

# Bay Area Air Quality Management District

939 Ellis Street  
San Francisco, CA 94109  
(415) 771-6000

---

---

**Final**

## MAJOR FACILITY REVIEW PERMIT

**Issued To:**  
**Redwood Landfill, Inc.**  
**Facility #A1179**

**Facility Address:**  
8950 Redwood Highway  
Novato, CA 94948

**Mailing Address:**  
P. O. Box 793  
Novato, CA 94948

**Responsible Official**  
Ramin Khany, Landfill Manager  
415-892-2851

**Facility Contact**  
Whitney King, Environmental Programs  
415-892-2851

---

**Type of Facility:** Landfill for Solid Waste Disposal      BAAQMD Engineering Division Contact:  
**Primary SIC:** 4953      Carol S. Allen  
**Product:** Refuse and Sludge Disposal

**ISSUED BY THE BAY AREA AIR QUALITY MANAGEMENT DISTRICT**

Signed by Peter Hess for  
Jack P. Broadbent, Executive Officer/Air Pollution Control Officer

December 29, 2005  
Date

**TABLE OF CONTENTS**

I. STANDARD CONDITIONS .....3

II. EQUIPMENT .....8

III. GENERALLY APPLICABLE REQUIREMENTS..... 11

IV. SOURCE-SPECIFIC APPLICABLE REQUIREMENTS .....14

V. SCHEDULE OF COMPLIANCE.....48

VI. PERMIT CONDITIONS .....49

VII. APPLICABLE LIMITS & COMPLIANCE MONITORING REQUIREMENTS .....83

VIII. TEST METHODS.....118

IX. PERMIT SHIELD.....124

X. REVISION HISTORY .....126

XI. GLOSSARY .....128

XII. APPLICABLE STATE IMPLEMENTATION PLAN.....136

## I. STANDARD CONDITIONS

### A. Administrative Requirements

The permit holder shall comply with all applicable requirements in the following regulations:

- BAAQMD Regulation 1 - General Provisions and Definitions  
(as amended by the District Board on 5/2/01);  
SIP Regulation 1 - General Provisions and Definitions  
(as approved by EPA through 6/28/99);  
BAAQMD Regulation 2, Rule 1 - Permits, General Requirements  
(as amended by the District Board on 8/1/01);  
SIP Regulation 2, Rule 1 - Permits, General Requirements  
(as approved by EPA through 1/26/99);  
BAAQMD Regulation 2, Rule 2 - Permits, New Source Review  
(as amended by the District Board on 5/17/00);  
SIP Regulation 2, Rule 2 - Permits, New Source Review and Prevention of  
Significant Deterioration  
(as approved by EPA through 1/26/99);  
BAAQMD Regulation 2, Rule 4 - Permits, Emissions Banking  
(as amended by the District Board on 5/17/00);  
SIP Regulation 2, Rule 4 - Permits, Emissions Banking  
(as approved by EPA through 1/26/99); and  
BAAQMD Regulation 2, Rule 6 - Permits, Major Facility Review  
(as amended by the District Board on 4/16/03).

### B. Conditions to Implement Regulation 2, Rule 6, Major Facility Review

1. This Major Facility Review Permit was issued on November 10, 2003 and expires on October 31, 2008. The permit holder shall submit a complete application for renewal of this Major Facility Review Permit no later than April 30, 2008 and no earlier than October 31, 2007. **If a complete application for renewal has not been submitted in accordance with this deadline, the facility may not operate after October 31, 2008.** (Regulation 2-6-307, 404.2, & 409.6; MOP Volume II, Part 3, §4.2)
2. The permit holder shall comply with all conditions of this permit. The permit consists of this document and all appendices. Any non-compliance with the terms and conditions of this permit will constitute a violation of the law and will be grounds for enforcement action; permit termination, revocation and re-issuance, or modification; or denial of a permit renewal application. (Regulation 2-6-307; MOP Volume II, Part 3, §4.11)

## I. Standard Conditions

3. In the event any enforcement action is brought as a result of a violation of any term or condition of this permit, the fact that it would have been necessary for the permittee to halt or reduce the permitted activity in order to maintain compliance with such term or condition shall not be a defense to such enforcement action. (MOP Volume II, Part 3, §4.11)
4. This permit may be modified, revoked, reopened and reissued, or terminated for cause. (Regulation 2-6-307, 409.8, 415; MOP Volume II, Part 3, §4.11)
5. The filing of a request by the facility for a permit modification, revocation and re-issuance, or termination, or the filing of a notification of planned changes or anticipated non-compliance does not stay the applicability of any permit condition. (Regulation 2-6-409.7; MOP Volume II, Part 3, §4.11)
6. This permit does not convey any property rights of any sort, or any exclusive privilege. (Regulation 2-6-409.7; MOP Volume II, Part 3, §4.11)
7. The permit holder shall supply within 30 days any information that the District requests in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. (Regulation 1-441, Regulation 2-6-409.4 & 501; MOP Volume II, Part 3, §4.11)
8. Any records required to be maintained pursuant to this permit that the permittee considers to contain proprietary or trade secret information shall be prominently designated as such. Copies of any such proprietary or trade secret information which are provided to the District shall be maintained by the District in a locked confidential file, provided, however, that requests from the public for the review of any such information shall be handled in accordance with the District's procedures set forth in Section 11 of the District's Administrative Code. (Regulation 2-6-419; MOP Volume II, Part 3, §4.11)
9. Proprietary or trade secret information provided to EPA will be subject to the requirements of 40 CFR Part 2, Subpart B - Public Information, Confidentiality of Business Information. (40 CFR Part 2)
10. The emissions inventory submitted with the application for this Major Facility Review Permit is an estimate of actual emissions or the potential to emit for the time period stated and is included only as one means of determining applicable requirements for emission sources. It does not establish, or constitute a basis for establishing, any new emission limitations. (MOP Volume II, Part 3, §4.11)

## **I. Standard Conditions**

11. The responsible official shall certify all documents submitted by the facility pursuant to the major facility review permit. The certification shall state that based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete. The certifications shall be signed by a responsible official for the facility. (MOP Volume II, Part 3, §4.11)

### **C. Requirement to Pay Fees**

The permit holder shall pay annual fees in accordance with District Regulation 3, including Schedule P. (Regulation 2-6-402 & 409.13, Regulation 3; MOP Volume II, Part 3, §4.12)

### **D. Inspection and Entry**

Access to Facility: The permit holder shall provide reasonable access to the facility and equipment which is subject to this permit to the APCO and/or to his or her designee. (Regulation 1-440, Regulation 2-6-409.3; MOP Volume II, Part 3, §4.14)

### **E. Records**

1. The permit holder must provide any information, records, and reports requested or specified by the APCO. (Regulation 1-441, Regulation 2-6-409.4)
2. Notwithstanding the specific wording in any requirement, all records for federally enforceable requirements shall be maintained for at least five years from the date of creation of the record. (Regulation 2-6-501, Regulation 3; MOP Volume II, Part 3, §4.7)

### **F. Monitoring Reports**

Reports of all required monitoring must be submitted to the District at least once every six months, except where an applicable requirement specifies more frequent reporting. The first reporting period for this permit shall be November 10, 2003 to April 30, 2004. The report shall be submitted by May 31, 2004. Subsequent reports shall be for the following periods: May 1st through October 31st and November 1st through April 30th, and are due on the last day of the month after the end of the reporting period. All instances of non-compliance shall be clearly identified in these reports. The reports shall be certified by the responsible official as true, accurate, and complete. In addition, all instances of non-compliance with the permit shall be reported in writing to the District's Compliance and Enforcement Division within 10 calendar days of the discovery of the incident. Within 30 calendar days of the

## **I. Standard Conditions**

discovery of any incident of non-compliance, the facility shall submit a written report including the probable cause of non-compliance and any corrective or preventative actions. The reports shall be sent to the following address:

Director of Compliance and Enforcement  
Bay Area Air Quality Management District  
939 Ellis Street  
San Francisco, CA 94109  
Attn: Title V Reports

(Regulation 2-6-502, Regulation 3; MOP Volume II, Part 3, §4.7)

## **G. Compliance Certification**

Compliance certifications shall be submitted annually by the responsible official of this facility to the Bay Area Air Quality Management District and to the Environmental Protection Agency. The certification period will be November 1<sup>st</sup> through October 31st. The certification shall be submitted by November 30th of each year. The certification must list each applicable requirement, the compliance status, whether compliance was continuous or intermittent, the method used to determine compliance, and any other specific information required by the permit. The permit holder may satisfy this requirement through submittal of District-generated Compliance Certification forms. The certification should be directed to the District's Compliance and Enforcement Division at the address above, and a copy of the certification shall be sent to the Environmental Protection Agency at the following address:

Director of the Air Division  
USEPA, Region IX  
75 Hawthorne Street  
San Francisco, CA 94105  
Attention: Air-3

(MOP Volume II, Part 3, §4.5 and 4.15)

## **H. Emergency Provisions**

1. The permit holder may seek relief from enforcement action in the event of a breakdown, as defined by Regulation 1-208 of the District's Rules and Regulations, by following the procedures contained in Regulations 1-431 and 1-432. The District will thereafter determine whether breakdown relief will be

## **I. Standard Conditions**

granted in accordance with Regulation 1-433. (MOP Volume II, Part 3, §4.8)

2. The permit holder may seek relief from enforcement action for a violation of any of the terms and conditions of this permit by applying to the District's Hearing Board for a variance pursuant to Health and Safety Code Section 42350. The Hearing Board will determine after notice and hearing whether variance relief should be granted in accordance with the procedures and standards set forth in Health and Safety Code Section 42350 et seq. (MOP Volume II, Part 3, §4.8)
3. The granting by the District of breakdown relief or the issuance by the Hearing Board of a variance will not provide relief from federal enforcement. (MOP Volume II, Part 3, §4.8)

### **I. Severability**

In the event that any provision of this permit is invalidated by a court or tribunal of competent jurisdiction, or by the Administrator of the EPA, all remaining portions of the permit shall remain in full force and effect. (Regulation 2-6-409.5; MOP Volume II, Part 3, §4.10)

### **J. Miscellaneous Conditions**

1. The maximum capacity for each source as shown in Table II-A is the maximum allowable capacity. Exceedance of the maximum allowable capacity for any source is a violation of Regulation 2, Rule 1, Section 301. (Regulation 2-1-301)

## II. EQUIPMENT

**Table II - A**  
**Permitted Sources**

Each of the following sources has been issued a permit to operate pursuant to the requirements of BAAQMD Regulation 2, Permits. The capacities in this table are the maximum allowable capacities for each source, pursuant to Standard Condition I.J and Regulation 2-1-301.

S-#	Description	Make or Type	Model	Capacity
S-2	Sewage Sludge Storage, Main Pond			106 dry tons (528 wet tons) per day and 21,120 dry tons (105,600 wet tons) per year
S-5	Redwood Landfill, Active Solid Waste Disposal Site  Landfill Gas Collection System, Active	Types of waste accepted include municipal, commercial, industrial, construction, designated, and special wastes.		Max. Design Capacity = 19.1 E6 yd <sup>3</sup> (14.6 E6 m <sup>3</sup> ) Max. Cumulative Waste In Place = 17.1 MM tons in place Max. Waste Acceptance Rate = 2,300 tons/day 97 vertical wells and 11 horizontal collectors
S-25	Yard and Green Waste Stockpiles			60,000 ft <sup>2</sup> 20,000 tons/year
S-28	Co-Compost Biosolids Feed Stockpile			40,000 tons/year
S-34	Active Compost and Co-Compost Windrows and Associated Activities			50,000 tons/year
S-35	Compost and Co-Compost Curing Piles and Associated Activities			50,000 tons/year
S-37	Compost and Co-Compost Final Product Storage Piles and Associated Activities			50,000 tons/year
S-38	On-Site Material Hauling			50,000 tons/year
S-39	Trommel Screening Processes, Powered by Either Electric Motors or S-48			50,000 tons/year
S-40	Diesel Engine (Powering Tub Grinder at S-41)	Caterpillar	3408 DITA	505 bhp, 1050 in <sup>3</sup> , 27.3 gallons/hour diesel oil, 3.74 MM BTU/hour



## II. Equipment

**Table II - A**  
**Permitted Sources**

Each of the following sources has been issued a permit to operate pursuant to the requirements of BAAQMD Regulation 2, Permits. The capacities in this table are the maximum allowable capacities for each source, pursuant to Standard Condition I.J and Regulation 2-1-301.

S-#	Description	Make or Type	Model	Capacity
S-41	Yard and Green Waste Shredding Operation	Tub Grinder, Diamond Z and Temporary Stockpiles	PWG 1260	50 tons/hour
S-42	Soil and Cover Material Stockpiles			1,160 tons/day and 105,500 tons/year
S-45	Pumpmaster Engine	Detroit Diesel	4-53	95 bhp, 212 in <sup>3</sup> , 5.5 gallons/hour diesel oil, 735,500 BTU/hour
S-46	Tipper Engine	Caterpillar	3054	94 bhp, 232 in <sup>3</sup> , 4.8 gallons/hour diesel oil, 657,600 BTU/hour
S-47	PACO Water Pump Engine	PACO	ORO129C	80 bhp, 230 in <sup>3</sup> , 4.0 gallons/hour diesel oil, 548,000 BTU/hour
S-48	Retec Power Screens Engine	John Deere	4045 TF	102 bhp, 276 in <sup>3</sup> , 5.2 gallons/hour diesel oil, 712,400 BTU/hour
S-49	Diesel Engine for Back-Up Generator	Cummins	4BT3.9G2	102 bhp, 276 in <sup>3</sup> , 5.0 gallons/hour diesel oil, 685,000 BTU/hour
S-50	Leachate Vaporator	Power Strategies		evaporating 5 gallons per minute of leachate, and burning 5 MM BTU/hour of landfill gas (propane may be used as start-up fuel)
S-55	Non-Retail Gasoline Dispensing Facility G # 8573 (Phase I is Two Point, Phase II is Vapor Balance)	1 Above Ground Tank 1 Gasoline Nozzle	Emco Wheaton 4005	1000 gallon capacity 10 gallons/minute

## II. Equipment

**Table II - B  
 Abatement Devices**

A-#	Description	Source(s) Controlled	Applicable Requirement	Operating Parameters	Limit or Efficiency
A-18	Water Sprays	S-5, S-25, S-34, S-35, S-37, S-39, and S-42	BAAQMD Regulation 6-301	None	Ringelmann No. 1
A-41	Water Sprays	S-41	BAAQMD Regulation 6-301	None	Ringelmann No. 1
A-50	Landfill Gas Flare, Power Strategies, EV-4000 120 MM BTU/hour	S-5	BAAQMD 8-34-301.3, see also Table IV-B	Minimum combustion zone temperature of 1475 °F, see also Table VII-B	98% destruction of NMOC or < 30 ppmv of NMOC, as CH <sub>4</sub> , at 3% O <sub>2</sub> , dry
A-51	Landfill Gas Flare, Perennial Energy, Inc., FL-144-38-E, 90 MM BTU/hour	S-5	BAAQMD 8-34-301.3, see also Table IV-B	Minimum combustion zone temperature of 1400 °F, see also Table VII-B	98% destruction of NMOC or < 30 ppmv of NMOC, as CH <sub>4</sub> , at 3% O <sub>2</sub> , dry

### III. GENERALLY APPLICABLE REQUIREMENTS

The permit holder shall comply with all applicable requirements, including those specified in the BAAQMD and SIP Rules and Regulations and other federal requirements cited below. These requirements apply in a general manner to the facility and/or to sources exempt from the requirement to obtain a District Permit to Operate. The District has determined that these requirements will not be violated under normal, routine operations, and that no additional periodic monitoring or reporting to demonstrate compliance is warranted. In cases where a requirement, in addition to being generally applicable, is also specifically applicable to one or more sources, the requirement and the source are also included in Section IV, Source-Specific Applicable Requirements, of this permit.

The dates in parentheses in the Title column identify the versions of the regulations being cited and are, as applicable:

1. BAAQMD regulation(s): The date(s) of adoption or most recent amendment of the regulation by the District Board of Directors
2. Any federal requirement, including a version of a District regulation that has been approved into the SIP: The most recent date of EPA approval of any portion of the rule, encompassing all actions on the rule through that date

The full language of SIP requirements is on EPA Region 9's website. The address is included at the end of this permit.

**NOTE:**

There are differences between the current BAAQMD rules and the versions of the rules in the SIP. All sources must comply with both versions of the rule until US EPA has reviewed and approved the District's revision of the regulation.

**Table III  
 Generally Applicable Requirements**

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)
BAAQMD Regulation 1	General Provisions and Definitions (5/2/01)	N
SIP Regulation 1	General Provisions and Definitions (6/28/99)	Y <sup>1</sup>
BAAQMD Regulation 2, Rule 1	General Requirements (8/1/01)	N
BAAQMD 2-1-429	Federal Emissions Statement (6/7/95)	Y
SIP Regulation 2, Rule 1	General Requirements (1/26/99)	Y <sup>1</sup>
BAAQMD Regulation 5	Open Burning (3/6/02)	N
SIP Regulation 5	Open Burning (9/4/98)	Y <sup>1</sup>
BAAQMD Regulation 6	Particulate Matter and Visible Emissions (12/19/90)	Y

### III. Generally Applicable Requirements

**Table III  
 Generally Applicable Requirements**

<b>Applicable Requirement</b>	<b>Regulation Title or Description of Requirement</b>	<b>Federally Enforceable (Y/N)</b>
BAAQMD Regulation 7	Odorous Substances (3/17/82)	N
BAAQMD Regulation 8, Rule 1	Organic Compounds - General Provisions (6/15/94)	Y
BAAQMD Regulation 8, Rule 2	Organic Compounds – Miscellaneous Operations (6/15/94)	Y
BAAQMD Regulation 8, Rule 3	Organic Compounds - Architectural Coatings (11/21/01)	Y
BAAQMD Regulation 8, Rule 4	Organic Compounds – General Solvent and Surface Coating Operations (10/16/02)	Y
BAAQMD Regulation 8, Rule 16	Organic Compounds - Solvent Cleaning Operations (10/16/02)	Y
BAAQMD Regulation 8, Rule 40	Organic Compounds – Aeration of Contaminated Soil and Removal of Underground Storage Tanks (12/15/99)	Y
BAAQMD 8-40-116	Exemption, Small Volume	Y
BAAQMD 8-40-117	Exemption, Accidental Spills	Y
BAAQMD Regulation 8, Rule 47	Organic Compounds - Air Stripping and Soil Vapor Extraction Operations (6/15/94)	Y
BAAQMD Regulation 8, Rule 49	Organic Compounds – Aerosol Paint Products (12/20/95)	N
SIP Regulation 8, Rule 49	Organic Compounds – Aerosol Paint Products (3/22/95)	Y <sup>1</sup>
BAAQMD Regulation 8, Rule 51	Organic Compounds - Adhesive and Sealant Products (7/17/02)	N
SIP Regulation 8, Rule 51	Organic Compounds - Adhesive and Sealant Products (2/26/02)	Y <sup>1</sup>
BAAQMD Regulation 11, Rule 1	Hazardous Pollutants – Lead (3/17/82)	N
SIP Regulation 11, Rule 1	Hazardous Pollutants - Lead (9/2/81)	Y <sup>1</sup>
BAAQMD Regulation 11, Rule 2	Hazardous Pollutants - Asbestos Demolition, Renovation and Manufacturing (10/7/98)	N
BAAQMD Regulation 11, Rule 14	Hazardous Pollutants - Asbestos Containing Serpentine (7/17/91)	N
BAAQMD Regulation 12, Rule 4	Miscellaneous Standards of Performance - Sandblasting (7/11/90)	N
SIP Regulation 12, Rule 4	Miscellaneous Standards of Performance - Sandblasting (9/2/81)	Y <sup>1</sup>
California Health and Safety Code Section 44300 et seq.	Air Toxics “Hot Spots” Information and Assessment Act of 1987	N
40 CFR Part 61, Subpart A	National Emission Standards for Hazardous Air Pollutants – General Provisions (4/9/04)	Y

### III. Generally Applicable Requirements

**Table III  
 Generally Applicable Requirements**

<b>Applicable Requirement</b>	<b>Regulation Title or Description of Requirement</b>	<b>Federally Enforceable (Y/N)</b>
40 CFR Part 61, Subpart M	National Emission Standards for Hazardous Air Pollutants – National Emission Standard for Asbestos (7/20/04)	Y

<sup>1</sup> This section has been removed from BAAQMD Regulations because it has been superseded. Nevertheless, the source must comply with this regulation until US EPA has reviewed and approved (or disapproved) the District's revision of the regulation.

#### IV. SOURCE-SPECIFIC APPLICABLE REQUIREMENTS

The permit holder shall comply with all applicable requirements, including those specified in the BAAQMD and SIP Rules and Regulations and other federal requirements cited below. The requirements cited in the following tables apply in a specific manner to the indicated source(s).

The dates in parentheses in the Title column identify the versions of the regulations being cited and are, as applicable:

1. BAAQMD regulation(s): The date(s) of adoption or most recent amendment of the regulation by the District Board of Directors
2. Any federal requirement, including a version of a District regulation that has been approved into the SIP: The most recent date of EPA approval of any portion of the rule, encompassing all actions on the rule through that date

The full text of each permit condition cited is included in Section VI, Permit Conditions, of this permit. The full language of SIP requirements is on EPA Region 9's website. The address is included at the end of this permit. All other text may be found in the regulations themselves.

**Table IV – A**  
**Source-Specific Applicable Requirements**  
 S-2 SEWAGE SLUDGE STORAGE, MAIN POND

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
<b>BAAQMD Regulation 8, Rule 2</b>	<b>Organic Compounds-Miscellaneous Operation (3/22/95)</b>		
8-2-301	Miscellaneous Operations	Y	
<b>BAAQMD Regulation 9, Rule 2</b>	<b>Inorganic Gaseous Pollutants – Hydrogen Sulfide (10/6/99)</b>		
9-2-301	Limitations on Hydrogen Sulfide	N	
<b>BAAQMD Condition # 96</b>			
Part 1	Odor Abatement Requirements (Regulation 1-301)	N	

## IV. Source Specific Applicable Requirements

**Table IV – B**  
**Source-Specific Applicable Requirements**  
 S-5 REDWOOD LANDFILL WITH GAS COLLECTION SYSTEM;  
 A-18 WATER SPRAYS; A-50 LANDFILL GAS FLARE, AND A-51 LANDFILL GAS FLARE

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
<b>BAAQMD Regulation 1</b>	<b>General Provisions and Definitions (5/2/01)</b>		
1-523	Parametric Monitoring and Recordkeeping Procedures	N	
1-523.1	Reporting requirement for periods of inoperation > 24 hours	Y	
1-523.2	Limit on duration of inoperation	Y	
1-523.3	Reporting requirement for violations of any applicable limits	N	
1-523.4	Records of inoperation, tests, calibrations, adjustments, & maintenance	Y	
1-523.5	Maintenance and calibration	N	
<b>SIP Regulation 1</b>	<b>General Provisions and Definitions (6/28/99)</b>		
1-523	Parametric Monitoring and Recordkeeping Procedures	Y <sup>1</sup>	
1-523.3	Reports of Violations	Y <sup>1</sup>	
<b>BAAQMD Regulation 6</b>	<b>Particulate Matter and Visible Emissions (12/19/90)</b>		
6-301	Ringelmann No. 1 Limitation	Y	
6-305	Visible Particles	Y	
6-310	Particle Weight Limitation (applies to flares only)	Y	
6-401	Appearance of Emissions	Y	
<b>BAAQMD Regulation 8, Rule 2</b>	<b>Organic Compounds-Miscellaneous Operation (6/15/94)</b>	<b>Y</b>	
8-2-301	Miscellaneous Operations	Y	
<b>BAAQMD Regulation 8, Rule 34</b>	<b>Organic Compounds – Solid Waste Disposal Sites (6/15/05)</b>		
8-34-113	Limited Exemption, Inspection and Maintenance	Y	
8-34-113.1	Emission Minimization Requirement	Y	
8-34-113.2	Shutdown Time Limitation	Y	
8-34-113.3	Recordkeeping Requirement	Y	
8-34-116	Limited Exemption, Well Raising	Y	
8-34-116.1	New Fill	Y	
8-34-116.2	Limits on Number of Wells Shutdown	Y	
8-34-116.3	Shutdown Duration Limit	Y	
8-34-116.4	Capping Well Extensions	Y	

## IV. Source Specific Applicable Requirements

**Table IV – B**  
**Source-Specific Applicable Requirements**  
 S-5 REDWOOD LANDFILL WITH GAS COLLECTION SYSTEM;  
 A-18 WATER SPRAYS; A-50 LANDFILL GAS FLARE, AND A-51 LANDFILL GAS FLARE

<b>Applicable Requirement</b>	<b>Regulation Title or Description of Requirement</b>	<b>Federally Enforceable (Y/N)</b>	<b>Future Effective Date</b>
8-34-116.5	Well Disconnection Records	Y	
8-34-117	Limited Exemption, Gas Collection System Components	Y	
8-34-117.1	Necessity of Existing Component Repairs/Adjustments	Y	
8-34-117.2	New Components are Described in Collection and Control System Design Plan	Y	
8-34-117.3	Meets Section 8-34-118 Requirements	Y	
8-34-117.4	Limits on Number of Wells Shutdown	Y	
8-34-117.5	Shutdown Duration Limit	Y	
8-34-117.6	Well Disconnection Records	Y	
8-34-118	Limited Exemption, Construction Activities	Y	
8-34-118.1	Construction Plan	Y	
8-34-118.2	Activity is Required to Maintain Compliance with this Rule	Y	
8-34-118.3	Required or Approved by Other Enforcement Agencies	Y	
8-34-118.4	Emission Minimization Requirement	Y	
8-34-118.5	Excavated Refuse Requirements	Y	
8-34-118.6	Covering Requirements for Exposed Refuse	Y	
8-34-118.7	Installation Time Limit	Y	
8-34-118.8	Capping Required for New Components	Y	
8-34-118.9	Construction Activity Records	Y	
8-34-301	Landfill Gas Collection and Emission Control System Requirements	Y	
8-34-301.1	Continuous Operation	Y	
8-34-301.2	Collection and Control Systems Leak Limitations	Y	
8-34-301.3	Limits for Enclosed Flares (applies to flares)	Y	
8-34-303	Landfill Surface Requirements	Y	
8-34-304	Gas Collection System Installation Requirements	Y	
8-34-304.1	Based on Waste Age For Inactive or Closed Areas	Y	
8-34-304.2	Based on Waste Age For Active Areas	Y	
8-34-304.3	Based on Amount of Decomposable Waste Accepted	Y	
8-34-304.4	Based on NMOC Emission Rate	Y	
8-34-305	Wellhead Requirements	Y	
8-34-305.1	Operate Under Vacuum	Y	
8-34-305.2	Temperature < 55 °C	Y	
8-34-305.3	Nitrogen < 20% or	Y	
8-34-305.4	Oxygen < 5%	Y	
8-34-405	Design Capacity Reports	Y	



## IV. Source Specific Applicable Requirements

**Table IV – B**  
**Source-Specific Applicable Requirements**  
 S-5 REDWOOD LANDFILL WITH GAS COLLECTION SYSTEM;  
 A-18 WATER SPRAYS; A-50 LANDFILL GAS FLARE, AND A-51 LANDFILL GAS FLARE

<b>Applicable Requirement</b>	<b>Regulation Title or Description of Requirement</b>	<b>Federally Enforceable (Y/N)</b>	<b>Future Effective Date</b>
8-34-408	Collection and Control System Design Plans	Y	
8-34-408.2	Sites With Existing Collection and Control Systems	Y	
8-34-411	Annual Report	Y	
8-34-412	Compliance Demonstration Tests	Y	
8-34-413	Performance Test Report	Y	
8-34-414	Repair Schedule for Wellhead Excesses	Y	
8-34-414.1	Records of Excesses	Y	
8-34-414.2	Corrective Action	Y	
8-34-414.3	Collection System Expansion	Y	
8-34-414.4	Operational Due Date for Expansion	Y	
8-34-415	Repair Schedule for Surface Leak Excesses	Y	
8-34-415.1	Records of Excesses	Y	
8-34-415.2	Corrective Action	Y	
8-34-415.3	Re-monitor Excess Location Within 10 Days	Y	
8-34-415.4	Re-monitor Excess Location Within 1 Month	Y	
8-34-415.5	If No More Excesses, No Further Re-Monitoring	Y	
8-34-415.6	Additional Corrective Action	Y	
8-34-415.7	Re-monitor Second Excess Within 10 days	Y	
8-34-415.8	Re-monitor Second Excess Within 1 Month	Y	
8-34-415.9	If No More Excesses, No Further Re-monitoring	Y	
8-34-415.10	Collection System Expansion for Third Excess in a Quarter	Y	
8-34-415.11	Operational Due Date for Expansion	Y	
8-34-416	Cover Repairs	Y	
8-34-501	Operating Records	Y	
8-34-501.1	Collection System Downtime	Y	
8-34-501.2	Emission Control System Downtime	Y	
8-34-501.3	Continuous Temperature Records for Enclosed Combustors (applies to flares)	Y	
8-34-501.4	Testing	Y	
8-34-501.6	Leak Discovery and Repair Records	Y	
8-34-501.7	Waste Acceptance Records	Y	
8-34-501.8	Non-decomposable Waste Records	Y	
8-34-501.9	Wellhead Excesses and Repair Records	Y	
8-34-501.10	Gas Flow Rate Records for All Emission Control Systems	Y	
8-34-501.12	Records Retention for 5 Years	Y	

## IV. Source Specific Applicable Requirements

**Table IV – B**  
**Source-Specific Applicable Requirements**  
 S-5 REDWOOD LANDFILL WITH GAS COLLECTION SYSTEM;  
 A-18 WATER SPRAYS; A-50 LANDFILL GAS FLARE, AND A-51 LANDFILL GAS FLARE

<b>Applicable Requirement</b>	<b>Regulation Title or Description of Requirement</b>	<b>Federally Enforceable (Y/N)</b>	<b>Future Effective Date</b>
8-34-503	Landfill Gas Collection and Emission Control System Leak Testing	Y	
8-34-504	Portable Hydrocarbon Detector	Y	
8-34-505	Well Head Monitoring	Y	
8-34-506	Landfill Surface Monitoring	Y	
8-34-507	Continuous Temperature Monitor and Recorded (applies to flares)	Y	
8-34-508	Gas Flow Meter	Y	
8-34-510	Cover Integrity Monitoring	Y	
<b>BAAQMD Regulation 8, Rule 40</b>	<b>Organic Compounds – Aeration of Contaminated Soil and Removal of Underground Storage Tanks (6/15/05)</b>		
8-40-110	Exemption, Storage Pile	Y	
8-40-112	Exemption, Sampling	Y	
8-40-113	Exemption, Non-Volatile Hydrocarbons	Y	
8-40-116	Exemption, Small Volume	Y	
8-40-116.1	Volume does not exceed 1 cubic yard	Y	
8-40-116.2	Volume does not exceed 8 cubic yards, organic content does not exceed 500 ppmw, may be used only once per quarter	Y	
8-40-117	Exemption, Accidental Spills	Y	
8-40-118	Exemption, Aeration Projects of Limited Impact	Y	
8-40-301	Uncontrolled Contaminated Soil Aeration	Y	
8-40-304	Active Storage Piles	Y	
8-40-305	Inactive Storage Piles	Y	
<b>BAAQMD Regulation 9, Rule 1</b>	<b>Inorganic Gaseous Pollutants – Sulfur Dioxide (3/15/95)</b>		
9-1-301	Limitations on Ground Level Concentrations (applies to flares only)	Y	
9-1-302	General Emission Limitations (applies to flares only)	Y	
<b>BAAQMD Regulation 9, Rule 2</b>	<b>Inorganic Gaseous Pollutants – Hydrogen Sulfide (10/6/99)</b>		
9-2-301	Limitations on Hydrogen Sulfide	N	
<b>40 CFR Part 60, Subpart A</b>	<b>Standards of Performance for New Stationary Sources – General Provisions (8/27/01)</b>		
60.4(b)	Requires Submission of Requests, Reports, Applications, and Other Correspondence to the Administrator	Y	

## IV. Source Specific Applicable Requirements

**Table IV – B**  
**Source-Specific Applicable Requirements**  
 S-5 REDWOOD LANDFILL WITH GAS COLLECTION SYSTEM;  
 A-18 WATER SPRAYS; A-50 LANDFILL GAS FLARE, AND A-51 LANDFILL GAS FLARE

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
60.7	Notification and Record Keeping	Y	
60.8	Performance Tests	Y	
60.11	Compliance with Standards and Maintenance Requirements	Y	
60.11(a)	Compliance determined by performance tests	Y	
60.11(d)	Control devices operated using good air pollution control practice	Y	
60.12	Circumvention	Y	
60.13	Monitoring Requirements	Y	
60.13(a)	Applies to all continuous monitoring systems	Y	
60.13(b)	Monitors shall be installed and operational before performing performance tests	Y	
60.13(e)	Continuous monitors shall operate continuously	Y	
60.13(f)	Monitors shall be installed in proper locations	Y	
60.13(g)	Multiple monitors are required for multiple stacks	Y	
60.14	Modification	Y	
60.15	Reconstruction	Y	
60.19	General Notification and Reporting Requirements	Y	
<b>40 CFR Part 60, Subpart WWW</b>	<b>Standards of Performance for New Stationary Sources – Standards of Performance for Municipal Solid Waste Landfills (2/24/99)</b>		
60.752	Standards for Air Emissions from Municipal Solid Waste Landfills	Y	
60.752(b)	Requirements for MSW Landfills with Design Capacity equal to or greater than 2.5 million Mg and 2.5 million m <sup>3</sup> (Large Designated Facilities)	Y	
60.752(b)(2)	Comply with all requirements in sections (b)(2)(i through iv)	Y	
60.752(b)(2)(i)	Submit a Collection and Control System Design Plan	Y	
60.752(b)(2)(i)(A)	The collection and control system in the Design Plan shall comply with 60.752(b)(2)(ii)	Y	
60.752(b)(2)(i)(B)	Design Plan shall include all proposed alternatives to 60.753 through 60.758	Y	
60.752(b)(2)(i)(C)	Design Plan shall conform to 60.759 (active collection system) or demonstrate sufficiency of proposed alternatives	Y	
60.752(b)(2)(ii)	Install a collection and control system	Y	
60.752(b)(2)(iii)	Route collected gases to a control system.	Y	

## IV. Source Specific Applicable Requirements

**Table IV – B**  
**Source-Specific Applicable Requirements**  
 S-5 REDWOOD LANDFILL WITH GAS COLLECTION SYSTEM;  
 A-18 WATER SPRAYS; A-50 LANDFILL GAS FLARE, AND A-51 LANDFILL GAS FLARE

<b>Applicable Requirement</b>	<b>Regulation Title or Description of Requirement</b>	<b>Federally Enforceable (Y/N)</b>	<b>Future Effective Date</b>
60.752 (b)(2)(iii)(B)	Reduce NMOC emissions by 98% by weight or reduce NMOC outlet concentration to less than 20 ppmv as hexane at 3% O <sub>2</sub> , dry basis, as demonstrated by initial performance test within 180 days of start-up.	Y	
60.752 (b)(2)(iv)	Operate in accordance with 60.753, 60.755, and 60.756	Y	
60.752(c)	Title V Operating Permit Requirements	Y	
60.752(c)(1)	Subject date is June 10, 1996 for Landfills new or modified between May 30, 1991 and March 12, 1996	Y	
60.753	Operational Standards for Collection and Control Systems	Y	
60.753(a)	Operate a Collection System in each area or cell in which:	Y	
60.753(a)(1)	Active Cell – solid waste in place for 5 years or more	Y	
60.753(a)(2)	Closed/Final Grade – solid waste in place for 2 years or more	Y	
60.753(b)	Operate each wellhead under negative pressure unless:	Y	
60.753(b)(1)	Fire or increased well temperature or to prevent fire	Y	
60.753(b)(2)	Use of geomembrane or synthetic cover (subject to alternative pressure limits)	Y	
60.753(b)(3)	Decommissioned well after approval received for shut-down	Y	
60.753(c)	Operate each wellhead at < 55 °C, and either < 20% N <sub>2</sub> or < than 5% O <sub>2</sub> (or other approved alternative levels)	Y	
60.753(c)(1)	N <sub>2</sub> determined by Method 3C	Y	
60.753(c)(2)	O <sub>2</sub> determined by 3A and as described in (2)(i-v)	Y	
60.753(d)	Surface Leak Limit is less than 500 ppm methane above background at landfill surface. This section also describes some surface monitoring procedures.	Y	
60.753(e)	Vent all collected gases to a control system complying with 60.752(b)(2)(iii). If collection or control system inoperable, shut down gas mover and close all vents within 1 hour	Y	
60.753(f)	Operate the control system at all times when collected gas is routed to the control system	Y	
60.753(g)	If monitoring demonstrates that 60.753(b), (c), or (d) are not being met, corrective action must be taken	Y	
60.754	Test Methods and Procedures	Y	
60.754(c)	For PSD, NMOC emissions shall be calculated using AP-42	Y	
60.754(d)	Test Methods for Performance Test (Method 18 or 25C)	Y	
60.755	Compliance Provisions	Y	

## IV. Source Specific Applicable Requirements

**Table IV – B**  
**Source-Specific Applicable Requirements**  
 S-5 REDWOOD LANDFILL WITH GAS COLLECTION SYSTEM;  
 A-18 WATER SPRAYS; A-50 LANDFILL GAS FLARE, AND A-51 LANDFILL GAS FLARE

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
60.755(a)	For Gas Collection Systems	Y	
60.755(a)(1)	Calculation procedures for maximum expected gas generation flow rate	Y	
60.755(a)(1)(i)	Equation for unknown year-to-year waste acceptance rate	Y	
60.755(a)(1)(ii)	Equation for known year-to-year waste acceptance rate	Y	
60.755(a)(2)	Vertical wells and horizontal collectors shall be of sufficient density to meet all performance specifications	Y	
60.755(a)(3)	Measure wellhead pressure monthly. If pressure is positive, take corrective action (final corrective action = expand system within 120 days of initial positive pressure reading)	Y	
60.755(a)(4)	Expansion not required during first 180 days after startup.	Y	
60.755(a)(5)	Monitor wellheads monthly for temperature and either nitrogen or oxygen. If readings exceed limits, take corrective action up to expanding system within 120 days of first excess.	Y	
60.755(b)	Wells shall be placed in cells as described in Design Plan and no later than 60 days after:	Y	
60.755(b)(1)	Five years after initial waste placement in cell, for active cells	Y	
60.755(b)(2)	Two years after initial waste placement in cell, for closed/final grade cells.	Y	
60.755(c)	Procedures for complying with surface methane standard	Y	
60.755(c)(1)	Quarterly monitoring of surface and perimeter	Y	
60.755(c)(2)	Procedure for determining background concentration	Y	
60.755(c)(3)	Method 21 except probe inlet placed 5-10 cm above ground	Y	
60.755(c)(4)	Excess is any reading of 500 ppmv or more. Take corrective action indicated below (i-v).	Y	
60.755(c)(4)(i)	Mark and record location of excess	Y	
60.755(c)(4)(ii)	Repair cover or adjust vacuum. Re-monitor within 10 calendar days.	Y	
60.755(c)(4)(iii)	If still exceeding 500 ppmv, take additional corrective action. Re-monitor within 10 calendar days of 2 <sup>nd</sup> excess.	Y	
60.755(c)(4)(iv)	Re-monitor within 1 month of initial excess.	Y	

## IV. Source Specific Applicable Requirements

**Table IV – B**  
**Source-Specific Applicable Requirements**  
 S-5 REDWOOD LANDFILL WITH GAS COLLECTION SYSTEM;  
 A-18 WATER SPRAYS; A-50 LANDFILL GAS FLARE, AND A-51 LANDFILL GAS FLARE

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
60.755(c)(4)(v)	For any location with 3 monitored excesses in a quarter, additional collectors (or other approved collection system repairs) shall be operational within 120 days of 1 <sup>st</sup> excess.	Y	
60.755(c)(5)	Monitor cover integrity monthly and repair as needed.	Y	
60.755(d)	Instrumentation and procedures for complying with 60.755(c).	Y	
60.755(d)(1)	Portable analyzer meeting Method 21	Y	
60.755(d)(2)	Calibrated with methane diluted to 500 ppmv in air	Y	
60.755(d)(3)	Use Method 21, Section 4.4 instrument evaluation procedures	Y	
60.755(d)(4)	Calibrate per Method 21, Section 4.2 immediately before monitoring.	Y	
60.755(e)	Provisions apply at all times except during startup, shutdown, or malfunction, provided the duration of these shall not exceed 5 days for collection systems or 1 hour for control systems.	Y	
60.756	Monitoring of Operations	Y	
60.756(a)	For active collection systems, install wellhead sampling port	Y	
60.756(a)(1)	Measure gauge pressure in wellhead on a monthly basis	Y	
60.756(a)(2)	Measure nitrogen or oxygen concentration in wellhead gas on a monthly basis.	Y	
60.756(a)(3)	Measure temperature of wellhead gas on a monthly basis.	Y	
60.756(b)	Enclosed combustors shall comply with (b)(1) and (b)(2)	Y	
60.756(b)(1)	Temperature monitor and continuous recorder (not required for boilers and process heaters with capacity > 44 MW)	Y	
60.756(b)(2)	Device that records flow to or bypass of the control device (i or ii below)	Y	
60.756(b)(2)(i)	Install, calibrate, and maintain a device that records flow to the control device at least every 15 minutes.	Y	
60.756(e)	Procedures for requesting alternative monitoring parameters	Y	
60.756(f)	Monitor surface on a quarterly basis.	Y	
60.757	Reporting Requirements	Y	
60.757(a)(3)	Amended Design Capacity Report required within 90 days of receiving a permitted increase in design capacity or within 90 days of an annual density calculation that results in a design capacity over the thresholds.	Y	
60.757(b)(3)	Sites with collection and control systems operating in compliance with this subpart are exempt from (b)(1) and (b)(2) above.	Y	

## IV. Source Specific Applicable Requirements

**Table IV – B**  
**Source-Specific Applicable Requirements**  
 S-5 REDWOOD LANDFILL WITH GAS COLLECTION SYSTEM;  
 A-18 WATER SPRAYS; A-50 LANDFILL GAS FLARE, AND A-51 LANDFILL GAS FLARE

<b>Applicable Requirement</b>	<b>Regulation Title or Description of Requirement</b>	<b>Federally Enforceable (Y/N)</b>	<b>Future Effective Date</b>
60.757(c)	Submit a Collection and Control System Design Plan within 1 year of first NMOC emission rate report showing NMOC > 50 MG/year, except as follows	Y	
60.757(f)	Submit Annual Reports containing information required by (f)(1) through (f)(6)	Y	
60.757(f)(1)	Value and length of time for exceedance of parameters monitored per 60.756(a), (b) or (d)	Y	
60.757(f)(2)	Description and duration of all periods when gas is diverted from the control device by a by-pass line	Y	
60.757(f)(3)	Description and duration of all periods when control device was not operating for more than 1 hour	Y	
60.757(f)(4)	All periods when collection system was not operating for more than 5 days.	Y	
60.757(f)(5)	Location of each surface emission excess and all re-monitoring dates and concentrations.	Y	
60.757(f)(6)	Location and installation dates for any wells or collectors added as a result of corrective action for a monitored excess.	Y	
60.757(g)	Initial Performance Test Report Requirements (g)(1-6)	Y	
60.757(g)(1)	Diagram of collection system showing positions of all existing collectors, proposed positions for future collectors, and areas to be excluded from control.	Y	
60.757(g)(2)	Basis for collector positioning to meet sufficient density req.	Y	
60.757(g)(3)	Documentation supporting percentage of asbestos or non-degradable material claims for areas without a collection system.	Y	
60.757(g)(4)	For areas excluded from collection due to non-productivity, calculations and gas generation rates for each non-productive area and the sum for all nonproductive areas.	Y	
60.757(g)(5)	Provisions for increasing gas mover equipment if current system is inadequate to handle maximum projected gas flow rate.	Y	
60.757(g)(6)	Provisions for control of off-site migration	Y	
60.758	Recordkeeping Requirements	Y	
60.758(a)	Design Capacity and Waste Acceptance Records (retain 5 years)	Y	
60.758(b)	Collection and Control Equipment Records (retain for life of control equipment except 5 years for monitoring data)	Y	
60.758(b)(1)	Collection System Records	Y	

## IV. Source Specific Applicable Requirements

**Table IV – B**  
**Source-Specific Applicable Requirements**  
 S-5 REDWOOD LANDFILL WITH GAS COLLECTION SYSTEM;  
 A-18 WATER SPRAYS; A-50 LANDFILL GAS FLARE, AND A-51 LANDFILL GAS FLARE

<b>Applicable Requirement</b>	<b>Regulation Title or Description of Requirement</b>	<b>Federally Enforceable (Y/N)</b>	<b>Future Effective Date</b>
60.758 (b)(1)(i)	Maximum expected gas generation flow rate.	Y	
60.758 (b)(1)(ii)	Density of wells and collectors	Y	
60.758(b)(2)	Control System Records - enclosed combustors other than boilers or process heaters with heat input > 44 MW	Y	
60.758 (b)(2)(i)	Combustion temperature measured every 15 minutes and averaged over the same time period as the performance test	Y	
60.758 (b)(2)(ii)	Percent NMOC reduction achieved by the control device	Y	
60.758(c)	Records of parameters monitored pursuant to 60.756 and periods of operation when boundaries are exceeded (retain for 5 years).	Y	
60.758(c)(1)	Exceedances subject to record keeping are	Y	
60.758 (c)(1)(i)	All 3-hour periods when average combustion temperature was more than 28 C below the average combustion temperature during the most recent complying performance test	Y	
60.758(c)(2)	Records of continuous flow to control device or monthly inspection records if seal and lock for bypass valves	Y	
60.758(d)	Plot map showing location of all existing and planned collectors with a unique label for each collector (retain for life of collection system)	Y	
60.758(d)(1)	Installation date and location of all newly installed collectors	Y	
60.758(d)(2)	Records of nature, deposition date, amount, and location of asbestos or non-degradable waste excluded from control	Y	
60.758(e)	Records of any exceedance of 60.753, location of exceedance and re-monitoring dates and data (for wellheads and surface). Retain for 5 years.	Y	
60.759	Specifications for Active Collection Systems	Y	
60.759(a)	Active wells and collectors shall be at sufficient density	Y	
60.759(a)(1)	Collection System in refuse shall be certified by PE to achieve comprehensive control of surface gas emissions	Y	
60.759(a)(2)	Collection Systems (active or passive) outside of refuse shall address migration control	Y	
60.759(a)(3)	All gas producing areas shall be controlled except as described below (i-iii).	Y	
60.759(b)	Gas Collection System Components	Y	



## IV. Source Specific Applicable Requirements

**Table IV – B**  
**Source-Specific Applicable Requirements**  
 S-5 REDWOOD LANDFILL WITH GAS COLLECTION SYSTEM;  
 A-18 WATER SPRAYS; A-50 LANDFILL GAS FLARE, AND A-51 LANDFILL GAS FLARE

<b>Applicable Requirement</b>	<b>Regulation Title or Description of Requirement</b>	<b>Federally Enforceable (Y/N)</b>	<b>Future Effective Date</b>
60.759(b)(1)	Must be constructed of PVC, HDPE, fiberglass, stainless steel, or other approved material and of suitable dimensions to convey projected gas amounts and withstand settling, traffic, etc.	Y	
60.759(b)(2)	Collectors shall not endanger liner, shall manage condensate and leachate, and shall prevent air intrusion and surface leaks.	Y	
60.759(b)(3)	Header connection assemblies shall include positive closing throttle valve, seals and couplings to prevent leaks, at least one sampling port, and shall be constructed of PVC, HDPE, fiberglass, stainless steel, or other approved materials.	Y	
60.759(c)	Gas Mover Equipment shall be sized to handle maximum expected gas generation rate over the intended period of use.	Y	
60.759(c)(1)	For existing systems, flow data shall be used to project maximum flow rate.	Y	
60.759(c)(2)	For new systems, gas generation rate shall be calculated per 60.755(a)(1)	Y	
<b>40 CFR Part 63, Subpart A</b>	<b>National Emission Standards for Hazardous Air Pollutants: General Provisions (4/22/04)</b>		
63.4	Prohibited activities and circumvention	Y	
63.5(b)	Requirements for existing, newly constructed, and reconstructed sources	Y	
63.6(e)	Operation and maintenance requirements and SSM Plan	Y	
63.6(f)	Compliance with non-opacity emission standards	Y	
63.10(b)(2)(i-v)	Records for startup, shutdown, malfunction, and maintenance	Y	
63.10(d)(5)	Startup, Shutdown, and Malfunction (SSM) Reports	Y	
<b>40 CFR Part 63, Subpart AAAA</b>	<b>National Emission Standards for Hazardous Air Pollutants: Municipal Solid Waste Landfills (1/16/03)</b>		
63.1955	What requirements must I meet?	Y	
63.1955(a)(1)	Comply with 40 CFR Part 60, Subpart WWW	Y	
63.1955(a)(2)	Comply with State Plan that implements 40 CFR Part 60, Subpart Cc	Y	
63.1955(b)	Comply with 63.1960-63.1985, if a collection and control system is required by 40 CFR Part 60, Subpart WWW or a State Plan implementing 40 CFR Part 60, Subpart Cc	Y	

## IV. Source Specific Applicable Requirements

**Table IV – B**  
**Source-Specific Applicable Requirements**  
 S-5 REDWOOD LANDFILL WITH GAS COLLECTION SYSTEM;  
 A-18 WATER SPRAYS; A-50 LANDFILL GAS FLARE, AND A-51 LANDFILL GAS FLARE

<b>Applicable Requirement</b>	<b>Regulation Title or Description of Requirement</b>	<b>Federally Enforceable (Y/N)</b>	<b>Future Effective Date</b>
63.1955(c)	Comply with all approved alternatives to standards for collection and control systems plus all SSM requirements and 6 month compliance reporting requirements	Y	
63.1960	How is compliance determined?	Y	
63.1965	What is a deviation?	Y	
63.1975	How do I calculate the 3-hour block average used to demonstrate compliance?	Y	
63.1980	What records and reports must I keep and submit?	Y	
63.1980(a)	Comply with all record keeping and reporting requirements in 40 CFR Part 60, Subpart WWW or the State Plan implementing 40 CFR Part 60, Subpart Cc, except that the annual report required by 40 CFR 60.757(f) must be submitted every 6 months	Y	
63.1980(b)	Comply with all record keeping and reporting requirements in 40 CFR Part 60, Subpart A and 40 CFR Part 63, Subpart A, including SSM Plans and Reports	Y	
<b>BAAQMD Condition # 19867</b>			
Part 1	Design capacity limit (Regulation 2-1-301)	Y	
Part 2	Cumulative decomposable waste limit (Regulation 2-1-301)	Y	
Part 3	Waste acceptance rate limits (Regulation 2-1-301)	Y	
Part 4	Cover materials usage limits (Regulation 2-1-301)	Y	
Part 5	Record keeping requirements for Parts 1-4 (Regulations 2-1-301, 8-34-501, and 40 CFR 60.758)	Y	
Part 6	Off-site vehicle fleet weight limit (Regulation 2-1-301)	Y	
Part 7	On-site vehicle fleet weight limit (Regulation 2-1-301)	Y	
Part 8	Limit on vehicle miles traveled for off-site vehicle fleet (Regulation 2-1-301)	Y	
Part 9	Limit on vehicle miles traveled for on-site vehicle fleet (Regulation 2-1-301)	Y	
Part 10	Record keeping requirements for Parts 6-9 (Regulations 2-1-301, 8-34-501, and 40 CFR 60.758)	Y	
Part 11	Particulate emissions control measures (Regulations 1-301, 2-1-301, and 6-301)	Y	
Part 12	Public nuisance consequences (Regulation 1-301)	N	

## IV. Source Specific Applicable Requirements

**Table IV – B**  
**Source-Specific Applicable Requirements**  
 S-5 REDWOOD LANDFILL WITH GAS COLLECTION SYSTEM;  
 A-18 WATER SPRAYS; A-50 LANDFILL GAS FLARE, AND A-51 LANDFILL GAS FLARE

<b>Applicable Requirement</b>	<b>Regulation Title or Description of Requirement</b>	<b>Federally Enforceable (Y/N)</b>	<b>Future Effective Date</b>
Part 13	Handling procedures for non-hazardous materials with no or low VOC Content (Toxic Risk Management Policy)	N	
Part 14	Usage limits and record keeping requirements for VOC laden soil. (Offsets and Regulation 8-2-301)	Y	
Part 15	Handling procedures VOC contaminated soil (Offsets and Regulations 8-40-301, 8-40-304, and 8-40-305)	Y	
Part 16	Control requirements for collected landfill gas (Regulations 8-34-301.1 and 8-34-301.3 and 40 CFR 60.752(b)(2)(iii))	Y	
Part 17	Landfill gas collection system description (Regulations 2-1-301, 8-34-301.1, 8-34-304, 8-34-305, and 2-6-413)	Y	
Part 18	Permit requirements if landfill gas concentrations exceed listed levels (Cumulative Increase, RACT, and Toxic Risk Management Policy)	Y	
Part 19	Allowable fuels for flares (RACT and Regulation 2-2-112)	Y	
Part 20	Landfill gas throughput limit and gas flow meter requirement for flares (Cumulative Increase and 40 CFR 60.756(b)(2)(i))	Y	
Part 21	[deleted]	✗	
Part 22	Combustion zone temperature limits and monitoring requirements for flares (Toxic Risk Management Policy, Regulations 8-34-301.1 and 8-34-501.3, and 40 CFR 60.756(b)(1))	Y	
Part 23	NMOC limit for flares (Cumulative Increase, Regulation 8-34-301.3, and 40 CFR 60.752(b)(2)(iii)(B))	Y	
Part 24	Flare destruction efficiency requirements for HAPs and toxic compounds (Toxic Risk Management Policy)	N	
Part 25	NOx emission limit for flares (RACT and Offsets)	Y	
Part 26	CO emission limit for flares (RACT and Cumulative Increase)	Y	
Part 27	[deleted]		
Part 28	[deleted]		
Part 29	Record keeping and reporting requirements for flares (Regulations 2-6-501, 8-34-501, and 40 CFR 60.758)	Y	
Part 30	Annual source test requirements (Cumulative Increase, Toxic Risk Management Policy, RACT, Offsets, Regulations 8-34-301.3 and 8-34-412, and 40 CFR 60.8 and 60.752(b)(2)(iii)(B))	Y	
Part 31	Annual landfill gas characterization test requirements (Cumulative Increase, RACT, Toxic Risk Management Policy and Regulations 8-34-412 and 9-1-302)	Y	

## IV. Source Specific Applicable Requirements

**Table IV – B**  
**Source-Specific Applicable Requirements**  
 S-5 REDWOOD LANDFILL WITH GAS COLLECTION SYSTEM;  
 A-18 WATER SPRAYS; A-50 LANDFILL GAS FLARE, AND A-51 LANDFILL GAS FLARE

<b>Applicable Requirement</b>	<b>Regulation Title or Description of Requirement</b>	<b>Federally Enforceable (Y/N)</b>	<b>Future Effective Date</b>
Part 32	Reporting periods and report submittal due dates for the Regulation 8, Rule 34 report (Regulation 8-34-411 and 40 CFR 63.1980(a))	Y	

1. This section has been removed from BAAQMD Regulations because it has been superseded. Nevertheless, the source must comply with this regulation until US EPA has reviewed and approved (or disapproved) the District's revision of the regulation.

## IV. Source Specific Applicable Requirements

**Table IV – C**  
**Source-Specific Applicable Requirements**  
 S-25 YARD AND GREEN WASTE STOCKPILES

<b>Applicable Requirement</b>	<b>Regulation Title or Description of Requirement</b>	<b>Federally Enforceable (Y/N)</b>	<b>Future Effective Date</b>
<b>BAAQMD Regulation 6</b>	<b>Particulate Matter and Visible Emissions (12/19/90)</b>		
6-301	Ringelmann No. 1 Limitation	Y	
6-305	Visible Particles	Y	
6-401	Appearance of Emissions	Y	
<b>BAAQMD Condition # 16066</b>			
Part 1	Yard and Green Waste Throughput Limit (Cumulative Increase)	Y	
Part 2	Record Keeping Requirements (Cumulative Increase)	Y	
Part 3	Particulate Emission Limits and Monitoring Requirements (Regulations 1-301, 6-301, and 6-305)	Y	
Part 4	Watering Requirements (Regulations 1-301 and 6-305)	Y	
Part 5	Stockpile Storage Time Limitations (Regulation 1-301)	N	

## IV. Source Specific Applicable Requirements

**Table IV – D**  
**Source-Specific Applicable Requirements**

S-28 CO-COMPOST BIOSOLIDS FEED STOCKPILES; S-34 ACTIVE COMPOST AND CO-COMPOST WINDROWS AND ASSOCIATED ACTIVITIES; S-35 COMPOST AND CO-COMPOST CURING PILES AND ASSOCIATED ACTIVITIES; S-37 COMPOST AND CO-COMPOST FINAL PRODUCT STORAGE PILES AND ASSOCIATED ACTIVITIES; S-38 ON-SITE MATERIAL HAULING; S-39 TROMMEL SCREENING PROCESSES, POWERED BY EITHER ELECTRIC MOTORS OR S-48; AND A-18 WATER SPRAYS

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
<b>BAAQMD Regulation 6</b>	<b>Particulate Matter and Visible Emissions (12/19/90)</b>		
6-301	Ringelmann No. 1 Limitation	Y	
6-305	Visible Particles	Y	
6-311	General Operations: Emission Limit Based on Process Weight Rate	Y	
6-401	Appearance of Emissions	Y	
<b>BAAQMD Regulation 8, Rule 2</b>	<b>Organic Compounds – Miscellaneous Operations (3/22/95)</b>		
8-2-301	Miscellaneous Operations	Y	
<b>BAAQMD Regulation 9, Rule 2</b>	<b>Inorganic Gaseous Pollutants – Hydrogen Sulfide (10/6/99)</b>		
9-2-301	Limitations on Hydrogen Sulfide	N	
<b>BAAQMD Condition # 13123</b>			
Part 1	Throughput Limits (Cumulative Increase)	Y	
Part 2	Record Keeping Requirements (Cumulative Increase)	Y	
Part 3	Watering Requirements for Material Handling Operations (Regulations 1-301 and 6-305)	Y	
Part 4	Maintenance Requirements for Roadways (Regulations 1-301 and 6-305)	Y	
Part 5	Particulate Emission Limits and Monitoring Requirements (Regulations 1-301, 6-301, and 6-305)	Y	
Part 6	Odor Control Requirements (Regulation 1-301)	N	
Part 7	Stockpile Storage Time Limitations (Regulation 1-301)	N	
Part 8	Public Nuisance Violation Consequences (Regulation 1-301)	N	

#### IV. Source Specific Applicable Requirements

**Table IV – E**  
**Source-Specific Applicable Requirements**  
 S-40 DIESEL ENGINE (POWERING TUB GRINDER AT S-41)

<b>Applicable Requirement</b>	<b>Regulation Title or Description of Requirement</b>	<b>Federally Enforceable (Y/N)</b>	<b>Future Effective Date</b>
<b>BAAQMD Regulation 6</b>	<b>Particulate Matter and Visible Emissions (12/19/90)</b>		
6-303	Ringelmann No. 2 Limitation	Y	
6-303.1	Internal combustion engines below 1500 cubic inches displacement or standby engines	Y	
6-305	Visible Particles	Y	
6-310	Particle Weight Limitation	Y	
6-401	Appearance of Emissions	Y	
<b>BAAQMD Regulation 9, Rule 1</b>	<b>Inorganic Gaseous Pollutants – Sulfur Dioxide (3/15/95)</b>		
9-1-301	Limitations on Ground Level Concentrations	Y	
9-1-304	Liquid and Solid Fuels	Y	
<b>BAAQMD Condition # 19864</b>			
Part 1	Fuel Usage Limits (Offsets and Cumulative Increase)	Y	
Part 2	Fuel Sulfur Content Limit (Cumulative Increase)	Y	
Part 3	Record Keeping Requirements (Offsets, Cumulative Increase, and Regulation 9-1-304)	Y	

## IV. Source Specific Applicable Requirements

**Table IV – F**  
**Source-Specific Applicable Requirements**  
 S-41 YARD AND GREEN WASTE SHREDDING OPERATIONS AND A-41 WATER SPRAYS

<b>Applicable Requirement</b>	<b>Regulation Title or Description of Requirement</b>	<b>Federally Enforceable (Y/N)</b>	<b>Future Effective Date</b>
<b>BAAQMD Regulation 6</b>	<b>Particulate Matter and Visible Emissions (12/19/90)</b>		
6-301	Ringelmann No. 1 Limitation	Y	
6-305	Visible Particles	Y	
6-311	Process Weight Limitation	Y	
6-401	Appearance of Emissions	Y	
<b>BAAQMD Condition # 19865</b>			
Part 1	Waste Material Throughput Limits (Cumulative Increase)	Y	
Part 2	Record Keeping Requirements (Cumulative Increase)	Y	
Part 3	Abatement Requirement for Tub Grinder (Cumulative Increase)	Y	
Part 4	Particulate Emission Limit and Abatement Requirement for Material Handling Operations (Regulations 6-301 and 6-305)	Y	
Part 5	Monitoring Requirements for Tub Grinder and Material Handling Operations (Regulations 2-1-403, 6-301, and 6-305)	Y	



## IV. Source Specific Applicable Requirements

**Table IV – G**  
**Source-Specific Applicable Requirements**  
 S-42 SOIL AND COVER MATERIAL STOCKPILES

<b>Applicable Requirement</b>	<b>Regulation Title or Description of Requirement</b>	<b>Federally Enforceable (Y/N)</b>	<b>Future Effective Date</b>
<b>BAAQMD Regulation 6</b>	<b>Particulate Matter and Visible Emissions (12/19/90)</b>		
6-301	Ringelmann No. 1 Limitation	Y	
6-305	Visible Particles	Y	
6-401	Appearance of Emissions	Y	
<b>BAAQMD Condition # 19866</b>			
Part 1	Throughput Limits (Cumulative Increase)	Y	
Part 2	Record Keeping Requirements (Cumulative Increase)	Y	
Part 3	Particulate Emission Limits and Abatement Requirements for Material Handling Operations (Regulations 6-301 and 6-305)	Y	
Part 4	Monitoring Requirements for Material Handling Operations (Regulations 2-1-403, 6-301, and 6-305)	Y	

## IV. Source Specific Applicable Requirements

**Table IV – H**  
**Source-Specific Applicable Requirements**  
 S-45 PUMPMaster ENGINE

<b>Applicable Requirement</b>	<b>Regulation Title or Description of Requirement</b>	<b>Federally Enforceable (Y/N)</b>	<b>Future Effective Date</b>
<b>BAAQMD Regulation 6</b>	<b>Particulate Matter and Visible Emissions (12/19/90)</b>		
6-303	Ringelmann No. 2 Limitation	Y	
6-303.1	Internal combustion engines below 1500 cubic inches displacement or standby engines	Y	
6-305	Visible Particles	Y	
6-310	Particulate Weight Limitation	Y	
6-401	Appearance of Emissions	Y	
<b>BAAQMD Regulation 9, Rule 1</b>	<b>Inorganic Gaseous Pollutants – Sulfur Dioxide (3/15/95)</b>		
9-1-301	Limitations on Ground Level Concentrations	Y	
9-1-304	Liquid and Solid Fuels	Y	
<b>BAAQMD Condition # 17842</b>			
Part 1	Operating Time Limits (Regulation 2-1-301)	Y	
Part 2	Fuel Usage Limits (Regulation 2-1-301)	Y	
Part 3	Record Keeping Requirements (Regulations 2-1-301 and 9-1-304)	Y	

#### IV. Source Specific Applicable Requirements

**Table IV – I**  
**Source-Specific Applicable Requirements**  
 S-46 TIPPER ENGINE

<b>Applicable Requirement</b>	<b>Regulation Title or Description of Requirement</b>	<b>Federally Enforceable (Y/N)</b>	<b>Future Effective Date</b>
<b>BAAQMD Regulation 6</b>	<b>Particulate Matter and Visible Emissions (12/19/90)</b>		
6-303	Ringelmann No. 2 Limitation	Y	
6-303.1	Internal combustion engines below 1500 cubic inches displacement or standby engines	Y	
6-305	Visible Particles	Y	
6-310	Particulate Weight Limitation	Y	
6-401	Appearance of Emissions	Y	
<b>BAAQMD Regulation 9, Rule 1</b>	<b>Inorganic Gaseous Pollutants – Sulfur Dioxide (3/15/95)</b>		
9-1-301	Limitations on Ground Level Concentrations	Y	
9-1-304	Liquid and Solid Fuels	Y	
<b>BAAQMD Condition # 17843</b>			
Part 1	Operating Time Limits (Regulation 2-1-301)	Y	
Part 2	Fuel Usage Limits (Regulation 2-1-301)	Y	
Part 3	Record Keeping Requirements (Regulations 2-1-301 and 9-1-304)	Y	

## IV. Source Specific Applicable Requirements

**Table IV – J**  
**Source-Specific Applicable Requirements**  
 S-47 PACO WATER PUMP ENGINE

<b>Applicable Requirement</b>	<b>Regulation Title or Description of Requirement</b>	<b>Federally Enforceable (Y/N)</b>	<b>Future Effective Date</b>
<b>BAAQMD Regulation 6</b>	<b>Particulate Matter and Visible Emissions (12/19/90)</b>		
6-303	Ringelmann No. 2 Limitation	Y	
6-303.1	Internal combustion engines below 1500 cubic inches displacement or standby engines	Y	
6-305	Visible Particles	Y	
6-310	Particulate Weight Limitation	Y	
6-401	Appearance of Emissions	Y	
<b>BAAQMD Regulation 9, Rule 1</b>	<b>Inorganic Gaseous Pollutants – Sulfur Dioxide (3/15/95)</b>		
9-1-301	Limitations on Ground Level Concentrations	Y	
9-1-304	Liquid and Solid Fuels	Y	
<b>BAAQMD Condition # 17844</b>			
Part 1	Operating Time Limits (Regulation 2-1-301)	Y	
Part 2	Fuel Usage Limits (Regulation 2-1-301)	Y	
Part 3	Record Keeping Requirements (Regulations 2-1-301 and 9-1-304)	Y	

#### IV. Source Specific Applicable Requirements

**Table IV – K**  
**Source-Specific Applicable Requirements**  
 S-48 RETEC POWER SCREENS ENGINE

<b>Applicable Requirement</b>	<b>Regulation Title or Description of Requirement</b>	<b>Federally Enforceable (Y/N)</b>	<b>Future Effective Date</b>
<b>BAAQMD Regulation 6</b>	<b>Particulate Matter and Visible Emissions (12/19/90)</b>		
6-303	Ringelmann No. 2 Limitation	Y	
6-303.1	Internal combustion engines below 1500 cubic inches displacement or standby engines	Y	
6-305	Visible Particles	Y	
6-310	Particulate Weight Limitation	Y	
6-401	Appearance of Emissions	Y	
<b>BAAQMD Regulation 9, Rule 1</b>	<b>Inorganic Gaseous Pollutants – Sulfur Dioxide (3/15/95)</b>		
9-1-301	Limitations on Ground Level Concentrations	Y	
9-1-304	Liquid and Solid Fuels	Y	
<b>BAAQMD Condition # 17845</b>			
Part 1	Operating Time Limits (Regulation 2-1-301)	Y	
Part 2	Fuel Usage Limits (Regulation 2-1-301)	Y	
Part 3	Record Keeping Requirements (Regulations 2-1-301 and 9-1-304)	Y	

## IV. Source Specific Applicable Requirements

**Table IV – L**  
**Source-Specific Applicable Requirements**  
 S-49 DIESEL ENGINE FOR BACK-UP GENERATOR

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
<b>BAAQMD Regulation 6</b>	<b>Particulate Matter and Visible Emissions (12/19/90)</b>		
6-303	Ringelmann No. 2 Limitation	Y	
6-303.1	Internal combustion engines below 1500 cubic inches displacement or standby engines	Y	
6-305	Visible Particles	Y	
6-310	Particulate Weight Limitation	Y	
6-401	Appearance of Emissions	Y	
<b>BAAQMD Regulation 9, Rule 1</b>	<b>Inorganic Gaseous Pollutants – Sulfur Dioxide (3/15/95)</b>		
9-1-301	Limitations on Ground Level Concentrations	Y	
9-1-304	Liquid and Solid Fuels	Y	
<b>BAAQMD Regulation 9 Rule 8</b>	<b>Inorganic Gaseous Pollutants – Nitrogen Oxides and Carbon Monoxide from Stationary Internal Combustion Engines (8/1/01)</b>		
9-8-330	Emergency Standby Engines, Hours of Operation	N	
9-8-330.1	For Emergency Use	N	
9-8-330.2	For Reliability-Related Activities	N	
9-8-530	Emergency Standby Engines, Monitoring and Recordkeeping	N	
9-8-530.1	Hours of Operation (total)	N	
9-8-530.2	Hours of Operation (emergency)	N	
9-8-530.3	Nature of Each Emergency Condition	N	
<b>BAAQMD Condition # 19613</b>			
Part 1	Hours of Operation Limitations (Regulation 9-8-330)	N	
Part 2	Definition of Emergency Conditions (Regulation 9-8-231)	N	
Part 3	Definition of Reliability-Related Activities (Regulation 9-8-232)	N	
Part 4	Meter Requirements (Regulation 9-8-530)	N	
Part 5	Records (Regulations 9-1-304 and 9-8-530)	Y	

## IV. Source Specific Applicable Requirements

**Table IV – M**  
**Source-Specific Applicable Requirements**  
 S-50 LEACHATE VAPORATOR

<b>Applicable Requirement</b>	<b>Regulation Title or Description of Requirement</b>	<b>Federally Enforceable (Y/N)</b>	<b>Future Effective Date</b>
<b>BAAQMD Regulation 1</b>	<b>General Provisions and Definitions (5/2/01)</b>		
1-523	Parametric Monitoring and Recordkeeping Procedures	N	
1-523.1	Reporting requirement for periods of inoperation > 24 hours	Y	
1-523.2	Limit on duration of inoperation	Y	
1-523.3	Reporting requirement for violations of any applicable limits	N	
1-523.4	Records of inoperation, tests, calibrations, adjustments, & maintenance	Y	
1-523.5	Maintenance and calibration	N	
<b>SIP Regulation 1</b>	<b>General Provisions and Definitions (6/28/99)</b>		
1-523	Parametric Monitoring and Recordkeeping Procedures	Y <sup>1</sup>	
1-523.3	Reports of Violations	Y <sup>1</sup>	
<b>BAAQMD Regulation 6</b>	<b>Particulate Matter and Visible Emissions (12/19/90)</b>		
6-301	Ringelmann No. 1 Limitation	Y	
6-305	Visible Particles	Y	
6-310	Particle Weight Limitation	Y	
6-401	Appearance of Emissions	Y	
<b>BAAQMD Regulation 8, Rule 2</b>	<b>Organic Compounds-Miscellaneous Operation (6/15/94)</b>	<b>Y</b>	
8-2-301	Miscellaneous Operations	Y	
<b>BAAQMD Regulation 8, Rule 34</b>	<b>Organic Compounds – Solid Waste Disposal Sites (6/15/05)</b>		
8-34-113	Limited Exemption, Inspection and Maintenance	Y	
8-34-113.1	Emission Minimization Requirement	Y	
8-34-113.2	Shutdown Time Limitation	Y	
8-34-113.3	Recordkeeping Requirement	Y	
8-34-301	Landfill Gas Collection and Emission Control System Requirements	Y	
8-34-301.1	Continuous Operation	Y	
8-34-301.2	Collection and Control Systems Leak Limitations	Y	
8-34-301.4	Limits for Other Emission Control Systems	Y	
8-34-408	Collection and Control System Design Plans	Y	

## IV. Source Specific Applicable Requirements

**Table IV – M**  
**Source-Specific Applicable Requirements**  
 S-50 LEACHATE VAPORATOR

<b>Applicable Requirement</b>	<b>Regulation Title or Description of Requirement</b>	<b>Federally Enforceable (Y/N)</b>	<b>Future Effective Date</b>
8-34-408.2	Sites With Existing Collection and Control Systems	Y	
8-34-411	Annual Report	Y	
8-34-412	Compliance Demonstration Tests	Y	
8-34-413	Performance Test Report	Y	
8-34-501	Operating Records	Y	
8-34-501.2	Emission Control System Downtime	Y	
8-34-501.3	Continuous Temperature Records for Enclosed Combustors	Y	
8-34-501.4	Testing	Y	
8-34-501.6	Leak Discovery and Repair Records	Y	
8-34-501.10	Gas Flow Rate Records for All Emission Control Systems	Y	
8-34-501.12	Records Retention for 5 Years	Y	
8-34-503	Landfill Gas Collection and Emission Control System Leak Testing	Y	
8-34-504	Portable Hydrocarbon Detector	Y	
8-34-507	Continuous Temperature Monitor and Recorded	Y	
8-34-508	Gas Flow Meter	Y	
<b>BAAQMD Regulation 9, Rule 1</b>	<b>Inorganic Gaseous Pollutants – Sulfur Dioxide (3/15/95)</b>		
9-1-301	Limitations on Ground Level Concentrations	Y	
9-1-302	General Emission Limitations	Y	
<b>BAAQMD Regulation 9, Rule 2</b>	<b>Inorganic Gaseous Pollutants – Hydrogen Sulfide (10/6/99)</b>		
9-2-301	Limitations on Hydrogen Sulfide	N	
<b>40 CFR Part 60, Subpart A</b>	<b>Standards of Performance for New Stationary Sources – General Provisions (8/27/01)</b>		
60.4(b)	Requires Submission of Requests, Reports, Applications, and Other Correspondence to the Administrator	Y	
60.7	Notification and Record Keeping	Y	
60.8	Performance Tests	Y	
60.11	Compliance with Standards and Maintenance Requirements	Y	
60.11(a)	Compliance determined by performance tests	Y	
60.11(d)	Control devices operated using good air pollution control practice	Y	
60.12	Circumvention	Y	
60.13	Monitoring Requirements	Y	



## IV. Source Specific Applicable Requirements

**Table IV – M**  
**Source-Specific Applicable Requirements**  
 S-50 LEACHATE VAPORATOR

<b>Applicable Requirement</b>	<b>Regulation Title or Description of Requirement</b>	<b>Federally Enforceable (Y/N)</b>	<b>Future Effective Date</b>
60.13(a)	Applies to all continuous monitoring systems	Y	
60.13(b)	Monitors shall be installed and operational before performing performance tests	Y	
60.13(e)	Continuous monitors shall operate continuously	Y	
60.13(f)	Monitors shall be installed in proper locations	Y	
60.13(g)	Multiple monitors are required for multiple stacks	Y	
60.14	Modification	Y	
60.15	Reconstruction	Y	
60.19	General Notification and Reporting Requirements	Y	
<b>40 CFR Part 60, Subpart WWW</b>	<b>Standards of Performance for New Stationary Sources – Standards of Performance for Municipal Solid Waste Landfills (2/24/99)</b>		
60.752	Standards for Air Emissions from Municipal Solid Waste Landfills	Y	
60.752 (b)(2)(iii)	Route collected gases to a control system meeting the following:	Y	
60.752 (b)(2)(iii)(B)	Reduce NMOC emissions by 98% by weight or reduce NMOC outlet concentration to less than 20 ppmv as hexane at 3% O <sub>2</sub> , dry basis, as demonstrated by initial performance test within 180 days of start-up.	Y	
60.752 (b)(2)(iv)	Operate in accordance with 60.753, 60.755, and 60.756	Y	
60.753	Operational Standards for Collection and Control Systems	Y	
60.753(e)	Vent all collected gases to a control system complying with 60.752(b)(2)(iii). If collection or control system inoperable, shut down gas mover and close all vents within 1 hour	Y	
60.753(f)	Operate the control system at all times when collected gas is routed to the control system	Y	
60.754	Test Methods and Procedures	Y	
60.754(d)	Test Methods for Performance Test (Method 18 or 25C)	Y	
60.755	Compliance Provisions	Y	
60.755(e)	Provisions apply at all times except during startup, shutdown, or malfunction, provided the duration of these shall not exceed 5 days for collection systems or 1 hour for control systems.	Y	
60.756	Monitoring of Operations	Y	
60.756(b)	Enclosed combustors shall comply with (b)(1) and (b)(2)	Y	
60.756(b)(1)	Temperature monitor and continuous recorder (not required for boilers and process heaters with capacity > 44 MW)	Y	

## IV. Source Specific Applicable Requirements

**Table IV – M**  
**Source-Specific Applicable Requirements**  
 S-50 LEACHATE VAPORATOR

<b>Applicable Requirement</b>	<b>Regulation Title or Description of Requirement</b>	<b>Federally Enforceable (Y/N)</b>	<b>Future Effective Date</b>
60.756(b)(2)	Device that records flow to or bypass of the control device	Y	
60.756 (b)(2)(i)	Install, calibrate, and maintain a device that records flow to the control device at least every 15 minutes.	Y	
60.756 (b)(2)(ii)	Secure a bypass valve in closed position with a lock-and-key configuration and inspect seal and lock monthly	Y	
60.756(e)	Procedures for requesting alternative monitoring parameters	Y	
60.757	Reporting Requirements	Y	
60.757(f)	Submit Annual Reports containing information required by (f)(1) through (f)(6)	Y	
60.757(f)(1)	Value and length of time for exceedance of parameters monitored per 60.756(a), (b) or (d)	Y	
60.757(f)(2)	Description and duration of all periods when gas is diverted from the control device by a by-pass line	Y	
60.757(f)(3)	Description and duration of all periods when control device was not operating for more than 1 hour	Y	
60.758	Recordkeeping Requirements	Y	
60.758(b)	Collection and Control Equipment Records (retain for life of control equipment except 5 years for monitoring data)	Y	
60.758(b)(2)	Control System Records - enclosed combustors other than boilers or process heaters with heat input > 44 MW	Y	
60.758 (b)(2)(i)	Combustion temperature measured every 15 minutes and averaged over the same time period as the performance test	Y	
60.758 (b)(2)(ii)	Percent NMOC reduction achieved by the control device	Y	
60.758(c)	Records of parameters monitored pursuant to 60.756 and periods of operation when boundaries are exceeded (retain for 5 years).	Y	
60.758(c)(1)	Exceedances subject to record keeping are	Y	
60.758 (c)(1)(i)	All 3-hour periods when average combustion temperature was more than 28 C below the average combustion temperature during the most recent complying performance test	Y	
60.758(c)(2)	Records of continuous flow to control device or monthly inspection records if seal and lock for bypass valves	Y	
<b>40 CFR Part 63, Subpart A</b>	<b>National Emission Standards for Hazardous Air Pollutants: General Provisions (4/22/04)</b>		
63.4	Prohibited activities and circumvention	Y	

## IV. Source Specific Applicable Requirements

**Table IV – M**  
**Source-Specific Applicable Requirements**  
 S-50 LEACHATE VAPORATOR

<b>Applicable Requirement</b>	<b>Regulation Title or Description of Requirement</b>	<b>Federally Enforceable (Y/N)</b>	<b>Future Effective Date</b>
63.5(b)	Requirements for existing, newly constructed, and reconstructed sources	Y	
63.6(e)	Operation and maintenance requirements and SSM Plan	Y	
63.6(f)	Compliance with non-opacity emission standards	Y	
63.10(b)(2)(i-v)	Records for startup, shutdown, malfunction, and maintenance	Y	
63.10(d)(5)	Startup, Shutdown, and Malfunction (SSM) Reports	Y	
<b>40 CFR Part 63, Subpart AAAA</b>	<b>National Emission Standards for Hazardous Air Pollutants: Municipal Solid Waste Landfills (1/16/03)</b>		
63.1955	What requirements must I meet?	Y	
63.1955(a)(1)	Comply with 40 CFR Part 60, Subpart WWW	Y	
63.1955(b)	Comply with 63.1960-63.1985, if a collection and control system is required by 40 CFR Part 60, Subpart WWW or a State Plan implementing 40 CFR Part 60, Subpart Cc	Y	
63.1955(c)	Comply with all approved alternatives to standards for collection and control systems plus all SSM requirements and 6 month compliance reporting requirements	Y	
63.1960	How is compliance determined?	Y	
63.1965	What is a deviation?	Y	
63.1975	How do I calculate the 3-hour block average used to demonstrate compliance?	Y	
63.1980	What records and reports must I keep and submit?	Y	
63.1980(a)	Comply with all record keeping and reporting requirements in 40 CFR Part 60, Subpart WWW or the State Plan implementing 40 CFR Part 60, Subpart Cc, except that the annual report required by 40 CFR 60.757(f) must be submitted every 6 months	Y	
63.1980(b)	Comply with all record keeping and reporting requirements in 40 CFR Part 60, Subpart A and 40 CFR Part 63, Subpart A, including SSM Plans and Reports	Y	
<b>BAAQMD Condition # 19609</b>			
Part 1	Leachate throughput limits (Cumulative Increase)	Y	
Part 2	Abatement requirements for leachate vapors (Cumulative Increase)	Y	
Part 3	Fuel limitations (Cumulative Increase)	Y	

## IV. Source Specific Applicable Requirements

**Table IV – M**  
**Source-Specific Applicable Requirements**  
 S-50 LEACHATE VAPORATOR

<b>Applicable Requirement</b>	<b>Regulation Title or Description of Requirement</b>	<b>Federally Enforceable (Y/N)</b>	<b>Future Effective Date</b>
Part 4	Landfill gas throughput limits and flow meter requirements (Cumulative Increase)	Y	
Part 5	NOx emission limits (Cumulative Increase)	Y	
Part 6	CO emission limits and alternative landfill gas throughput/CO concentration limits (Cumulative Increase)	Y	
Part 7	NMOC destruction efficiency requirement and alternative concentration limit (Cumulative Increase, Regulation 8-34-301.4, and 40 CFR 60.752(b)(2)(iii)(B))	Y	
Part 8	Record keeping requirements (Cumulative Increase, Regulations 2-6-501 and 8-34-501, and 40 CFR 60.758)	Y	
Part 9	Source testing requirements (Cumulative Increase, Regulations 8-34-301.4 and 8-34-412, and 40 CFR 60.752(b)(2)(iii)(B))	Y	

1. This section has been removed from BAAQMD Regulations because it has been superseded. Nevertheless, the source must comply with this regulation until US EPA has reviewed and approved (or disapproved) the District's revision of the regulation.

## IV. Source Specific Applicable Requirements

**Table IV – N**  
**Source-Specific Applicable Requirements**  
 S-55 NON-RETAIL GASOLINE DISPENSING FACILITY # 8573

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
<b>BAAQMD Regulation 8, Rule 5</b>	<b>Organic Compounds, Storage of Organic Liquids (11/27/02)</b>		
8-5-301	Storage Tank Control Requirements	Y	
8-5-303	Requirements for Pressure Vacuum Valves	Y	
8-5-501	Records	Y	
8-5-501.1	Types and amounts of materials stored	Y	
<b>BAAQMD Regulation 8, Rule 7</b>	<b>Organic Compounds, Gasoline Dispensing Facilities (11/6/02)</b>		
8-7-113	Tank Gauging and Inspection Exemption	Y	
8-7-114	Stationary Tank Testing Exemption	Y	
8-7-116	Periodic Testing Requirements Exemption	Y	
8-7-301	Phase I Requirements	Y	
8-7-301.1	Requirements for Transfers into Stationary Tanks, Cargo Tanks, and Mobile Refuelers	Y	
8-7-301.2	CARB Certification Requirements	Y	
8-7-301.3	Submerged Fill Pipe Requirement	Y	
8-7-301.5	Maintenance and Operating Requirement	Y	
8-7-301.6	Leak-Free and Vapor Tight Requirement for Components	Y	
8-7-301.7	Fitting Requirements for Vapor Return Line	Y	
8-7-301.12	Spill Box Drain Valve Limitation	Y	
8-7-301.13	Annual Vapor Tightness Test Requirement	Y	
8-7-302	Phase II Requirements	Y	
8-7-302.1	Requirements for Transfers into Motor Vehicle Fuel Tanks	Y	
8-7-302.2	Maintenance Requirement	Y	
8-7-302.3	Proper Operation and Free of Defects Requirements	Y	
8-7-302.4	Repair Time Limit for Defective Components	Y	
8-7-302.5	Leak-Free and Vapor Tight Requirement for Components	Y	
8-7-302.6	Requirements for Bellows Nozzles	Y	
8-7-302.7	Requirements for Vapor Recovery Nozzles on Balance Systems	Y	
8-7-302.8	Minimum Liquid Removal Rate	Y	
8-7-302.9	Coaxial Hose Requirement	Y	
8-7-302.10	Construction Materials Specifications	Y	
8-7-302.12	Liquid Retain Limitation	Y	

## IV. Source Specific Applicable Requirements

**Table IV – N**  
**Source-Specific Applicable Requirements**  
 S-55 NON-RETAIL GASOLINE DISPENSING FACILITY # 8573

<b>Applicable Requirement</b>	<b>Regulation Title or Description of Requirement</b>	<b>Federally Enforceable (Y/N)</b>	<b>Future Effective Date</b>
8-7-302.13	Nozzle Spitting Limitation	Y	
8-7-302.14	Annual Back Pressure Test Requirements for Balance Systems	Y	
8-7-303	Topping Off	Y	
8-7-304	Certification Requirements	Y	
8-7-306	Prohibition of Use	Y	
8-7-307	Posting of Operating Instructions	Y	
8-7-308	Operating Practices	Y	
8-7-309	Contingent Vapor Recovery Requirement	Y	
8-7-313	Requirements for New or Modified Phase II Installations	Y	
8-7-316	Pressure Vacuum Valve Requirements, Aboveground Storage Tanks and Vaulted Below Grade Storage Tanks	Y	
8-7-401	Equipment Installation and Modification	Y	
8-7-406	Testing Requirements, New and Modified Installations	Y	
8-7-407	Periodic Testing Requirements	Y	
8-7-408	Periodic Testing Notification and Submission Requirements	Y	
8-7-501	Burden of Proof	Y	
8-7-502	Right of Access	Y	
8-7-503	Record Keeping Requirements	Y	
8-7-503.1	Gasoline Throughput Records	Y	
8-7-503.2	Maintenance Records	Y	
8-7-503.3	Records Retention Time	Y	
<b>BAAQMD Condition # 14098</b>	<b>Gasoline Throughput Limit (Toxic Risk Management Policy)</b>	N	
<b>BAAQMD Condition # 16516</b>	<b>Annual Leak Test (Regulation 8-7-407)</b>	Y	
<b>CARB Executive Order G-70-17-AD</b>	<b>Modification of Certification of the Emco Wheaton Balance Phase II Vapor Recovery System (5/6/93)</b>		
Paragraph 9	Piping and Component Configurations	N	
Paragraph 10	Nozzle Type Requirements for New Installations	N	
Paragraph 11	Dispensing Rate Limit	N	
Paragraph 12	Restrictions on Use of Nozzle Extenders	N	

## IV. Source Specific Applicable Requirements

**Table IV – N**  
**Source-Specific Applicable Requirements**  
 S-55 NON-RETAIL GASOLINE DISPENSING FACILITY # 8573

<b>Applicable Requirement</b>	<b>Regulation Title or Description of Requirement</b>	<b>Federally Enforceable (Y/N)</b>	<b>Future Effective Date</b>
Paragraph 13	Requirement to Comply with Other Agencies' Rules and Regulations	N	
Paragraph 14	Nozzle Performance Shall Conform to Certification	N	
Paragraph 15	Prohibition on Alteration of Equipment, Parts, Design, or Operation	N	
Paragraph 16	Operating and Maintenance Requirements	N	
<b>CARB Executive Order G-70-160</b>	<b>Certification of Above Ground Tank Vault, Aboveground Tank Filling/Dispensing Vapor Recovery System (11/9/94)</b>		
Paragraph 9	Tank Design Configuration Limitations	N	
Paragraph 10	Emergency Vent Leak Limit	N	
Paragraph 11	Requirement to Use ARB Certified Phase I and Phase II Systems	N	
Paragraph 12	Phase I Piping Configuration Requirements and Disconnection Leak Limit	N	
Paragraph 13	Coaxial Hose Routing Requirements for Liquid Trap Limitations	N	
Paragraph 14	P/V Valve Requirements	N	
Paragraph 15	Tank Insulation Requirements	N	
Paragraph 16	Tank Exterior Surface Requirements	N	
Paragraph 17	Requirement to Comply with Local Air District Rules	N	
Paragraph 18	Requirements for Deliveries from a Cargo Truck	N	
Paragraph 19	Leak Checking Requirements	N	
Paragraph 20	Requirement to Comply with Local Fire Official's Requirements	N	
Paragraph 21	Requirement to Comply with Other Agencies' Rules and Regulations	N	
Paragraph 22	Prohibition on Alteration of Equipment, Parts, Design, or Operation	N	

## **V. SCHEDULE OF COMPLIANCE**

The permit holder shall comply with all applicable requirements cited in this permit. The permit holder shall also comply with applicable requirements that become effective during the term of this permit on a timely basis.



## VI. PERMIT CONDITIONS

Any condition that is preceded by an asterisk is not federally enforceable.

### **Condition # 96**

**FOR: S-2, SEWAGE SLUDGE STORAGE, MAIN POND**

- \*1. If any odor complaints are verified and found to have emanated from this pond, the pond shall be immediately chemically treated to abate the problem. (Basis: Regulation 1-301)

### **Condition # 13123**

**FOR: S-28, CO-COMPOST BIOSOLIDS FEED STOCKPILES; S-34, ACTIVE COMPOST AND CO-COMPOST WINDROWS AND ASSOCIATED ACTIVITIES; S-35, COMPOST AND CO-COMPOST CURING PILES AND ASSOCIATED ACTIVITIES; S-37, COMPOST AND CO-COMPOST FINAL PRODUCT STORAGE PILES AND ASSOCIATED ACTIVITIES; S-38, ON-SITE MATERIAL HAULING; S-39, TROMMEL SCREENING PROCESSES, POWERED BY EITHER ELECTRIC MOTORS OR S-48; AND A-18 WATER SPRAYS**

1. Total throughput shall not exceed the following limits per consecutive 12-month period. (Basis: Cumulative Increase)  
  
S-28 = 40,000 tons  
S-35 = 50,000 tons  
S-37 = 50,000 tons  
S-39 = 50,000 tons
2. In order to demonstrate compliance with Part 1, the Permit Holder shall keep a dated record of the material throughput in a District approved logbook. Material throughput shall be totaled on a monthly basis, and shall be made available to the District staff for inspection. (Basis: Cumulative Increase)
3. The material handling operations associated with these sources - such as loading, unloading, stockpiling, mixing, and turning - shall be abated by water sprays (A-18), as necessary to comply with Part 5. Dry, dusty material shall be wetted down before unloading from truck beds, as necessary to comply with Part 5. (Basis: Regulations 1-301 and 6-305)

## VI. Permit Conditions

### Condition # 13123

**FOR: S-28, CO-COMPOST BIOSOLIDS FEED STOCKPILES; S-34, ACTIVE COMPOST AND CO-COMPOST WINDROWS AND ASSOCIATED ACTIVITIES; S-35, COMPOST AND CO-COMPOST CURING PILES AND ASSOCIATED ACTIVITIES; S-37, COMPOST AND CO-COMPOST FINAL PRODUCT STORAGE PILES AND ASSOCIATED ACTIVITIES; S-38, ON-SITE MATERIAL HAULING; S-39, TROMMEL SCREENING PROCESSES, POWERED BY EITHER ELECTRIC MOTORS OR S-48; AND A-18 WATER SPRAYS**

4. All roadways associated with this facility shall be maintained in a clean or wetted condition, as necessary to comply with Part 5.  
(Basis: Regulations 1-301 and 6-305)
5. Visible dust emissions from any operation of this facility shall not exceed Ringelmann 1.0 or result in fallout on adjacent property in such quantities as to cause a public nuisance per Regulation 1-301. To ensure compliance with this part, the Permit Holder shall visually observe all material handling operations and roadways associated with these sources and shall immediately initiate corrective actions, if any visible dust emissions are detected that persist for longer than 3 minutes in an hour. (Basis: Regulations 1-301, 6-301 and 6-305)
- \*6. All measures - including but not limited to proper housekeeping and management practices, contained and dry storage piles, and dust minimization - shall be implemented, as necessary to control odors from these sources.  
(Basis: Regulation 1-301)
- \*7. During normal operations, the yard waste material shall be processed within 72 hours of receipt so that it does not decompose in the storage piles and generate odor on-site. In the event of an equipment breakdown or other unforeseeable circumstance that would prevent the processing of yard waste within 72 hours, yard waste may be stored for no more than 7 days. If any stockpile that has been stored for longer than 72 hours is deemed to be odorous by a District inspector, then the allowable stockpile storage time shall be reduced from 7 days back to 72 hours. Any stockpile that is deemed to be odorous by a District inspector shall be removed within 24 hours. (Basis: Regulation 1-301)

## VI. Permit Conditions

### Condition # 13123

**FOR: S-28, CO-COMPOST BIOSOLIDS FEED STOCKPILES; S-34, ACTIVE COMPOST AND CO-COMPOST WINDROWS AND ASSOCIATED ACTIVITIES; S-35, COMPOST AND CO-COMPOST CURING PILES AND ASSOCIATED ACTIVITIES; S-37, COMPOST AND CO-COMPOST FINAL PRODUCT STORAGE PILES AND ASSOCIATED ACTIVITIES; S-38, ON-SITE MATERIAL HAULING; S-39, TROMMEL SCREENING PROCESSES, POWERED BY EITHER ELECTRIC MOTORS OR S-48; AND A-18 WATER SPRAYS**

- \*8. If the plant receives two or more Violation Notices from the District for "Public Nuisance" in any consecutive 12 month period, the Permit Holder for these sources shall implement the following control measures, as applicable, or any other measures that the District deems necessary and appropriate within the time period specified by the District. If requested by the District, the Permit Holder shall submit to the District an application to modify the Permit to Operate and/or these permit conditions within 30 days of notification.
- a. Enclose nuisance operations in a warehouse-like building.
  - b. Pave roadways associated with the nuisance operation.
  - c. Use chemical suppressants to control fugitive dust emissions from roadways associated with the nuisance operation.
  - d. Apply odor inhibitor solutions to odorous operations.
  - e. Install an odor abatement system.
  - f. Reduce the stockpile time allowed by Part 7.
  - g. Reduce the throughput rates allowed by Part 1.
  - h. Discontinue odorous co-composting operations (no use of sewage sludge) during the ozone season or other appropriate time period.
- (Basis: Regulation 1-301)

### Condition # 14098

**FOR: S-55, NON-RETAIL GASOLINE DISPENSING FACILITY # 8573**

Pursuant to BAAQMD Toxic Section Policy, this facility's annual gasoline throughput shall not exceed 940,000 gallons in any consecutive 12-month period. (Basis: Toxic Risk Management Policy)

## VI. Permit Conditions

### Condition # 16066

#### FOR: S-25, YARD AND GREEN WASTE STOCKPILES

1. The total throughput of yard and green wastes at the S-25 Yard and Green Waste Stockpiles shall not exceed 20,000 tons during any consecutive 12-month period. (Basis: Cumulative Increase)
2. In order to demonstrate compliance with Part 1, the Permit Holder shall keep a dated record of material throughput in a District approved logbook. Material throughput shall be totaled on a monthly basis and shall be made available to District staff for inspection. (Basis: Cumulative Increase)
3. Visible dust emissions from this operation shall not exceed Ringelmann 1.0 or result in fallout on adjacent property in such quantities as to cause a public nuisance per Regulation 1-301. To ensure compliance with this part, the Permit Holder shall visually observe all unloading, stockpiling, and loading operations and shall immediately initiate corrective actions, if any visible dust emissions are detected that persist for longer than 3 minutes in an hour. (Basis: Regulations 1-301, 6-301 and 6-305)
4. The material handling operations such as loading, unloading, and stockpiling shall be abated, as necessary, by the A-18 Water Sprays to comply with Part 3. (Basis: Regulations 1-301 and 6-305)
- \*5. During normal operations, yard and green waste material shall be processed within 72 hours of receipt so that it does not decompose in the stockpiles and generate odors on-site. In the event of an equipment breakdown or other unforeseeable circumstance that would prevent the processing of yard and green waste within 72 hours, yard and green waste may be stored for no more than 7 days. If any stockpile that has been stored for longer than 72 hours is deemed to be odorous by a District inspector, then the allowable stockpile storage time shall be reduced from 7 days back to 72 hours. Any stockpile that is deemed to be odorous by a District inspector shall be removed within 24 hours. (Basis: Regulation 1-301)

## VI. Permit Conditions

### **Condition # 16516**

**FOR: S-55, NON-RETAIL GASOLINE DISPENSING FACILITY # 8573**

The Static Pressure Performance Test (Leak Test) ST-38 shall be successfully conducted at least once in each twelve consecutive month period after the date of successful completion of the startup Static Pressure Performance Test. Test results shall be submitted to BAAQMD within 20 days of the test date. (Basis: Regulation 8-7-407)

### **Condition # 17842**

**FOR: S-45, PUMPMASTER ENGINE**

1. The S-45 Pump Master Engine shall not operate more than 8 hours during any one day and shall not operate more than 2,496 hours during any consecutive 12-month period. (Basis: Regulation 2-1-301)
2. Diesel fuel usage at S-45 shall not exceed 13,728 gallons during any consecutive 12-month period. (Basis: Regulation 2-1-301)
3. In order to demonstrate compliance with Parts 1 and 2 above, the Permit Holder shall maintain the following records in a District approved log:
  - a. Daily records of the operating hours for S-45.
  - b. Monthly records of the operating hours for S-45.
  - c. Monthly records of the amount of diesel fuel used at S-45.
  - d. All monthly records shall be summarized on a rolling 12-month basis.
  - e. Vendor certifications of the fuel oil sulfur content for any fuels burned in S-45.

All records shall be made available to District staff upon request and shall be kept on site for a minimum of 5 years from the date of entry.

(Basis: Regulations 2-1-301 and 9-1-304)

## VI. Permit Conditions

### Condition # 17843

#### FOR: S-46, TIPPER ENGINE

1. The S-46 Tipper Engine shall not operate more than 8 hours during any one day and shall not operate more than 2,496 hours during any consecutive 12-month period. (Basis: Regulation 2-1-301)
2. Diesel fuel usage at S-46 shall not exceed 11,981 gallons during any consecutive 12-month period. (Basis: Regulation 2-1-301)
3. In order to demonstrate compliance with Parts 1 and 2 above, the Permit Holder shall maintain the following records in a District approved log:
  - a. Daily records of the operating hours for S-46.
  - b. Monthly records of the operating hours for S-46.
  - c. Monthly records of the amount of diesel fuel used at S-46.
  - d. All monthly records shall be summarized on a rolling 12-month basis.
  - e. Vendor certifications of the fuel oil sulfur content for any fuels burned in S-46.

All records shall be made available to District staff upon request and shall be kept on site for a minimum of 5 years from the date of entry.

(Basis: Regulations 2-1-301 and 9-1-304)

## VI. Permit Conditions

### Condition # 17844

#### FOR: S-47, PACO WATER PUMP ENGINE

1. The S-47 PACO Water Pump Engine shall not operate more than 8 hours during any one day and shall not operate more than 2,496 hours during any consecutive 12-month period. (Basis: Regulation 2-1-301)
2. Diesel fuel usage at S-47 shall not exceed 9,984 gallons during any consecutive 12-month period. (Basis: Regulation 2-1-301)
3. In order to demonstrate compliance with Parts 1 and 2 above, the Permit Holder shall maintain the following records in a District approved log:
  - a. Daily records of the operating hours for S-47.
  - b. Monthly records of the operating hours for S-47.
  - c. Monthly records of the amount of diesel fuel used at S-47.
  - d. All monthly records shall be summarized on a rolling 12-month basis.
  - e. Vendor certifications of the fuel oil sulfur content for any fuels burned in S-47.

All records shall be made available to District staff upon request and shall be kept on site for a minimum of 5 years from the date of entry.

(Basis: Regulations 2-1-301 and 9-1-304)

## VI. Permit Conditions

### Condition # 17845

#### FOR: S-48, RETEC POWER SCREENS ENGINE

1. The S-48 Retec Power Screens Engine shall not operate more than 8 hours during any one day and shall not operate more than 2,496 hours during any consecutive 12-month period. (Basis: Regulation 2-1-301)
2. Diesel fuel usage at S-48 shall not exceed 12,979 gallons during any consecutive 12-month period. (Basis: Regulation 2-1-301)
3. In order to demonstrate compliance with Parts 1 and 2 above, the Permit Holder shall maintain the following records in a District approved log:
  - a. Daily records of the operating hours for S-48.
  - b. Monthly records of the operating hours for S-48.
  - c. Monthly records of the amount of diesel fuel used at S-48.
  - d. All monthly records shall be summarized on a rolling 12-month basis.
  - e. Vendor certifications of the fuel oil sulfur content for any fuels burned in S-48.

All records shall be made available to District staff upon request and shall be kept on site for a minimum of 5 years from the date of entry.

(Basis: Regulations 2-1-301 and 9-1-304)



## VI. Permit Conditions

### Condition # 19609

#### FOR: S-50, LEACHATE VAPORATOR

1. The total throughput of leachate to the S-50 Leachate Vaporator shall not exceed 2,628,000 gallons during any consecutive 12 month period and shall not exceed 7200 gallons during any one day. (Basis: Cumulative Increase)
2. All leachate vapors generated at S-50 shall be vented to the properly operating A-50 Landfill Gas Flare. In order to assure compliance with this condition, S-50 shall be equipped with automated shut down controls that will discontinue the operation of S-50 and prevent the release of leachate vapors to the atmosphere in the event that A-50 is not operating or is not achieving the minimum temperature requirement. (Basis: Cumulative Increase)
3. The S-50 Leachate Vaporator shall be fired on landfill gas. Propane may be used during start-up. (Basis: Cumulative Increase)
4. The total throughput of landfill gas (with an HHV of 500 BTU/scf) to S-50 shall not exceed 87,600,000 scf during any consecutive 12-month period and shall not exceed 240,000 scf during any one day. These throughput limits may be reduced in the future in order to maintain compliance with Part 6 below. In order to demonstrate compliance with this part, the S-50 Leachate Vaporator shall be equipped with a properly operating continuous gas flow meter. (Basis: Cumulative Increase)
5. Nitrogen oxides (NO<sub>x</sub>) emissions from S-50 shall not exceed 10.0 pounds, calculated as NO<sub>2</sub>, per day. Compliance with this emission limit may be demonstrated by meeting the following concentration limit. The concentration of NO<sub>x</sub> in the combustion flue gases from S-50 shall not exceed 63 ppmv, corrected to 3% oxygen, dry basis. If a compliance demonstration test indicates that the nitrogen oxide concentration will exceed 63 ppmv, the Permit Holder shall reduce the landfill gas flow rate to S-50 and retest the unit to determine the maximum landfill gas flow at which nitrogen oxide emissions will not exceed 10.0 pounds per day. The table below describes several maximum landfill gas flow rates and maximum NO<sub>x</sub> concentrations that will satisfy this condition. (Basis: Cumulative Increase)

<u>LFG Flow Rate, scf/hour</u>	<u>PPM NO<sub>x</sub> at 3% O<sub>2</sub>, dry</u>
9500	66
9000	70
8000	79
6000	105

## VI. Permit Conditions

### Condition # 19609

#### FOR: S-50, LEACHATE VAPORATOR

6. Carbon monoxide (CO) emissions from S-50 shall not exceed 10.0 pounds per day. Compliance with this emission limit may be demonstrated by meeting the following concentration limit. The concentration of CO in the combustion flue gases from S-50 shall not exceed 103 ppmv, corrected to 3% oxygen, dry basis. If a compliance demonstration test indicates that the carbon monoxide concentration will exceed 103 ppmv, the Permit Holder shall reduce the landfill gas flow rate to S-50 and retest the unit to determine the maximum landfill gas flow at which carbon monoxide emissions will not exceed 10.0 pounds per day. The table below describes several maximum landfill gas flow rates and maximum CO concentrations that will satisfy this condition. (Basis: Cumulative Increase)

<u>LFG Flow Rate, scf/hour</u>	<u>PPM CO at 3% O<sub>2</sub>, dry</u>
9500	109
9000	115
8000	129
6000	172

7. The S-50 Leachate Vaporator shall either achieve a minimum destruction efficiency of 98% by weight for total non-methane organic compounds in the landfill gas or shall emit no more than 15 ppmv of NMOC as C6 from P-50. (Basis: Cumulative Increase, Regulation 8-34-301.34, and 40 CFR 60.752(b)(2)(iii)(B))
8. In order to demonstrate compliance with Parts 1 and 4, the Permit Holder shall maintain the following records in a District approved logbook:
- record the operating times for the S-50 Leachate Vaporator for each operating day,
  - calculate and record, on a weekly basis, the landfill gas flow rate and leachate flow rate to S-50 using flow meter data or other appropriate measurements,
  - calculate and record, on a weekly basis, the amount of leachate processed by S-50 during each operating day using daily operating time data and weekly leachate flow rate data recorded above,
  - calculate and record, on a weekly basis, the amount of landfill gas burned by S-50 during each operating day using daily operating time data and weekly landfill gas flow rate data recorded above, and
  - summarize the above records, on a monthly basis.

## VI. Permit Conditions

### Condition # 19609

#### FOR: S-50, LEACHATE VAPORATOR

All leachate throughput records, landfill gas flow rate records, and source test results shall be retained on site for a minimum of five years and shall be made available to District staff upon request. (Basis: Cumulative Increase, Regulations 2-6-501 and 8-34-501, and 40 CFR 60.758)

9. In order to demonstrate compliance with Parts 5-7 above and Regulation 8, Rule 34, Sections 301.4 and 412, the Permit Holder shall ensure that a District approved source test is conducted annually on S-50. Each annual source test shall determine the following:
  - a. landfill gas flow rate to S-50 (dry basis);
  - b. concentrations (dry basis) of total non-methane organic compounds (NMOC) in the landfill gas;
  - c. stack gas flow rate from S-50 (dry basis);
  - d. concentrations (dry basis) of NO<sub>x</sub>, CO, NMOC, and O<sub>2</sub> in the stack gas;
  - e. NO<sub>x</sub> and CO daily emission rates from S-50;
  - f. the NMOC destruction efficiency achieved by S-50; and
  - g. the average combustion zone temperature in S-50 during the test period.Each annual source test shall be conducted no earlier than 9 months and no later than 12 months after the previous annual source test. The Source Test Section of the District shall be contacted to obtain approval of the source test procedures at least 14 days in advance of each source test. The Source Test Section shall be notified of the scheduled test date at least 7 days in advance of each source test. The source test report shall be submitted to the Compliance and Enforcement Division and the Source Test Section within 45 days of the test date. (Basis: Cumulative Increase, Regulations 8-34-301.4 and 8-34-412, and 40 CFR 60.752(b)(2)(iii)(B))

### Condition # 19613

#### FOR: S-49, DIESEL ENGINE FOR BACK-UP GENERATOR

1. Hours of Operation: The emergency standby engine (S-49) shall only be operated to mitigate emergency conditions or for reliability-related activities. Operation while mitigating emergency conditions is unlimited. Operation for reliability-related activities is limited to 100 hours per any calendar year. (Basis: Regulation 9-8-330)

## VI. Permit Conditions

### Condition # 19613

#### FOR: S-49, DIESEL ENGINE FOR BACK-UP GENERATOR

2. "Emergency Conditions" is defined as any of the following:
  - a. Loss of regular natural gas supply.
  - b. Failure of regular electric power supply.
  - c. Flood mitigation.
  - d. Sewage overflow mitigation.
  - e. Fire.
  - f. Failure of a primary motor, but only for such time as needed to repair or replace the primary motor.(Basis: Regulation 9-8-231)
  
3. "Reliability-related activities" is defined as any of the following:
  - a. Operation of an emergency standby engine to test its ability to perform for an emergency use, or
  - b. Operation of an emergency standby engine during maintenance of a primary motor.(Basis: Regulation 9-8-232)
  
4. The emergency standby engine (S-49) shall be equipped with either:
  - a. a non-resettable totalizing meter that measures and records the hours of operation for the engine, or
  - b. a non-resettable fuel usage meter.(Basis: Regulation 9-8-530)
  
5. Records: The Permit Holder shall maintain the following records in an APCO-approved log:
  - a. Monthly records of the total hours of operation for S-49.
  - b. Monthly records of any hours of operation for emergency conditions.
  - c. For each emergency, describe the nature of the emergency condition.
  - d. Records of the vendor certified sulfur content for all fuels burned in this engine.

All records shall be kept on site for at least five years from the date of entry and shall be made available for District inspection upon request. These record keeping requirements do not replace the record keeping requirements contained in any applicable rules or regulations. (Basis: Regulations 9-1-304 and 9-8-530)

## VI. Permit Conditions

### Condition # 19864

#### FOR: S-40, DIESEL ENGINE (POWERING TUB GRINDER AT S-41)

1. The total amount of fuel used at the S-40 Diesel Engine shall not exceed 218 gallons per day and shall not exceed 16,000 gallons per year. (Basis: Offsets and Cumulative Increase)
2. Only low sulfur fuel containing no more than 0.05% sulfur by weight shall be burned in S-40. (Basis: Cumulative Increase)
3. In order to demonstrate compliance with Parts 1 and 2, the Permit Holder shall maintain the following records in an APCO approved log book.
  - a. Maintain daily records of fuel usage at S-40.
  - b. Summarize daily fuel usage records on a monthly basis and an annual basis.
  - c. Maintain records of the vendor certified sulfur content in the diesel oil for each fuel shipment.

These records shall be retained on site for a minimum of five years from the date of entry and shall be made available to District staff upon request. (Basis: Offsets, Cumulative Increase, and Regulation 9-1-304)

### Condition # 19865

#### FOR: S-41, YARD AND GREEN WASTE SHREDDING OPERATION AND A-41, WATER SPRAYS

1. The total amount of waste material processed at the S-41 Yard and Green Waste Shredding Operation shall not exceed 400 tons per day and shall not exceed 80,000 tons per year. (Basis: Cumulative Increase)
2. In order to demonstrate compliance with Part 1, the Permit Holder shall maintain daily records, summarized on a monthly and annual basis, of the total amount of waste material processed at S-41. All records shall be maintained in an APCO approved log book, retained on site for a minimum of five years from the date of entry, and made available to District staff upon request. (Basis: Cumulative Increase)
3. Particulate emissions from the tub grinder shall be abated by the A-41 Water Spray System, during all periods of operation. (Basis: Cumulative Increase)

## VI. Permit Conditions

### Condition # 19865

#### FOR: S-41, YARD AND GREEN WASTE SHREDDING OPERATION AND A-41, WATER SPRAYS

4. Particulate emissions from the waste material unloading operations, tub grinder loading operations, waste material stockpiles, and shredded material stockpiles shall be abated by water sprays as necessary to prevent visible emissions and to prevent exceedance of the Regulation 6-301 Ringelmann 1.0 limit. (Basis: Regulations 6-301 and 6-305)
5. In order to demonstrate compliance with Part 4 and Regulations 6-301 and 6-305, the Permit Holder shall observe the tub grinder during all periods of operation and shall observe all material loading or unloading operations. If visible emissions are detected that persist for longer than 3 minutes in an hour, the operator of this source shall take the necessary corrective action to stop the emissions. (Basis: Regulations 2-1-403, 6-301, and 6-305)

### Condition # 19866

#### FOR: S-42, SOIL AND COVER MATERIAL STOCKPILES

1. The total amount material received at the S-42 Soil and Cover Material Stockpiles shall not exceed 1160 tons per day and shall not exceed 105,500 tons per year. (Basis: Cumulative Increase)
2. In order to demonstrate compliance with Part 1, the Permit Holder shall maintain daily records, summarized on a monthly and annual basis, of the total amount of material received at S-42. All records shall be maintained in an APCO approved log book, retained on site for a minimum of five years from the date of entry, and made available to District staff upon request. (Basis: Cumulative Increase)
3. Particulate emissions from the stockpiles and the material loading and unloading operations shall be abated by water sprays, as necessary, to prevent visible emissions and to prevent exceedance of the Regulation 6-301 Ringelmann 1.0 limit. (Basis: Regulations 6-301 and 6-305)
4. In order to demonstrate compliance with Part 3 and Regulations 6-301 and 6-305, the Permit Holder shall observe all material loading or unloading operations. If visible emissions are detected that persist for longer than 3 minutes in an hour, the operator of this source shall take the necessary corrective action to stop the emissions. (Basis: Regulations 2-1-403, 6-301, and 6-305)

## VI. Permit Conditions

### Condition # 19867

**FOR: S-5 REDWOOD LANDFILL WITH GAS COLLECTION SYSTEM; A-18 WATER SPRAYS; A-50 LANDFILL GAS FLARE, AND A-51 LANDFILL GAS FLARE**

1. The maximum design capacity of the landfill (total volume of all wastes and cover materials placed in the landfill, excluding final cover) shall not exceed 19.1 million cubic yards, unless the Permit Holder can demonstrate that an increase of this design capacity limit will not result in any increases in the maximum permitted emission rates for the S-5 Redwood Landfill and A-50 Landfill Gas Flare, which are described in Application # 17552.  
(Basis: Regulation 2-1-301)
2. The total cumulative amount of all decomposable materials placed in the landfill (total weight of all decomposable wastes and decomposable cover materials placed in the landfill, excluding final cover) shall not exceed 17.1 million tons, unless the Permit Holder can demonstrate that an increase of this limit will not result in an increase in the maximum permitted precursor organic compound (POC) emission rate of 20.424 tons/year of POC from the S-5 Redwood Landfill due to waste decomposition. Any changes in waste acceptance rates, types of waste accepted, or other practices that will result in an increase in the maximum permitted POC, NPOC, or toxic air contaminant emission rates for S-5 or A-50, which are described in Application # 17552, shall be considered a modification of S-5 or A-50 pursuant to Regulation 2-1-234. (Basis: Regulation 2-1-301)
3. The total amount of all waste materials (including sewage sludge) accepted at the landfill shall not exceed 2300 tons per day (except during temporary emergency situations approved by the Local Enforcement Agency) and shall not exceed 450,000 tons per calendar year. The total amount of sewage sludge accepted at the landfill shall not exceed 1000 wet tons per day (except during temporary emergency situations approved by the Local Enforcement Agency) and shall not exceed 200,750 wet tons per calendar year. (Basis: Regulation 2-1-301)
4. The total amount of all cover materials (excluding final cover) placed in the landfill shall not exceed 1160 tons per day and shall not exceed 105,500 tons per calendar year. (Basis: Regulation 2-1-301)
5. In order to demonstrate compliance with Parts 1-4 above, the Permit Holder shall maintain the following records in an APCO approved log book:
  - a. Record on a daily basis the type and amount of all materials received at the landfill.

## VI. Permit Conditions

### Condition # 19867

**FOR: S-5 REDWOOD LANDFILL WITH GAS COLLECTION SYSTEM; A-18 WATER SPRAYS; A-50 LANDFILL GAS FLARE, AND A-51 LANDFILL GAS FLARE**

- b. For each type of material received at the landfill, clearly identify how the material will be used at this site (i.e. disposed of in the landfill directly, used as daily cover material, used as intermediate cover material, used in composting operations, sent to yard and green waste recycling operations, sent to other recycling operations, used for on-site road construction or surfacing, used for other construction purposes, sent to on-site stockpiles for later use, etc.). For material types that may be used for multiple purposes at this site, identify the amount of material used for each purpose.
- c. For each type of material received at the landfill, clearly identify whether the material is decomposable or inert. Inert materials are defined by Regulation 8-34-203. For the purposes of this condition, soils containing more than 50 ppm by weight of volatile organic compounds (VOC) or "contaminated soil" as defined in Regulation 8-40-205 are decomposable materials. Soils containing 50 ppm by weight VOC or less are inert materials.
- d. If cover materials are taken from on-site stockpiles, record on a daily basis the amount of material removed from the stockpiles and used as cover material (for each type of material).
- e. Summarize on a monthly basis: the total amount of all wastes accepted, the total amount of sewage sludge accepted, the total amount of accepted materials that were directly used as cover material, the amount of cover materials that were removed from on-site stockpiles, the total amount of materials used for cover, the total amount of decomposable cover materials, the total amount of decomposable wastes placed in the landfill, the total amount of non-decomposable wastes disposed of in the landfill, the total amount of decomposable materials placed in the landfill, and the total amount of all materials placed in the landfill.

The Permit Holder shall begin maintaining the above records by no later than December 1, 2002. These records shall be kept at site for at least 5 years from the date the data is entered and shall be made available to the District staff for inspection. (Basis: Regulations 2-1-301, 8-34-501, and 40 CFR 60.758)

6. The mean vehicle fleet weight for all off-site vehicles (excluding vehicles that are not transporting waste, recyclables, or construction related materials such as employee, contractor, or visitor vehicles) shall not exceed 15.4 tons. (Basis: Regulation 2-1-301)



## VI. Permit Conditions

### Condition # 19867

**FOR: S-5 REDWOOD LANDFILL WITH GAS COLLECTION SYSTEM; A-18 WATER SPRAYS; A-50 LANDFILL GAS FLARE, AND A-51 LANDFILL GAS FLARE**

7. The mean vehicle fleet weight for all on-site landfilling and construction related vehicles (bulldozers, scrapers, back hoes, compactors, road graders, loaders, dump trucks, soil trucks, water trucks, fuel trucks, or maintenance vehicles, etc.) shall not exceed 28.4 tons. (Basis: Regulation 2-1-301)
8. The total vehicle miles traveled (VMT) by the off-site vehicle fleet shall not exceed the following limits:
  - a. 875 VMT per day on gravel roads
  - b. 438 VMT per day on dirt roads
  - c. 50 VMT per day on paved roads
  - d. 273,000 VMT per calendar year on gravel roads
  - e. 136,500 VMT per calendar year on dirt roads
  - f. 15,600 VMT per calendar year on paved roads(Basis: Regulation 2-1-301)
9. The total vehicle miles traveled (VMT) by the on-site vehicle fleet shall not exceed the following limits:
  - a. 62 VMT per day (essentially all travel is assumed to occur on dirt roads)
  - b. 19,145 VMT per calendar year (essentially all travel is assumed to occur on dirt roads)(Basis: Regulation 2-1-301)
10. In order to demonstrate compliance with Parts 6-9, the Permit Holder shall maintain the following records in an APCO approved log book:
  - a. For each type of vehicle fleet (off-site vehicles and on-site construction equipment) maintain a list of all the types of vehicles in the fleet. For each vehicle type, record the empty vehicle weight, maximum load weight, and average vehicle weight (average of full and empty weights). This list shall be reviewed annually and updated whenever necessary to ensure that the list accurately reflects the types of vehicles that may be present at the landfill during any calendar year.
  - b. For the off-site vehicle fleet, record on a daily basis and summarize on a monthly basis: the number of vehicle trips (round trips to/from the landfill) for each type of vehicle in the fleet.

## VI. Permit Conditions

### Condition # 19867

**FOR: S-5 REDWOOD LANDFILL WITH GAS COLLECTION SYSTEM; A-18 WATER SPRAYS; A-50 LANDFILL GAS FLARE, AND A-51 LANDFILL GAS FLARE**

- c. For the on-site vehicle fleet, record on a daily basis and summarize on a monthly basis: the number of vehicle trips for each type of vehicle in the fleet. For construction vehicles like bulldozers or compactors that have no set travel route but instead make many small trips across the active face, the number of vehicle trips can be estimated from operating times and procedures or odometer readings and the maximum round trip travel distance (see subpart f. below). If no data is available for estimating vehicle trips, the vehicle trips shall be recorded as 1 vehicle trip per day per vehicle used during that day.
- d. At least once per calendar year, the Permit Holder shall calculate and record the mean vehicle fleet weight for each type of vehicle fleet. For each vehicle fleet, the mean vehicle fleet weight shall be calculated using the vehicle trip data for: (i) the day with the highest number of vehicle trips during the previous calendar year; and (ii) the day with the highest total amount of waste accepted during the previous calendar year. Mean vehicle fleet weights shall also be recalculated whenever new vehicle types are added to a vehicle fleet. The mean vehicle fleet weight (MVFW) is a weighted average calculated by multiplying the average vehicle weight for each vehicle type (AVWi) times the number of vehicle trips per day for that vehicle type (DVTi), summing  $AVWi * DVTi$  for all vehicle types, and dividing the resulting sum by the total number of vehicle trips for that day (DVT).
- e. For the off-site vehicle fleet, the Permit Holder shall determine (using odometer measurements, maps, or other appropriate means) the maximum round trip distance traveled on-site by each vehicle type in the fleet on gravel roads, dirt roads, and paved roads (VMT per round trip per vehicle type per road type). Alternatively, the Permit Holder may determine a maximum round trip distance per road type for one or more groups of vehicle types, if all vehicle types in the group travel essentially the same roads and distances. This distance shall be determined at least once per calendar year and whenever significant changes to on-site travel routes have occurred.

## VI. Permit Conditions

### Condition # 19867

**FOR: S-5 REDWOOD LANDFILL WITH GAS COLLECTION SYSTEM; A-18 WATER SPRAYS; A-50 LANDFILL GAS FLARE, AND A-51 LANDFILL GAS FLARE**

- f. For the on-site vehicle fleet, the Permit Holder shall determine (using odometer measurements, maps, or other appropriate means) the maximum round trip distance traveled by each vehicle type in the fleet on dirt roads (VMT per round trip per vehicle type). Alternatively, the Permit Holder may determine a maximum round trip distance per road type for one or more groups of vehicle types, if all vehicle types in the group travel essentially the same roads and distances. This distance shall be determined at least once per calendar year and whenever significant changes to travel routes have occurred.
- g. For each vehicle fleet type, the Permit Holder shall calculate and record the total vehicle miles traveled (VMT) per day on each type of road (dirt, gravel, and paved for off-site vehicles and dirt only for on-site vehicles) using the data recorded pursuant to subparts b., c., d., and f. The daily VMT per road type shall be summarized for each calendar month and for each calendar year.

The Permit Holder shall begin maintaining the above records by no later than December 1, 2002. These records shall be kept at site for at least 5 years from the date the data is entered and shall be made available to the District staff for inspection. (Basis: Regulations 2-1-301, 8-34-501, and 40 CFR 60.758)

- 11. Particulate emissions from any operation of the landfill shall be abated by A-18 Water Sprays in such a manner that visible dust emissions shall not exceed Ringelmann 1.0 or result in fallout on adjacent property in such quantities as to cause a public nuisance per Regulation 1-301. The Permit Holder shall meet the following minimum watering requirements:
  - a. On any dry operating days, water shall be applied to unpaved roads and parking areas at a rate of 0.5 gallons per square yard or more.
  - b. On any dry operating days, water shall be applied to unpaved roads at a frequency of at least once every three hours of operation.
  - c. On any dry operating days, water shall be applied to unpaved parking areas or infrequently traveled unpaved roads at least twice per day or at least once per every 150 vehicle trips (whichever is more frequent).
  - d. On any dry operating days, water shall be applied to the active landfill face, the active area of stockpiles, composting operations, or other dust prone areas at least twice per day.

## VI. Permit Conditions

### Condition # 19867

**FOR: S-5 REDWOOD LANDFILL WITH GAS COLLECTION SYSTEM; A-18 WATER SPRAYS; A-50 LANDFILL GAS FLARE, AND A-51 LANDFILL GAS FLARE**

- e. On any operating day when rain fall is not sufficient to prevent visible emissions, additional water shall be applied to any road, parking area, active face, stockpile, or dusty area as frequently as necessary to prevent visible emissions that persist for longer than 3 minutes in an hour.

In order to demonstrate compliance with this requirement, the Permit Holder shall maintain the following information in an APCO approved log book:

- f. Accurate maps of the facility showing the locations of all roads and parking areas at the facility (dirt, gravel, and paved roads shall be clearly distinguished), stockpiles, and active filling areas. The current travel routes for both off-site and on-site vehicle traffic and the water spray trucks shall be clearly indicated on the maps.
- g. Record the frequency of water spray applications (on gravel roads, dirt roads, stockpiles, the active face, and any other dust prone areas) for each operating day.

(Basis: Regulations 1-301, 2-1-301, and 6-301)

- \*12. If the plant receives two or more violation notices from the District for "Public Nuisance" in any consecutive 12 month period, the Permit Holder shall implement the following control measures, as applicable, or any other measures that the District deems necessary and/or appropriate, within the time period specified by the District. If requested by the District, the Permit Holder shall submit to the District a permit application to modify the Permit to Operate and/or these permit conditions, within 30 days of notification.

- a. Pave main haul roads and parking areas associated with the nuisance operation such as roads for landfilling, composting, recycling, or sludge handling operations.
- b. Add gravel or other aggregate based surfacing to dirt roads and parking areas that are associated with the nuisance operation.
- c. Use chemical suppressants on unpaved roads and unpaved parking areas that are associated with the nuisance operation.
- d. Increase the frequency of water application on unpaved roads, parking areas, the active face of the landfill, stockpiles, or any other dust prone areas that are associated with the nuisance operation.
- e. Use frequent sweeping and/or water flushing, during the dry season, on paved areas that are associated with the nuisance operation.

(Basis: Regulation 1-301)

## VI. Permit Conditions

### Condition # 19867

**FOR: S-5 REDWOOD LANDFILL WITH GAS COLLECTION SYSTEM; A-18 WATER SPRAYS; A-50 LANDFILL GAS FLARE, AND A-51 LANDFILL GAS FLARE**

- \*13. The Permit Holder may use non-hazardous contaminated materials containing no more than 50 ppm by weight of Volatile Organic Compounds (VOC) as daily or interim cover material, provided that these materials are properly handled and disposed of in accordance with this part and any other applicable requirements.
- a. Any metal laden materials (materials that have been contaminated with arsenic, asbestos, beryllium, cadmium, hexavalent chromium, nickel, copper, lead, mercury, selenium, or zinc) shall be properly handled at all times and shall be abated by appropriate dust mitigation measures including: the use of covers during on-site transport, the use of frequent water sprays during active handling (loading, unloading, spreading, etc.) of these materials, and the use of water sprays, covers, or chemical dust suppressants on inactive storage areas.
  - b. If metal laden materials are used as interim cover, the metal laden material shall be covered with a non-contaminated material such as clean soil or compacted green waste prior to subjecting the area to frequent vehicle or construction equipment traffic.
  - c. Metal laden materials shall not be used in the construction of unpaved roadways or parking lots.
- (Basis: Toxic Risk Management Policy)
14. The Permit Holder shall limit the quantity of VOC laden soil handled per year such that annual VOC emissions due to on-site handling, storage, disposal, or reuse of VOC laden soil (calculated in accordance with this part) shall not exceed 10,530 pounds per calendar year. VOC laden soil is any material that contains volatile organic compounds, as defined in Regulation 8-40-213, at a concentration of 50 ppm by weight or less. Soil containing more than 50 ppmw of VOC is considered to be "contaminated soil" and is subject to Part 15 instead of this part. Materials containing only non-volatile hydrocarbons and meeting the requirements of Regulation 8-40-113 are not subject to this part. In addition, the Permit Holder shall demonstrate compliance with Regulation 8-2-301 by randomly screening each lot of VOC laden soil for VOC surface emissions (in such a manner as to be representative of the entire lot and using the testing procedures outlined in Regulation 8-40-604) to show that each lot of VOC laden soil is not contaminated soil and could therefore not result in emissions in excess of 300 ppmv of total carbon. Soil presumed to be VOC laden soil that is found to have a surface VOC concentration greater than 50 ppmv shall be considered contaminated soil and will be subject to the requirements of Part 15 of these conditions.

## VI. Permit Conditions

### Condition # 19867

**FOR: S-5 REDWOOD LANDFILL WITH GAS COLLECTION SYSTEM; A-18 WATER SPRAYS; A-50 LANDFILL GAS FLARE, AND A-51 LANDFILL GAS FLARE**

In order to demonstrate compliance with this condition, the Permit Holder shall maintain the following records in a District approved log.

- a. Record a lot number for each shipment of VOC laden soil, as described in Part 15m.
- b. Record the soil delivery date, the testing date for the VOC surface emissions screening test, the name and affiliation of the person conducting the screening test, and the results of the screening test for each lot of VOC laden soil accepted at the site.
- c. Maintain certifications that the Regulation 8-40-604 procedures were followed for each screening test.
- d. Record on a monthly basis the amount of VOC laden soil handled at the landfill. This total amount (in units of pounds per day) is Q in the equation in subpart f below.
- e. Record on a monthly basis the VOC content of all soils handled at the landfill. This VOC Content (C in the equation below) should be expressed as parts per million by weight as total carbon (or C1).
- f. Calculate and record on a monthly basis the VOC Emission Rate (E) using the following equation:  $E = Q * C / 1E6$
- g. Summarize emission rates on a calendar year basis.

All records shall be maintained on site or shall be made readily available to District staff upon request for at least 5 years from the date of entry.

(Basis: Offsets and Regulations 8-2-301, 8-40-205, and 8-40-604)

15. Handling Procedures for Soil Containing Volatile Organic Compounds:
  - a. The procedures listed below in subparts b-l do not apply if the following criteria are satisfied. However, the record keeping requirements in subpart m below are applicable.
    - i. The Permit Holder has appropriate documentation demonstrating that either the organic content of the soil or the organic concentration above the soil is below the "contaminated" level (as defined in Regulation 8, Rule 40, Sections 205, 207, and 211). The handling of soil containing VOCs in concentrations below the "contaminated" level is subject to Part 14 above.
    - ii. The Permit Holder has no documentation to prove that soil is not contaminated, but source of the soil is known and there is no reason to suspect that the soil might contain organic compounds.

## VI. Permit Conditions

### Condition # 19867

**FOR: S-5 REDWOOD LANDFILL WITH GAS COLLECTION SYSTEM; A-18 WATER SPRAYS; A-50 LANDFILL GAS FLARE, AND A-51 LANDFILL GAS FLARE**

- b. The Permit Holder shall provide notification to the Compliance and Enforcement Division of the Permit Holder's intention to accept contaminated soil at the facility at least 24 hours in advance of receiving the contaminated soil. The Permit Holder shall provide an estimate of the amount of contaminated soil to be received, the degree of contamination (range and average VOC Content), and the type or source of contamination.
- c. Any soil received at the facility that is known or suspected to contain volatile organic compounds (VOCs) shall be handled as if the soil were contaminated, unless the Permit Holder receives test results proving that the soil is not contaminated. To prove that the soil is not contaminated, the Permit Holder shall collect soil samples in accordance with Regulation 8-40-601 within 24 hours of receipt of the soil by the facility. The organic content of the collected soil samples shall be determined in accordance with Regulation 8-40-602.
  - i. If these test results indicate that the soil is still contaminated or if the soil was not sampled within 24 hours of receipt by the facility, the Permit Holder must continue to handle the soil in accordance with the procedures subparts d-l below, until the soil has completed treatment or has been placed in a final disposal location and adequately covered. Storing soil in a temporary stockpile or pit is not considered treatment. Co-mingling, blending, or mixing of soil lots is not considered treatment.
  - ii. If these test results indicate that the soil - as received at the facility - has an organic content of 50 ppmw or less, then the soil may be considered to be not contaminated and need not be handled in accordance with the procedures listed in subparts d-l below, but shall be handled in accordance with Part 14 above.
- d. Any contaminated soil received at the facility shall be clearly identified as contaminated soil, shall be handled in accordance with subparts e-l below, and shall be segregated from non-contaminated soil. Contaminated soil lots may not be co-mingled, blended, or otherwise mixed with non-contaminated soil lots prior to treatment, reuse, or disposal. Mixing soil lots in an attempt to reduce the overall concentration of the contaminated soil or to circumvent any requirements or limits is strictly prohibited.

## VI. Permit Conditions

### Condition # 19867

#### **FOR: S-5 REDWOOD LANDFILL WITH GAS COLLECTION SYSTEM; A-18 WATER SPRAYS; A-50 LANDFILL GAS FLARE, AND A-51 LANDFILL GAS FLARE**

- e. On-site handling of contaminated soil shall be limited to no more than 2 on-site transfers per soil lot. For instance, unloading soil from off-site transport vehicles into a temporary storage pile is considered one transfer. Moving soil from a temporary storage to a staging area is considered one transfer. Moving soil from a temporary storage pile to a final disposal site is one transfer. Moving soil from a staging area to a final disposal site is one transfer. Therefore, unloading soil from off-site transport into a temporary storage pile and then moving the soil from that temporary storage pile to the final disposal site is allowed. Unloading soil from off-site transport into a staging area and then moving the soil from that staging area to the final disposal site is allowed. However, unloading soil from off-site transport to a temporary storage pile, moving this soil to a staging area, and then moving the soil again to a final disposal site is 3 on-site transfers and is not allowed.
- f. All contaminated soil shall be either treated, deposited in a final disposal site, or transported off-site for treatment, within 90 days of receipt at the facility.
- g. The total amount of contaminated soil disposed of at this site shall not exceed 6240 tons during any calendar year. The Permit Holder shall apply for a change of conditions before accepting any soil containing more than 100 ppm by weight of VOC. (Basis: Offsets)
- h. All active storage piles shall meet the requirements of Regulation 8-40-304 by using water sprays, vapor suppressants or approved coverings to minimize emissions. The exposed surface area of any active storage pile (including the active face at a landfill) shall be limited to 6000 ft<sup>2</sup>. The types of storage piles that may become subject to these provisions include (but are not limited to) truck unloading areas, staging areas, temporary stockpiles, soil on conveyors, bulldozers or trucks, the active face of a landfill, or other permanent storage pile at the final disposal location.



## VI. Permit Conditions

### Condition # 19867

#### **FOR: S-5 REDWOOD LANDFILL WITH GAS COLLECTION SYSTEM; A-18 WATER SPRAYS; A-50 LANDFILL GAS FLARE, AND A-51 LANDFILL GAS FLARE**

- i. All inactive storage piles shall meet the requirements of Regulation 8-40-305 including the requirement to cover contaminated soil during periods of inactivity longer than one hour. The types of storage piles that may become subject to these provisions include (but are not limited to) soil on trucks or other on-site equipment, staging areas, temporary stockpiles, and the permanent storage pile at the final disposal location. District approved coverings for inactive storage piles include continuous heavy-duty plastic sheeting (in good condition, joined at the seams, and securely anchored) or encapsulating vapor suppressants (with re-treatment as necessary to prevent emissions).
- j. The Permit Holder must:
  - i. Keep contaminated soil covered with continuous heavy-duty plastic sheeting (in good condition, joined at the seams, and securely anchored) whenever soil is to be stored in temporary stockpiles or during on-site transport in trucks. Soil in trucks shall not be left uncovered for more than 1 hour.
  - ii. Establish a tipping area for contaminated soils near the active face that is isolated from the tipping area for other wastes.
  - iii. Spray contaminated soil with water or vapor suppressant immediately after dumping the soil from a truck at the tipping area.
  - iv. Ensure that all contaminated soil is transferred from the tipping area to the active face immediately after spraying with water or vapor suppressant.
  - v. Ensure that contaminated soil in the tipping area is not disturbed by subsequent trucks. Trucks shall not drive over contaminated soil in the tipping area or track contaminated soil out of the tipping area on their wheels.
  - vi. Spray contaminated soil on the active face with water or vapor suppressant (to keep the soil visibly moist) until the soil can be covered with an approved covering.
  - vii. Limit the area of exposed soil on the active face to no more than 6000 ft<sup>2</sup>.
  - viii. Ensure that contaminated soil spread on the active face is completely covered on all sides with one of the following approved coverings: at least 6 inches of clean compacted soil, at least 12 inches of compacted garbage, or at least 12 inches of compacted green waste.

## VI. Permit Conditions

### Condition # 19867

#### **FOR: S-5 REDWOOD LANDFILL WITH GAS COLLECTION SYSTEM; A-18 WATER SPRAYS; A-50 LANDFILL GAS FLARE, AND A-51 LANDFILL GAS FLARE**

- ix. Ensure that covering of soil on the active face is completed within one hour of the time that the soil was first dumped from a truck at the tipping area.
  
- k. Contaminated soil shall not be used as daily, intermediate, or final cover material for landfill waste operations unless the requirements of Regulation 8, Rule 40, Sections 116 or 117 have been satisfied.
  
- l. Contaminated soil is considered to be a decomposable solid waste pursuant to Regulation 8, Rule 34. All contaminated soil disposed of at a site shall be included in any calculations of the amount of decomposable waste in place for annual reporting requirements or for purposes of Regulation 8-34-111 or 8-34-304.
  
- m. The Permit Holder shall keep the following records for each lot of soil received, in order to demonstrate on-going compliance with the applicable provisions of Regulation 8, Rule 40 and this part.
  - i. For all soil received by the facility (including soil with no known contamination), record the arrival date at the facility, the soil lot number, the amount of soil in the lot, the organic content or organic concentration of the lot (if known), the type of contamination (if any), and keep copies of any test data or other information that documents whether the soil is contaminated (as defined in 8-40-205) or not contaminated, with what, and by how much.
  - ii. If the soil is tested for organic content after receipt by the facility, a report with the sampling date, test results, and the date results were received.
  - iii. For all on-site handling of contaminated soil, use a checklist or other approved method to demonstrate that appropriate procedures were followed during all on-site handling activities. One checklist shall be completed for each day and for each soil lot (if multiple lots are handled per day).
  - iv. For soil aerated in accordance with 8-40-116 or 117 record the soil lot number, the amount of soil in the lot, the organic content, the final placement date, the final placement location, and describe how the soil was handled or used on-site.

## VI. Permit Conditions

### Condition # 19867

**FOR: S-5 REDWOOD LANDFILL WITH GAS COLLECTION SYSTEM; A-18 WATER SPRAYS; A-50 LANDFILL GAS FLARE, AND A-51 LANDFILL GAS FLARE**

- v. For final disposal at a landfill, record on a daily basis the soil lot number, the amount of soil placed in the landfill, the disposal date, and the disposal location.
- vi. Summarize the total amount of contaminated soil disposed of at this site on a monthly and calendar year basis to demonstrate compliance with subpart g.

All records shall be retained for at least 5 years from the date of entry and shall be made available for District inspection upon request.

(Basis: Offsets and Regulation 8-40-301, 8-40-304 and 8-40-305)

16. During all times that the landfill gas collection system is operating, all collected landfill gas shall be vented to either the A-50 Landfill Gas Flare alone or A-50 and the S-50 Leachate Vaporator. Upon start-up of the A-51 Landfill Gas Flare, collected landfill gas shall be vented to one of the following control system configurations: A-50 and A-51 operating concurrently; A-51 operating alone; A-50, A-51, and S-50 operating concurrently; or A-51 and S-50 operating concurrently. Up to 5 MM BTU/hour (approximately 167 scfm) of landfill gas may be diverted from a flare and used as fuel at the S-50 Leachate Vaporator. In order to assure compliance with this condition, the A-50 and A-51 Landfill Gas Flares shall be equipped with local and remote alarms and auto restart capabilities.

(Basis: 8-34-301.1, 8-34-301.3, and 40 CFR 60.752(b)(2)(iii))

17. The landfill gas collection system described in subpart a below shall be operated continuously. Wells shall not be shut off, disconnected, or removed from operation without written authorization from the District, unless the Permit Holder complies with all applicable requirements of Regulation 8, Rule 34, Sections 113, 116, 117, and 118. The Permit Holder shall apply for and receive an Authority to Construct before modifying the landfill gas collection system described in subparts a-b below. Increasing or decreasing the number of wells or collectors, or significantly changing the length of collectors or the locations of wells or collectors are modifications that are subject to the Authority to Construct requirement.

- a. The Permit Holder has been issued a Permit to Operate for the landfill gas collection system components listed below. Well and collector locations, depths, and lengths are as described in detail in Permit Application # 9565.

Required Components

## VI. Permit Conditions

Total Number of Vertical Wells:	97
Total Number of Horizontal Collectors:	11

## VI. Permit Conditions

### Condition # 19867

**FOR: S-5 REDWOOD LANDFILL WITH GAS COLLECTION SYSTEM; A-18 WATER SPRAYS; A-50 LANDFILL GAS FLARE, AND A-51 LANDFILL GAS FLARE**

- b. The Permit Holder has been issued an Authority to Construct for the landfill gas collection system components listed below. Specific well and collector locations, depths, and lengths of associated piping are as described in detail in Permit Application # 9565.

	Minimum	Maximum
Install New Vertical Wells:	0	58
Install New Horizontal Collectors	0 feet	4000 feet
Decommission Horizontal Collectors	0 feet	11

Wells installed or shutdown pursuant to subpart b shall be added to or removed from subpart a in accordance with the procedures identified in Regulations 2-6-414 or 2-6-415. The Permit Holder shall maintain records of the initial operation date for each new well.

(Basis: Regulations 2-1-301, 8-34-301.1, 8-34-304, 8-34-305, and 2-6-413)

18. If a gas characterization test indicates that this site's landfill gas contains organic compounds in excess of any of the concentrations listed in Parts 18a or 18b below, then the Permit Holder shall submit an application for a Change of Permit Conditions, within no later than 30 days from receipt of the test results.

- a. Total Non-Methane Organic Compounds: 750 ppmv  
 (calculated as hexane equivalent)  
 (Basis: Cumulative Increase)

- \*b. For toxic air contaminants (TACs):

<u>Compound</u>	<u>Concentration</u>
Acrylonitrile	280 ppbv
Benzene	340 ppbv
Carbon Tetrachloride	70 ppbv
Chloroform	70 ppbv
1,4 Dichlorobenzene	400 ppbv
1,1 Dichloroethane	150 ppbv
Ethylene Dibromide	70 ppbv
Ethylene Dichloride	70 ppbv
Methylene Chloride	320 ppbv
Perchloroethylene	450 ppbv
1,1,2,2 Tetrachloroethane	70 ppbv
Trichloroethylene	250 ppbv
Vinyl Chloride	880 ppbv

(Basis: Toxic Risk Management Policy)

## VI. Permit Conditions

### Condition # 19867

#### **FOR: S-5 REDWOOD LANDFILL WITH GAS COLLECTION SYSTEM; A-18 WATER SPRAYS; A-50 LANDFILL GAS FLARE, AND A-51 LANDFILL GAS FLARE**

- c. The concentration of total reduced sulfur compounds (TRS) in collected landfill gas shall not exceed a peak of 1300 ppmv (calculated as H<sub>2</sub>S) and shall not exceed an annual average of 425 ppmv (calculated as H<sub>2</sub>S). The peak and annual average TRS concentrations shall be measured and calculated in accordance with Parts 31a and 31b.  
(Basis: Cumulative Increase, RACT, and Regulation 9-1-302)
19. The A-50 and A-51 Landfill Gas Flares shall be fired on landfill gas and may also be used to abate leachate vapors from the S-50 Leachate Vaporator. (Basis: RACT and Regulation 2-2-112)
20. The total combined throughput of landfill gas (with an HHV of 500 BTU/scf) to the A-50 Landfill Gas Flare and the A-51 Landfill Gas Flare shall not exceed 1,490,000,000 scf during any consecutive 12-month period and shall not exceed 5,760,000 scf during any one day. In order to demonstrate compliance with this condition, the A-50 and A-51 Flares shall be equipped with a one or more properly operating continuous gas flow meters. (Basis: Cumulative Increase, 40 CFR 60.756(b)(2)(i))
21. [deleted]
22. The temperature in the combustion zone of each flare shall be maintained at the minimum temperature listed below, averaged over any 3-hour period. In order to demonstrate compliance with this condition, A-50 and A-51 shall each be equipped with a continuous temperature monitor and recorder. If a source test demonstrates compliance with all applicable requirements at a different temperature, the APCO may revise these temperature limits, in accordance with the procedures identified in Regulation 2-6-414 or 2-6-415, based on the following criteria. The minimum combustion zone temperature for the flare shall be equal to the average combustion zone temperature determined during the most recent complying source test minus 50 degrees F, provided that the minimum combustion zone temperature is not less than 1400 degrees F.
  - a. The minimum combustion zone temperature for A-50 is 1475 degrees F, averaged over any 3-hour period.
  - b. Upon start-up of A-51, the minimum combustion zone temperature for A-51 is 1400 degrees F, averaged over any 3-hour period.(Basis: Toxic Risk Management Policy, Regulations 8-34-301.3 and 8-34-501.3, and 40 CFR 60.756(b)(1))

## VI. Permit Conditions

### Condition # 19867

**FOR: S-5 REDWOOD LANDFILL WITH GAS COLLECTION SYSTEM; A-18 WATER SPRAYS; A-50 LANDFILL GAS FLARE, AND A-51 LANDFILL GAS FLARE**

23. The A-50 and A-51 Landfill Gas Flares shall comply with the NMOC emission limit in Regulation 8-34-301.3.  
(Basis: Cumulative Increase, 8-34-301.3, and 40 CFR 60.752(b)(2)(iii)(B))
- \*24. The A-50 and A-51 Landfill Gas Flares shall each achieve a minimum destruction efficiency of 83% by weight for any EPA Hazardous Air Pollutants or any District toxic compounds that are determined to be present in the landfill gas or leachate vapors. (Basis: Toxic Risk Management Policy)
25. Nitrogen oxides (NO<sub>x</sub>) emissions from each enclosed flare (A-50 and A-51) shall not exceed 0.06 pounds of NO<sub>x</sub>, calculated as NO<sub>2</sub>, per million BTU. Compliance with this emission limit may be demonstrated by not exceeding the following flue gas concentration limit: 15 ppmv of NO<sub>x</sub>, corrected to 15% oxygen, dry basis.  
(Basis: RACT and Offsets)
26. Carbon monoxide (CO) emissions from each enclosed flare (A-50 and A-51) shall not exceed 0.30 pounds of CO per million BTU. Compliance with this emission limit may be demonstrated by not exceeding the following flue gas concentration limit: 123 ppmv of CO, corrected to 15% oxygen, dry basis.  
(Basis: RACT and Cumulative Increase)
27. [deleted]
28. [deleted]
29. The Permit Holder shall maintain records of all planned and unanticipated shut downs of the A-50 and A-51 Flares and of any temperature excursions. The records shall include the date, time, duration, and reason for any shut down or excursion. Any unanticipated shut downs or temperature excursions shall be reported to the Enforcement Division immediately. All inspection and maintenance records, records of shut downs and excursions, gas flow records, temperature records, analytical results, source test results, and any other records required to demonstrate compliance with the above permit conditions, Regulation 8 Rule 34, or 40 CFR Part 60 Subpart WWW shall be retained on site for a minimum of five years and shall be made available to District staff upon request.  
(Basis: 2-6-501, 8-34-501, 40 CFR 60.758)

## VI. Permit Conditions

### Condition # 19867

**FOR: S-5 REDWOOD LANDFILL WITH GAS COLLECTION SYSTEM; A-18 WATER SPRAYS; A-50 LANDFILL GAS FLARE, AND A-51 LANDFILL GAS FLARE**

30. In order to demonstrate compliance with Parts 23, 25, and 26 above, Regulation 8, Rule 34, Sections 301.3 and 412, and 40 CFR 60.8 and 60.752(b)(2)(iii)(B), the Permit Holder shall ensure that a District approved source test is conducted annually on the A-50 Landfill Gas Flare and the A-51 Landfill Gas Flare. Each annual source test shall determine the following:
- a. landfill gas flow rate to the flare (dry basis);
  - b. concentrations (dry basis) of carbon dioxide (CO<sub>2</sub>), nitrogen (N<sub>2</sub>), oxygen (O<sub>2</sub>), total hydrocarbons (THC), methane (CH<sub>4</sub>), and total non-methane organic compounds (NMOC) in the landfill gas;
  - c. stack gas flow rate from the flare (dry basis);
  - d. concentrations (dry basis) of NO<sub>x</sub>, CO, NMOC, and O<sub>2</sub> in the flare stack gas;
  - e. NMOC destruction efficiency achieved by the flare;
  - f. NO<sub>x</sub> and CO emission rates from the flare in units of pounds per MM BTU,
  - g. average combustion zone temperature in the flare during the test period.
- The first source test for A-51 shall be conducted no later than 60 days after the initial start-up date for A-51. Each annual source test shall be conducted no earlier than 9 months and no later than 12 months after the previous annual source test. The Source Test Section of the District shall be contacted to obtain approval of the source test procedures at least 14 days in advance of each source test. The Source Test Section shall be notified of the scheduled test date at least 7 days in advance of each source test. The source test report shall be submitted to the Compliance and Enforcement Division and the Source Test Section within 60 days of the test date.
- (Basis: Cumulative Increase, Toxic Risk Management Policy, RACT, Offsets, Regulations 8-34-301.3, 8-34-412, 40 CFR 60.8 and 40 CFR 60.752(b)(2)(iii)(B))



## VI. Permit Conditions

### Condition # 19867

**FOR: S-5 REDWOOD LANDFILL WITH GAS COLLECTION SYSTEM; A-18 WATER SPRAYS; A-50 LANDFILL GAS FLARE, AND A-51 LANDFILL GAS FLARE**

31. Landfill Gas Testing:

- a. The Permit Holder shall conduct a characterization of the landfill gas on a quarterly basis with one test concurrent with one of the annual source tests required by Part 30 above. The landfill gas sample shall be drawn from the main landfill gas header. Each quarterly landfill gas sample shall be analyzed for the sulfur compounds listed below. Once per year (concurrent with a Part 30 annual source test) the landfill gas shall be analyzed for all the organic and sulfur compounds listed below. All concentrations shall be reported on a dry basis. The laboratory analysis report for the annual organic and sulfur compound gas characterization test shall be included with the Part 30 source test report and shall be submitted to the Compliance and Enforcement Division and the Source Test Section within 60 days of the test date. (Basis: Toxic Risk Management Policy and Regulations 8-34-412 and 9-1-302)

Organic Compounds

acrylonitrile  
benzene  
carbon tetrachloride  
chlorobenzene  
chlorodifluoromethane  
chloroethane  
chloroform  
1,1 dichloroethane  
1,1 dichlorethene  
1,2 dichlorethene  
1,4 dichlorbenzene  
dichlorodifluoromethane  
dichlorofluoromethane  
ethylbenzene

Organic Compounds

ethylene dibromide  
fluorotrichloromethane  
hexane  
isopropyl alcohol  
methyl ethyl ketone  
methylene chloride  
perchloroethylene  
toluene  
1,1,1 trichloroethane  
1,1,2,2 tetrachloroethane  
trichloroethylene  
vinyl chloride  
xylenes

Sulfur Compounds

carbon disulfide  
carbonyl sulfide  
dimethyl sulfide  
ethyl mercaptan  
hydrogen sulfide  
methyl mercaptan

## VI. Permit Conditions

### Condition # 19867

**FOR: S-5 REDWOOD LANDFILL WITH GAS COLLECTION SYSTEM; A-18 WATER SPRAYS; A-50 LANDFILL GAS FLARE, AND A-51 LANDFILL GAS FLARE**

- b. Once per week, beginning no later than March 31, 2005, the Permit Holder shall analyze the landfill gas for hydrogen sulfide (H<sub>2</sub>S) concentration using a Draeger tube to further demonstrate compliance with Part 18c and Regulation 9-1-302. The landfill gas sample shall be drawn from the main landfill gas header. The Permit Holder shall follow the manufacturer's procedures for using the Draeger tube and interpreting the results. The total reduced sulfur (TRS) content of the landfill gas shall be calculated using the average ratio of TRS/H<sub>2</sub>S for this site according to the following equation:  $TRS = 1.015 * H_2S$  measured by Draeger tube. The Permit Holder shall maintain records of all Draeger tube test dates and test results and shall summarize the average H<sub>2</sub>S concentrations and the calculated TRS content of the landfill gas on a quarterly basis. Each Draeger tube test result (after conversion to TRS content) and the quarterly laboratory analysis in Part 31a shall be compared to the Peak TRS Limit in Part 18c. On a rolling quarterly basis, the Permit Holder shall determine the annual average TRS content for comparison to the Annual Average TRS Limit in Part 18c. (Basis: Cumulative Increase, RACT, and Regulation 9-1-302).
32. The annual report required by BAAQMD Regulation 8-34-411 shall be submitted in two semi-annual increments. The reporting period for the first increment of the Regulation 8-34-411 annual report that is submitted subsequent to the issuance of the MFR Permit for this site shall be from December 1, 2003 through April 30, 2004. This first increment report shall be submitted by May 31, 2004. The reporting periods and report submittal due dates for all subsequent increments of the Regulation 8-34-411 report shall be synchronized with the reporting periods and report submittal due dates for the semi-annual MFR Permit monitoring reports that are required by Section I.F of the MFR Permit for this site. A single report may be submitted to satisfy the requirements of Section I.F, Regulation 8-34-411, and 40 CFR Part 63.1980(a), provided that all items required by each applicable reporting requirement are included in the single report. (Basis: Regulation 8-34-411 and 40 CFR Part 63.1980(a))

## VII. APPLICABLE LIMITS & COMPLIANCE MONITORING REQUIREMENTS

This section has been included to summarize the applicable emission limits contained in Section IV, Source-Specific Applicable Requirements, of this permit. The following tables show the relationship between each emission limit and the associated compliance monitoring provisions, if any. The monitoring frequency column indicates whether periodic (P) or continuous (C) monitoring is required. For periodic monitoring, the frequency of the monitoring has also been shown using the following codes: annual (A), quarterly (Q), monthly (M), weekly (W), daily (D), hourly (H), or on an event basis (E). No monitoring (N) has been required if the current applicable rule or regulation does not require monitoring, and the operation is unlikely to deviate from the applicable emission limit based upon the nature of the operation.

**Table VII – A**  
**Applicable Limits and Compliance Monitoring Requirements**  
 S-2 SEWAGE SLUDGE STORAGE, MAIN POND

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
Total Carbon Emissions	BAAQMD 8-2-301	Y		15 pounds/day or 300 ppm, dry basis	None	N	N/A
H <sub>2</sub> S	BAAQMD 9-2-301	N		Property Line Ground Level Limits: ≤ 0.06 ppm, averaged over 3 minutes and ≤ 0.03 ppm, averaged over 60 minutes	None	N	N/A

## VII. Applicable Limits and Compliance Monitoring Requirements

**Table VII – B**  
**Applicable Limits and Compliance Monitoring Requirements**  
 S-5 REDWOOD LANDFILL WITH GAS COLLECTION SYSTEM,  
 A-50 LANDFILL GAS FLARE, AND A-51 LANDFILL GAS FLARE

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
Collection System Installation Dates	BAAQMD 8-34-304.1	Y		For Inactive/Closed Areas: collection system components must be installed and operating by 2 years + 60 days after initial waste placement	BAAQMD 8-34-501.7 and 501.8 and BAAQMD Condition # 19867, Parts 5 and 17b	P/E	Records
Collection System Installation Dates	BAAQMD 8-34-304.2	Y		For Active Areas: Collection system components must be installed and operating by 5 years + 60 days after initial waste placement	BAAQMD 8-34-501.7 and 501.8 and BAAQMD Condition # 19867, Parts 5 and 17b	P/E	Records
Collection System Installation Dates	BAAQMD 8-34-304.3	Y		For Any Uncontrolled Areas or Cells: collection system components must be installed and operating within 60 days after the uncontrolled area or cell accumulates 1,000,000 tons of decomposable waste	BAAQMD 8-34-501.7 and 501.8 and BAAQMD Condition # 19867, Parts 5 and 17b	P/E	Records
Collection System Installation Dates	40 CFR 60.753 (a)(2) and 60.755 (b)(2)	Y		For Inactive/Closed Areas: collection system components must be installed and operating by 2 years + 60 days after initial waste placement	40 CFR 60.758(a), (d)(1) and (d)(2), and 60.759(a)(3)	P/E	Records

## VII. Applicable Limits and Compliance Monitoring Requirements

**Table VII – B**  
**Applicable Limits and Compliance Monitoring Requirements**  
 S-5 REDWOOD LANDFILL WITH GAS COLLECTION SYSTEM,  
 A-50 LANDFILL GAS FLARE, AND A-51 LANDFILL GAS FLARE

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
Collection System Installation Dates	40 CFR 60.753 (a)(1) and 60.755 (b)(1)	Y		For Active Areas: Collection system components must be installed and operating by 5 years + 60 days after initial waste placement	40 CFR 60.758(a), (d)(1) and (d)(2)	P/E	Records
Gas Flow	BAAQMD 8-34-301 and 301.1 and BAAQMD Condition # 19867, Parts 16 and 17	Y		Landfill gas collection system shall operate continuously and all collected gases shall be vented to a properly operating control system	BAAQMD 8-34-501.1, 8-34-501.2, 8-34-501.10, 8-34-508, and BAAQMD Condition # 19867, Parts 20 and 29	C  P/D	Gas Flow Meter and Recorder (every 15 minutes), and Records of Landfill Gas Flow Rates, Collection and Control Systems Downtime, and Collection System Components

## VII. Applicable Limits and Compliance Monitoring Requirements

**Table VII – B**  
**Applicable Limits and Compliance Monitoring Requirements**  
 S-5 REDWOOD LANDFILL WITH GAS COLLECTION SYSTEM,  
 A-50 LANDFILL GAS FLARE, AND A-51 LANDFILL GAS FLARE

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
Gas Flow	40 CFR 60.753(a) and (e)	Y		Operate a Collection System in each area or cell and vent all collected gases to a properly operating control system	40 CFR 60.756(b)(2) (i or ii) and 60.758(c)(2)	C or P/M	Gas Flow Meter and Recorder (every 15 minutes) or Monthly Inspection of Bypass Valve and Lock and Records
Gas Flow	BAAQMD 8-34-301, 301.1, 301.3, and 301.4, and BAAQMD Condition # 19867, Parts 16	Y		Vent all collected gases to a properly operating control system and operate control system continuously.	BAAQMD 8-34-501.10 and 508 and BAAQMD Condition # 19867, Parts 16 and 29	C  P/E	Gas Flow Meter and Recorder (every 15 minutes); Alarms; and Records
Gas Flow	40 CFR 60.752 (b)(2)(iii) and 60.753(e) and (f)	Y		Vent all collected gases to a properly operating control system and operate control system at all times when gas is vented to it	40 CFR 60.756(b)(2) (i or ii) and 60.758(c)(2)	C or P/M	Gas Flow Meter and Recorder (every 15 minutes) or Monthly Inspection of Bypass Valve and Lock and Records

## VII. Applicable Limits and Compliance Monitoring Requirements

**Table VII – B**  
**Applicable Limits and Compliance Monitoring Requirements**  
 S-5 REDWOOD LANDFILL WITH GAS COLLECTION SYSTEM,  
 A-50 LANDFILL GAS FLARE, AND A-51 LANDFILL GAS FLARE

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
Landfill Gas Through-put	BAAQMD Condition # 19867, Part 20	Y		≤ 5,760,000 scf per day and ≤ 1,490,000,000 scf per 12-month period (applies to A-50 and A-51 combined)	BAAQMD Condition # 19867, Parts 20 and 29	C	Gas Flow Meter and Recorder
Collection and Control Systems Shutdown Time	BAAQMD 8-34-113.2	Y		240 hours per year and 5 consecutive days	BAAQMD 8-34-501.1	P/D	Operating Records
Collection System Startup Shutdown or Malfunction	40 CFR 60.755(e)	Y		5 days per event	40 CFR 60.7(b), 60.757(f)(2) and (f)(4)	P/D	Operating Records (all occurrences and duration of each)
Control System Startup Shutdown or Malfunction	40 CFR 60.755(e)	Y		1 hour per event	40 CFR 60.7(b), 60.757(f)(2) and (f)(3)	P/D	Operating Records (all occurrences and duration of each)
Startup Shutdown or Malfunction Procedures	40 CFR 63.6(e)	Y		Minimize Emissions by Implementing SSM Plan	40 CFR 63.1980(a-b)	P/E	Records (all occurrences, duration of each, corrective actions)

## VII. Applicable Limits and Compliance Monitoring Requirements

**Table VII – B**  
**Applicable Limits and Compliance Monitoring Requirements**  
 S-5 REDWOOD LANDFILL WITH GAS COLLECTION SYSTEM,  
 A-50 LANDFILL GAS FLARE, AND A-51 LANDFILL GAS FLARE

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
Periods of Inoperation for Para-metric Monitors	BAAQMD 1-523.2	Y		15 consecutive days per incident and 30 calendar days per 12-month period	BAAQMD 1-523.4	P/D	Operating Records for All Parametric Monitors (for gas flow and temperature monitors)
Continuous Monitors	40 CFR 60.13(e)	Y		Requires Continuous Operation except for breakdowns, repairs, calibration, and required span adjustments	40 CFR 60.7(b)	P/D	Operating Records for All Continuous Monitors (for gas flow and temperature monitors)
Wellhead Pressure	BAAQMD 8-34-305.1	Y		< 0 psig	BAAQMD 8-34-414, 501.9 and 505.1	P/M	Monthly Inspection and Records
Wellhead Pressure	40 CFR 60.753(b)	Y		< 0 psig	40 CFR 60.755(a)(3), 60.756(a)(1), and 60.758(c) and (e)	P/M	Monthly Inspection and Records
Temperature of Gas at Wellhead	BAAQMD 8-34-305.2	Y		< 55 °C	BAAQMD 8-34-414, 501.9 and 505.2	P/M	Monthly Inspection and Records



## VII. Applicable Limits and Compliance Monitoring Requirements

**Table VII – B**  
**Applicable Limits and Compliance Monitoring Requirements**  
 S-5 REDWOOD LANDFILL WITH GAS COLLECTION SYSTEM,  
 A-50 LANDFILL GAS FLARE, AND A-51 LANDFILL GAS FLARE

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
Temperature of Gas at Wellhead	40 CFR 60.753(c)	Y		< 55 °C	40 CFR 60.755(a)(5), 60.756(a)(3), and 60.758(c) and (e)	P/M	Monthly Inspection and Records
Gas Concentrations at Wellhead	BAAQMD 8-34-305.3 or 305.4	Y		N <sub>2</sub> < 20% OR O <sub>2</sub> < 5%	BAAQMD 8-34-414, 501.9 and 505.3 or 505.4	P/M	Monthly Inspection and Records
Gas Concentrations at Wellhead	40 CFR 60.753(c)	Y		N <sub>2</sub> < 20% OR O <sub>2</sub> < 5%	40 CFR 60.755(a)(5), 60.756(a)(2), and 60.758(c) and (e)	P/M	Monthly Inspection and Records
Well Shutdown Limits	BAAQMD 8-34-116.2	Y		No more than 5 wells at a time or 10% of total collection system, whichever is less	BAAQMD 8-34-116.5 and 501.1	P/D	Records
Well Shutdown Limits	BAAQMD 8-34-116.3	Y		24 hours per well	BAAQMD 8-34-116.5 and 501.1	P/D	Records
Well Shutdown Limits	BAAQMD 8-34-117.4	Y		No more than 5 wells at a time or 10% of total collection system, whichever is less	BAAQMD 8-34-117.6 and 501.1	P/D	Records
Well Shutdown Limits	BAAQMD 8-34-117.5	Y		24 hours per well	BAAQMD 8-34-117.6 and 501.1	P/D	Records

## VII. Applicable Limits and Compliance Monitoring Requirements

**Table VII – B**  
**Applicable Limits and Compliance Monitoring Requirements**  
 S-5 REDWOOD LANDFILL WITH GAS COLLECTION SYSTEM,  
 A-50 LANDFILL GAS FLARE, AND A-51 LANDFILL GAS FLARE

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
Total Carbon Emissions	BAAQMD 8-2-301	Y		15 pounds/day or 300 ppm, dry basis (applies to soil containing $\leq 50$ ppmw of VOC during aeration or use as cover)	BAAQMD Condition # 19867, Part 14	P/E	Soil or Surface VOC Analysis and Records
Volatile Organic Compound (VOC) Emissions	BAAQMD Condition # 19867, Part 14	Y		10,530 pounds per calendar year (applies to soil containing $\leq 50$ ppmw of VOC during aeration or use as cover)	BAAQMD Condition # 19867, Part 14	P/E, M	Soil or Surface VOC Analysis and Records
TOC (Total Organic Compounds Plus Methane)	BAAQMD 8-34-301.2	Y		1000 ppmv as methane (component leak limit)	BAAQMD 8-34-501.6 and 503	P/Q	Quarterly Inspection of collection and control system components with portable analyzer and Records

## VII. Applicable Limits and Compliance Monitoring Requirements

**Table VII – B**  
**Applicable Limits and Compliance Monitoring Requirements**  
 S-5 REDWOOD LANDFILL WITH GAS COLLECTION SYSTEM,  
 A-50 LANDFILL GAS FLARE, AND A-51 LANDFILL GAS FLARE

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
TOC	BAAQMD 8-34-303	Y		500 ppmv as methane at 2 inches above surface	BAAQMD 8-34-415, 416, 501.6, 506 and 510	P/M, Q, and E	Monthly Visual Inspection of Cover, Quarterly Inspection with Portable Analyzer of Surface, Various Reinspection Times for Leaking Areas, and Records
TOC	40 CFR 60.753(d)	Y		<500 ppmv as methane at 5-10 cm from surface	40 CFR 60.755(c)(1), (4) and (5), 60.756(f), and 60.758(c) and (e)	P/M, Q and E	Monthly Visual Inspection of Cover, Quarterly Inspection with Portable Analyzer of Surface, Various Reinspection Times for Leaking Areas, and Records

## VII. Applicable Limits and Compliance Monitoring Requirements

**Table VII – B**  
**Applicable Limits and Compliance Monitoring Requirements**  
 S-5 REDWOOD LANDFILL WITH GAS COLLECTION SYSTEM,  
 A-50 LANDFILL GAS FLARE, AND A-51 LANDFILL GAS FLARE

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
Non-Methane Organic Compounds (NMOC)	BAAQMD Condition # 19867, Part 18a	Y		750 ppmv (calculated as hexane equivalent) in landfill gas	BAAQMD Condition # 19867, Part 31	P/A	Annual Landfill Gas Characterization Analysis
NMOC	BAAQMD 8-34-301.3 and BAAQMD Condition # 19867, Part 23	Y		98% removal by weight OR < 30 ppmv, dry basis @ 3% O <sub>2</sub> , expressed as methane (applies to Flares)	BAAQMD 8-34-412 and 8-34-501.4 and BAAQMD Condition # 19867, Part 30	P/A	Annual Source Tests and Records
NMOC	40 CFR 60.752(b)(2)(iii)(B)	Y		98% removal by weight OR < 20 ppmv dry @ 3% O <sub>2</sub> , expressed as hexane (applies to Flares)	40 CFR 60.8 and 60.752(b)(2)(iii)(B) and 60.758 (b)(2)(ii)	P/E	Initial Source Test and Records
Temperature of Combustion Zone (CT)	BAAQMD Condition # 19867, Part 22a	Y		A-50: CT ≥ 1475 °F, averaged over any 3-hour period	BAAQMD 8-34-501.3, 8-34-507, and BAAQMD Condition # 19867, Part 22	C	Temperature Sensor and Recorder (continuous)
Temperature of Combustion Zone (CT)	BAAQMD Condition # 19867, Part 22b	Y		A-51: CT ≥ 1400 °F, averaged over any 3-hour period	BAAQMD 8-34-501.3, 8-34-507, and BAAQMD Condition # 19867, Part 22	C	Temperature Sensor and Recorder (continuous)

## VII. Applicable Limits and Compliance Monitoring Requirements

**Table VII – B**  
**Applicable Limits and Compliance Monitoring Requirements**  
 S-5 REDWOOD LANDFILL WITH GAS COLLECTION SYSTEM,  
 A-50 LANDFILL GAS FLARE, AND A-51 LANDFILL GAS FLARE

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
CT	40 CFR 60.758 (c)(1)(i)	Y		A-50: $CT \geq 1475$ °F A-51: $CT \geq 1400$ °F (3-hour average) from $(CT \geq CT_{PF} - 28$ °C), where $CT_{PF}$ is the average combustion temperature during the most recent complying performance test (applies to Flares)	40 CFR 60.756(b)(1) and 60.758 (b)(2)(i)	C	Temperature Sensor and Recorder (measured every 15 minutes and averaged over 3 hours)
Opacity	BAAQMD 6-301 and BAAQMD Condition # 19867, Part 11	Y		Ringelmann No. 1 for < 3 minutes/hour (applies to S-5)	BAAQMD Condition # 19867 Part 11	P/E, D	Records of all site watering and road cleaning events
Opacity	BAAQMD 6-301	Y		Ringelmann No. 1 for < 3 minutes/hour (applies to Flares)	None	N	NA
FP	BAAQMD 6-310	Y		$\leq 0.15$ grains/dscf (applies to Flares)	None	N	NA
NOx	BAAQMD Condition # 19867, Part 25	Y		$\leq 0.06$ pounds per MM BTU, calculated as NO <sub>2</sub> , or $\leq 15$ ppmv @ 15% O <sub>2</sub> , dry (applies to A-50 and A-51, each)	BAAQMD Condition # 19867, Part 30	P/A	Annual Source Test
CO	BAAQMD Condition # 19867, Part 26	Y		$\leq 0.30$ pounds per MM BTU, or $\leq 123$ ppmv @ 15% O <sub>2</sub> , dry (applies to A-50 and A-51, each)	BAAQMD Condition # 19867, Part 30	P/A	Annual Source Test

## VII. Applicable Limits and Compliance Monitoring Requirements

**Table VII – B**  
**Applicable Limits and Compliance Monitoring Requirements**  
 S-5 REDWOOD LANDFILL WITH GAS COLLECTION SYSTEM,  
 A-50 LANDFILL GAS FLARE, AND A-51 LANDFILL GAS FLARE

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
SO <sub>2</sub>	BAAQMD 9-1-301	Y		Property Line Ground Level Limits: ≤ 0.5 ppm for 3 minutes and ≤ 0.25 ppm for 60 min. and ≤ 0.05 ppm for 24 hours (applies to Flares)	None	N	NA
SO <sub>2</sub>	BAAQMD 9-1-302	Y		≤ 300 ppm, dry basis (applies to A-50 and A-51, each)	BAAQMD Condition # 19867, Parts 18c and 31	P/W, Q	Weekly Draeger Tube Analysis and Quarterly Laboratory Analysis of Landfill Gas
H <sub>2</sub> S	BAAQMD 9-2-301	N		Property Line Ground Level Limits: ≤ 0.06 ppm, averaged over 3 minutes and ≤ 0.03 ppm, averaged over 60 minutes	None	N	NA
Total Reduced Sulfur (TRS)	BAAQMD Condition # 19867, Part 18c	Y		Peak TRS Limit (any single test): 1300 ppmv of TRS (expressed as H <sub>2</sub> S) in landfill gas and Annual Average TRS Limit: 425 ppmv of TRS (expressed as H <sub>2</sub> S) in landfill gas	BAAQMD Condition # 19867, Part 31	P/W, Q	Weekly Draeger Tube Analysis and Quarterly Laboratory Analysis of Landfill Gas and Records

## VII. Applicable Limits and Compliance Monitoring Requirements

**Table VII – B**  
**Applicable Limits and Compliance Monitoring Requirements**  
 S-5 REDWOOD LANDFILL WITH GAS COLLECTION SYSTEM,  
 A-50 LANDFILL GAS FLARE, AND A-51 LANDFILL GAS FLARE

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
Cumulative Waste Disposal	BAAQMD Condition # 19867, Part 1	Y		19.1 million cubic yards of all wastes and cover materials (excluding final cover)	BAAQMD Condition # 19867, Part 5	P/D	Records
Cumulative Waste Disposal	BAAQMD Condition # 19867, Part 2	Y		17.1 million tons of decomposable wastes and decomposable cover materials, unless POC $\leq$ 20.424 tons/year	BAAQMD Condition # 19867, Part 5	P/D	Records
Amount of Waste Accepted	BAAQMD Condition # 19867, Part 3	Y		all wastes (including sewage sludge): 2300 tons per day (except during emergencies) and 450,000 tons per calendar year sewage sludge only: 1000 wet tons per day (except during emergencies) and 200,750 wet tons per calendar year	BAAQMD Condition # 19867, Part 5	P/D	Records
Cover Material Usage Rate	BAAQMD Condition # 19867, Part 4	Y		1160 tons per day and 105,500 tons per calendar year	BAAQMD Condition # 19867, Part 5	P/D	Records
Contaminated Soil Disposal Rate	BAAQMD Condition # 19867, Part 15f	Y		6240 tons per calendar year	BAAQMD Condition # 19867, Part 15m	P/E	Records

## VII. Applicable Limits and Compliance Monitoring Requirements

**Table VII – B**  
**Applicable Limits and Compliance Monitoring Requirements**  
 S-5 REDWOOD LANDFILL WITH GAS COLLECTION SYSTEM,  
 A-50 LANDFILL GAS FLARE, AND A-51 LANDFILL GAS FLARE

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
Contaminated Soil VOC Content	BAAQMD Condition # 19867, Part 15f	Y		≤ 100 ppmw of VOC in soil	BAAQMD Condition # 19867, Part 15m	P/E	Records
Amount of Contaminated Soil Aerated or Used as Cover	BAAQMD 8-40-116.1	Y		1 cubic yard per project	BAAQMD Condition # 19867, Part 15m	P/E	Records
Amount of Contaminated Soil Aerated or Used as Cover	BAAQMD 8-40-116.2	Y		8 cubic yards per project, provided organic content ≤ 500 ppmw and limited to 1 exempt project per 3 month period	BAAQMD 8-40-116.2 and BAAQMD Condition # 19867, Part 15m	P/E	Records
Amount of Accidental Spillage	BAAQMD 8-40-117	Y		Soil Contaminated by Accidental Spillage of ≤ 5 gallons of Liquid Organic Compounds	BAAQMD Condition # 19867, Part 15m	P/E	Records
Total Aeration Project Emissions	BAAQMD 8-40-118	Y		150 pounds per project and toxic air contaminant emissions per year < BAAQMD Table 2-5-1 trigger levels	BAAQMD Condition # 19867, Part 15m	P/E	Records
Amount of Contaminated Soil Aerated or Used as Cover	BAAQMD 8-40-301 and BAAQMD Condition # 19867, Part 15k	Y		Prohibited for Soil with Organic Content >50 ppmw unless exempt per BAAQMD 8-40-116, 117, or 118	BAAQMD Condition # 19867, Part 15m	P/E	Records



## VII. Applicable Limits and Compliance Monitoring Requirements

**Table VII – B**  
**Applicable Limits and Compliance Monitoring Requirements**  
 S-5 REDWOOD LANDFILL WITH GAS COLLECTION SYSTEM,  
 A-50 LANDFILL GAS FLARE, AND A-51 LANDFILL GAS FLARE

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type																
Contaminated Soil Handling	BAAQMD Condition # 19867, Part 15e	Y		Limited to 2 on-site transfers per lot of contaminated soil	BAAQMD Condition # 19867, Part 15m	P/E	Records																
Contaminated Soil On-Site Storage Time	BAAQMD Condition # 19867, Part 15f	Y		Storage Time $\leq$ 90 days from receipt	BAAQMD Condition # 19867, Part 15m	P/E	Records																
Vehicle Fleet Weight	BAAQMD Condition # 19867, Part 6	Y		15.4 tons for off-site vehicle fleet	BAAQMD Condition # 19867, Part 10	P/E	Records																
Vehicle Fleet Weight	BAAQMD Condition # 19867, Part 7	Y		28.4 tons for on-site vehicle fleet	BAAQMD Condition # 19867, Part 10	P/E	Records																
Vehicle Miles Traveled (VMT)	BAAQMD Condition # 19867, Part 8	Y		<table border="0"> <tr> <td>VMT</td> <td>Road</td> </tr> <tr> <td><u>Limit</u></td> <td><u>Type</u></td> </tr> <tr> <td>875 per day</td> <td>gravel</td> </tr> <tr> <td>438 per day</td> <td>dirt</td> </tr> <tr> <td>50 per day</td> <td>paved</td> </tr> <tr> <td>273,000 per year</td> <td>gravel</td> </tr> <tr> <td>136,500 per year</td> <td>dirt</td> </tr> <tr> <td>15,600 per year</td> <td>paved</td> </tr> </table>	VMT	Road	<u>Limit</u>	<u>Type</u>	875 per day	gravel	438 per day	dirt	50 per day	paved	273,000 per year	gravel	136,500 per year	dirt	15,600 per year	paved	BAAQMD Condition # 19867, Part 10	P/D	Records
VMT	Road																						
<u>Limit</u>	<u>Type</u>																						
875 per day	gravel																						
438 per day	dirt																						
50 per day	paved																						
273,000 per year	gravel																						
136,500 per year	dirt																						
15,600 per year	paved																						
Vehicle Miles Traveled (VMT)	BAAQMD Condition # 19867, Part 9	Y		<table border="0"> <tr> <td>VMT</td> <td>Road</td> </tr> <tr> <td><u>Limit</u></td> <td><u>Type</u></td> </tr> <tr> <td>62 per day</td> <td>dirt</td> </tr> <tr> <td>19,145 per year</td> <td>dirt</td> </tr> </table>	VMT	Road	<u>Limit</u>	<u>Type</u>	62 per day	dirt	19,145 per year	dirt	BAAQMD Condition # 19867, Part 10	P/D	Records								
VMT	Road																						
<u>Limit</u>	<u>Type</u>																						
62 per day	dirt																						
19,145 per year	dirt																						
Water Application Rates	BAAQMD Condition # 19867, Part 11a	Y		0.5 gallons per square yard on unpaved roads and parking areas	BAAQMD Condition # 19867, Part 11f-g	P/D	Records																

## VII. Applicable Limits and Compliance Monitoring Requirements

**Table VII – B**  
**Applicable Limits and Compliance Monitoring Requirements**  
 S-5 REDWOOD LANDFILL WITH GAS COLLECTION SYSTEM,  
 A-50 LANDFILL GAS FLARE, AND A-51 LANDFILL GAS FLARE

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type																												
Water Application Frequency	BAAQMD Condition # 19867, Part 11b-d	Y		unpaved roads: once every 3 hours; unpaved parking areas and infrequently traveled unpaved roads: twice per day or once every 150 vehicle trips; active face, stockpiles, composting, etc.: twice per day	BAAQMD Condition # 19867, Part 11f-g	P/D	Records																												
Toxic Air Contaminants (TACs)	BAAQMD Condition # 19867, Part 18b	N		Concentration Limits for TACs in Landfill Gas: <table border="0"> <thead> <tr> <th><u>Compound</u></th> <th><u>PPBV</u></th> </tr> </thead> <tbody> <tr><td>acrylonitrile</td><td>280</td></tr> <tr><td>benzene</td><td>340</td></tr> <tr><td>carbon tetrachloride</td><td>70</td></tr> <tr><td>chloroform</td><td>70</td></tr> <tr><td>1,4 dichlorobenzene</td><td>400</td></tr> <tr><td>1,1 dichloroethane</td><td>150</td></tr> <tr><td>ethylene dibromide</td><td>70</td></tr> <tr><td>ethylene dichloride</td><td>70</td></tr> <tr><td>methylene chloride</td><td>320</td></tr> <tr><td>perchloroethylene</td><td>450</td></tr> <tr><td>1,1,2,2 tetrachloroethane</td><td>70</td></tr> <tr><td>trichloroethylene</td><td>250</td></tr> <tr><td>vinyl chloride</td><td>880</td></tr> </tbody> </table>	<u>Compound</u>	<u>PPBV</u>	acrylonitrile	280	benzene	340	carbon tetrachloride	70	chloroform	70	1,4 dichlorobenzene	400	1,1 dichloroethane	150	ethylene dibromide	70	ethylene dichloride	70	methylene chloride	320	perchloroethylene	450	1,1,2,2 tetrachloroethane	70	trichloroethylene	250	vinyl chloride	880	BAAQMD Condition # 19867, Part 31	P/A	Annual Landfill Gas Analysis
<u>Compound</u>	<u>PPBV</u>																																		
acrylonitrile	280																																		
benzene	340																																		
carbon tetrachloride	70																																		
chloroform	70																																		
1,4 dichlorobenzene	400																																		
1,1 dichloroethane	150																																		
ethylene dibromide	70																																		
ethylene dichloride	70																																		
methylene chloride	320																																		
perchloroethylene	450																																		
1,1,2,2 tetrachloroethane	70																																		
trichloroethylene	250																																		
vinyl chloride	880																																		
TAC / HAP	BAAQMD Condition # 19867, Part 24	N		Destruction Efficiency: $\geq 83\%$ by weight for any TAC or HAP	None	N	NA																												

## VII. Applicable Limits and Compliance Monitoring Requirements

**Table VII – C**  
**Applicable Limits and Compliance Monitoring Requirements**  
 S-25 YARD AND GREEN WASTE STOCKPILES

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
Opacity	BAAQMD 6-301 and BAAQMD Condition # 16066, Part 3	Y		Ringelmann 1.0 for 3 minutes in any hour	BAAQMD Condition # 16066, Part 3	P/E	Observation of Source in Operation
Through-put	BAAQMD Condition # 16066, Part 1	Y		≤ 20,000 tons per 12-month period.	BAAQMD Condition # 16066, Part 2	P/M	Records
Stockpile Storage Time	BAAQMD Condition # 16066, Part 5	N		72 hours from receipt or 7 days from receipt, if processing equipment is not functional or during exceptional circumstances	BAAQMD Condition # 16066, Part 2	P/M	Records

## VII. Applicable Limits and Compliance Monitoring Requirements

**Table VII – D**

**Applicable Limits and Compliance Monitoring Requirements**

S-28 CO-COMPOST BIOSOLIDS FEED STOCKPILES; S-34 ACTIVE COMPOST AND CO-COMPOST WINDROWS AND ASSOCIATED ACTIVITIES; S-35 COMPOST AND CO-COMPOST CURING PILES AND ASSOCIATED ACTIVITIES; S-37 COMPOST AND CO-COMPOST FINAL PRODUCT STORAGE PILES AND ASSOCIATED ACTIVITIES; S-38 ON-SITE MATERIAL HAULING; S-39 TROMMEL SCREENING PROCESSES, POWERED BY EITHER ELECTRIC MOTORS OR S-48; AND A-18 WATER SPRAYS

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
Opacity	BAAQMD 6-301 and BAAQMD Condition # 13123, Part 5	Y		Ringelmann 1.0 for 3 minutes in any hour	BAAQMD Condition # 13123, Part 5	P/E	Observation of Source in Operation
FP	BAAQMD 6-311	Y		$E = 0.026(P)^{0.67}$ where: E = Allowable Emission Rate (lb/hr); and P = Process Weight Rate (lb/hr) Maximum Allowable Emission Rate = 40 lb/hr For P > 57,320 lb/hr	None	N	NA
Total Carbon Emissions	BAAQMD 8-2-301	Y		15 pounds/day or 300 ppm, dry basis	None	N	NA
H <sub>2</sub> S	BAAQMD 9-2-301	N		Property Line Ground Level Limits: $\leq 0.06$ ppm, averaged over 3 minutes and $\leq 0.03$ ppm, averaged over 60 minutes	None	N	NA

## VII. Applicable Limits and Compliance Monitoring Requirements

**Table VII – D**

**Applicable Limits and Compliance Monitoring Requirements**

S-28 CO-COMPOST BIOSOLIDS FEED STOCKPILES; S-34 ACTIVE COMPOST AND CO-COMPOST WINDROWS AND ASSOCIATED ACTIVITIES; S-35 COMPOST AND CO-COMPOST CURING PILES AND ASSOCIATED ACTIVITIES; S-37 COMPOST AND CO-COMPOST FINAL PRODUCT STORAGE PILES AND ASSOCIATED ACTIVITIES; S-38 ON-SITE MATERIAL HAULING; S-39 TROMMEL SCREENING PROCESSES, POWERED BY EITHER ELECTRIC MOTORS OR S-48; AND A-18 WATER SPRAYS

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
Through-put	BAAQMD Condition # 13123, Part 1	Y		Per 12-month period: S-28: 40,000 tons S-35: 50,000 tons S-37: 50,000 tons S-39: 50,000 tons	BAAQMD Condition # 13123, Part 2	P/D	Records
Stockpile Storage Time	BAAQMD Condition # 13123, Part 7	N		72 hours from receipt or 7 days from receipt, if processing equipment is not functional or during exceptional circumstances	BAAQMD Condition # 13123, Part 2	P/D	Records

## VII. Applicable Limits and Compliance Monitoring Requirements

**Table VII -E**  
**Applicable Limits and Compliance Monitoring Requirements**  
 S-40 DIESEL ENGINE (POWERING TUB GRINDER AT S-41)

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
Opacity	BAAQMD 6-303	Y		Ringelmann 2.0 for 3 minutes in any hour	None	N	NA
FP	BAAQMD 6-310	Y		≤ 0.15 grains/dscf	None	N	NA
SO <sub>2</sub>	BAAQMD 9-1-301	Y		Property Line Ground Level Limits: ≤ 0.5 ppm for 3 minutes and ≤ 0.25 ppm for 60 min. and ≤ 0.05 ppm for 24 hours	None	N	NA
Liquid Fuel Sulfur Content	BAAQMD 9-1-304	Y		0.5% sulfur by weight	BAAQMD Condition # 19864, Part 3c	P/E	Vendor Certification Records
Liquid Fuel Sulfur Content	BAAQMD Condition # 19864, Part 2	Y		0.05% sulfur by weight	BAAQMD Condition # 19864, Part 3c	P/E	Vendor Certification Records
Fuel Oil Usage	BAAQMD Condition # 19864, Part 1	Y		218 gallons per day and 16,000 gallons per year	BAAQMD Condition # 19864, Part 3a-b	P/D	Records

## VII. Applicable Limits and Compliance Monitoring Requirements

**Table VII -F**  
**Applicable Limits and Compliance Monitoring Requirements**  
 S-41 YARD AND GREEN WASTE SHREDDING OPERATIONS AND A-41 WATER SPRAYS

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
Opacity	BAAQMD 6-301 and BAAQMD Condition # 19865, Part 4	Y		Ringelmann 1.0 for 3 minutes in any hour	BAAQMD Condition # 19865, Part 5	P/E	Observation of Source in Operation
FP	BAAQMD 6-311	Y		$E = 0.026(P)^{0.67}$ where: E = Allowable Emission Rate (lb/hr); and P = Process Weight Rate (lb/hr) Maximum Allowable Emission Rate = 40 lb/hr For P > 57,320 lb/hr	None	N	NA
Through-put	BAAQMD Condition # 19865, Part 1	Y		400 tons per day and 80,000 tons per year	BAAQMD Condition # 19865, Part 2	P/D	Records

## VII. Applicable Limits and Compliance Monitoring Requirements

**Table VII –G**  
**Applicable Limits and Compliance Monitoring Requirements**  
 S-42 SOIL AND COVER MATERIAL STOCKPILES

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
Opacity	BAAQMD 6-301 and BAAQMD Condition # 19866, Part 3	Y		Ringelmann 1.0 for 3 minutes in any hour	BAAQMD Condition # 19866, Part 4	P/E	Observation of Sources in Operation
Through-put	BAAQMD Condition # 19866, Part 1	Y		1160 tons per day and 105,500 tons per year	BAAQMD Condition # 19866, Part 2	P/D	Records



## VII. Applicable Limits and Compliance Monitoring Requirements

**Table VII –H**  
**Applicable Limits and Compliance Monitoring Requirements**  
 S-45 PUMPMaster ENGINE

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
Opacity	BAAQMD 6-303	Y		Ringelmann 2.0 for 3 minutes in any hour	None	N	NA
FP	BAAQMD 6-310	Y		≤ 0.15 grains/dscf	None	N	NA
SO <sub>2</sub>	BAAQMD 9-1-301	Y		Property Line Ground Level Limits: ≤ 0.5 ppm for 3 min. and ≤ 0.25 ppm for 60 min. and ≤ 0.05 ppm for 24 hours	None	N	NA
Liquid Fuel Sulfur Content	BAAQMD 9-1-304	Y		0.5% sulfur by weight	BAAQMD Condition # 17842, Part 3e	P/E	Vendor Certification Records
Operating Time	BAAQMD Condition # 17842, Part 1	Y		8 hours per day and 2496 hours per 12-month period	BAAQMD Condition # 17842, Part 3	P/D	Records
Fuel Usage	BAAQMD Condition # 17842, Part 2	Y		13,728 gallons per 12-month period	BAAQMD Condition # 17842, Part 3	P/D	Records

## VII. Applicable Limits and Compliance Monitoring Requirements

**Table VII –I**  
**Applicable Limits and Compliance Monitoring Requirements**  
 S-46 TIPPER ENGINE

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
Opacity	BAAQMD 6-303	Y		Ringelmann 2.0 for 3 minutes in any hour	None	N	NA
FP	BAAQMD 6-310	Y		≤ 0.15 grains/dscf	None	N	NA
SO <sub>2</sub>	BAAQMD 9-1-301	Y		Property Line Ground Level Limits: ≤ 0.5 ppm for 3 min. and ≤ 0.25 ppm for 60 min. and ≤ 0.05 ppm for 24 hours	None	N	NA
Liquid Fuel Sulfur Content	BAAQMD 9-1-304	Y		0.5% sulfur by weight	BAAQMD Condition # 17843, Part 3e	P/E	Vendor Certification Records
Operating Time	BAAQMD Condition # 17843, Part 1	Y		8 hours per day and 2496 hours per 12-month period	BAAQMD Condition # 17843, Part 3	P/D	Records
Fuel Usage	BAAQMD Condition # 17843, Part 2	Y		11,981 gallons per 12-month period	BAAQMD Condition # 17843, Part 3	P/D	Records

## VII. Applicable Limits and Compliance Monitoring Requirements

**Table VII -J**  
**Applicable Limits and Compliance Monitoring Requirements**  
 S-47 PACO WATER PUMP ENGINE

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
Opacity	BAAQMD 6-303	Y		Ringelmann 2.0 for 3 minutes in any hour	None	N	NA
FP	BAAQMD 6-310	Y		≤ 0.15 grains/dscf	None	N	NA
SO <sub>2</sub>	BAAQMD 9-1-301	Y		Property Line Ground Level Limits: ≤ 0.5 ppm for 3 min. and ≤ 0.25 ppm for 60 min. and ≤ 0.05 ppm for 24 hours	None	N	NA
Liquid Fuel Sulfur Content	BAAQMD 9-1-304	Y		0.5% sulfur by weight	BAAQMD Condition # 17844, Part 3e	P/E	Vendor Certification Records
Operating Time	BAAQMD Condition # 17844, Part 1	Y		8 hours per day and 2496 hours per 12-month period	BAAQMD Condition # 17844, Part 3	P/D	Records
Fuel Usage	BAAQMD Condition # 17844, Part 2	Y		9,984 gallons per 12-month period	BAAQMD Condition # 17844, Part 3	P/D	Records

## VII. Applicable Limits and Compliance Monitoring Requirements

**Table VII -K**  
**Applicable Limits and Compliance Monitoring Requirements**  
 S-48 RETEC POWER SCREENS ENGINE

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
Opacity	BAAQMD 6-303	Y		Ringelmann 2.0 for 3 minutes in any hour	None	N	NA
FP	BAAQMD 6-310	Y		≤ 0.15 grains/dscf	None	N	NA
SO <sub>2</sub>	BAAQMD 9-1-301	Y		Property Line Ground Level Limits: ≤ 0.5 ppm for 3 min. and ≤ 0.25 ppm for 60 min. and ≤ 0.05 ppm for 24 hours	None	N	NA
Liquid Fuel Sulfur Content	BAAQMD 9-1-304	Y		0.5% sulfur by weight	BAAQMD Condition # 17845, Part 3e	P/E	Vendor Certification Records
Operating Time	BAAQMD Condition # 17845, Part 1	Y		8 hours per day and 2496 hours per 12-month period	BAAQMD Condition # 17845, Part 3	P/D	Records
Fuel Usage	BAAQMD Condition # 17845, Part 2	Y		12,979 gallons per 12-month period	BAAQMD Condition # 17845, Part 3	P/D	Records

## VII. Applicable Limits and Compliance Monitoring Requirements

**Table VII -L**  
**Applicable Limits and Compliance Monitoring Requirements**  
 S-49 DIESEL ENGINE FOR BACK-UP GENERATOR

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
Opacity	BAAQMD 6-303	Y		Ringelmann 2.0 for 3 minutes in any hour	None	N	NA
FP	BAAQMD 6-310	Y		≤ 0.15 grains/dscf	None	N	NA
SO <sub>2</sub>	BAAQMD 9-1-301	Y		Property Line Ground Level Limits: ≤ 0.5 ppm for 3 min. and ≤ 0.25 ppm for 60 min. and ≤ 0.05 ppm for 24 hours	None	N	NA
Liquid Fuel Sulfur Content	BAAQMD 9-1-304	Y		0.5% sulfur by weight	BAAQMD Condition # 19613, Part 5d	P/E	Vendor Certification Records
Operating Hours	BAAQMD 9-8-330.2 and BAAQMD Condition # 19613, Part 1	N		Operating Hours for Reliability-Related Activities: ≤ 100 hours in a calendar year	BAAQMD 9-8-530 and BAAQMD Condition # 19613, Parts 4 and 5a-c	P/C, M	Meter to Record either Operating Hours or Fuel Usage and Records

## VII. Applicable Limits and Compliance Monitoring Requirements

**Table VII – M**  
**Applicable Limits and Compliance Monitoring Requirements**  
 S-50 LEACHATE VAPORATOR

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
Leachate Through-put	BAAQMD Condition # 19609, Part 1	Y		7200 gallons per day and 2,628,000 gallons per 12-month period	BAAQMD Condition # 19609, Part 8	P/D	Records
Landfill Gas Through-put	BAAQMD Condition # 19609, Part 4	Y		240,000 scf per day and 87,600,000 scf per 12-month period	BAAQMD Condition # 19609, Parts 4 and 8	C	Gas Flow Meter and Records
Gas Flow	BAAQMD 8-34-301, 301.1, and 301.4	Y		Vent all collected gases to a properly operating control system and operate control system continuously.	BAAQMD 8-34-501.10 and 508 and BAAQMD Condition # 19609, Parts 4 and 8	C	Gas Flow Meter and Recorder (every 15 minutes) and Records
Gas Flow	40 CFR 60.752 (b)(2)(iii) and 60.753(e) and (f)	Y		Vent all collected gases to a properly operating control system and operate control system at all times when gas is vented to it	40 CFR 60.756(b)(2) (i or ii) and 60.758(c)(2)	C or P/M	Gas Flow Meter and Recorder (every 15 minutes) or Monthly Inspection of Bypass Valve and Lock and Records
Collection and Control Systems Shutdown Time	BAAQMD 8-34-113.2	Y		240 hours per year and 5 consecutive days	BAAQMD 8-34-501.1	P/D	Operating Records

## VII. Applicable Limits and Compliance Monitoring Requirements

**Table VII – M**  
**Applicable Limits and Compliance Monitoring Requirements**  
 S-50 LEACHATE VAPORATOR

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
Control System Startup Shutdown or Mal-function	40 CFR 60.755(e)	Y		1 hour per event	40 CFR 60.7(b), 60.757(f)(2) and (f)(3)	P/D	Operating Records (all occurrences and duration of each)
Startup Shutdown or Mal-function Procedures	40 CFR 63.6(e)	Y		Minimize Emissions by Implementing SSM Plan	40 CFR 63.1980(a-b)	P/E	Records (all occurrences, duration of each, corrective actions)
Periods of Inoperation for Parametric Monitors	BAAQMD 1-523.2	Y		15 consecutive days per incident and 30 calendar days per 12-month period	BAAQMD 1-523.4	P/D	Operating Records for All Parametric Monitors (for gas flow and temperature monitors)
Continuous Monitors	40 CFR 60.13(e)	Y		Requires Continuous Operation except for breakdowns, repairs, calibration, and required span adjustments	40 CFR 60.7(b)	P/D	Operating Records for All Continuous Monitors (for gas flow and temperature monitors)

## VII. Applicable Limits and Compliance Monitoring Requirements

**Table VII – M**  
**Applicable Limits and Compliance Monitoring Requirements**  
 S-50 LEACHATE VAPORATOR

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
Total Carbon Emissions	BAAQMD 8-2-301	Y		15 pounds/day or 300 ppm, dry basis (applies to emissions from leachate vapors after control by A-50 Flare)	BAAQMD Condition # 19609, Parts 2 and 8	P/D	Records and Operating Restrictions
TOC (Total Organic Compounds Plus Methane)	BAAQMD 8-34-301.2	Y		1000 ppmv as methane (component leak limit)	BAAQMD 8-34-501.6 and 503	P/Q	Quarterly Inspection of collection and control system components with portable analyzer and Records
Non-Methane Organic Compounds (NMOC)	BAAQMD 8-34-301.4	Y		98% removal by weight OR < 120 ppmv, dry basis @ 3% O <sub>2</sub> , expressed as methane	BAAQMD 8-34-412 and 8-34-501.4 and BAAQMD Condition # 19609, Parts 8 and 9	P/A	Annual Source Tests and Records
NMOC	BAAQMD Condition # 19609, Part 7	Y		98% removal by weight OR < 15 ppmv, dry basis @ 3% O <sub>2</sub> , expressed as hexane	BAAQMD 8-34-412 and 8-34-501.4 and BAAQMD Condition # 19609, Parts 8 and 9	P/A	Annual Source Tests and Records



## VII. Applicable Limits and Compliance Monitoring Requirements

**Table VII – M**  
**Applicable Limits and Compliance Monitoring Requirements**  
 S-50 LEACHATE VAPORATOR

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
NMOC	40 CFR 60.752(b)(2)(iii)(B)	Y		98% removal by weight OR < 20 ppmv dry @ 3% O <sub>2</sub> , expressed as hexane	40 CFR 60.8 and 60.752(b)(2)(iii)(B) and 60.758(b)(2)(ii)	P/E	Initial Source Test and Records
Opacity	BAAQMD 6-301	Y		Ringelmann No. 1 for < 3 minutes/hr	None	N	NA
FP	BAAQMD 6-310	Y		≤ 0.15 grains/dscf	None	N	NA
SO <sub>2</sub>	BAAQMD 9-1-301	Y		Property Line Ground Level Limits: ≤ 0.5 ppm for 3 minutes and ≤ 0.25 ppm for 60 min. and ≤ 0.05 ppm for 24 hours	None	N	NA
SO <sub>2</sub>	BAAQMD 9-1-302	Y		≤ 300 ppm, dry basis	BAAQMD Condition # 19867, Parts 18a and 31	P/Q	Quarterly Landfill Gas Analysis
H <sub>2</sub> S	BAAQMD 9-2-301	N		Property Line Ground Level Limits: ≤ 0.06 ppm, averaged over 3 minutes and ≤ 0.03 ppm, averaged over 60 minutes	None	N	NA
NO <sub>x</sub>	BAAQMD Condition # 19609, Part 5	Y		10.0 pounds per day (calculated as NO <sub>2</sub> ), or ≤ 63 ppmv @ 3% O <sub>2</sub> , dry OR LFG PPM NO <sub>x</sub> scf/hour @ 3% O <sub>2</sub> 9500 66 9000 70 8000 79 6000 105	BAAQMD Condition # 19609, Part 9	P/A	Annual Source Test

## VII. Applicable Limits and Compliance Monitoring Requirements

**Table VII – M**  
**Applicable Limits and Compliance Monitoring Requirements**  
 S-50 LEACHATE VAPORATOR

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
CO	BAAQMD Condition # 19609, Part 6	Y		10.0 pounds per day, or $\leq 103$ ppmv @ 3% O <sub>2</sub> , dry, OR LFG PPM CO <u>scf/hour</u> @ 3% O <sub>2</sub> 9500 109 9000 115 8000 129 6000 172	BAAQMD Condition # 19609, Part 9	P/A	Annual Source Test

## VII. Applicable Limits and Compliance Monitoring Requirements

**Table VII – N**  
**Applicable Limits and Compliance Monitoring Requirements**  
 S-55 NON-RETAIL GASOLINE DISPENSING FACILITY # 8573

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
Gasoline Through-put	BAAQMD Condition # 14098	N		≤ 940,000 gallons per 12-month period	BAAQMD 8-5-501.1 and 8-7-503.1	P/A	Records
Through-put (exempt from Phase I)	BAAQMD 8-7-114	Y		1000 gallons per facility for tank integrity leak checking	BAAQMD 8-7-501 and 8-7-503.2	P/E	Records
Organic Compounds	BAAQMD 8-7-301.2	Y		All Phase I Systems Shall Meet the Emission Limitations of the Applicable CARB Certification	CARB EO G-70-160	P/E	CARB Certification Procedures
Organic Compounds	BAAQMD 8-7-301.6	Y		All Phase I Equipment (except components with allowable leak rates) shall be leak free (≤3 drops/minute) and vapor tight	CARB EO G-70-160, paragraph 19 and BAAQMD 8-7-301.13 and 8-7-407 and BAAQMD Condition # 16516	P/A	Annual Check for Vapor Tightness and Proper Operation of Vapor Recovery System

## VII. Applicable Limits and Compliance Monitoring Requirements

**Table VII – N**  
**Applicable Limits and Compliance Monitoring Requirements**  
 S-55 NON-RETAIL GASOLINE DISPENSING FACILITY # 8573

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
Organic Compounds	BAAQMD 8-7-302.5	Y		All Phase II Equipment (except components with allowable leak rates or at the nozzle/fill-pipe interface) Shall Be: leak free ( $\leq 3$ drops/minute) and vapor tight	CARB EO G-70-160, paragraph 19 and BAAQMD 8-7-301.13 and 8-7-407 and BAAQMD Condition # 16516	P/A	Annual Check for Vapor Tightness and Proper Operation of Vapor Recovery System
Organic Compounds	CARB EO G-70-160, paragraph 10	N		Any Emergency Vent Shall Be: leak free	CARB EO G-70-160, paragraph 19 and BAAQMD 8-7-301.13 and 8-7-407 and BAAQMD Condition # 16516	P/A	Annual Check for Vapor Tightness and Proper Operation of Vapor Recovery System
Defective Component Repair/Replacement Time Limit	BAAQMD 8-7-302.4	Y		7 days	BAAQMD 8-7-503.2	P/E	Records
Liquid Removal Rate	BAAQMD 8-7-302.8	Y		$\geq 5$ ml per gallon dispensed, when dispensing rate $> 5$ gallons/minute	CARB EO G-70-17-AD	P/E	CARB Certification Procedures

## VII. Applicable Limits and Compliance Monitoring Requirements

**Table VII – N**  
**Applicable Limits and Compliance Monitoring Requirements**  
 S-55 NON-RETAIL GASOLINE DISPENSING FACILITY # 8573

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
Liquid Retain from Nozzles	BAAQMD 8-7-302.12	Y		100 ml per 1000 gallons dispensed	CARB EO G-70-17-AD	P/E	CARB Certification Procedures
Nozzle Spitting	BAAQMD 8-7-302.13	Y		1.0 ml per nozzle per test	CARB EO G-70-17-AD	P/E	CARB Certification Procedures
Pressure-Vacuum Valve Settings	BAAQMD 8-7-316 and CARB EO G-70-160, paragraph 14	Y		Pressure Setting: 2.5 inches of water, gauge	CARB EO G-70-160	P/E	CARB Certification Procedures
Pressure-Vacuum Valve Settings	BAAQMD 8-5-303.1	Y		Pressure Setting: 10% of maximum working pressure or at least 0.5 psig	CARB EO G-70-160	P/E	CARB Certification Procedures
Dispensing Rate Limit	CARB EO G-70-17-AD, paragraph 11	N		10 gallons per minute	CARB EO G-70-17-AD	P/E	CARB Certification Procedures
Disconnection Liquid Leaks	CARB EO G-70-160, paragraph 12	N		10 ml per disconnect, averaged over 3 disconnect operations	CARB EO G-70-160, paragraph 19 and BAAQMD 8-7-301.13 and 8-7-407 and BAAQMD Condition # 16516	P/A	Annual Check for Vapor Tightness and Proper Operation of Vapor Recovery System

## VIII. TEST METHODS

The test methods associated with the emission limit of a District regulation are generally found in Section 600 et seq. of the regulation. The following table indicates only the test methods associated with the emission limits in Section VII, Applicable Limits & Compliance Monitoring Requirements, of this permit.

**Table VIII  
 Test Methods**

<b>Applicable Requirement</b>	<b>Description of Requirement</b>	<b>Acceptable Test Methods</b>
BAAQMD 6-301	Ringelmann No. 1 Limitation	Manual of Procedures, Volume I, Evaluation of Visible Emissions
BAAQMD 6-303	Ringelmann No. 2 Limitation	Manual of Procedures, Volume I, Evaluation of Visible Emissions
BAAQMD 6-310	Particulate Weight Limitation	Manual of Procedures, Volume IV, ST-15, Particulate, or For combustion equipment: EPA Reference Method 5, Determination of Particulate Matter Emissions from Stationary Sources
BAAQMD 6-311	Process Weight Rate Based Emissions Limits	Manual of Procedures, Volume IV, ST-15, Particulates Sampling, or Calculate Emissions in Accordance with EPA AP-42 Procedures
BAAQMD 8-2-301	Organic Compound Emission Limitation for Miscellaneous Operations	For Operations Other Than S-5: Manual of Procedures, Volume IV, ST-7, Organic Compounds; or EPA Reference Method 25 or 25A For S-5: BAAQMD Regulation 8-40-604 measurement procedures and EPA Method 21 (or any method determined to be equivalent by the US EPA and approved by the APCO)
BAAQMD 8-7-301.6	Vapor Tightness Requirement	Manual of Procedures, Volume IV, ST-38, Gasoline Dispensing Facility Static Pressure Integrity Test Aboveground Vaulted Tanks or ARB Test Method TP 201.3B Determination of Static Pressure Performance of Vapor Recovery Systems of Dispensing Facilities with Above-Ground Storage Tanks
BAAQMD 8-7-302.5	Vapor Tightness Requirement	Manual of Procedures, Volume IV, ST-38, Gasoline Dispensing Facility Static Pressure Integrity Test Aboveground Vaulted Tanks or ARB Test Method TP 201.3B Determination of Static Pressure Performance of Vapor Recovery Systems of Dispensing Facilities with Above-Ground Storage Tanks

## VIII. Test Methods

**Table VIII  
 Test Methods**

<b>Applicable Requirement</b>	<b>Description of Requirement</b>	<b>Acceptable Test Methods</b>
BAAQMD 8-7-302.8	Liquid Removal Rate	Manual of Procedures, Volume IV, ST-37, Gasoline Dispensing Facility Liquid Removal Devices or ARB Test Method TP-201.6 Determination of Liquid Removal of Vapor Recovery Systems of Dispensing Facilities
BAAQMD 8-7-302.12	Liquid Retain from Nozzles	Manual of Procedures, Volume IV, ST-41, Gasoline Liquid Retention in Nozzles and Hoses (this method has not been approved yet)
BAAQMD 8-7-302.13	Nozzle Spitting	Manual of Procedures, Volume IV, ST-41, Gasoline Liquid Retention in Nozzles and Hoses (this method has not been approved yet)
BAAQMD 8-34-301.2	Collection and Control System Leak Limitations	EPA Reference Method 21, Determination of Volatile Organic Compound Leaks
BAAQMD 8-34-301.3	NMOC Emission Limits for Flares	Manual of Procedures, Volume IV, ST-14, Oxygen, Continuous Sampling; and Manual of Procedures, Volume IV, ST-7, Organic Compounds; or EPA Reference Method 18, 25, 25A, or 25C
BAAQMD 8-34-301.4	NMOC Emission Limits for Other Emission Control Systems	Manual of Procedures, Volume IV, ST-14, Oxygen, Continuous Sampling; and Manual of Procedures, Volume IV, ST-7, Organic Compounds; or EPA Reference Method 18, 25, 25A, or 25C
BAAQMD 8-34-303	Landfill Surface Leak Limit	EPA Reference Method 21, Determination of Volatile Organic Compound Leaks
BAAQMD 8-34-305.1	Wellhead Gauge Pressure	APCO Approved Device
BAAQMD 8-34-305.2	Temperature Limit for Gas at Wellheads	APCO Approved Device
BAAQMD 8-34-305.3	Nitrogen Concentration in Gas at Wellheads	EPA Reference Method 3C, Determination of Carbon Dioxide, Methane, Nitrogen, and Oxygen from Stationary Sources
BAAQMD 8-34-305.3	Wellhead Nitrogen	EPA Reference Method 3C, Determination of Carbon Dioxide, Methane, Nitrogen, and Oxygen from Stationary Sources
BAAQMD 8-34-305.4	Oxygen Concentration in Gas at Wellheads	EPA Reference Method 3C, Determination of Carbon Dioxide, Methane, Nitrogen, and Oxygen from Stationary Sources

## VIII. Test Methods

**Table VIII  
 Test Methods**

<b>Applicable Requirement</b>	<b>Description of Requirement</b>	<b>Acceptable Test Methods</b>
BAAQMD 8-34-412	Compliance Demonstration Test	EPA Reference Method 18, Measurement of Gaseous Organic Compound Emissions by Gas Chromatography, Method 25, Determination of Total Gaseous Nonmethane Organic Emissions as Carbon, Method 25A, Determination of Total Gaseous Organic Concentration Using a Flame Ionization Analyzer, or Method 25C, Determination of Nonmethane Organic Compounds (NMOC) in MSW Landfill Gases
BAAQMD 8-40-116.2	Organic Content Limit for Small Volume Exemption	BAAQMD 8-40-601 and EPA Reference Methods 8015B and 8021B
BAAQMD 8-40-301	Limits on Uncontrolled Aeration of Contaminated Soil	BAAQMD 8-40-601 and EPA Reference Methods 8015B and 8021B; or EPA Reference Method 21
BAAQMD 9-1-301	Limitations on Ground Level Concentrations (SO <sub>2</sub> )	Manual of Procedures, Volume VI, Part 1, Ground Level Monitoring for Hydrogen Sulfide and Sulfur Dioxide
BAAQMD 9-1-302	General Emission Limitation (SO <sub>2</sub> )	Manual of Procedures, Volume IV, ST-19A, Sulfur Dioxide, Continuous Sampling
BAAQMD 9-1-304	Fuel Sulfur Content Limit	Manual of Procedures, Volume III, Method 10, Determination of Sulfur in Fuel Oil
BAAQMD 9-2-301	Limitations on Hydrogen Sulfide	Manual of Procedures, Volume VI, Part 1, Ground Level Monitoring for Hydrogen Sulfide and Sulfur Dioxide
40 CFR 60.8	Performance Tests	EPA Reference Method 18, Measurement of Gaseous Organic Compound Emissions by Gas Chromatography, Method 25, Determination of Total Gaseous Nonmethane Organic Emissions as Carbon, Method 25A, Determination of Total Gaseous Organic Concentration Using a Flame Ionization Analyzer, or Method 25C, Determination of Nonmethane Organic Compounds (NMOC) in MSW Landfill Gases
40 CFR 60.752 (b)(2)(iii)(B)	NMOC Outlet Concentration and Destruction Efficiency Limits	EPA Reference Method 18, Measurement of Gaseous Organic Compound Emissions by Gas Chromatography, Method 25, Determination of Total Gaseous Nonmethane Organic Emissions as Carbon, Method 25A, Determination of Total Gaseous Organic Concentration Using a Flame Ionization Analyzer, or Method 25C, Determination of Nonmethane Organic Compounds (NMOC) in MSW Landfill Gases
40 CFR 60.753(b)	Wellhead Pressure	APCO Approved Device



## VIII. Test Methods

**Table VIII  
 Test Methods**

<b>Applicable Requirement</b>	<b>Description of Requirement</b>	<b>Acceptable Test Methods</b>
40 CFR 60.753(c)	Temperature, N <sub>2</sub> , and O <sub>2</sub> concentration in wellhead gas	EPA Reference Method 3C, Determination of Carbon Dioxide, Methane, Nitrogen, and Oxygen from Stationary Sources
40 CFR 60.753(d)	Methane Limit at Landfill Surface	EPA Reference Method 21, Determination of Volatile Organic Compound Leaks
BAAQMD Condition # 13123, Part 5	Ringelmann No. 1 Limitation	Manual of Procedures, Volume I, Evaluation of Visible Emissions
BAAQMD Condition # 16066, Part 3	Ringelmann No. 1 Limitation	Manual of Procedures, Volume I, Evaluation of Visible Emissions
BAAQMD Condition # 19609, Parts 4 and 6	Landfill Gas Throughput Limits for Leachate Vaporator	APCO Approved Gas Flow Meter and Recorder
BAAQMD Condition # 19609, Part 5	NO <sub>x</sub> Emission Limit for Leachate Vaporator	Manual of Procedure, Volume IV, ST-13A, Oxides of Nitrogen, Continuous Sampling; and Manual of Procedure, Volume IV, ST-14, Oxygen, Continuous Sampling
BAAQMD Condition # 19609, Part 6	CO Emission Limit for Leachate Vaporator	Manual of Procedure, Volume IV, ST-6, Carbon Monoxide, Continuous Sampling; and Manual of Procedure, Volume IV, ST-14, Oxygen, Continuous Sampling
BAAQMD Condition # 19609, Part 7	NMOC Emission Limits for Leachate Vaporator	Manual of Procedures, Volume IV, ST-14, Oxygen, Continuous Sampling; and Manual of Procedures, Volume IV, ST-7, Organic Compounds; or EPA Reference Method 18, 25, 25A, or 25C
BAAQMD Condition # 19609, Part 9	Annual Compliance Demonstration Tests	Manual of Procedures, Volume IV, ST-17, Stack Gas Velocity and Volumetric Flow Rate; ST-23 Water Vapor; ST-14, Oxygen, Continuous Sampling; ST-13A, Oxides of Nitrogen, Continuous Sampling; ST-6, Carbon Monoxide, Continuous Sampling; and Manual of Procedures, Volume IV, ST-7, Organic Compounds or EPA Reference Methods 18, 25, 25A, or 25C
BAAQMD Condition # 19864, Part 2	Fuel Sulfur Content Limit	Manual of Procedures, Volume III, Method 10, Determination of Sulfur in Fuel Oil

## VIII. Test Methods

**Table VIII  
 Test Methods**

<b>Applicable Requirement</b>	<b>Description of Requirement</b>	<b>Acceptable Test Methods</b>
BAAQMD Condition # 19865, Part 4	Ringelmann No. 1 Limitation	Manual of Procedures, Volume I, Evaluation of Visible Emissions
BAAQMD Condition # 19866, Part 3	Ringelmann No. 1 Limitation	Manual of Procedures, Volume I, Evaluation of Visible Emissions
BAAQMD Condition # 19867, Part 13	Volatile Organic Compound (VOC) Concentration in Soils	BAAQMD 8-40-601 and EPA Reference Methods 8015B, 8021B, or any method determined to be equivalent by the US EPA and approved by the APCO; or EPA Reference Method 21
BAAQMD Condition # 19867, Part 14	Total Carbon Emission Limit for VOC Laden Soil	VOC Content as determined by EPA Reference Methods 8015B or 8021B (or any method determined to be equivalent by the US EPA and approved by the APCO), and converted to Total Carbon as defined in BAAQMD Regulation 8-2-202. Total Carbon Emissions determined by APCO approved equation described in BAAQMD Condition #19867, Part 14.
BAAQMD Condition # 19867, Part 15	VOC Concentration in Soils	BAAQMD 8-40-601 and EPA Reference Methods 8015B, 8021B, or any method determined to be equivalent by the US EPA and approved by the APCO; or EPA Reference Method 21
BAAQMD Condition # 19867, Part 18a	Total Concentration of Non-Methane Organic Compounds (NMOC) in Landfill Gas	EPA Reference Method 18, Measurement of Gaseous Organic Compound Emissions by Gas Chromatography; or Method 25C, Determination of Nonmethane Organic Compounds (NMOC) in MSW Landfill Gases
BAAQMD Condition # 19867, Part 18b	Concentrations of Toxic Air Contaminants (TACs) in Landfill Gas	EPA Reference Method 18, Measurement of Gaseous Organic Compound Emissions by Gas Chromatography
BAAQMD Condition # 19867, Part 18c	Concentration of Total Reduced Sulfur (TRS) Compounds in Landfill Gas (Peak and Annual Average Limits)	Draeger tube used in accordance with manufacturer's recommendations and calculation procedures described in Condition # 19867, Part 31b; and Manual of Procedures, Volume III, Method 5 Determination of Total Mercaptans in Effluents and Method 25 Determination of Hydrogen Sulfide in Effluents, or Method 44 Determination of Reduced Sulfur Gases and Sulfur Dioxide in Effluent Samples by Gas Chromatographic Methods

## VIII. Test Methods

**Table VIII  
 Test Methods**

<b>Applicable Requirement</b>	<b>Description of Requirement</b>	<b>Acceptable Test Methods</b>
BAAQMD Condition # 19867, Part 20	Landfill Gas Throughput Limit for Flares	APCO Approved Gas Flow Meter and Recorder
BAAQMD Condition # 19867, Part 22	Flare Combustion Zone Temperature Limits	APCO Approved Device
BAAQMD Condition # 19867, Part 23	NMOC Emission Limits for Flares	Manual of Procedures, Volume IV, ST-14, Oxygen, Continuous Sampling; and Manual of Procedures, Volume IV, ST-7, Organic Compounds; or EPA Reference Method 18, 25, 25A, or 25C
BAAQMD Condition # 19867, Part 24	TAC or HAP Compound Destruction Efficiency for Flares	EPA Reference Method 18, Measurement of Gaseous Organic Compound Emissions by Gas Chromatography
BAAQMD Condition # 19867, Part 25	NOx Emission Limit for Flares	Manual of Procedure, Volume IV, ST-13A, Oxides of Nitrogen, Continuous Sampling; and Manual of Procedure, Volume IV, ST-14, Oxygen, Continuous Sampling
BAAQMD Condition # 19867, Part 26	CO Emission Limit for Flares	Manual of Procedure, Volume IV, ST-6, Carbon Monoxide, Continuous Sampling; and Manual of Procedure, Volume IV, ST-14, Oxygen, Continuous Sampling
BAAQMD Condition # 19867, Part 30	Annual Compliance Demonstration Tests	Manual of Procedures, Volume IV, ST-17, Stack Gas Velocity and Volumetric Flow Rate; ST-23 Water Vapor; ST-14, Oxygen, Continuous Sampling; ST-13A, Oxides of Nitrogen, Continuous Sampling; ST-6, Carbon Monoxide, Continuous Sampling; and Manual of Procedures, Volume IV, ST-7, Organic Compounds or EPA Reference Methods 18, 25, 25A, or 25C
CARB EO G-70-160, paragraph 10	Leak Free Emergency Vent	Manual of Procedures, Volume IV, ST-38, Gasoline Dispensing Facility Static Pressure Integrity Test Aboveground Vaulted Tanks or ARB Test Method TP 201.3B Determination of Static Pressure Performance of Vapor Recovery Systems of Dispensing Facilities with Above-Ground Storage Tanks
CARB EO G-70-160, paragraph 12	Disconnection Liquid Leaks for Phase I Systems	BAAQMD Enforcement Division, Policies and Procedures, Regulation 8, Rule 33, Bulk Gasoline Distribution Facilities and Gasoline Delivery Vehicles Guidelines, Section 5.B.1.

## IX. PERMIT SHIELD

### A. SUBSUMED REQUIREMENTS

Pursuant to District Regulations 2-6-233.2 and 2-6-409.12, as of the date this permit is issued, the federally enforceable monitoring, recordkeeping, and reporting requirements cited in the following table for the source or group of sources identified at the top of the table are subsumed by the monitoring, recordkeeping, and reporting for more stringent requirements or by a “hybrid” monitoring scheme. The District has determined that compliance with the requirements listed below and elsewhere in this permit will assure compliance with the substantive requirements of the subsumed monitoring requirements. Enforcement actions and litigation may not be initiated against the source or group of sources covered by this shield based on the subsumed monitoring requirements cited.

**Table IX-A**  
**S-5 REDWOOD LANDFILL**

<b>Subsumed Requirement Citation</b>	<b>Title or Description</b>	<b>Streamlined Requirements</b>	<b>Title or Description</b>
8-2-601	Determination of Compliance (for organic compound emissions as total carbon)	8-40-604	Measurement of Organic Concentration (to classify soil as “contaminated” or “not contaminated”)

The Regulation 8, Rule 2 total carbon test procedure is subsumed by the Regulation 8, Rule 40 VOC test procedure for the Redwood Landfill (S-5), because testing performed pursuant to Regulation 8-40-604 will rule out the need to test in accordance with Regulation 8-2-601.

Regulation 8, Rule 2 “Miscellaneous Operations” is only applicable to sources of precursor organic compounds that are not otherwise limited by Regulation 8 or Regulation 10 rules. In the case of the landfill, Regulation 8, Rule 2 would apply to storage, handling, reuse (such as for cover material), and disposal of soil that contains some VOC, but is not defined as “contaminated soil” by Regulation 8-40-205. Soil which has an organic content exceeding 50 ppmw or that registers an organic concentration greater than 50 ppmv (expressed as methane, C1) is subject to Regulation 8, Rule 40.

Regulation 8-2-301 limits organic compound emissions (expressed as total carbon) from an operation to 15 pounds per day, if the emission from the operation has an organic compound concentration greater than 300 ppmv (expressed as total carbon, dry basis). Since soil found not to be contaminated using the procedures of

## **IX. Permit Shield**

Regulation 8-40-604 will have a surface VOC concentration of less than 50 ppmv (expressed as methane, C1) it can reasonably be assumed that the concentration is also less than 300 ppmv (total carbon, dry basis) as determined by the procedures of Regulation 8-2-601. Since the operation complies with the total carbon concentration limit (< 300 ppmv), it complies with Regulation 8-2-301.

In summary, measurements conducted under Regulation 8-40-604 that show surface VOC concentrations are less than 50 ppmv (expressed as methane, C1) are conclusive to demonstrate compliance with Regulation 8-2-301.

## X. REVISION HISTORY

**Title V Permit Issuance (Application 17363):** **November 10, 2003**

**Significant Revision (Application 8501):** **November 10, 2004**

- In Table II-B, change the capacity of the A-50 Flare from 75 MM BTU/hour to 120 MM BTU/hour.
- Add several missing sections of 40 CFR Part 60, Subpart WWW (flare operating and monitoring requirements) to Table IV-B.
- Delete future effective dates that have passed from Tables IV-B, IV-M, VII-B, VII-M and Condition # 19867, Part 22.
- Delete unnecessary requirements of Condition # 19867 (Parts 27 and 28) and delete references to these parts in Tables IV-B, VII-B, and VIII.
- Correct errors in Tables IV-B and IV-M and in Condition # 19867, Parts 16 and 30.
- Revise landfill gas throughput limits for A-50 in Condition # 19867, Part 20 and Table VII-B.
- Revise the NMOC emission limit for A-50 in Condition # 19867, Part 23 and Table VII-B.
- Revise the non-federally enforceable TAC destruction efficiency limit for A-50 in Condition # 19867, Part 24 and Table VII-B.

**Minor Revision (Applications 6943 and 9565):** **November 10, 2004**

- In Table II-A and Section VI, Condition # 19867, Part 17a, update collection system description to reflect gas collection system components that are operating as of August 1, 2004.
- In Section VI, Condition # 19867, Part 17b, add the description of the collection system component changes that have been authorized pursuant to Application # 9565.

**Significant Revision (Applications 10873 and 10874):** **July 27, 2005**

- In Condition # 19867, Part 18a and Table VII-B, replace the current TRS content limit for landfill gas with a new peak TRS limit and a higher annual average TRS content limit.
- In Condition # 19867, Part 31, add a new subpart b that describes the Draeger tube hydrogen sulfide analysis requirements, testing frequency, TRS calculation procedures, and record keeping requirements.

## X. Revision History

- Add the weekly Draeger tube monitoring requirements and TRS calculation procedures to Table VII-B and Table VIII.

### **Administrative Amendment (Application 11948):**

**July 27, 2005**

- On the Title Page, change Responsible Official from James Devin to Ramin Khany.
- In Table III, correct the federal enforceability column for several citations and add two missing citations: SIP Regulation 11, Rule 1 and 40 CFR Part 61, Subpart A.
- In Section XII, update the web address for SIP provisions.

### **Minor Revision (Application 11948):**

**December 29, 2005**

- Add the new A-51 Landfill Gas Flare to Tables II-B, IV-B, VII-B, and VIII, and to Condition # 19867, Parts 16, 19, 20, 22-26, 29, and 30.
- Clarify allowable control system operating scenarios by combining Condition # 19867, Parts 16 and 21 into Part 16 and by deleting Part 21. Delete Part 21 from Table IV-B and update related citations in Table VII-B.
- In Condition # 19867, Parts 18 and 31, clarify reporting requirements and condition basis associated with the landfill gas sulfur content limits and update related citations and basis in Tables IV-B, VII-B, and VIII.
- Update regulatory amendment dates in Tables IV-B and IV-M.
- Add two terms to the Glossary in Section XI.

## **XI. GLOSSARY**

**ACT**

Federal Clean Air Act

**APCO**

Air Pollution Control Officer: Head of Bay Area Air Quality Management District

**ARB**

Air Resources Board (same as CARB)

**ATCM**

Airborne Toxic Control Measure

**BAAQMD**

Bay Area Air Quality Management District

**BACT**

Best Available Control Technology

**Basis**

The underlying authority that allows the District to impose requirements.

**CAA**

The federal Clean Air Act

**CAAQS**

California Ambient Air Quality Standards

**CAPCOA**

California Air Pollution Control Officers Association

**CARB**

California Air Resources Board (same as ARB)

**CCR**

California Code of Regulations

**CEQA**

California Environmental Quality Act



## **XI. Glossary**

### **CFR**

The Code of Federal Regulations. 40 CFR contains the implementing regulations for federal environmental statutes such as the Clean Air Act. Parts 50-99 of 40 CFR contain the requirements for air pollution programs.

### **CH<sub>4</sub> or CH<sub>4</sub>**

Methane

### **CO**

Carbon Monoxide

### **CO<sub>2</sub>**

Carbon Dioxide

### **CT**

Combustion Zone Temperature

### **Cumulative Increase**

The sum of permitted emissions from each new or modified source since a specified date pursuant to BAAQMD Rule 2-1-403, Permit Conditions (as amended by the District Board on 7/17/91) and SIP Rule 2-1-403, Permit Conditions (as approved by EPA on 6/23/95). Used to determine whether threshold-based requirements are triggered.

### **District**

The Bay Area Air Quality Management District

### **EG**

Emission Guidelines

### **EO**

Executive Order

### **EPA**

The federal Environmental Protection Agency.

### **Excluded**

Not subject to any District regulations.

## **XI. Glossary**

### **Federally Enforceable, FE**

All limitations and conditions which are enforceable by the Administrator of the EPA including those requirements developed pursuant to 40 CFR Part 51, subpart I (NSR), Part 52.21 (PSD), Part 60 (NSPS), Part 61 (NESHAPs), Part 63 (MACT), and Part 72 (Permits Regulation, Acid Rain), including limitations and conditions contained in operating permits issued under an EPA-approved program that has been incorporated into the SIP.

### **FP**

Filterable Particulate as measured by BAAQMD Method ST-15, Particulate.

### **GDF**

Gasoline Dispensing Facility

### **H<sub>2</sub>S or H<sub>2</sub>S**

Hydrogen Sulfide

### **HAP**

Hazardous Air Pollutant. Any pollutant listed pursuant to Section 112(b) of the Act. Also refers to the program mandated by Title I, Section 112, of the Act and implemented by 40 CFR Part 63.

### **HHV**

Higher Heating Value. The quantity of heat evolved as determined by a calorimeter where the combustion products are cooled to 60F and all water vapor is condensed to liquid.

### **LFG**

Landfill gas

### **Major Facility**

A facility with potential emissions of: (1) at least 100 tons per year of regulated air pollutants, (2) at least 10 tons per year of any single hazardous air pollutant, and/or (3) at least 25 tons per year of any combination of hazardous air pollutants, or such lesser quantity of hazardous air pollutants as determined by the EPA administrator.

### **MAX or Max.**

Maximum

## **XI. Glossary**

### **MFR**

Major Facility Review. The District's term for the federal operating permit program mandated by Title V of the Federal Clean Air Act and implemented by District Regulation 2, Rule 6.

### **MIN or Min.**

Minimum

### **MOP**

The District's Manual of Procedures.

### **MSW**

Municipal solid waste

### **MW**

Molecular weight

### **N<sub>2</sub>**

Nitrogen

### **NA**

Not Applicable

### **NAAQS**

National Ambient Air Quality Standards

### **NESHAPS**

National Emission Standards for Hazardous Air Pollutants. See in 40 CFR Parts 61 and 63.

### **NMHC**

Non-methane Hydrocarbons (Same as NMOC)

### **NMOC**

Non-methane Organic Compounds (Same as NMHC)

### **NO<sub>x</sub> or NO<sub>x</sub>**

Oxides of nitrogen.

## **XI. Glossary**

### **NSPS**

Standards of Performance for New Stationary Sources. Federal standards for emissions from new stationary sources. Mandated by Title I, Section 111 of the Federal Clean Air Act, and implemented by 40 CFR Part 60 and District Regulation 10.

### **NSR**

New Source Review. A federal program for pre-construction review and permitting of new and modified sources of pollutants for which criteria have been established in accordance with Section 108 of the Federal Clean Air Act. Mandated by Title I of the Federal Clean Air Act and implemented by 40 CFR Parts 51 and 52 and District Regulation 2, Rule 2. (Note: There are additional NSR requirements mandated by the California Clean Air Act.)

### **O<sub>2</sub> or O<sub>2</sub>**

Oxygen

### **Offset Requirement**

A New Source Review requirement to provide federally enforceable emission offsets for the emissions from a new or modified source. Applies to emissions of POC, NO<sub>x</sub>, PM<sub>10</sub>, and SO<sub>2</sub>.

### **Phase II Acid Rain Facility**

A facility that generates electricity for sale through fossil-fuel combustion and is not exempted by 40 CFR 72 from Titles IV and V of the Clean Air Act.

### **POC**

Precursor Organic Compounds

### **PM**

Particulate Matter

### **PM<sub>10</sub> or PM<sub>10</sub>**

Particulate matter with aerodynamic equivalent diameter of less than or equal to 10 microns

### **PSD**

Prevention of Significant Deterioration. A federal program for permitting new and modified sources of those air pollutants for which the District is classified "attainment" of the National Air Ambient Quality Standards. Mandated by Title I of the Act and implemented by both 40 CFR Part 52 and District Regulation 2, Rule 2.

## **XI. Glossary**

### **PV or P/V Valve**

Pressure/Vacuum Valve

### **RMP**

Risk Management Plan

### **S**

Sulfur

### **SIP**

State Implementation Plan. State and District programs and regulations approved by EPA and developed in order to attain the National Air Ambient Quality Standards. Mandated by Title I of the Act.

### **SO<sub>2</sub> or SO<sub>2</sub>**

Sulfur dioxide

### **SSM**

Startup, Shutdown, or Malfunction

### **SSM Plan**

A plan, which states the procedures that will be followed during a startup, shutdown, or malfunction, that is prepared in accordance with the general NESHAP provisions (40 CFR Part 63, Subpart A) and maintained on site at the facility.

### **TAC**

Toxic Air Contaminant (as identified by CARB)

### **THC**

Total Hydrocarbons (NMHC + Methane)

### **Title V**

Title V of the federal Clean Air Act. Requires a federally enforceable operating permit program for major and certain other facilities.

### **TOC**

Total Organic Compounds (NMOC + Methane, Same as THC)

### **TPH**

Total Petroleum Hydrocarbons

## XI. Glossary

### **TRMP**

Toxic Risk Management Policy

### **TRS**

Total Reduced Sulfur

### **TSP**

Total Suspended Particulate

### **VOC**

Volatile Organic Compounds

### **VMT**

Vehicle Miles Traveled

### **Symbols:**

<	=	less than
>	=	greater than
≤	=	less than or equal to
≥	=	greater than or equal to

### **Units of Measure:**

bhp	=	brake-horsepower
btu	=	British Thermal Unit
BTU	=	British Thermal Unit
°C	=	degrees Centigrade
cfm	=	cubic feet per minute
dscf	=	dry standard cubic feet
°F	=	degrees Fahrenheit
ft <sup>3</sup>	=	cubic feet
g	=	grams
gal	=	gallon
gpm	=	gallons per minute
gr	=	grains
hp	=	horsepower
hr	=	hour
lb	=	pound
lbmol	=	pound-mole
in	=	inches
m <sup>2</sup>	=	square meter
m <sup>3</sup>	=	cubic meters

## XI. Glossary

min	=	minute
mm	=	millimeter
MM	=	million
MM BTU	=	million BTU
MMcf	=	million cubic feet
Mg	=	mega grams
ppb	=	parts per billion
ppbv	=	parts per billion, by volume
ppm	=	parts per million
ppmv	=	parts per million, by volume
ppmw	=	parts per million, by weight
psia	=	pounds per square inch, absolute
psig	=	pounds per square inch, gauge
scf	=	standard cubic feet
scfm	=	standard cubic feet per minute
sdcf	=	standard dry cubic feet
sdcfm	=	standard dry cubic feet per minute
yd	=	yard
yd <sup>3</sup>	=	cubic yards
yr	=	year

## **XII. APPLICABLE STATE IMPLEMENTATION PLAN**

The Bay Area Air Quality Management District's portion of the State Implementation Plan can be found at EPA Region 9's website. The address is:

<http://yosemite.epa.gov/r9/r9sips.nsf/Agency?ReadForm&count=500&state=California&cat=Bay+Area+Air+Quality+Management+District-Agency-Wide+Provisions>