaluated Environmental Acceptability Demonstration to the District within 6 months of a change that impacts the demonstration of environmental acceptability.
- iv. The owner or operator shall identify all periods of exceedances of the twelve consecutive month period soil throughput, including the quantity of excess TAC emissions or a negative declaration if no excess exceedance occurred.

U3 Comments

1. The following affected facilities are included in the Regulation 7.25 non-BACT plant-wide 5 tons per twelve consecutive month period limit:

Unit	Point	Description	VOC PTE (ton per year)
U2	E-4	Leachate (SBR)	2.15
U3	E-5	Bioremediation	7.62
U5	E-7	Liquid Solidification	1.86

2. A revised Environmental Acceptability Demonstration was submitted to the District on February 25, 2013. The permit contains a throughput limit to ensure TAC emissions are below the rate modeled which demonstrated environmental acceptability.

Emission Unit U4: Gasoline Storage Tank**U4 Applicable Regulations**

FEDERALLY ENFORCEABLE REGULATIONS		
Regulation	Title	Applicable Sections
7.12	Standard of Performance for New Storage Vessels for Volatile Organic Compounds	3.3
7.15	Standards of Performance for Gasoline Transfer To New Service Station Storage Tanks (Stage 1 Vapor Recovery)	1, 2, 3.1, 3.3, 3.8, 4, 5, 6

DISTRICT ONLY ENFORCEABLE REGULATIONS		
Regulation	Title	Applicable Sections
5.00	Definitions	All
5.01	General Provisions	1 through 4
5.20	Methodology for Determining Benchmark Ambient Concentration of a Toxic Air Contaminant	1 through 6
5.21	Environmental Acceptability for Toxic Air Contaminants	1 through 5
5.22	Procedures for Determining the Maximum Ambient Concentration of a Toxic Air Contaminant	1 through 5
5.23	Categories of Toxic Air Contaminants	1 through 6

U4 Emission Points		
Emission Point	Description	Control ID
E-6	1,000 gallon gasoline above ground storage tank	N/A

U4 Control Devices: There are no control devices associated with Emission Unit U4.

U4 Specific Conditions**S1. Standards (Regulation 2.16, section 4.1.1)****a. VOC**

- i. The owner or operator shall install, maintain and operate the storage tank with a submerged fill pipe, a vapor balance system and vapor tight connections on the liquid fill and vapor return hoses. (Regulation 7.12, section 3.3; Regulation 7.15, sections 3.1.1 and 3.1.4)
- ii. The owner or operator shall equip all fill tubes with vapor-tight covers including gaskets. (Regulation 7.15, section 3.8.1)
- iii. The owner or operator shall maintain all hoses, fittings, and couplings in a vapor-tight condition. (Regulation 7.15, section 3.8.5)

b. TAC

The owner or operator shall not allow emissions of any TAC to exceed environmentally acceptable (EA) levels, whether specifically established by modeling or determined by the District to be de minimis. (Regulations 5.00 and 5.21) (U4 Comment)

S2. Monitoring and Record Keeping (Regulation 2.16, sections 4.1.9.1 and 4.1.9.2)

The owner or operator shall maintain the required records for a minimum of 5 years and make the records readily available to the District upon request.

a. VOC

- i. The owner or operator shall keep a record that shows if the storage vessel is equipped with a submerged fill pipe. Submerged fill pipe means any fill pipe the discharge of which is entirely submerged when the liquid level is 6 inches above the bottom of the tank; or when applied to a tank which is loaded from the side, shall mean every fill pipe the discharge opening of which is entirely submerged when the liquid level is 2 times the fill pipe diameter above the bottom of the tank.
- ii. The owner or operator shall perform a monthly inspection of this facility to assure that gaskets, hoses and couplings are maintaining their vapor tight characteristics and that no liquid or vapor leaks are occurring.
- iii. The owner or operator shall maintain records of the monthly inspections performed. These records shall include:
 - 1) Date of inspection;
 - 2) Name of who performed the inspection;
 - 3) Findings of the inspection;
 - 4) Date of any remedial action; and
 - 5) Description of the remedial action taken
- iv. The owner or operator shall record the monthly throughput of gasoline.

b. TAC

- i. The owner or operator shall maintain records sufficient to demonstrate environmental acceptability, including, but not limited to MSDS, analysis of emissions, and/or modeling results. (U4 Comment)
- ii. The owner or operator shall re-evaluate the environmental acceptability and document the environmentally acceptable emissions if a new TAC is introduced or the content of a TAC in a raw material increases. (U4 Comment)

- iii. The owner or operator shall re-evaluate the environmental acceptability and document the environmentally acceptable emissions if the process experiences a condition resulting in greater emissions than the approved demonstration of environmentally acceptable emissions. (U4 Comment)

S3. Reporting (Regulation 2.16, section 4.1.9.3)

The owner or operator shall include, at a minimum, the following information in the semi-annual compliance monitoring reports.

a. VOC

- i. Remedial measures taken, should U4 Specific Condition S2.a.iii.5) have an entry during the reporting period.
- ii. A negative declaration if no remedial actions were taken.

b. TAC

Within 6 months of a change of a raw material, the owner or operator shall submit the re-evaluated EA demonstration to the District.

U4 Comment

TAC emissions from motor vehicle fueling or refueling are considered de minimis per Regulation 5.21, section 2.6.

Emission Unit U5: Liquid Solidification Process**U5 Applicable Regulations:**

FEDERALLY ENFORCEABLE REGULATIONS		
Regulation	Title	Applicable Sections
1.14	Control of Fugitive Particulate Emissions	2.1, 2.4, 2.5
7.25	Standard of Performance for New Sources Using Volatile Organic Compounds	1, 2.1, 3, 4

DISTRICT ONLY ENFORCEABLE REGULATIONS		
Regulation	Title	Applicable Sections
5.00	Definitions	All
5.01	General Provisions	1 through 4
5.20	Methodology for Determining Benchmark Ambient Concentration of a Toxic Air Contaminant	1 through 6
5.21	Environmental Acceptability for Toxic Air Contaminants	1 through 5
5.22	Procedures for Determining the Maximum Ambient Concentration of a Toxic Air Contaminant	1 through 5
5.23	Categories of Toxic Air Contaminants	1 through 6

U5 Emission Points		
Emission Point	Description	Control ID
E-7	Solidification mixing area	N/A

U5 Control Devices: There are no control devices associated with Emission Unit U5.

U5 Specific Conditions

S1. Standards (Regulation 2.16, section 4.1.1)

a. VOC

The owner or operator shall not allow or cause the combined plant-wide total VOC emissions from Units U2, U3, and U5 to exceed 5 tons per twelve consecutive month period, unless a BACT is submitted and approved by the District. (Regulation 7.25, section 2.1 and 3.1) (U5 Comment 1)

b. Opacity

- i. No person shall cause or permit the discharge of fugitive emissions in excess of 20% opacity. (Regulation 1.14, section 2.3)
- ii. No person shall cause or permit the discharge of visible fugitive emissions beyond the lot line of the property on which the emissions originate. (Regulation 1.14, section 2.4)

c. PM

No person shall cause, allow, or permit any materials to be handled, transported, or stored without taking reasonable precautions to prevent particulate matter from becoming airborne beyond the work site. (Regulation 1.14, section 2.1)

d. TAC

- i. The owner or operator shall not allow emissions of any TAC to exceed environmentally acceptable (EA) levels, whether specifically established by modeling or determined by the District to be de minimis. (Regulations 5.00 and 5.21) (U5 Comment 3)
- ii. The owner or operator shall not allow or cause the emissions to exceed the following per twelve consecutive month period: (Regulation 5.21, section 4.3)

Pollutant	CAS #	Category	Limit (lb)
Chloroform	67-66-3	1	68.23
1,4-Dichlorobenzene	106-46-7	1	76.66

S2. Monitoring and Record Keeping (Regulation 2.16, sections 4.1.9.1 and 4.1.9.2)

The owner or operator shall maintain the required records for a minimum of 5 years and make the records readily available to the District upon request.

a. VOC

- i. The owner or operator shall maintain monthly records of hours of operation.
- ii. The owner or operator shall monthly calculate and record the VOC emissions from the previous twelve consecutive month period.
- iii. VOC emissions will be calculated using the following equation unless another method is approved by the District: (U5 Comment 2)

$$\text{Monthly VOC} = \text{Monthly Hours of operation (hr/month)} \times 0.42 \text{ lb VOC/hr} \times 1 \text{ ton/2000 lb}$$

b. Opacity

- i. Conduct a monthly one minute visible emissions survey of the liquid solidification process during normal and daylight hours. Where visible emissions are observed, the owner or operator shall initiate corrective action within eight hours of the initial visible emission observation. If the visible emissions persist, the owner or operator shall perform a Method 9, in accordance with 40 CFR Part 60, Appendix A, within 24 hours of the initial observation.
- ii. The owner or operator shall maintain monthly records of the results of all visible emissions surveys and tests. Records of the results of any visible emissions survey shall include the date of the survey, the name of the person conducting the survey, whether or not visible emissions were observed, and what if any corrective action was performed. If an emission point is not being operated during a given month, then no visible emission survey needs to be performed and a negative declaration shall be entered in the record.

c. PM

See U5 Specific Condition S2.b.

d. TAC

- i. The owner or operator shall maintain records sufficient to demonstrate environmental acceptability, including, but not limited to MSDS, analysis of emissions, and/or modeling results.
- ii. The owner or operator shall re-evaluate the environmental acceptability and document the environmentally acceptable emissions if a new TAC is introduced or the content of a TAC in a raw material increases.
- iii. The owner or operator shall re-evaluate the environmental acceptability and document the environmentally acceptable emissions if the process experiences a condition resulting in greater emissions than the approved demonstration of environmentally acceptable emissions.
- iv. The owner or operator shall monthly calculate and record the TAC emissions listed in U5 Specific Condition S1.d.ii. from the previous twelve consecutive month.
- v. TAC emissions will be calculated using the following equation unless another method is approved by the District (U5 Comment 4)

$$\text{Monthly TAC} = \text{Monthly Hours of operation (hr/month)} \times \text{TAC E.F. (lb/hr)}$$

Pollutant	CAS #	Category	E.F. (lb/hr)
Chloroform	67-66-3	1	0.008
1,4-Dichlorobenzene	106-46-7	1	0.009

S3. Reporting (Regulation 2.16, section 4.1.9.3)

The owner or operator shall include, at a minimum, the following information in the semi-annual compliance monitoring reports.

a. VOC

- i. Emission Units U2, U3, and U5 combined VOC emissions (in tons) for each twelve consecutive month period in the reporting period in order to demonstrate compliance with the 5 tons per twelve consecutive month period limit on non-BACT Regulation 7.25 affected facilities.

- ii. Identification of all periods of exceedances of the twelve consecutive month period VOC emission standard, including the quantity of excess emissions or a negative declaration if no excess emissions occurred.

b. Opacity

- i. Any deviation from the requirement to perform monthly visible emission (VE) surveys or Method 9 tests;
- ii. Any deviation from the requirement to record the results of each VE survey and Method 9 test performed;
- iii. The number, date, and time of each VE survey where visible emissions were observed and the results of the Method 9 test performed;
- iv. Identification of all periods of exceedance of the opacity standard;
- v. Description of any corrective action taken for each exceedance of the opacity standard; and

If no deviations from permit requirements occur during a reporting period, the owner or operator shall submit a negative declaration stating that no permit deviations occurred during the reporting period.

c. PM

See U5 Specific Condition S3.a.i.

d. TAC

- i. The owner or operator shall report any conditions that were inconsistent with those conditions analyzed in the most recent Environmental Acceptability Demonstration or a negative declaration stating that operations were within the conditions analyzed. This includes, but is not limited to, control device upset conditions.
- ii. The owner or operator shall re-analyze the Environmental Acceptability Demonstration to determine whether any conditions outside the analysis comply with the STAR program. Changes to the air dispersion modeling program or meteorological data used in the most recent Environmental Acceptability Demonstration do not trigger the requirement to re-analyze. (Regulation 5.21 sections 4.22 – 4.24)
- iii. The owner or operator shall submit the re-evaluated Environmental Acceptability Demonstration to the District within 6 months of a change that impacts the demonstration of environmental acceptability.
- iv. The owner or operator shall identify all periods of exceedances of the twelve consecutive month period TAC emission standards, including the quantity of excess emissions or a negative declaration if no excess emissions occurred.

U5 Comments

1. The following affected facilities are included in the Regulation 7.25 non-BACT plant-wide 5 tons per twelve consecutive month period limit:

Unit	Point	Description	VOC PTE (ton per year)
U2	E-4	Leachate (SBR)	2.15
U3	E-5	Bioremediation	7.62
U5	E-7	Liquid Solidification	1.86

2. The VOC emission factor is derived from US EPA's AP-42, Fifth Edition, Volume 1, Chapter 4: Evaporation Loss Sources.
3. A revised Environmental Acceptability Demonstration was submitted to the District on February 25, 2013. The permit contains emission limits to ensure TAC emissions are below the rates modeled which demonstrated environmental acceptability.
4. The pound per hour emission factors (E.F.) were based upon the maximum concentration of waste allowed to be accepted at the facility per 40 CFR 261.24 obtained from information submitted to the District on August 17, 2012.

Emission Unit U6: Truck Traffic on paved and unpaved roads**U6 Specific Conditions****S1. Standards (Regulation 2.16, section 4.1.1)****PM**

The owner or operator shall use dust suppression on all unpaved roads in use for cell construction to the extent that the dust suppression vehicle is spraying water at a frequency of at least 15 minutes for every hour. The only exception to the 15 minutes per hour of dust suppression shall be during times of rainfall or when the landfill is not operating. (Permit 422-08-C (R1))
(U6 Comment 1)

S2. Monitoring and Record Keeping (Regulation 2.16, sections 4.1.9.1 and 4.1.9.2)

The owner or operator shall maintain the required records for a minimum of 5 years and make the records readily available to the District upon request.

PM

- i. The owner or operator shall maintain daily records of hours during which dust suppression is being performed on all unpaved roads during cell construction by the dust suppression vehicle, or a statement that rain occurred. If a statement that rain occurred is made it shall include the start and stop time of rainfall. During landfill operation, dust suppression shall occur at the standard frequency at all times except during rainfall. All records shall include the date, and name of the person making the entry.
(Permit 422-08-C (R1))
- ii. The owner or operator shall maintain records, monthly, of the vehicle miles traveled of all vehicles. (U6 Comment 2)
- iii. PM emissions will be calculated using the following equation unless another method is approved by the District: (U6 Comment 3)

$$PM = E \text{ (Emission Factor, lb/VMT)} \times VMT \text{ (miles)} \div 2000 \text{ (lb/ton)} \times 15\%$$

S3. Reporting (Regulation 2.16, section 4.1.9.3)

The owner or operator shall include, at a minimum, the following information in the semi-annual compliance monitoring reports.

PM

Identification of all periods when dust suppression was not used on all unpaved roads for cell construction at a frequency equal to or greater than 15 minutes of every hour, or a statement that dust suppression was used at the described frequency during all times.

U6 Comments

1. In order to utilize 85% control of PM from unpaved roads the District has determined that the source must use dust suppression at the described frequency.
2. Records of vehicle miles traveled on paved and unpaved are necessary for reporting emissions for the annual emission inventory.

3. For paved roads, the emission factor is from AP-42, section 13.2.1 (January 2011):

$$E = [k(sL)^{0.91}(W)^{1.02}] [1 - P/4N]$$

where

E = emission factor, lb/VMT

k = particle size multiplier, 0.011 for PM, 0.0022 for PM10, 0.00054 for PM2.5

sL = road surface silt loading, 7.4 g/ft²

W = mean vehicle weight, ton

P = number of precipitation days, 124 days

N = number of days in the averaging period, 365 days

For unpaved roads the emission factor is from AP-42, section 13.2.2 (November 2006):

$$E = k(s/12)^a(W/3)^b[(365-P)/365]$$

where

E = emission factor, lb/VMT

s = surface material slit content, 6.4

W = mean vehicle weight, ton

P = number of precipitation days, 124 days

k, a, b = empirical constants

Table 13.2.2-2.	PM	PM10	PM2.5
k (lb/VMT)	4.9	1.5	0.15
a	0.7	0.9	0.9
b	0.45	0.45	0.45

Emission Unit U7: Paint Booth**U7 Applicable Regulations**

FEDERALLY ENFORCEABLE REGULATIONS		
Regulation	Title	Applicable Sections
7.08	Standards of Performance for New Process Operations	1, 2, 3.1
7.59	Standard of Performance for New Miscellaneous Metal Parts and Products Surface Coating Operations	1, 2, 3, 4, 5.2, 6

DISTRICT ONLY ENFORCEABLE REGULATIONS		
Regulation	Title	Applicable Sections
5.00	Definitions	All
5.01	General Provisions	1 through 4
5.20	Methodology for Determining Benchmark Ambient Concentration of a Toxic Air Contaminant	1 through 6
5.21	Environmental Acceptability for Toxic Air Contaminants	1 through 5
5.22	Procedures for Determining the Maximum Ambient Concentration of a Toxic Air Contaminant	1 through 5
5.23	Categories of Toxic Air Contaminants	1 through 6

U7 Emission Points		
Emission Point	Description	Control ID
E-9	Paint booth used for painting disposal bins or boxes located at customer's businesses	Dry filter

U7 Specific Conditions

S1. Standards (Regulation 2.16, section 4.1.1)

a. VOC

The owner or operator shall not allow or cause VOC emissions, including all coatings, additives, catalysts, solvents, thinners, and cleaners from this paint booth to exceed 5 tons per twelve consecutive month period. (Regulation 7.59, section 5.2) (U7 Comment 1)

b. Opacity

The owner or operator shall not allow visible emissions to equal or exceed 20% opacity. (Regulation 7.08, section 3.1.1)

c. PM

The owner or operator shall not allow PM emissions to exceed 2.34 lb/hr. (Regulation 7.08, section 3.1.2) (U7 Comment 2)

d. TAC

i. The owner or operator shall not allow emissions of any TAC to exceed environmentally acceptable (EA) levels, whether specifically established by modeling or determined by the District to be de minimis. (Regulations 5.00 and 5.21) (U7 Comment 3)

ii. The owner or operator shall not allow or cause the emissions to exceed the following per twelve consecutive month period: (Regulation 5.21, section 4.3) (U7 Comment 3)

Pollutant	CAS #	Category	Limit (lb)
Toluene	108-88-3	2	2,400,000
Xylene	1330-20-7	2	48,000

S2. Monitoring and Record Keeping (Regulation 2.16, sections 4.1.9.1 and 4.1.9.2)

The owner or operator shall maintain the required records for a minimum of 5 years and make the records readily available to the District upon request.

a. VOC

i. An owner or operator of an affected facility subject to this regulation shall maintain records that include, but not be limited to, the following: (Regulation 7.59, section 6.1)

- 1) The regulation and section number applicable to the affected facility for which the records are being maintained,
- 2) The application method and substrate type (metal, plastic, etc.),
- 3) The amount and type of coatings (including catalyst and reducer for multi-component coatings) and solvent (including exempt compounds) used at each point of application during each calendar month,
- 4) The VOC content as applied in each coating and solvent,
- 5) The date, or usage record period, for each application of coating and solvent,
- 6) The amount of surface preparation, clean-up, wash-up of solvent (including exempt compounds) used and the VOC content of each material used during the calendar month.

- ii. The VOC content shall be calculated using a percent solids basis (excluding water and exempt solvents) for coatings using EPA Method 24. (Regulation 7.59, section 6.2)
- iii. The owner or operator shall monthly calculate and record the VOC emissions from the previous twelve consecutive month period.

b. **Opacity**

- i. The owner or operator shall inspect the filters in the paint booth at least monthly to ensure proper installment (i.e. proper alignment/placement, gaps, etc.) and replace as needed.
- ii. The owner or operator shall keep a record that shows the date and the name of the person who inspected the filters and if filters were replaced.

c. **PM**

See U7 Specific Condition S2.b.

d. **TAC**

- i. The owner or operator shall maintain records sufficient to demonstrate environmental acceptability, including, but not limited to MSDS, analysis of emissions, and/or modeling results.
- ii. The owner or operator shall re-evaluate the environmental acceptability and document the environmentally acceptable emissions if a new TAC is introduced or the content of a TAC in a raw material increases.
- iii. The owner or operator shall re-evaluate the environmental acceptability and document the environmentally acceptable emissions if the process experiences a condition resulting in greater emissions than the approved demonstration of environmentally acceptable emissions.
- iv. The owner or operator shall monthly calculate and record the TAC emissions listed in U7 Specific Condition S1.d.ii. from the previous twelve consecutive month period.

S3. **Reporting (Regulation 2.16, section 4.1.9.3)**

The owner or operator shall include, at a minimum, the following information in the semi-annual compliance monitoring reports.

a. **VOC**

- i. The VOC emissions (in tons) for each twelve consecutive month period in the reporting period in order to demonstrate compliance with the 5 tons per twelve consecutive month period limit.
- ii. Identification of all periods of exceedances of the twelve consecutive month period VOC emission standard, including the quantity of excess emissions or a negative declaration if no excess emissions occurred.

b. **Opacity**

Any deviation from the requirement to perform and record the required monthly visual inspections of the paint booth filter system.

c. **PM**

There are no routine compliance reporting requirements for this equipment.

d. TAC

- i. The owner or operator shall report any conditions that were inconsistent with those conditions analyzed in the most recent Environmental Acceptability Demonstration or a negative declaration stating that operations were within the conditions analyzed. This includes, but is not limited to, control device upset conditions.
- ii. The owner or operator shall re-analyze the Environmental Acceptability Demonstration to determine whether any conditions outside the analysis comply with the STAR program. Changes to the air dispersion modeling program or meteorological data used in the most recent Environmental Acceptability Demonstration do not trigger the requirement to re-analyze. (Regulation 5.21 sections 4.22 – 4.24)
- iii. The owner or operator shall submit the re-evaluated Environmental Acceptability Demonstration to the District within 6 months of a change that impacts the demonstration of environmental acceptability.
- iv. The owner or operator shall identify all periods of exceedances of the twelve consecutive month period TAC emission standards, including the quantity of excess emissions or a negative declaration if no excess emissions occurred.

U7 Comments

1. The 5 ton per twelve consecutive month period limit was requested in the Title V Permit Renewal Application dated April 14, 2005.
2. Using the minimum spray gun transfer efficiency of 35%, the percent solids of the material (45.9%), and the efficiency of the filters (greater than 90%), the PM emission limit of the spray booth cannot be exceeded.
3. The permit contains emission limits to ensure TAC emissions are de minimis.
4. The equipment or processes covered by this permit are not currently subject to the standards of the NESHAP, 40 CFR 63 subpart M. The subpart does not apply to surface coating that occurs as facility maintenance operations. As defined in the subpart the activity would be considered facility maintenance.

Permit Shield

The owner or operator is hereby granted a permit shield that shall apply as long as the owner or operator demonstrates ongoing compliance with all the conditions of this permit. Compliance with the conditions of this permit shall be deemed compliance with all applicable requirements of the regulations cited in this permit as of the date of issuance, pursuant to Regulation 2.16, section 4.6.1.

Off-Permit Documents

“Landfill Gas Collection and Control System Revised Design Plan and Surface Emission Monitoring Plan”

“LMAPCD NSPS 40 CFR 60 Subpart WWW Determinations”

Alternative Operating Scenario

The company requested no alternative operating scenario in its Title V Application.

Insignificant Activities			
Equipment	Quantity	PTE (ton per year)	Reg. Basis
Landfill gas compressor/Pressure washer	2	VOC (0.43)	2.16, section 1.23.1.1
CNG Refueling Facility [IA Comment 6)]	1	VOC (0.023)	2.16, section 1.23.1.1
Sorting Process	1	PM ₁₀ (2.47)	2.16, section 1.23.1.1
Space Heaters (Total)	18	NO _x (0.74)	2.16, section 1.23.1.1
Internal combustion engines			
#1 Generator (Backup & Portable) (CI)	1	NO _x (0.12)	2.02, section 2.2
#2 Generator (Light Plant & Portable) (CI)	1	NO _x (0.91)	2.02, section 2.2
Compressor (Portable) (CI)	1	NO _x (1.74)	2.02, section 2.2
Pressure Washer (Portable) (CI)	1	NO _x (0.32)	2.02, section 2.2
Tub grinder (Portable) (CI)	1	NO _x (1.36)	2.02, section 2.2
CNG Generator (Emergency) (SI)	1	CO (1.14)	2.02, section 2.2
Storage Tanks (lubricating oil)	11	VOC (0.01)	2.02, section 2.3.9.2
Cold solvent parts cleaner [IA Comment 7)]	1	VOC (0.00)	2.02, section 2.3.22
Storage Tanks (portable)	1	VOC (0.00)	2.02, section 2.3.23
Storage Tanks (diesel fuel)	5	VOC (0.01)	2.02, section 2.3.25

IA Comments

- 1) Insignificant activities identified in District Regulation 2.02 section 2 may be subject to size or production rate disclosure requirements pursuant to Regulation 2.16 section 3.5.4.1.4.
- 2) Insignificant activities identified in District Regulation 2.02 section 2 shall comply with generally applicable requirements as required by Regulation 2.16 section 4.1.9.4.
- 3) In lieu of recording annual throughputs and calculating actual annual emissions, the owner or operator may elect to report the Pollutant Potential To Emit quantity listed in the Insignificant Activities table, as the annual emission for each piece of equipment, since the emissions from the source's Insignificant Activities are very minor in comparison to the plant wide emissions.
- 4) The Insignificant Activities Table is correct as of the date the permit was proposed for review by U.S. EPA, Region 4.
- 5) The owner or operator shall submit an updated list of insignificant activities that occurred during the preceding year pursuant to Regulation 2.16 section 4.3.5.3.6.
- 6) The VOC emissions are from natural gas leakage when uncoupling the fill hose to vehicles.
- 7) The District determined that Regulation 6.18 does not apply based on the MSDS for ARMAKLEEN MPC Cleaning solution which the source submitted May 30, 2012.

Emission Unit IA1: CNG Emergency Generator**IA1 Applicable Regulations**

FEDERALLY ENFORCEABLE REGULATIONS		
Regulation	Title	Applicable Sections
40 CFR 60 Subpart JJJ	Standards of Performance for Stationary Spark Ignition Internal Combustion Engines	60.4230(a)(4)(iv), 60.4233(e), 60.4243(a)(1), 60.4243(b)(1), 60.4243(d)
40 CFR 63 Subpart ZZZZ	National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines	63.6595(a)(1), 63.6603(a), 63.6605, 63.6625(e),(f),(h),(i), 63.6640(b), (f)(1), 63.6650(f), 63.6655(e),(f)

IA1 Emission Points		
Emission Point	Description	Control ID
IA1	CNG Emergency Generator, Kohler 60REZGB, 105 hp, 78kW, natural gas fueled, 4-stroke, lean burn	NA

IA1 Control Devices: There are no control devices associated with Emission Unit IA1.

IA1 Specific Conditions**S1. Standards (Regulation 2.16, section 4.1.1)****a. Unit Operation**

- i. The owner or operator shall limit the operation of this unit to one hundred (100) hours per calendar year, during non-emergency events, for maintenance checks and readiness testing. (40 CFR 60.4243(d)) (IA1 Comment 1)
- ii. The owner or operator shall limit the hours of operation in non-emergency situations to fifty (50) hours per calendar year, but those fifty (50) hours are counted towards the 100 hours per calendar year provided for maintenance and testing. The fifty (50) hours per calendar year for non-emergency situations cannot be used for peak shaving or to generate income for a facility to supply power to an electric grid or otherwise supply power as part of a financial arrangement with another entity. For the owners and operators of emergency engines, any operation other than emergency operation, maintenance and testing, and operation in non-emergency situations for fifty (50) hours per calendar year, is prohibited. (40 CFR 60.4243(d))

- iii. The owner or operator shall purchase an engine certified to the emission standards of Table 1 to this subpart for their stationary SI ICE, as applicable for the same model year and maximum engine power. The engine must be installed and configured according to the manufacturer's specifications.
(40 CFR 60.4233(e)) (IA1 Comment 2)

- b. **CO**

The owner or operator shall not allow CO emissions to exceed 387 g/hp-hr (519 g/kW-hr), per Table 1 of 40 CFR 60 Subpart JJJJ. (40 CFR 60.4233(e)) (IA1 Comment 2)

- c. **NO_x**

The owner or operator shall not allow NO_x (+ HC) emissions to exceed 10 g/hp-hr (13.4 g/kW-hr), per Table 1 of 40 CFR 60 Subpart JJJJ. (40 CFR 60.4233(e)) (IA1 Comment 2)

S2. Monitoring and Record Keeping (Regulation 2.16, sections 4.1.9.1 and 4.1.9.2)

The owner or operator shall maintain the required records for a minimum of 5 years and make the records readily available to the District upon request.

- a. **Unit Operation**

- i. The owner or operator shall record, on the first working day after the end of each month, the unit's operating time and a description of the operation for the previous month, to the nearest tenth of an hour.
- ii. The owner or operator shall calculate and record monthly, the monthly and calendar year total hours of operation of the unit.
- iii. The owner or operator shall maintain records of the conducted maintenance to demonstrate compliance for the certified stationary SI ICE.
(40 CFR 60.4243(a)(1))

- b. **CO**

There are no routine compliance monitoring or record keeping requirements for this equipment. (IA1 Comment 2)

- c. **NO_x**

There are no routine compliance monitoring or record keeping requirements for this equipment. (IA1 Comment 2)

S3. Reporting (Regulation 2.16, section 4.1.9.3)

The owner or operator shall include, at a minimum, the following information in the semi-annual compliance monitoring reports.

- a. **Unit Operation**

The owner or operator shall report if the emergency generator is operated over 100 hours per calendar year for maintenance checks and readiness testing.

- b. **CO**

There are no routine compliance reporting requirements for this equipment.

- c. **NO_x**

There are no routine compliance reporting requirements for this equipment.

IA1 Comments

1. There is no limit to the allowable hours of operation during an emergency. However records shall indicate how many hours the emergency generator operated and a description of the emergency.
2. The EPA Certificate of Conformity submitted to the District on October 11, 2012 for the emergency generator certify the CO and NO_x emissions for the family of engines that includes the 105 hp natural gas fueled engine meets the EPA emission standard requirements.
3. The operation is subject to 40 CFR 63 Subpart ZZZZ, National Emissions Standards for Hazardous Air Pollutants for Stationary Internal Combustion Engines, because it involves a stationary reciprocating internal combustion engine (RICE) located at a major source of HAP emissions. The proposed stationary RICE meets the definition in 40 CFR 63.6675 of a new emergency stationary RICE, which, per 40 CFR 63.6590(c)(2), will meet the requirements of Part ZZZZ by meeting the requirements of 40 CFR Part 60 subpart JJJJ, for spark ignition engines, and no further requirements apply for such engines under Subpart ZZZZ.
4. The initial notification required by 40 CFR 63.6645(d), as referenced by 40 CFR 63.6590(b)(1), must be, per 40 CFR 63.6645(c), submitted not later than 120 days after becoming subject to 40 CFR 63 Subpart ZZZZ. Pursuant to 40 CFR 63.6645(d), the initial notification should include the information in 40 CFR 63.9(b)(2)(i) through (v); a statement the stationary RICE has no additional requirements; and an explanation of the basis of the exclusion (*i.e.*, operates exclusively as an emergency stationary RICE).
5. Since this unit is an Insignificant Activity, Regulation 5.21 does not apply.

Protocol Checklist for a Performance Test

A completed protocol should include the following information:

- Facility Name, Location, and ID #;
- Responsible Official and Environmental Contact Names;
- Permit #s which are requiring the test to be conducted;
- Test methods to be used (i.e. EPA Method 1, 2, 3, 4, and 5);
- Alternative test methods or description of modifications to the test methods to be used;
- Purpose of the test including equipment, and pollutant to be tested; the purpose may be described in the permit which requires the test to be conducted or may be to show compliance with a Federal Regulation or emission standard;
- Tentative test dates (these may change but the District will need final notice at least 10 days in advance of the actual test dates in order to arrange for observation);
- Maximum rated production capacity of the system;
- Production rate goal to be achieved during the performance test for demonstration of compliance;
- Method to be used for determining rate of production during the performance test;
- Method to be used for determining rate of production during subsequent operations of the process equipment to demonstrate compliance;
- Description of normal operation cycles;
- Discussion of operating conditions that tend to cause worse case pollution emissions; it is specifically important to clarify this if worst case emissions do not come from the maximum production rate;
- Process Flow Diagram;
- List the type and manufacturer of the control equipment if any;
- List the Control Equipment (baghouse, scrubber, condenser, etc.) parameter data to be monitored and recorded during the performance test; note that these will be used to ensure representative operation during subsequent operations; this can include pressure drops, flow rates, pH, and temperature; since the parameters achieved during the test may be required during subsequent operations describe what pressure drops, etcetera, are indicative of good operating performance; and
- Generally describe the proposed test, how it will be conducted, how measurements will be taken, and how quality assurance and accuracy of the data will be maintained.
- How quality assurance and accuracy of the data will be maintained, including;
 - Sample identification and chain-of-custody procedures;
 - Are Audit samples required for this test Method (EPA contact number for Audit Samples 919-541-1062) if yes then please make samples available to the District for observation during the stack test;
 - Audit Sample Provider;
 - Number of Audit Samples to be used:
- Pipe, duct, stack, or flue diameter to be tested;
- Distances from the testing sample ports to the nearest upstream and downstream flow disturbances such as bends, valves, constrictions, expansions, and exit points for outlet and additionally for inlet;
- Determine number of traverse points to be tested for outlet and additionally for inlet if required using Appendix A-1 to 40 CFR Part 60;
 - Method 1 if stack is >12"
 - Method 1a if stack is between 4" and 12"
 - Alternate method of determination for <4"

If a sample location at least two stack or duct diameters downstream and half a diameter upstream from any flow disturbance is not available then an alternative procedure is available for determining the acceptability of a measurement location. This procedure described in Section 11.5 allows for the determination of gas flow angles at the sampling points and comparison of the measured results with acceptability criteria.

End of Document