# **Bay Area Air Quality Management District**

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

# **Final**Proposed

# **MAJOR FACILITY REVIEW PERMIT**

# Issued To: City of Mountain View (Shoreline) Facility #A2740

### **Facility Address:**

2600 Shoreline Boulevard Mountain View, CA 94043

## **Mailing Address:**

P. O. Box 7540231 N. Whisman Rd. Mountain View, CA 9403994043

### **Responsible Official**

Kevin C. Duggan City Manager

650-903-6301

#### **Facility Contact**

John T. Welbourn Tim Pike

**Environmental Engineering Manager** 

Streets & Landfill Closure Manager

650-903<del>-6219</del>-6092

**Type of Facility:** Landfill BAAQMD Engineering Division Contact:

**Primary SIC:** 4953 Carol S. Allen

**Product:** Closed Solid Waste Disposal Facility

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

<u>September 19, 2007</u>

Jack P. Broadbent, Executive Officer/Air Pollution Control Officer

Date

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Facility Name: City of Mountain View (Shoreline)

Permit for Facility #: A2740

### 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  $\frac{5}{2}$ /01 $\frac{7}{9}$ /08);

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  $\frac{8}{1/01}\frac{7}{19/06}$ );

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  $\frac{5}{17}\frac{006}{15}$ );

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  $\frac{5}{17}/0012/21/04$ );

SIP Regulation 2, Rule 4 - Permits, Emissions Banking

(as approved by EPA through 1/26/99); and

BAAQMD Regulation 2, Rule 5 – Permits, New Source Review of Toxic Air Contaminants

(as adopted by the District Board on 6/15/05; and

BAAQMD Regulation 2, Rule 6 - Permits, Major Facility Review

(as amended by the District Board on 4/16/03):and

SIP Regulation 2, Rule 6 – Permits, Major Facility Review

(as approved by EPA through 6/23/95).

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

1. This Major Facility Review Permit was issued on July 28, 2003 [enter issuance date] and expires on June 30, 2008 [enter 5<sup>th</sup> anniversary of issuance date]. The permit holder shall submit a complete application for renewal of this Major Facility Review Permit no later than December 31, 2007 [enter date 6 months prior to permit expiration date], and no earlier than June 30, 2007 [enter date 12 months prior to expiration date]. If a complete application for renewal has not been submitted in accordance with this deadline, the facility may not operate after June 30, 2008 [enter permit expiration date]. If the permit renewal has not been issued by June 30, 2008 [enter permit expiration date], but a complete application for renewal has been submitted in accordance with the above deadlines, the existing permit will continue in force until the District takes final action on the renewal application. (Regulation 2-6-307, 404.2, 407 & 409.6; MOP

## I. Standard Conditions

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)
- 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 reissuance, 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

#### I. Standard Conditions

establishing, any new emission limitations. (MOP Volume II, Part 3, §4.11)

- 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. (Regulation 2-6-409.20, MOP Volume II, Part 3, §4.11)
- 12. The permit holder is responsible for compliance, and certification of compliance, with all conditions of the permit, regardless whether it acts through employees, agents, contractors, or subcontractors. (Regulation 2-6-307)

## 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 that 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 July 28, 2003 to December 31, 2003. The report shall be submitted by January 31, 2004. Subsequent reports shall be for the following periods: January 1st through June 30th and July 1st through December 31st, 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

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#### I. Standard Conditions

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 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 July 1st tothrough June 30th. The certification shall be submitted by July 31st 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 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

### I. Standard Conditions

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)

Facility Name: City of Mountain View (Shoreline)

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# 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-1	Landfill (includes the 544-acre	Closed Solid Waste		Maximum Design Capacity:
	Landfill, Crittenden Landfill	Disposal Site		18,852,000 yd <sup>3</sup> (14,413,400 m <sup>3</sup> );
	and the major portion of the			Maximum Cumulative Waste In
	Vista Landfill)			Place: 12,725,000 tons;
	Landfill Gas Collection System	Active		7 horizontal collectors
				264 vertical wells
S-11	Diesel Engine for Emergency	Cummins	6CTA8.3	207 bhp, 506 in <sup>3</sup> ,
	Standby Generator		G-2	10.6 gallons/hour of diesel oil,
				1.453 MM BTU/hour
S-12	Microturbine, landfill gas fired	Ingersoll-Rand	70LM	71 kW nominal, 92 kW maximum
				at 0 °F, 1.6 MM BTU/hour
S-13	Microturbine, landfill gas fired	Ingersoll-Rand	70LM	71 kW nominal, 92 kW maximum
				at 0 °F, 1.6 MM BTU/hour
S-14	Diesel Engine for Emergency	Kohler	D300	469 bhp, 740 in <sup>3</sup> ,
	Standby Generator		12.1A65	19.8 gallons/hour of diesel oil,
				2.772 MM BTU/hour

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# II. Equipment

**Table II B - Abatement Devices** 

<b>A-</b> #	Description	Source(s) Controlled	Applicable Requirement	Operating Parameters	Limit or Efficiency
A-3	Landfill Gas Flare	S-1	BAAQMD	Minimum combustion	Either 98% destruction
	(33 MM BTU/hour)		8-34-301.3,	zone temperature of:	of NMOC or
			see also	1400 °F	< 30 ppmv of NMOC,
			Table IV-A	(3-hour average),	as CH <sub>4</sub> , at 3% O <sub>2</sub> , dry
				see also Table VII-A	
A-4	Landfill Gas Flare	S-1	BAAQMD	Minimum combustion	Either 98% destruction
	(48 MM BTU/hour)		8-34-301.3,	zone temperature of:	of NMOC or
			see also	1400 °F	< 30 ppmv of NMOC,
			Table IV-A	(3-hour average),	as CH <sub>4</sub> , at 3% O <sub>2</sub> , dry
				see also Table VII-A	
A-5	Landfill Gas Flare	S-1	BAAQMD	Minimum combustion	Either 98% destruction
	(48 MM BTU/hour)		8-34-301.3,	zone temperature of:	of NMOC or
			see also	1400 °F	< 30 ppmv of NMOC,
			Table IV-A	(3-hour average),	as CH <sub>4</sub> , at 3% O <sub>2</sub> , dry
				see also Table VII-A	

# 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. This section also contains provisions that may apply to temporary sources.

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.

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

#### NOTE:

There are differences between the current BAAQMD rules and the versions of the rules in the SIP. All sources must comply with <u>both</u> 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 (5/2/017/9/08)	N
SIP Regulation 1	General Provisions and Definitions (6/28/99)	Y
BAAQMD Regulation 2, Rule 1	Permits – General Requirements (8/1/017/19/06)	N
BAAQMD 2-1-429	Federal Emissions Statement ( <del>6/7/95</del> 12/21/04)	<u> </u>
SIP Regulation 2, Rule 1	Permits – General Requirements (1/26/99)	Y
SIP Regulation 2-1-429	Federal Emissions Statement (4/3/95)	<u>Y</u>

# III. Generally Applicable Requirements

# Table III Generally Applicable Requirements

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)
BAAQMD Regulation 2, Rule 5	Permits – New Source Review of Toxic Air Contaminants (6/15/05)	<u>N</u>
BAAQMD Regulation 5	Open Burning (3/6/02)	N
SIP Regulation 5	Open Burning (9/4/98)	Y
BAAQMD Regulation 6, Rule 1	Particulate Matter-and Visible Emissions General  Requirements (12/19/9012/5/07)	¥ <u>N</u>
SIP Regulation 6	Particulate Matter (9/4/98)	<u>Y</u>
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 (6/15/947/20/05))	¥ <u>N</u>
SIP Regulation 8, Rule 2	Organic Compounds – Miscellaneous Operations (3/22/95)	<u>Y</u>
BAAQMD Regulation 8, Rule 3	Organic Compounds – Architectural Coatings (11/21/01)	N <u>Y</u>
SIP Regulation 8, Rule 3	Organic Compounds - Architectural Coatings (2/18/98)	¥
BAAQMD Regulation 8, Rule 4	Organic Compounds – General Solvent and Surface Coating Operations (10/16/02)	<u>NY</u>
SIP Regulation 8, Rule 4	Organic Compounds - General Solvent and Surface Coating Operations (12/23/97)	¥
BAAQMD Regulation 8, Rule 15	Organic Compounds – Emulsified and Liquid Asphalts (6/1/94)	<u>Y</u>
BAAQMD Regulation 8, Rule 16	Organic Compounds – Solvent Cleaning Operations (10/16/02)	N <u>Y</u>
SIP Regulation 8, Rule 16	Organic Compounds - Solvent Cleaning Operations (12/9/94)	¥
BAAQMD Regulation 8, Rule 40	Organic Compounds – Aeration of Contaminated Soil and Removal of Underground Storage Tanks (12/15/996/15/05)	¥ <u>N</u>
BAAQMD 8-40-116	Exemption, Small Volume	¥
BAAQMD 8-40-117	Exemption, Accidental Spills	¥
SIP Regulation 8, Rule 40	Organic Compounds – Aeration of Contaminated Soil and Removal of Underground Storage Tanks (4/19/01)	<u>Y</u>
BAAQMD Regulation 8, Rule 47	Organic Compounds – Air Stripping and Soil Vapor Extraction Operations (6/15/05)	<u>N</u>
SIP Regulation 8, Rule 47	Organic Compounds – Air Stripping and Soil Vapor Extraction Operations (4/26/95)	<u>Y</u>
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

# III. Generally Applicable Requirements

# Table III Generally Applicable Requirements

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)
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
BAAQMD Regulation 9, Rule 1	<u>Inorganic Gaseous Pollutants – Sulfur Dioxide (3/15/95)</u>	<u>N</u>
SIP Regulation 9, Rule 1	<u>Inorganic Gaseous Pollutants – Sulfur Dioxide (6/8/99)</u>	<u>Y</u>
BAAQMD Regulation 9, Rule 2	<u>Inorganic Gaseous Pollutants – Hydrogen Sulfide (10/6/99)</u>	<u>N</u>
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
California Health and Safety Code	Portable Equipment	<u>N</u>
Section 41750 et seq		
California Health and Safety Code Section 44300 et seq.	Air Toxics "Hot Spots" Information and Assessment Act of 1987	N
California Health and Safety Code,	Airborne Toxic Control Measure for Stationary Compression	<u>N</u>
Title 17, Section 93115	Ignition Engines (10/18/07)	
California Health and Safety Code,	Airborne Toxic Control Measure for Diesel Particulate Matter	<u>N</u>
<u>Title 17, Section 93116</u>	from Portable Engines Rated at 50 Horsepower and Greater (9/12/07)	
40 CFR Part 61, Subpart A	National Emission Standards for Hazardous Air Pollutants – General Provisions (5/16/07)	<u>Y</u>
40 CFR Part 61, Subpart M	National Emission Standards for Hazardous Air Pollutants – National Emission Standard for Asbestos (6/19/95)	Y
EPA Regulation 40 CFR 82	Protection of Stratospheric Ozone (2/21/95)	<u>Y</u>
Subpart F, 40 CFR 82.156	Leak Repair	Y
Subpart F, 40 CFR 82.161	Certification of Technicians	Y
Subpart F, 40 CFR 82.166	Records of Refrigerant	Y

# 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.

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

All other text may be found in the regulations themselves.

# Table IV – A Source-Specific Applicable Requirements S-1 Landfill and Gas Collection System, A-3 Landfill Gas Flare, A-4 Landfill Gas Flare, and A-5 Landfill Gas Flare

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
BAAQMD Regulation 1	General Provisions and Definitions (5/2/20017/19/0608)		
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	

# IV. Source-Specific Applicable Requirements

# Table IV – A Source-Specific Applicable Requirements S-1 Landfill and Gas Collection System, A-3 Landfill Gas Flare, A-4 Landfill Gas Flare, and A-5 Landfill Gas Flare

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
SIP Regulation 1	General Provisions and Definitions (6/28/1999)		
1-523	Parametric Monitoring and Recordkeeping Procedures	$Y^{\downarrow}$	
1-523.3	Reports of Violations	$Y^{\downarrow}$	
<u>1-523.5</u>	Maintenance and Calibration	<u>Y</u> <sup>±</sup>	
BAAQMD Regulation 6, Rule 1	Particulate Matter – General Requirements (12/5/07)		
<u>6-1-301</u>	Ringelmann No. 1 Limitation (applies to A-3, A-4, and A-5 Landfill Gas Flares only)	<u>N</u>	
<u>6-1-305</u>	<u>Visible Particles</u> (applies to A-3, A-4, and A-5 Landfill Gas Flares only)	<u>N</u>	
<u>6-1-310</u>	Particle Weight Limitation (applies to A-3, A-4, and A-5 Landfill Gas Flares only)	<u>N</u>	
<u>6-1-401</u>	Appearance of Emissions (applies to A-3, A-4, and A-5 Landfill Gas Flares only)	<u>N</u>	
BAAQMD SIP Regulation 6	Particulate Matter and Visible Emissions (12/19/19909/4/98))		
6-301	Ringelmann No. 1 Limitation (applies to A-3, A-4, and A-5 Flares only)	Y	
6-305	Visible Particles (applies to A-3, A-4, and A-5 Flares only)	Y	
6-310	Particle Weight Limitation (applies to A-3, A-4, and A-5 Flares only)	Y	
6-401	Appearance of Emissions (applies to A-3, A-4, and A-5 Flares only)	Y	
BAAQMD Regulation 8, Rule 34	Organic Compounds – Solid Waste Disposal Sites (6/15/ <del>20</del> 05)		
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	
8-34-117	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	

# IV. Source-Specific Applicable Requirements

# Table IV – A Source-Specific Applicable Requirements S-1 Landfill and Gas Collection System, A-3 Landfill Gas Flare, A-4 Landfill Gas Flare, and A-5 Landfill Gas Flare

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
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	
	Limits for Enclosed Flares	(Y/N)  Y  Y  Y  Y  Y  Y  Y  Y  Y  Y  Y  Y  Y	
8-34-301.3	(applies to A-3, A-4, and A-5 Flares only)	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	
8-34-304.4	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 (except as specified in Condition # 16065, Part 5)	Y	
8-34-305.3	Nitrogen < 20% (except as specified in Condition # 16065, Part 5) or	Y	
8-34-305.4	Oxygen < 5% (except as specified in Condition # 16065, Part 5)	Y	
8-34-405	Design Capacity Reports		
8-34-408	Collection and Control System Design Plans		
8-34-408.2	Sites With Existing Collection and Control Systems		
8-34-411	Annual Report	Y	

# IV. Source-Specific Applicable Requirements

# Table IV – A Source-Specific Applicable Requirements S-1 Landfill and Gas Collection System, A-3 Landfill Gas Flare, A-4 Landfill Gas Flare, and A-5 Landfill Gas Flare

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
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 A-3, A-4, and A-5 Flares only)	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	
8-34-503	Landfill Gas Collection and Emission Control System Leak Testing	Y	

# IV. Source-Specific Applicable Requirements

# Table IV – A Source-Specific Applicable Requirements S-1 Landfill and Gas Collection System, A-3 Landfill Gas Flare, A-4 Landfill Gas Flare, and A-5 Landfill Gas Flare

8-34-505 Well Head Monitoring Y 8-34-506 Landfill Surface Monitoring Y 8-34-506.1 Criteria for Annual Monitoring: Closed Landfill Y 8-34-506.2 Criteria for Annual Monitoring: No Excess in 3 Quarters Y 8-34-506.3 Criteria for Annual Monitoring: Revert to Quarterly Monitoring if an Excess is Detected P 8-34-506.3 Criteria for Annual Monitoring: Revert to Quarterly Monitoring if an Excess is Detected P 8-34-507 Continuous Temperature Monitor and Recorder (applies to A-3, A-4, and A-5 Flares only) 8-34-508 Gas Flow Meter Y 8-34-510 Cover Integrity Monitoring Y 8-34-510 Cover Integrity Monitoring Y 8-34-510 Limitations on Ground Level Concentrations (applies to A-3, A-4, and A-5 Flares only) 9-1-301 Limitations on Ground Level Concentrations (applies to A-3, A-4, and A-5 Flares only) 9-1-302 General Emission Limitations (applies to A-3, A-4, and A-5 Flares only) 8-34-309 Inorganic Gaseous Pollutants – Hydrogen Sulfide (10/6/1999) 8-34-300 Limitations on Hydrogen Sulfide N 8-34-500 Regulation 9, Inorganic Gaseous Pollutants – Hydrogen Sulfide (10/6/1999) 8-34-300 Limitations on Hydrogen Sulfide N 9-1-301 Limitations on Hydrogen Sulfide N 9-1-302 Regulation 9, Inorganic Gaseous Pollutants – Hydrogen Sulfide (10/6/1999) 8-34-350 Requires Submission of Requests, Reports, Applications, and Other Crampions (5/4/1998/6/13/07)) 8-34-350 Requires Submission of Requests, Reports, Applications, and Other Correspondence to the Administrator 9-35-350 Requires Submission of Requests, Reports, Applications, and Other Correspondence to the Administrator 9-35-350 Requires Compliance With Standards and Maintenance Requirements Y 9-35-350 Requires Compliance determined by performance tests Y 9-35-350 Requires Compliance determined by performance tests Y 9-35-350 Requires Compliance determined by performance tests Y 9-35-350 Requires Control devices operated using good air pollution control practice Y	Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
8-34-506 Landfill Surface Monitoring Y 8-34-506.1 Criteria for Annual Monitoring: Closed Landfill Y 8-34-506.2 Criteria for Annual Monitoring: No Excess in 3 Quarters  Criteria for Annual Monitoring: Revert to Quarterly Monitoring if an Excess is Detected  Continuous Temperature Monitor and Recorder (applies to A-3, A-4, and A-5 Flares only)  8-34-508 Gas Flow Meter Y 8-34-510 Cover Integrity Monitoring Y  BAAQMD Regulation 9, Inorganic Gaseous Pollutants – Sulfur Dioxide (3/15/4995)  Rule 1  Limitations on Ground Level Concentrations (applies to A-3, A-4, and A-5 Flares only)  9-1-301 Concentrations (applies to A-3, A-4, and A-5 Flares only)  BAAQMD Regulation 9, Inorganic Gaseous Pollutants – Hydrogen Sulfide (10/6/14999)  BAAQMD Regulation 9, Inorganic Gaseous Pollutants – Hydrogen Sulfide (10/6/14999)  Rule 2  9-1-302 Subpart A  Standards of Performance for New Stationary Sources – General Provisions (5/4/19986/13/07)  Subpart A  Requires Submission of Requests, Reports, Applications, and Other Correspondence to the Administrator  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	8-34-504	Portable Hydrocarbon Detector	Y	
8-34-506.1 Criteria for Annual Monitoring: Closed Landfill  8-34-506.2 Criteria for Annual Monitoring: No Excess in 3 Quarters  Y  8-34-506.3 Criteria for Annual Monitoring: Revert to Quarterly Monitoring if an Excess is Detected  Continuous Temperature Monitor and Recorder (applies to A-3, A-4, and A-5 Flares only)  8-34-507 Gas Flow Meter  8-34-508 Gas Flow Meter  8-34-510 Cover Integrity Monitoring  Y  8-34-509 Inorganic Gaseous Pollutants – Sulfur Dioxide (3/15/4995)  Rule 1  9-1-301 Limitations on Ground Level Concentrations (applies to A-3, A-4, and A-5 Flares only)  9-1-302 General Emission Limitations (applies to A-3, A-4, and A-5 Flares only)  BAAQMD Regulation 9, Inorganic Gaseous Pollutants – Hydrogen Sulfide (10/6/4999)  Rule 2  9-2-301 Limitations on Hydrogen Sulfide  N  40 CFR Part 60, Subpart A  60.4(b) Requires Submission of Requests, Reports, Applications, and Other Correspondence to the Administrator  60.7 Notification and Record Keeping  Y  60.8 Performance Tests  Y  60.11 Compliance with Standards and Maintenance Requirements  Y  60.11(d) Control devices operated using good air pollution control practice  Y	8-34-505	Well Head Monitoring	Y	
8-34-506.1 Criteria for Annual Monitoring: Closed Landfill  8-34-506.2 Criteria for Annual Monitoring: No Excess in 3 Quarters  Y  8-34-506.3 Criteria for Annual Monitoring: Revert to Quarterly Monitoring if an Excess is Detected  Continuous Temperature Monitor and Recorder (applies to A-3, A-4, and A-5 Flares only)  8-34-507 Gas Flow Meter  8-34-508 Gas Flow Meter  8-34-510 Cover Integrity Monitoring  Y  8-34-509 Inorganic Gaseous Pollutants – Sulfur Dioxide (3/15/4995)  Rule 1  9-1-301 Limitations on Ground Level Concentrations (applies to A-3, A-4, and A-5 Flares only)  9-1-302 General Emission Limitations (applies to A-3, A-4, and A-5 Flares only)  BAAQMD Regulation 9, Inorganic Gaseous Pollutants – Hydrogen Sulfide (10/6/4999)  Rule 2  9-2-301 Limitations on Hydrogen Sulfide  N  40 CFR Part 60, Subpart A  60.4(b) Requires Submission of Requests, Reports, Applications, and Other Correspondence to the Administrator  60.7 Notification and Record Keeping  Y  60.8 Performance Tests  Y  60.11 Compliance with Standards and Maintenance Requirements  Y  60.11(d) Control devices operated using good air pollution control practice  Y	8-34-506	Landfill Surface Monitoring	Y	
Criteria for Annual Monitoring: Revert to Quarterly Monitoring if an Excess is Detected  8-34-507 Continuous Temperature Monitor and Recorder (applies to A-3, A-4, and A-5 Flares only)  8-34-508 Gas Flow Meter  8-34-510 Cover Integrity Monitoring  Y  BAAQMD Regulation 9, Inorganic Gaseous Pollutants – Sulfur Dioxide (3/15/14995)  Rule 1  Pol-301 Limitations on Ground Level Concentrations (applies to A-3, A-4, and A-5 Flares only)  General Emission Limitations (applies to A-3, A-4, and A-5 Flares only)  BAAQMD Regulation 9, Inorganic Gaseous Pollutants – Hydrogen Sulfide (10/6/14999)  Rule 2  Pol-301 Limitations on Hydrogen Sulfide N  HO CFR Part 60, Standards of Performance for New Stationary Sources – General Provisions (5/4/14986/13/07))  Requires Submission of Requests, Reports, Applications, and Other Correspondence to the Administrator  60.4(b) Requires Submission of Requests, Reports, Applications, and Other Correspondence to the Administrator  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	8-34-506.1		Y	
Excess is Detected  8-34-507  Continuous Temperature Monitor and Recorder (applies to A-3, A-4, and A-5 Flares only)  8-34-508  Gas Flow Meter  Y  8-34-510  Cover Integrity Monitoring  Y  BAAQMD  Regulation 9, Rule 1  Limitations on Ground Level Concentrations (applies to A-3, A-4, and A-5 Flares only)  General Emission Limitations (applies to A-3, A-4, and A-5 Flares only)  P-1-302  General Emission Limitations (applies to A-3, A-4, and A-5 Flares only)  BAAQMD  Regulation 9, Rule 2  P-2-301  Limitations on Hydrogen Sulfide  N  HOCFR Part 60, Subpart A  Requires Submission of Requests, Reports, Applications, and Other Correspondence to the Administrator  60.4(b)  Requires Submission of Requests, Reports, Applications, and Other Correspondence to the Administrator  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	8-34-506.2	Criteria for Annual Monitoring: No Excess in 3 Quarters	Y	
Regulation 9, Inorganic Gaseous Pollutants – Sulfur Dioxide (3/15/1995)  BAAQMD (applies to A-3, A-4, and A-5 Flares only)  Pol-301 Limitations on Ground Level Concentrations (applies to A-3, A-4, and A-5 Flares only)  General Emission Limitations (applies to A-3, A-4, and A-5 Flares only)  BAAQMD (applies to A	8-34-506.3		Y	
8-34-508 Gas Flow Meter Y 8-34-510 Cover Integrity Monitoring Y  BAAQMD Regulation 9, Inorganic Gaseous Pollutants – Sulfur Dioxide (3/15/4995)  Rule 1  9-1-301 Limitations on Ground Level Concentrations (applies to A-3, A-4, and A-5 Flares only)  9-1-302 General Emission Limitations (applies to A-3, A-4, and A-5 Flares only)  BAAQMD Regulation 9, Inorganic Gaseous Pollutants – Hydrogen Sulfide (10/6/4999)  Rule 2  9-2-301 Limitations on Hydrogen Sulfide N  40 CFR Part 60, Standards of Performance for New Stationary Sources – General Provisions (5/4/19986/13/07))  80-4(b) Requires Submission of Requests, Reports, Applications, and Other Correspondence to the Administrator  60.4(b) Reprint A Reports Submission of Requests, Reports, Applications, and Other Correspondence Tests  60.11 Compliance with Standards and Maintenance Requirements  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	8-34-507		Y	
8-34-510 Cover Integrity Monitoring  BAAQMD Regulation 9, Rule 1  9-1-301 Limitations on Ground Level Concentrations (applies to A-3, A-4, and A-5 Flares only)  9-1-302 General Emission Limitations (applies to A-3, A-4, and A-5 Flares only)  BAAQMD Regulation 9, Rule 2  9-2-301 Limitations on Hydrogen Sulfide 40 CFR Part 60, Subpart A  Requires Submission of Requests, Reports, Applications, and Other Correspondence to the Administrator  60.4(b) Requires Submission of Requests, Reports, Applications, and Other Correspondence to the Administrator  60.7 Notification and Record Keeping  7 Y  60.8 Performance Tests  8 Y  60.11 Compliance with Standards and Maintenance Requirements  9 Y  10 Y  10 Y  11 Y  12 Y  13 Y  14 Y  15 Y  16 Y  16 Y  16 Y  17 Y  18 Y  18 Y  19 Y  19 Y  10 Y  10 Y  10 Y  11 Y  11 Y  12 Y  13 Y  14 Y  15 Y  16 Y  16 Y  16 Y  17 Y  18 Y	8-34-508		Y	
BAAQMD Regulation 9, Rule 1  9-1-301 Limitations on Ground Level Concentrations (applies to A-3, A-4, and A-5 Flares only)  9-1-302 General Emission Limitations (applies to A-3, A-4, and A-5 Flares only)  P-1-302 BAAQMD Regulation 9, Inorganic Gaseous Pollutants – Hydrogen Sulfide (10/6/1999)  Regulation 9, Rule 2  9-2-301 Limitations on Hydrogen Sulfide N  Standards of Performance for New Stationary Sources – General Provisions (5/4/19986/13/07))  Requires Submission of Requests, Reports, Applications, and Other Correspondence to the Administrator  Notification and Record Keeping 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	8-34-510	Cover Integrity Monitoring	Y	
General Emission Limitations (applies to A-3, A-4, and A-5 Flares only)   Y	BAAQMD Regulation 9, Rule 1	Inorganic Gaseous Pollutants – Sulfur Dioxide (3/15/ <del>19</del> 95)		
(applies to A-3, A-4, and A-5 Flares only)  BAAQMD  Regulation 9, Inorganic Gaseous Pollutants – Hydrogen Sulfide (10/6/1999)  Rule 2  9-2-301 Limitations on Hydrogen Sulfide  N  Standards of Performance for New Stationary Sources – General Provisions (5/4/19986/13/07))  Requires Submission of Requests, Reports, Applications, and Other Correspondence to the Administrator  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	9-1-301		Y	
BAAQMD Regulation 9, Rule 2 9-2-301 Limitations on Hydrogen Sulfide (10/6/4999)  Standards of Performance for New Stationary Sources – General Provisions (5/4/19986/13/07))  Requires Submission of Requests, Reports, Applications, and Other Correspondence to the Administrator  60.7 Notification and Record Keeping  Performance Tests  Y  60.11 Compliance with Standards and Maintenance Requirements  Y  60.11(a) Control devices operated using good air pollution control practice  Y	9-1-302	General Emission Limitations	Y	
Standards of Performance for New Stationary Sources – General Provisions (5/4/19986/13/07)  Requires Submission of Requests, Reports, Applications, and Other Correspondence to the Administrator  Notification and Record Keeping  Performance Tests  Y  Compliance with Standards and Maintenance Requirements  Compliance determined by performance tests  Y  Control devices operated using good air pollution control practice	BAAQMD Regulation 9, Rule 2			
Part 60, Subpart A  Requires Submission of Requests, Reports, Applications, and Other Correspondence to the Administrator  Notification and Record Keeping  Performance Tests  Compliance with Standards and Maintenance Requirements  Compliance determined by performance tests  Y  Control devices operated using good air pollution control practice  Y  Ceneral Provisions (5/4/19986/13/07)  Y  Correspondence to the Administrator  Y  Correspondence to the Administrator  Y  Correspondence Tests  Y  Compliance Tests  Y  Compliance with Standards and Maintenance Requirements  Y  Compliance determined by performance tests  Y  Control devices operated using good air pollution control practice	9-2-301	Limitations on Hydrogen Sulfide	N	
Correspondence to the Administrator  Notification and Record Keeping  Performance Tests  Compliance with Standards and Maintenance Requirements  Compliance determined by performance tests  Control devices operated using good air pollution control practice  Y  Correspondence to the Administrator  Y  Control devices operated using good air pollution control practice	40 CFR Part 60, Subpart A	-		
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	60.4(b)		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	60.7	Notification and Record Keeping	Y	
60.11(a) Compliance determined by performance tests Y 60.11(d) Control devices operated using good air pollution control practice Y	60.8	Performance Tests	Y	
60.11(d) Control devices operated using good air pollution control practice Y	60.11	Compliance with Standards and Maintenance Requirements	Y	
60.11(d) Control devices operated using good air pollution control practice Y	60.11(a)	Compliance determined by performance tests	Y	
	60.11(d)		Y	
	60.12	1 00 1		

# IV. Source-Specific Applicable Requirements

# Table IV – A Source-Specific Applicable Requirements S-1 Landfill and Gas Collection System, A-3 Landfill Gas Flare, A-4 Landfill Gas Flare, and A-5 Landfill Gas Flare

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
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)	Requires multiple monitors for multiple stacks	Y	
60.14	Modification	Y	
60.15	Reconstruction	Y	
60.19	General Notification and Reporting Requirements	Y	
40 CFR	Standards of Performance for New Stationary Sources – Emission		
Part 60, Subpart Cc	Guidelines and Compliance Times for Municipal Solid Waste Landfills (2/24/ <del>19</del> 99)		
60.36c(a)	Collection and Control Systems in Compliance by 30 months after Initial NMOC Emission Rate Report Shows NMOC Emissions ≥ 50 MG/year	Y	
40 CFR Part 62, Subpart F	Approval and Promulgation of State Plans for Designated Facilities and Pollutants: California (9/20/20016/9/03))		
<u>62.1100</u>	Identification of Plan	<u>Y</u>	
62.1115	Identification of Sources	Y	
40 CFR Part 63, Subpart A	National Emission Standards for Hazardous Air Pollutants: General Provisions (3/16/1994_4/20/06))		
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	

# IV. Source-Specific Applicable Requirements

# Table IV – A Source-Specific Applicable Requirements S-1 Landfill and Gas Collection System, A-3 Landfill Gas Flare, A-4 Landfill Gas Flare, and A-5 Landfill Gas Flare

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
40 CFR Part 63, Subpart AAAA	National Emission Standards for Hazardous Air Pollutants: Municipal Solid Waste Landfills (1/16/20034/20/06)		
63.1945	When do I have to comply with this subpart?	Y	
63.1945(b)	Compliance date for existing affected landfills	Y	
63.1955	What requirements must I meet?	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	
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	
BAAQMD			
Condition # 16065			
Part 1	Design capacity and waste acceptance limits (Regulation 2-1-301)	Y	
Part 2	Landfill gas control system requirements (Regulation 8-34-301)	Y	
Part 3	Landfill gas collection system operating requirements (Regulation 8-34-301.1)	Y	

# IV. Source-Specific Applicable Requirements

# Table IV – A Source-Specific Applicable Requirements S-1 Landfill and Gas Collection System, A-3 Landfill Gas Flare, A-4 Landfill Gas Flare, and A-5 Landfill Gas Flare

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
Part 4	Landfill gas collection system description (Regulations 2-1-301, 8-34-301.1, 8-34-303, 8-34-304, and 8-34-305)	Y	
Part 5	Alternative well head requirements limits for specific wells (Regulation 8-34-305)	Y	
Part 6	Alarm and equipment requirements for flares (Regulation 8-34-301)	Y	
Part 7	Combustion zone temperature limits for flares (Toxic Risk Management Policy and Regulations 8-34-301.3)	Y	
Part 8	Landfill gas flow rate limit for flares (Cumulative Increase)[deleted]	Y	
Part 9	NO <sub>x</sub> emission limits for flares (Cumulative Increase)	Y	
Part 10	CO emission limits for flares (Cumulative Increase and RACT)	Y	
Part 11	Vinyl chloride emission limit for flares  (Toxic Risk Management Policy)[deleted]	N	
Part 12	Landfill gas sulfur content limit and monitoring requirements (Regulation 9-1-302)	Y	
Part 13	Annual source test requirements (Cumulative Increase, Toxic Risk Management Policy, and Regulations 8-34-301.3, and-8-34-412, and 9-1-302)	Y	
Part 14	Annual landfill gas characterization analyses  (AB-2588 Air Toxics Hot sports Act, Toxic Risk Management Policy and Regulation 8-34-412, and 9-1-302)	Y	
Part 15	Record keeping requirements (Cumulative Increase and Regulations 2-1-301, 2-6-501, 8-34-301, 8-34-303, 8-34-305, 8-34-412, 8-34-414, 8-34-415, 8-34-501, 8-34-503, 8-34-505, 8-34-506, and 9-1-302)	Y	
Part 16	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	

# IV. Source-Specific Applicable Requirements

# Table IV – B Source-Specific Applicable Requirements S-11 Diesel Engine for Emergency Standby Generator S-14 Diesel Engine for Emergency Standby Generator

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
<b>BAAQMD</b>			
Regulation 6,	Particulate Matter – General Requirements (12/5/07)		
Rule 1			
<u>6-1-303</u>	Ringelmann No. 2 Limitation	<u>N</u>	
<u>6-1-303.1</u>	For Internal Combustion Engines Less Than 1500 in <sup>3</sup> Displacement, or For Standby Engines	<u>N</u>	
6-1-305	<u>Visible Particles</u>	<u>N</u>	
6-1-310	Particulate Weight Limitation	<u>N</u>	
6-1-401	Appearance of Emissions	<u>N</u>	
BAAQMD			
SIP	Particulate Matter and Visible Emissions ( <del>12/19/1990</del> <u>9/4/98</u> )		
Regulation 6			
6-303	Ringelmann No. 2 Limitation	Y	
6-305	Visible Particles	Y	
6-310	Particulate Weight Limitation	Y	
6-401	Appearance of Emissions	Y	
BAAQMD Regulation 9, Rule 1	Inorganic Gaseous Pollutants – Sulfur Dioxide (3/15/ <del>19</del> 95)		
9-1-301	Limitations on Ground Level Concentrations	Y	
9-1-304	Fuel Burning (Liquid and Solid Fuels)	Y	
BAAQMD	Inorganic Gaseous Pollutants – Nitrogen Oxides and Carbon		
Regulation 9	Monoxide from Stationary Internal Combustion Engines (8/1/2001		
Rule 8	<u>7/25/07</u> )		
9-8-110	Exemptions	<u>N</u>	
<u>9-8-110.1</u>	For <250 hp Engines	<u>N</u>	<u>Expires</u> <u>1/1/12</u>
<u>9-8-110.3</u>	For Liquid Fuel Fired Engines	<u>N</u>	Expires <u>1/1/12</u>
<u>9-8-110.5</u>	For Emergency Standby Engines	<u>N</u>	
9-8-330	Emergency Standby Engines, Hours of Operation	N	
9-8-330.1	For Emergency Use	N	

# IV. Source-Specific Applicable Requirements

# Table IV – B Source-Specific Applicable Requirements S-11 Diesel Engine for Emergency Standby Generator S-14 Diesel Engine for Emergency Standby Generator

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
9-8-330.2	For Reliability-Related Activities	N	<u>Expires</u> <u>1/1/12</u>
<u>9-8-330.3</u>	For Reliability-Related Activities	<u>N</u>	<u>1/1/12</u>
<u>9-8-502</u>	Recordkeeping	<u>N</u>	
<u>9-8-502.1</u>	For Exempt Engines	<u>N</u>	
9-8-530	Emergency Standby Engines and Low Usage 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	
CCR, Title 17,	Airborne Toxic Control Measure for Stationary Compression		
Section 93115	Ignition Engines (10/18/07)		
<u>§93115.3</u>	Exemption (applies to S-14 only)	<u>N</u>	
§93115.3(d)	For In-Use Engines Permitted Before 1/1/05 Pursuant to Risk  Management Guidance (applies to S-14 only)	<u>N</u>	
<u>§93115.5</u>	Fuel and Fuel Additive Requirements for New and In-Use Stationary CI Engines That Have a Rated Brake Horsepower of Greater Than (>50 bhp)	<u>N</u>	
§93115.5(b)	For In-Use Emergency Standby CI Engines	N	
<u>§93115.6</u>	Emergency Standby Diesel-Fueled CI Engine (>50 bhp) Operating Requirements and Emission Standards	<u>N</u>	
§93115.6(b)	For In-Use Emergency Standby Diesel Fueled CI Engines	<u>N</u>	
§93115.6(b)(1)	Operating Restrictions For Rotating Outages	N	
§93115.6(b)(3)	Emission Standards and Operating Requirements (applies to S-11 only)	<u>N</u>	
§93115.6 (b)(3)(A)	Diesel PM Standard and Hours of Operating Limitations (applies to S-11 only)	<u>N</u>	
§93115.6 (b)(3)(A)(1)	General Requirements (applies to S-11 only)	<u>N</u>	
§93115.6 (b)(3)(A)(1)(b)	For Engines That Emit Less Than or Equal to 0.40 g/bhp-hp (applies to S-11 only)	<u>N</u>	
<u>§93115.10</u>	Recordkeeping, Reporting and Monitoring Requirements	<u>N</u>	
<u>§93115.10(e)</u>	Monitoring Equipment	<u>N</u>	
<u>§93115.10(e)(1)</u>	Non-Resettable Hour Meter	<u>N</u>	

# IV. Source-Specific Applicable Requirements

# Table IV – B Source-Specific Applicable Requirements S-11 DIESEL ENGINE FOR EMERGENCY STANDBY GENERATOR S-14 DIESEL ENGINE FOR EMERGENCY STANDBY GENERATOR

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
<u>§93115.10(g)</u>	Reporting Requirements for Emergency Standby-Engines	<u>N</u>	
§93115.10(g)(1)	Records and Monthly Summary	<u>N</u>	
§93115.10(g)(2)	Records Retention and Availability	<u>N</u>	
BAAQMD Condition # 19210			
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)	¥	
BAAQMD Condition # 24175			
Part 1	For S-11 only: Operating Time Limitation for Reliability-Related  Testing (CCR Title 17, Section 93115.6(b)(3)(A)(1)(b)	<u>N</u>	
Part 2	For S-14 only: Operating Time Limitation for Reliability-Related Testing (Cumulative Increase, Offsets, Toxic Risk Management Policy, CCR Title 17, Section 93115.3(d), and Regulations 9-8-330.2 and 9-8-330.3)	<u>N</u>	
Part 3	Operating Restrictions (CCR Title 17, Section 93115.6(b)(1 and 3) and Regulation 9-8-330)	<u>N</u>	
Part 4	Hour Meter Monitoring Requirement (CCR Title 17, Section 93115.10(e)(1) and Regulation 9-8-530)	<u>N</u>	
Part 5	Records (CCR Title 17, Section 93115.10(e and g) and Regulations 2-6-501, 9-1-304, and 9-8-530)	<u>Y</u>	

# IV. Source-Specific Applicable Requirements

# Table IV – C Source-Specific Applicable Requirements S-12 MICROTURBINE AND S-13 MICROTURBINE

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
<b>BAAQMD</b>			
Regulation 6,	<u>Particulate Matter – General Requirements (12/5/07)</u>		
Rule 1			
<u>6-1-301</u>	Ringelmann No. 1 Limitation	<u>N</u>	
<u>6-1-305</u>	<u>Visible Particles</u>	<u>N</u>	
<u>6-1-310</u>	Particulate Weight Limitation	<u>N</u>	
<u>6-1-401</u>	Appearance of Emissions	<u>N</u>	
BAAQMD			
<u>SIP</u>	Particulate Matter and Visible Emissions (12/19/1990 9/4/98)		
Regulation 6			
6-301	Ringelmann No. 1 Limitation	Y	
6-305	Visible Particles	Y	
6-310	Particulate Weight Limitation	Y	
6-401	Appearance of Emissions	Y	
BAAQMD			
Regulation 8,	Organic Compounds - Solid Waste Disposal Sites (6/15/2005)		
Rule 34			
8-34-113	Limited Exemption, Inspection and Maintenance	Y	
8-34-113 8-34-113.1	Limited Exemption, Inspection and Maintenance  Emission Minimization Requirement	Y Y	
		+	
8-34-113.1	Emission Minimization Requirement Records	Y	
8-34-113.1 8-34-113.3 8-34-301	Emission Minimization Requirement Records Landfill Gas Collection and Emission Control System Requirements	Y Y	
8-34-113.1 8-34-113.3 8-34-301 8-34-301.2	Emission Minimization Requirement  Records  Landfill Gas Collection and Emission Control System Requirements  Collection and Control Systems Leak Limitations	Y Y Y	
8-34-113.1 8-34-113.3 8-34-301 8-34-301.2 8-34-301.4	Emission Minimization Requirement  Records  Landfill Gas Collection and Emission Control System Requirements  Collection and Control Systems Leak Limitations  Limits for Other Emission Control Systems	Y Y Y Y	
8-34-113.1 8-34-113.3 8-34-301 8-34-301.2 8-34-301.4 8-34-411	Emission Minimization Requirement Records Landfill Gas Collection and Emission Control System Requirements Collection and Control Systems Leak Limitations Limits for Other Emission Control Systems Annual Report	Y Y Y Y	
8-34-113.1 8-34-113.3 8-34-301 8-34-301.2 8-34-301.4 8-34-411	Emission Minimization Requirement  Records  Landfill Gas Collection and Emission Control System Requirements  Collection and Control Systems Leak Limitations  Limits for Other Emission Control Systems  Annual Report  Compliance Demonstration Tests	Y Y Y Y Y Y Y Y Y Y	
8-34-113.1 8-34-113.3 8-34-301 8-34-301.2 8-34-301.4 8-34-411 8-34-412 8-34-413	Emission Minimization Requirement Records Landfill Gas Collection and Emission Control System Requirements Collection and Control Systems Leak Limitations Limits for Other Emission Control Systems Annual Report Compliance Demonstration Tests Performance Test Report	Y Y Y Y Y Y Y Y Y Y Y Y Y	
8-34-113.1 8-34-113.3 8-34-301 8-34-301.2 8-34-301.4 8-34-411 8-34-412 8-34-413 8-34-501	Emission Minimization Requirement Records Landfill Gas Collection and Emission Control System Requirements Collection and Control Systems Leak Limitations Limits for Other Emission Control Systems Annual Report Compliance Demonstration Tests Performance Test Report Operating Records	Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y	
8-34-113.1 8-34-113.3 8-34-301 8-34-301.2 8-34-301.4 8-34-411 8-34-412 8-34-413 8-34-501	Emission Minimization Requirement Records  Landfill Gas Collection and Emission Control System Requirements Collection and Control Systems Leak Limitations Limits for Other Emission Control Systems Annual Report Compliance Demonstration Tests Performance Test Report Operating Records Testing	Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y	
8-34-113.1 8-34-113.3 8-34-301 8-34-301.2 8-34-301.4 8-34-411 8-34-412 8-34-413 8-34-501 8-34-501.6	Emission Minimization Requirement Records  Landfill Gas Collection and Emission Control System Requirements Collection and Control Systems Leak Limitations Limits for Other Emission Control Systems Annual Report Compliance Demonstration Tests Performance Test Report Operating Records Testing Leak Discovery and Repair Records	Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y	
8-34-113.1 8-34-113.3 8-34-301 8-34-301.2 8-34-301.4 8-34-411 8-34-412 8-34-413 8-34-501 8-34-501.4 8-34-501.6 8-34-501.10	Emission Minimization Requirement Records  Landfill Gas Collection and Emission Control System Requirements Collection and Control Systems Leak Limitations Limits for Other Emission Control Systems Annual Report Compliance Demonstration Tests Performance Test Report Operating Records Testing Leak Discovery and Repair Records Gas Flow Rate Records for All Emission Control Systems	Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y	
8-34-113.1 8-34-113.3 8-34-301 8-34-301.2 8-34-301.4 8-34-411 8-34-412 8-34-413 8-34-501 8-34-501.6	Emission Minimization Requirement Records  Landfill Gas Collection and Emission Control System Requirements Collection and Control Systems Leak Limitations Limits for Other Emission Control Systems Annual Report Compliance Demonstration Tests Performance Test Report Operating Records Testing Leak Discovery and Repair Records	Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y	

Facility Name: City of Mountain View (Shoreline)

Permit for Facility #: A2740

# IV. Source-Specific Applicable Requirements

# $\label{eq:control_control} Table\ IV-C \\ Source-Specific\ Applicable\ Requirements \\ S-12\ MICROTURBINE\ AND\ S-13\ MICROTURBINE$

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
8-34-503	Landfill Gas Collection and Emission Control System Leak Testing	Y	
8-34-504	Portable Hydrocarbon Detector	Y	
8-34-509	Key Emission Control System Operating Parameter(s)	Y	
BAAQMD Regulation 9, Rule 1	Inorganic Gaseous Pollutants – Sulfur Dioxide (3/15/ <del>19</del> 95)		
9-1-301	Limitations on Ground Level Concentrations	Y	
9-1-302	General Emission Limitations	Y	
BAAQMD Regulation 9, Rule 2	Inorganic Gaseous Pollutants – Hydrogen Sulfide (10/6/ <del>19</del> 99)		
9-2-301	Limitations on Hydrogen Sulfide	N	
BAAQMD Condition # 23579			
Part 1	NO <sub>x</sub> Emissions Limit (Offsets)	Y	
Part 2	CO Emissions Limit (Cumulative Increase)	Y	
Part 3	Source Testing Requirements (Cumulative Increase, Offsets, and Regulations 8-34-301.4, 8-34-412, and 8-34-509)	Y	
Part 4	Records (Regulations 2-6-501, 8-34-301.4, 8-34-412, 8-34-501.11, 8-34-501.12, and 8-34-509)	Y	

# IV. Source-Specific Applicable Requirements

# Table IV D Source-Specific Applicable Requirements S-14 Diesel Engine for Emergency Standby Generator

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
BAAQMD Regulation 6	Particulate Matter and Visible Emissions (12/19/1990)		
6-303	Ringelmann No. 2 Limitation	¥	
6-305	Visible Particles	¥	
6-310	Particulate Weight Limitation	¥	
6-401	Appearance of Emissions	¥	
BAAQMD Regulation 9, Rule 1	Inorganic Gaseous Pollutants — Sulfur Dioxide (3/15/1995)		
9-1-301	Limitations on Ground Level Concentrations	¥	
9-1-304	Liquid and Solid Fuels	¥	
BAAQMD Regulation 9 Rule 8	Inorganic Gascous Pollutants – Nitrogen Oxides and Carbon  Monoxide from Stationary Internal Combustion Engines (8/1/2001)		
9-8-330	Emergency Standby Engines, Hours of Operation	N	
9-8-330.1	For Emergency Use	N	
<del>9-8-330.2</del>	For Reliability-Related Activities	N	
<del>9-8-530</del>	Emergency Standby Engines, Monitoring and Recordkeeping	N	
<del>9-8-530.1</del>	Hours of Operation (total)	N	
<del>9-8-530.2</del>	Hours of Operation (emergency)	N	
9-8-530.3	Nature of Each Emergency Condition	N	
BAAQMD Condition # 21195			
Part 1	Fuel Oil Sulfur Limit (Cumulative Increase and TBACT)	¥	
<del>Part 2</del>	Hours of Operation Limitations (Cumulative Increase, Offsets, Toxic Risk Management Policy, and Regulation 9-8-330)	¥	
<del>Part 3</del>	Meter Requirements (Cumulative Increase, Offsets, Toxic Risk Management Policy, and Regulation 9-8-530)	¥	
Part 4	Records (Cumulative Increase, Offsets, Toxic Risk Management Policy, and Regulations 9-1-304 and 9-8-530)	¥	

# 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.

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### VI. PERMIT CONDITIONS

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

#### **Condition # 16065**

FOR: S-1 LANDFILL AND GAS COLLECTION SYSTEM; A-3 LANDFILL GAS FLARE; A-4 LANDFILL GAS FLARE; AND A-5 LANDFILL GAS FLARE;

- 1. The S-1 Landfill is closed. The Permit Holder shall apply for and receive a Change of Permit Conditions before accepting any solid waste for disposal at S-1. The total cumulative amount of all wastes placed in the landfill areas controlled by the Permit Holder shall not exceed 12,725,000 tons. The maximum design capacity of the landfill (total volume of all wastes and cover materials placed in the landfill area controlled by the Permit Holder, excluding final cover) shall not exceed 18,852,000 cubic yards. (Basis: Regulation 2-1-301)
- 2. All landfill gas collected by the Landfill Gas Collection Systems for S-1 shall be: abated by the Landfill Gas Flares (A-3, A-4, or A-5); abated by burned in the Microturbines (S-12 or S-13); or sold to ALZA Corporation for off-site combustion in one or more of the following devices: S-29 IC Engine-Genset at Facility # A5081, S-2 IC Engine-Genset at Facility # B3816, or S-4 IC Engine-Genset at Facility # B3817. The Permit Holder may use any combination of the landfill gas control devices listed above, provided that sufficient landfill gas is collected and controlled to prevent violations of the Regulation 8-34-303 surface leak limit and provided that all of the following operating requirements are satisfied. (Basis: Regulation 8-34-301)
  - a. Operation of the microturbines (S-12 and S-13) to abate landfill gas is optional, and is not required for landfill gas abatement. To ensure adequate landfill gas control capacity, When the microturbines are burning landfill gas, other approved control devices (such as one flare or three engines) the microturbines must be operated concurrently with other control devices such as at least one flare or the three off-site engines the microturbines to achieve the necessary control system capacity for the landfill.
  - b. Raw or untreated landfill gas shall not be vented to the atmosphere, except for unavoidable landfill gas emissions that occur during collection system installation, maintenance, or repair (which is performed in compliance with Regulation 8, Rule 34, Sections 113, 117, and/or 118) and inadvertent component or surface leaks that do not exceed the limits specified in 8-34-301.2 or 8-34-303.

(Basis: Regulation 8-34-301)

Facility Name: City of Mountain View (Shoreline)

Permit for Facility #: A2740

#### VI. Permit Conditions

#### **Condition # 16065**

FOR: S-1 LANDFILL AND GAS COLLECTION SYSTEM; A-3 LANDFILL GAS FLARE; A-4 LANDFILL GAS FLARE; AND A-5 LANDFILL GAS FLARE;

- 3. The landfill gas collection system described below in Part 4a shall be operated continuously, as defined in Regulation 8-34-219. Wells and adjustment valves shall not be disconnected, removed, or completely closed, without prior written authorization from the District, unless the Permit Holder Complies with all applicable provisions of Regulation 8, Rule 34, Sections 113, 117, and 118. (Basis: Regulation 8-34-301.1)
- 4. The Permit Holder shall apply for and receive an Authority to Construct a Change of Conditions before modifyingaltering the landfill gas collection system described in Part 4a below. Increasing or decreasing the number of wells or collectors, changing the length of collectors, or changing the locations of wells or eollectors are all considered to be modificationsalterations that are subject to the Authority to Constructinis requirement. Redrilling or replacement of an existing well does not require a Change of Conditions provided the replacement well is close to the location of the existing well. Adding or modifying risers, laterals, or header pipes are not subject to this Change of Condition requirement. (Basis: Regulations 8-34-301.1, 8-34-303, 8-34-304, and 8-34-305)
  - 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 # 1009.

Area DescriptionRequired Components544 Acre Site140 vertical wells544 Acre Site6 horizontal collectorsVista Site88 vertical wellsVista Site1 horizontal collectorCrittenden Site36 vertical wells

(Basis: Regulations 8 34 301.1, 8 34 303, 8 34 304, and 8 34 305)

5. The gas collection system operating requirements listed below shall replace the well head requirements identified in Regulation 8-34-305.2 through 8-34-305.4 for the specified wells and collectors. All wells and collectors remain subject to the Regulation 8-34-305.1 requirement to maintain vacuum on each well head. In addition, part 5c clarifies the applicable limits for vaults containing gas collection system components. (Basis: Regulations 8-34-301.2, 8-34-303, and 8-34-305)

#### VI. Permit Conditions

#### **Condition # 16065**

FOR: S-1 LANDFILL AND GAS COLLECTION SYSTEM; A-3 LANDFILL GAS FLARE; A-4 LANDFILL GAS FLARE; AND A-5 LANDFILL GAS FLARE;

a. The Regulation 8-34-305.2 temperature limit shall not apply to the wells listed below. The landfill gas temperature in each of the wells listed below shall not exceed 140 degrees F.

Vista Landfill: VE-6, VE-9, VF-3, VF-11, VG-3, VG-3A, VG-4,

VH-4, VH-5, VH-10, VJ-3, and-VJ-4, VJ-04A (12

13 wells)

544-Acre Landfill: NEA-08 (1 vertical well)

b. The Regulation 8-34-305.3 nitrogen concentration limit and the Regulation 8-34-305.4 oxygen concentration limit shall not apply to the wells listed below, provided that the oxygen concentration in the landfill gas at the main header does not exceed 5% O<sub>2</sub> by volume (dry basis) and the methane concentration in the landfill gas at the main header is not less than 35% CH<sub>4</sub> by volume (dry basis). The permit holder shall monitor the landfill gas from the main header for oxygen and methane on a monthly basis to demonstrate compliance with this part.

Crittenden Landfill:

CRA-1, CRA-2R, CRA-3, CRA-4, CRA-5R, CRA-6, CRA-7, CRA-8, CRA-9, CRA-10, CRA-13, CRB-1, CRB-2, CRB-3, CRB-4, CRB-5, CRB-6, CRB-7R, CRB-8, CRD-1, CRD-3, CRD-5, CRD-8, CRD-9, CRD-10, and CRD-11 (26 vertical wells)

Vista Landfill:

VA-HZ, VA-1, VA-01A, VA-2, VA-3, VA-3A, VA-4, VB-1, VB-2R, VB-3A, VB-4, VB-5R, VB-5A, VB-6, VB-7, VB-8, VC-1, VC-2, VC-3, VC-5, VC-6, VC-7, VC-8, VE-1, VE-4R, VE-5, VE-6, VE-7, VE-8, VE-9, VE-10, VF-1, VF-2, VF-4, VF-5R, VF-7, VF-8R, VH-3, VJ-2R, VJ-3R, VJ-4A, VJ-4R, VJ-5R, VJ-6, VJ-7R, VJ-8, VJ-9R, VJ-10, VJ-11R, VK-3, VK-4, VK-5 (1 horizontal collector

and 51 vertical wells)

#### VI. Permit Conditions

#### **Condition # 16065**

FOR: S-1 LANDFILL AND GAS COLLECTION SYSTEM; A-3 LANDFILL GAS FLARE; A-4 LANDFILL GAS FLARE; AND A-5 LANDFILL GAS FLARE;

544-Acre Landfill:

13, WA-14, WA-15, WA-16, WA-18, WA-19, WA-20, WA-21, WA-22, WA-24, WA-25, WA-26, WA-27, WA-28, WA-29, WB-1, WB-2, WB-3, WB-4, WB-5, WB-5A, WB-6, WB-6A, WB-7, WB-7A, WB-8, WB-9, WB-10, WB-11, WB-12, WB12-A, WB-16, WB-17, WD-3, WN-1, WN-2, WN-3R, WN-4, WN-4A, WN-5, WN-6, WN-7, WN-8, WN-9, WN-10, WN-11, WN-12, WN-13 (51 vertical wells) A-16, B-2, B-3, B-20, B-24, B-28, Y-01, Y-02, Y-03, Y-04, Y-05, Y-06, LE-1, LE-2, LE-3, LE-4, FHZ-1, FHZ-2, FHZ-3, FHZ-4, FHZ-5, and MPHZ (6 horizontal collectors and 16 vertical wells) NEA-01, NEA-02, NEA-03, NEA-04, NEA-05, NEA-06, NEA-07, NEA-08, NEA-09, NEA-11, NEA-13, NEA-15, NEA-16, NEB-01, NEB-02, NEB-03, NEB-04, NEB-05, NEB-06, NEB-07, NEB-08, NEB-10, NEB-11, NEB-12, NEB-13, NEB-14, NEC-01, NEC-02, NEC-03, NED-01, NEE-02, NEE-03, NEE-04, NEE-05, and NEE-06. (32-38 vertical wells)

WA-1, WA-02, WA-5, WA-6, WA-8, WA-9, WA-

- c. This subpart applies to vaults containing gas collection system equipment, where the top of the vault is located at or near the surface of the landfill. The vault shall be monitored at both 1 cm from the vault (for comparison to the component leak limit of Regulation 8-34-301.2) and 2 inches above the vault (for comparison to the surface leak limit of Regulation 8-34-303).
  - i. If during an inspection the District's monitored readings show compliance with both the component leak limit and the surface leak limit, the vault and components within shall be deemed to be in compliance with Regulations 8-34-301.2 and 8-34-303. No further testing is necessary.

#### VI. Permit Conditions

#### **Condition # 16065**

FOR: S-1 LANDFILL AND GAS COLLECTION SYSTEM; A-3 LANDFILL GAS FLARE; A-4 LANDFILL GAS FLARE; AND A-5 LANDFILL GAS FLARE;

- ii. If the District's monitored readings show an excess of either the component leak limit or the surface leak limit, the operator shall comply with the Regulation 8-34-415 Repair Schedule for Landfill Surface Leak Excesses, until the source of the leak can be identified. The vault shall be opened and allowed to air out for at least 10 minutes. The collection system components within the vault shall be re-monitored at 1 cm from the components and the landfill surface surrounding the vault shall be re-monitored at 2 inches above the surface.
- iii. If the re-monitoring (after airing the vault for 10 minutes) shows no component leaks and no surface leaks, the vault and components within shall be deemed to be in compliance with Regulations 8-34-301.2 and 8-34-303.
- iv. If the re-monitoring shows a component leak, or the operator's further evaluation determines that the source of the emissions excess was a collection system component, then a violation of 8-34-301.2 shall be deemed to have occurred; and the operator shall take all necessary corrective action and shall comply with all applicable reporting requirements.
- v. If the re-monitoring shows a surface leak but not a component leak, the operator shall continue to comply with all applicable provisions of the Regulation 8-34-415 Repair Schedule for Landfill Surface Leak Excesses.
- 6. Each flare shall be equipped with auto restart capability and both local and remote alarm systems. (Basis: 8-34-301.1)
- 7. The combustion zone temperature of each flare (A-3, A-4, and A-5) shall be maintained at a minimum of 1400 degrees F, averaged over any three-hour period. If a source test demonstrates compliance with all applicable requirements at a different temperature, the APCO will revise the minimum combustion zone temperature limit in accordance with the procedures identified in Regulations 2-6-414 or 2-6-415 and the following criteria. The minimum combustion zone temperature for a flare shall be equal to the average combustion zone temperature measured during the most recent complying source test minus 50 degrees F, provided that the minimum combustion zone temperature shall not be less than 1400 degrees F. (Basis: Toxic Risk Management Policy and Regulation 8-34-301.3)

#### VI. Permit Conditions

#### **Condition # 16065**

FOR: S-1 LANDFILL AND GAS COLLECTION SYSTEM; A-3 LANDFILL GAS FLARE; A-4 LANDFILL GAS FLARE; AND A-5 LANDFILL GAS FLARE;

- 8. The total gas flow rate to the flares shall not exceed 4200 cfm, averaged over any calendar day. (Basis: Cumulative Increase)[deleted]
- 9. Nitrogen oxide (NO<sub>x</sub>) emissions from the flares shall not exceed the concentration limits listed below, except as provided by source test results demonstrating a NO<sub>x</sub> emission rate within the specified limit. (Basis: Cumulative Increase)
  - a. For A-3: 33 ppmv of NO<sub>x</sub>, corrected to 15% oxygen, dry basis. <u>If the NO<sub>x</sub> limit of 33 ppmv is exceeded, the flare will remain in compliance if source test results indicate a NO<sub>x</sub> emission rate of 0.13 pounds per MMBTU or less;</u>
  - b. For A-4: 15 ppmv of NO<sub>x</sub>, corrected to 15% oxygen, dry basis. <u>If the NO<sub>x</sub> limit of 15 ppmv is exceeded, the flare will remain in compliance if source test results indicate a NO<sub>x</sub> emission rate of 0.06 pounds per MMBTU or less;</u>
  - c. For A-5: 15 ppmv of NO<sub>x</sub>, corrected to 15% oxygen, dry basis. If the NO<sub>x</sub> limit of 15 ppmv is exceeded, the flare will remain in compliance if source test results indicate a NO<sub>x</sub> emission rate of 0.06 pounds per MMBTU or less;
- 10. Carbon monoxide (CO) emissions from the flares shall not exceed the concentration limits listed below, except as provided by source test results demonstrating a CO emission rate within the specified limit. (Basis: Cumulative Increase and RACT)
  - a. For A-3: 83 ppmv of CO, corrected to 15% oxygen, dry basis. If the CO limit of 83 ppmv is exceeded, the flare will remain in compliance if source test results indicate a CO emission rate of 0.20 pounds per MMBTU or less.
  - b. For A-4: 83 ppmv of CO, corrected to 15% oxygen, dry basis. If the CO limit of 83 ppmv is exceeded, the flare will remain in compliance if source test results indicate a CO emission rate of 0.20 pounds per MMBTU or less.
  - c. For A-5: 83 ppmv of CO, corrected to 15% oxygen, dry basis. If the CO limit of 83 ppmv is exceeded, the flare will remain in compliance if source test results indicate a CO emission rate of 0.20 pounds per MMBTU or less.

#### VI. Permit Conditions

#### **Condition # 16065**

FOR: S-1 LANDFILL AND GAS COLLECTION SYSTEM; A-3 LANDFILL GAS FLARE; A-4 LANDFILL GAS FLARE; AND A-5 LANDFILL GAS FLARE;

- \*11. If the vinyl chloride concentration at any flare stack exceeds 48 ppmv, the Permit Holder shall submit a request to the District for a Change of Permit Conditions within 30 days of receipt of the source test results. (Basis: Toxic Risk Management Policy)[deleted]
- 12. If the Ttotal reduced sulfur compounds concentration in the collected landfill gas shall be is monitored as a surrogate for monitoring sulfur dioxide in the flare control system's exhaust. The concentration of total reduced sulfur compounds in the collected landfill gas shall not exceed 1300 ppmv (dry). In order to demonstrate compliance with this part, the Permit Holder shall measure the total sulfur content as hydrogen sulfide in collected landfill gas on a quarterly basis using a draeger tube. The landfill gas sample shall be taken from the main landfill gas header. The Permit Holder shall follow the manufacturer's recommended procedures for using the draeger tube and interpreting the results. The Permit Holder shall conduct the first draeger tube test no later than 3 months after the issue date of the MFR Permit and quarterly thereafter. (Basis: Regulation 9-1-302)
- In order to demonstrate compliance with Parts 7-11 8-12-7, 9, 10, and 12 above and Regulations 8, Rule 34, Sections 301.3, and and 412,8-34-301.3, 8-34-412, and 9-1-302, the Permit Holder shall ensure that a District approved source test is conducted annually on each flare (A-3, A-4, and A-5). 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  $NO_x$ , CO, THC, CH<sub>4</sub>, NMOC, vinyl chloride, and  $O_2$  in the flare stack gas;
  - e. the NMOC destruction efficiency achieved by the flare; and
  - f. the average combustion zone temperature in the flare during the test period.
  - g. concentration (dry basis) of SO<sub>2</sub> in the flare stack gas, unless the Permit Holder is meeting the requirements of Part 12 and tests for all sulfur compounds listed in EPA's AP-42 Table 2.4-1 pursuant to Part 14.

#### VI. Permit Conditions

#### **Condition # 16065**

FOR: S-1 LANDFILL AND GAS COLLECTION SYSTEM; A-3 LANDFILL GAS FLARE; A-4 LANDFILL GAS FLARE; AND A-5 LANDFILL GAS FLARE;

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, Toxic Risk Management Policy, and Regulations 8-34-301.3, and 8-34-412, and 9-1-302.)

- The Permit Holder shall conduct a characterization of the landfill gas concurrent 14. with the annual source test required by Part 13 above. The landfill gas sample shall be drawn from the main landfill gas header. In addition to the compounds listed in Part 13b, the landfill gas shall be analyzed for all the organic compounds listed in the most recent version of EPA's AP-42 Table 2.4-1. Sulfur compound testing is not required, if the Permit Holder is satisfying Part 13g by conducting annual SO<sub>2</sub> testing at the flare exhaust. All concentrations shall be reported on a dry basis. The test report shall be submitted to the Compliance and Enforcement Division within 45 days of the test date. After conducting three annual landfill gas characterization tests, the Permit Holder may request to remove specific compounds from the list of compounds to be tested, if the compounds have not been detected, have no significant impact on the cancer risk determination for the site, and have no significant impact on the hazard index determination for the site. (Basis: AB-2588 Air Toxics Hot Spots Act, Toxic Risk Management Policy and Regulation 8-34-412 and 9-1-302.)
- 15. In order to demonstrate compliance with the above conditions, the Permit Holder shall: maintain the following records. All records shall be maintained on site in an APCO approved logbook or shall be made readily available to District staff upon request for a period of at least 5 years from the date of entry. These recordkeeping requirements do not replace the record keeping requirements contained in any applicable rules or regulations. (Basis: Cumulative Increase and Regulations 2-1-301, 2-6-501, 8-34-301, 8-34-303, 8-34-305, 8-34-412, 8-34-414, 8-34-415, 8-34-501, 8-34-503, 8-34-505, 8-34-506, and 9-1-302.
  - a. Maintain an accurate map of the landfill that indicates the locations of all refuse boundaries and the locations of all wells and collectors (using unique identifiers) that are required to be operating continuously pursuant to Part 4a;

### VI. Permit Conditions

#### **Condition # 16065**

FOR: S-1 LANDFILL AND GAS COLLECTION SYSTEM; A-3 LANDFILL GAS FLARE; A-4 LANDFILL GAS FLARE; AND A-5 LANDFILL GAS FLARE;

- b. Record the initial startup date for any new wells or collectors;
- c. Maintain records of all test dates and test results performed to maintain compliance with Parts 12-14 above, Regulations 8-34-301, 8-34-303, 8-34-305, 8-34-412, 8-34-414, and 8-34-415, or any other applicable rule or regulation.

All records shall be maintained on site in an APCO approved logbook or shall be made readily available to District staff upon request for a period of at least 5 years from the date of entry. These record keeping requirements do not replace the record keeping requirements contained in any applicable rules or regulations. (Basis: Cumulative Increase and Regulations 2-1-301, 2-6-501, 8-34-301, 8-34-303, 8-34-305, 8-34-412, 8-34-414, 8-34-415, 8-34-501, 8-34-503, 8-34-505, 8-34-506, and 9-1-302)

16. 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, 2002 through December 31, 2003. This first increment report shall be submitted by January 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. (Basis: Regulation 8-34-411 and 40 CFR Part 63.1980(a))

Permit for Facility #: A2740

#### VI. Permit Conditions

#### **Condition # 19210 24175**

FOR: S-11 DIESEL ENGINE FOR EMERGENCY STANDBY GENERATOR; AND S-14 DIESEL ENGINE FOR EMERGENCY STANDBY GENERATOR

- \*1. Hours of Operation: The emergency standby generator, S-11, shall only be operated for emergency use or for reliability-related activities. In accordance with Regulation 9-8-330.2, S-11 shall not be operated for more than 100 hours in a calendar year for reliability related activities. Operation for emergency use is unlimited. (Basis: Regulation 9-8-330 and Toxic Risk Management Policy)The owner/operator shall not exceed 30 hours per year for reliability-related testing at the S-11 Diesel Engine. (Basis: CCR Title 17, Section 93115.6(b)(3)(A)(1)(b))
- 2. a. Until January 1, 2012, the owner/operator shall not exceed 100 hours per year for reliability-related testing at the S-14 Diesel Engine. (Basis: Cumulative Increase, Offsets, Toxic Risk Management Policy, Regulation 9-8-330.2, and CCR Title 17, Section 93115.3(d))
  - \*b. Effective January 1, 2012, the owner/operator shall not exceed 50 hours per year for reliability-related testing at the S-14 Diesel Engine. (Basis: Regulation 9-8-330.3)
- 2. Emergency use is defined as the use of an emergency standby engine during any of the following: (Basis: Regulation 9-8-231)
  - a. In the event of loss of regular natural gas supply;
  - b. In the event of 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.
- \*3. Reliability-related activities are defined as the use of an emergency standby engine during any of the following: (Basis: Regulation 9-8-232)
  - a. Operation of an emergency standby engine to test its ability to perform for an emergency use;
  - Operation of an emergency standby engine during maintenance of a primary motor.

Permit for Facility #: A2740

#### VI. Permit Conditions

#### **Condition # 24175**

FOR: S-11 DIESEL ENGINE FOR EMERGENCY STANDBY GENERATOR AND S-14 DIESEL ENGINE FOR EMERGENCY STANDBY GENERATOR

- \*3. The owner/operator shall operate each emergency standby engine only for the following purposes: to mitigate emergency conditions, for emission testing to demonstrate compliance with a District, State, or Federal emission limit, or for reliability-related activities (maintenance and other testing, but excluding emission testing). Operating while mitigating emergency conditions or while emission testing to show compliance with District, State or Federal emission limits is not limited. (Basis: CCR Title 17, Section 93115.6(b)(1 and 3) and Regulation 9-8-330)
- \*4. Monitoring: Each emergency standby engine shall be equipped with either: (Basis: Regulation 9-8-530)
  - a. A non-resettable totalizing meter that measures and records hours of operation.
  - b. A non-resettable fuel usage meter
- \*4. The owner/operator shall operate each emergency standby engine only when a non-resettable totalizing meter (with a minimum display capability of 9,999 hours) that measures the hours of operation for the engine is installed, operated and properly maintained. (Basis: CCR Title 17, Section 93115.10(e)(1) and Regulation 9-8-530)
- Records: The Permit Holder shall maintain the following records in an APCOapproved log:
  - \*a. Monthly records of the total hours of operation for this engine.
  - \*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)

Permit for Facility #: A2740

#### VI. Permit Conditions

#### **Condition # 24175**

FOR: S-11 DIESEL ENGINE FOR EMERGENCY STANDBY GENERATOR AND S-14 DIESEL ENGINE FOR EMERGENCY STANDBY GENERATOR

- 5. Records: The owner/operator shall maintain the following monthly records in a District-approved log for at least 60 months from the date of entry. Log entries shall be retained on-site, either at a central location or at the date of entry. Log entries shall be retained on-site, either at a central location or at the engine's location, and made immediately available to the District staff upon request. (Basis: CCR Title 17, Section 93115.10(e and g) and Regulation 2-6-501, 9-1-304, and 9-8-530)
  - a. Hours of operation for reliability-related activities (maintenance and testing).
  - b. Hours of operation for emission testing to show compliance with emission limits.
  - c. Hours of operation for emergencies.
  - d. For each emergency, the nature of the emergency condition.
  - e. Fuel usage for the engine.
  - f. Records of the vendor-certified sulfur content for fuel burned in this engine.

Permit for Facility #: A2740

#### VI. Permit Conditions

#### **Condition # 21195**

For: S-14 Diesel Engine for Emergency Standby Generator

- 1. The S-14 Diesel Engine shall exclusively use diesel fuel with a sulfur content of no more than 0.05% by weight. (basis: Cumulative Increase and TBACT)
- 2. The Permit Holder shall operate S-14 only under the following circumstances:
  - a. For emergency use for an unlimited number of hours.
  - b. For reliability-related activities so long as total hours of operation for this purpose do not exceed 100 hours in a calendar year.

(basis: Cumulative Increase, Offsets, Toxic Risk Management Policy, and Regulation 9-8-330)

#### Emergency use is defined by the following circumstances:

- c. In the event of loss of regular natural gas supply;
- d. In the event of failure of regular electric power supply;
- e. Flood mitigation;
- f. Sewage overflow mitigation;
- g. Fire;
- h. Failure of a primary motor, but only for such time as needed to repair or replace the primary motor.

(basis: Regulation 9-8-231)

#### Reliability-related activities are defined as either:

- i. Operation of an emergency standby engine to test its ability to perform for an emergency use; or
- j. Operation of an emergency standby engine during maintenance of a primary motor.

(basis: Regulation 9-8-232)

#### 3. The Permit Holder shall equip S-14 with either:

- a. a non-resettable totalizing meter that measures hours of operation for the engine; or
- b. a non-resettable fuel usage meter (20 gallons of fuel shall be assumed to be equivalent to one hour of reliability related operation).

(basis: Cumulative Increase, Offsets, Toxic Risk Management Policy, and Regulation 9-8-530)

Permit for Facility #: A2740

#### VI. Permit Conditions

#### **Condition # 21195**

For: S-14 Diesel Engine for Emergency Standby Generator

- 4. To determine compliance with the above conditions, the owner/operator shall maintain the following records and provide all of the data necessary to evaluate compliance with the above conditions. A monthly log of usage shall indicate the following:
  - a. Hours of operation (total)
  - b. Hours of operation (emergency)
  - c. For each emergency, the nature of the emergency condition
  - d. Records of the vendor certified sulfur content for all fuels burned in this engine.

The Permit Holder shall maintain all records in a District-approved log. The Permit Holder shall retain the records on site for five years, from the date of entry, and make them available for inspection by District staff upon request. These record-keeping requirements shall not replace the record-keeping requirements contained in any applicable District Regulations. (basis: Cumulative Increase, Offsets, Toxic Risk Management Policy, and Regulations 9-1-304 and 9-8-530)

#### VI. Permit Conditions

#### **Condition # 23579**

FOR: S-12 MICROTURBINE AND S-13 MICROTURBINE;

- 1. The nitrogen oxide (NOx) emissions from each Microturbine (S-12 and S-13) shall not exceed 10.0 pounds per day calculated as NO2. Compliance with this emission limit may be demonstrated by having no emissions exceeding 62 ppmv of NOx at 15% oxygen, dry basis. (Basis: Offsets)
- 2. The carbon monoxide (CO) emissions from each Microturbine (S-12 and S-13) shall not exceed 10.0 pounds per day. Compliance with this emission limit may be demonstrated by having no emissions exceeding 100 ppmv of CO at 15% oxygen, dry basis. (Basis: Cumulative increase)
- 3. To demonstrate compliance with Parts 1 and 2 above and Regulation 8, Rule 34, Sections 301.4, 412, and 509, the Permit Holder shall conduct annual compliance demonstration tests on the S-12 and S-13 Microturbines. In order to allow this facility to synchronize the source test dates for the landfill gas flares and the microturbines, the microturbine source tests that would normally have been conducted in January 2008 may be delayed, provided the 2008 microturbine source tests are conducted no later than September 30, 2008. 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 Source Test Section within 45 days of the test date. The source tests shall determine the following:
  - a. landfill gas flow rate (dry basis) and heat input rate to the microturbine;
  - b. concentrations (dry basis) of carbon dioxide (CO2), nitrogen (N2), oxygen (O2), and methane (CH4) in the landfill gas;
  - c. stack gas flow rate from the microturbine (dry basis); and
  - d. concentrations (dry basis) of NOx, CO, CH4, NMOC, and O2 in the stack gas.

(Basis: Cumulative Increase, Offsets, and Regulations 8-34-301.4, 8-34-412, and 8-34-509)

#### VI. Permit Conditions

#### **Condition # 23579**

FOR: S-12 MICROTURBINE AND S-13 MICROTURBINE;

4. The Permit Holder shall maintain records of all test dates and test results for any tests that are conducted to demonstrate compliance with these conditions or any other applicable rule or regulation. All records shall be maintained on site in an APCO approved logbook or shall be made readily available to District staff upon request for a period of at least 5 years from the date of entry. These record keeping requirements do not replace the record keeping requirements contained in any applicable rules or regulations. (Basis: Cumulative Increase, Offsets, and Regulations 2-6-501, 8-34-301.4, 8-34-412, 8-34-501.11, 8-34-501.12, and 8-34-509)

## 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), 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-1 Landfill and Gas Collection System, A-3 Landfill Gas Flare,
A-4 Landfill Gas Flare, and A-5 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
Amount	BAAQMD	Y		0 tons/day and	BAAQMD	P/A	Records
of Waste	Condition #			$\leq$ 12,725,000 tons	8-34-501.7		
Accepted	16065,			(cumulative amount of all			
	Part 1			wastes) and			
				$\leq 18,852,000 \text{ yd}^3$			
				(cumulative amount of all			
				wastes and cover materials)			
Gas Flow	BAAQMD	Y		Landfill gas collection	BAAQMD	С	Gas Flow
	8-34-301			system shall operate	8-34-501.10		Meter and
	and 301.1			continuously and all	and 508		Recorder
				collected gases shall be			(every 15
				vented to a properly			minutes)
				operating control system			
Gas Flow	BAAQMD	Y		Landfill gas collection	BAAQMD	C,P/E	Gas Flow
	Condition #			system shall operate	8-34-501.1,		Meter, Flare
	16065,			continuously and all	501.2,		Alarms, and
	Parts 2-3			collected gases shall be	501.10, and		Records of
				vented to a properly	508 and		Collection
				operating control system	BAAQMD		and Control
					Condition #		Systems
					16065, Part 6		Downtime

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## VII. Applicable Limits and Compliance Monitoring Requirements

# Table VII – A Applicable Limits and Compliance Monitoring Requirements S-1 Landfill and Gas Collection System, A-3 Landfill Gas Flare, A-4 Landfill Gas Flare, and A-5 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
<del>Gas Flow</del>	BAAQMD Condition # 16065; Part 8	¥		Total Landfill Gas  Throughput to All Flares:  ≤ 4200 cfm,  averaged over  any calendar day	BAAQMD 8-34-501.10 and 508	E	Gas Flow Meter and Recorder (every 15 minutes)
Collection System Installa- tion 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 # 16065, Parts 15a-b	P/E	Records
Collection and Control Systems Shutdown Time	BAAQMD 8-34-113.2	Y		≤ 240 hours/year and ≤ 5 consecutive days	BAAQMD 8-34-501.1	P/D	Operating Records
Startup Shutdown or Mal- function Pro- cedures	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 Inopera- tion for Para- metric Monitors	BAAQMD 1-523.2	Y		≤ 15 consecutive days/incident and ≤ 30 calendar days/12 month period	BAAQMD 1-523.4	P/D	Operating Records for All Parametric Monitors (for gas flow and temperature monitors)

## VII. Applicable Limits and Compliance Monitoring Requirements

# Table VII – A Applicable Limits and Compliance Monitoring Requirements S-1 Landfill and Gas Collection System, A-3 Landfill Gas Flare, A-4 Landfill Gas Flare, and A-5 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
Contin-	40 CFR	Y		Requires Continuous	40 CFR	P/D	Operating
uous	60.13(e)			Operation except for	60.7(b)		Records for
Monitors				breakdowns, repairs,			All
				calibration, and required			Continuous
				span adjustments			Monitors
							(for gas flow
							and
							temperature
							monitors)
Wellhead	BAAQMD	Y		< 0 psig	BAAQMD	P/M	Monthly
Pressure	8-34-305.1				8-34-414,		Inspection
					501.9, and		and Records
					505.1		
Temper-	BAAQMD	Y		< 55 °C (131 °F)	BAAQMD	P/M	Monthly
ature of	8-34-305.2			(Wells listed in BAAQMD	8-34-414,		Inspection
Gas at				Condition # 16065, Part 5a	501.9 and		and Records
Wellhead				are excluded from this	505.2 and		
				limit.)			
Temper-	BAAQMD	Y		≤ 140 °F	BAAQMD	P/M	Monthly
ature of	Condition #			(This limit applies only to	8-34-414,		Inspection
Gas at	16065, Part			wells listed in BAAQMD	501.9 and		and Records
Wellhead	5a			Condition # 16065, Part 5a)	505.2 and		
Gas	BAAQMD	Y		$N_2 < 20\%$ OR $O_2 < 5\%$	BAAQMD	P/M	Monthly
Concen-	8-34-305.3			(Wells listed in BAAQMD	8-34-414,		Inspection
trations at	or 305.4			Condition # 16065, Part 5b	501.9 and		and Records
Wellhead				are excluded from these	505.3 or		
				limits.)	505.4		
Gas	BAAQMD	Y		$O_2 \le 5\%$ by volume,	BAAQMD	P/M	Monthly
Concen-	Condition #			dry basis AND	Condition #		Inspection
trations at	16065,			$CH_4 \ge 35\%$ by volume,	16065,		and Records
Header	Part 5b			dry basis	Part 5b		

## VII. Applicable Limits and Compliance Monitoring Requirements

# Table VII – A Applicable Limits and Compliance Monitoring Requirements S-1 Landfill and Gas Collection System, A-3 Landfill Gas Flare, A-4 Landfill Gas Flare, and A-5 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
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
TOC (Total Organic Com- pounds Plus Methane)	BAAQMD 8-34-301.2	Y		Component Leak Limit: ≤ 1000 ppmv as methane at 1 cm from component (see BAAQMD Condition # 16065, Part 5c for clarifications about vaults)	BAAQMD 8-34-501.6 and 503 and BAAQMD Condition # 16065, Part 15c	P/Q	Quarterly Inspection of collection and control system components with Portable Analyzer and Records
TOC	BAAQMD 8-34-303	Y		Surface Leak Limit: ≤ 500 ppmv as methane at 2 inches above surface (see BAAQMD Condition # 16065, Part 5c for clarifications about vaults)	BAAQMD 8-34-415, 416, 501.6, 506 and 510 and BAAQMD Condition # 16065, Part 15c	P/M, Q, and E	Monthly Visual Inspection of Cover, Quarterly Inspection of Surface with Portable Analyzer, Reinspections as Needed, and Records

## VII. Applicable Limits and Compliance Monitoring Requirements

# Table VII – A Applicable Limits and Compliance Monitoring Requirements S-1 LANDFILL AND GAS COLLECTION SYSTEM, A-3 LANDFILL GAS FLARE, A-4 LANDFILL GAS FLARE, AND A-5 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-	BAAQMD	Y		≥ 98% removal by weight	BAAQMD	P/A	Source Tests
Methane	8-34-301.3			OR	8-34-412 and		and Records
Organic				< 30 ppmv,	501.4 and		
Com-				dry basis @ 3% O <sub>2</sub> ,	BAAQMD		
pounds				expressed as methane	Condition #		
(NMOC)				(applies to flares only)	16065,		
					Parts 13 and		
					15c		
Temper-	BAAQMD	Y		$CT \ge 1400  ^{\circ}F,$	BAAQMD	С	Temperature
ature of	Condition #			averaged over	8-34-501.3		Sensor and
Combus-	16065,			any 3-hour period	and 507		Recorder
tion Zone	Part 7			(applies to each flare,			
(CT)				A-3, A-4, and A-5)			
Opacity	BAAQMD	Y		Ringelmann No. 1	None	N	NA
	6- <u>1-</u> 301			for < 3 minutes/hour			
				(applies to flares only)			
FP	BAAQMD	Y		≤ 0.15 grains/dscf	None	N	NA
	6- <u>1-</u> 310			(applies to flares only)			
$SO_2$	BAAQMD	Y		Property Line Ground	None	N	NA
	9-1-301			Level Limits:			
				$\leq$ 0.5 ppm for 3 minutes			
				and $\leq$ 0.25 ppm for 60 min.			
				and $\leq$ 0.05 ppm for 24 hours			
				(applies to flares only)			
$SO_2$	BAAQMD	Y		≤ 300 ppm (dry basis)	BAAQMD	P/ <del>Q</del> A	<u>Annual</u>
	Regulation			(applies to flares only)	Condition #		Source
	9-1-302				16065,		Testing at
					Parts <u>1213g</u>		Flare or
					and 15c or 14		Sulfur
					and 15c		Analysis of
							Landfill Gas
							and Records

## VII. Applicable Limits and Compliance Monitoring Requirements

# Table VII – A Applicable Limits and Compliance Monitoring Requirements S-1 Landfill and Gas Collection System, A-3 Landfill Gas Flare, A-4 Landfill Gas Flare, and A-5 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	BAAQMD	Y		$\leq$ 1300 ppmv,	BAAQMD	P/ <del>Q</del> A	Sulfur
Gas	Condition #			expressed as H <sub>2</sub> S	Condition #		Analysis of
Sulfur	16065,			(applies if SO <sub>2</sub> testing is not	16065,		Landfill Gas
Content	Part 12			conducted at flare exhaust)	Parts <del>12, 14,</del>		and Records
					and 15c		
$H_2S$	BAAQMD	N		Property Line Ground	None	N	NA
	9-2-301			Level Limits:			
				$\leq$ 0.06 ppm,			
				averaged over 3 minutes			
				and $\leq 0.03$ ppm,			
				averaged over 60 minutes			
$NO_x$	BAAQMD	Y		< 0.13 lbs/MMBTU	BAAQMD	P/A	Source Tests
	Condition #			<u>or</u>	Condition #		and Records
	16065,			≤ 33 ppmv,	16065, Parts		
	Part 9a			at 15% O <sub>2</sub> , dry basis	13 and 15c		
				(applies to A-3 Flare only)			
$NO_x$	BAAQMD	Y		< 0.06 lbs/MMBTU	BAAQMD	P/A	Source Tests
	Condition #			<u>or</u>	Condition #		and Records
	16065,			$\leq$ 15 ppmv,	16065, Parts		
	Part 9b-c			at 15% O <sub>2</sub> , dry basis	13 and 15c		
				(applies to A-4 and A-5			
				Flares only)			
CO	BAAQMD	Y		< 0.20 lbs/MMBTU	BAAQMD	P/A	Source Tests
	Condition #			<u>or</u>	Condition #		and Records
	16065,			≤ 83 ppmv,	16065, Parts		
	Part 10a-c			at 15% O <sub>2</sub> , dry basis	13 and 15c		
				(applies to A-3, A-4, and			
				A-5 Flares only)			
Vinyl	BAAQMD	¥		<u>≤ 48 ppmv,</u>	BAAQMD	<del>P/A</del>	Source Tests
Chloride	Condition #			at each flare stack	Condition #		and Records
	<del>16065,</del>				16065, Parts		
	Part 11				13 and 15c		

## VII. Applicable Limits and Compliance Monitoring Requirements

Table VII – B
Applicable Limits and Compliance Monitoring Requirements
S-11 DIESEL ENGINE FOR EMERGENCY STANDBY GENERATOR
S-14 DIESEL ENGINE FOR EMERGENCY STANDBY 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	Y		Ringelmann No. 2	None	N	NA
	Regulation			for < 3 minutes/hour			
	6- <u>1-</u> 303						
FP	BAAQMD	Y		≤ 0.15 grains/dscf	None	N	NA
	Regulation						
	6- <u>1-</u> 310	3.7		D . I . C . I	NT.	N	27.4
$SO_2$	BAAQMD	Y		Property Line Ground	None	N	NA
	Regulation			Level Limits:			
	9-1-301			$\leq$ 0.5 ppm for 3 minutes and $\leq$ 0.25 ppm for 60 min.			
				and $\leq 0.25$ ppm for 24 hours			
SO <sub>2</sub>	BAAQMD	Y		Fuel Sulfur Limit:	BAAQMD	P/E	Vendor
Liquid	Regulation	1		< 0.5% S, by weight	Condition #	1/12	Certification
<u>Elquid</u> Fuel	9-1-304			<u> √ 0.5 % by weight</u>	1921024175,		Certification
Sulfur	7 1 50 1				Part 5 <del>df</del>		
Content					<u>-</u>		
Liquid	CCR	<u>N</u>		Standby Engines must use	BAAQMD	<u>P/E</u>	<u>Vendor</u>
<u>Fuel</u>	<u>Title 17,</u>			CARB Diesel Fuel or other	Condition		Certification
<u>Sulfur</u>	<u>Section</u>			CARB Approved	<u>#24175,</u>		
Content	<u>93115.5</u>			Alternative Fuel,	Part 5f		
	<u>(b)</u>			which has			
	<u>and</u>			Fuel Sulfur Limits of:			
	<u>CCR</u>			< 500 ppmw of S			
	<u>Title 13,</u>			(< 0.05% S, by weight)			
	Section			<u>or</u>			
	<u>2281(a)</u>			< 15 ppmw of S			
	<u>(1-5)</u>			(for fuel sold after 6/1/06)			

## VII. Applicable Limits and Compliance Monitoring Requirements

# Table VII – B Applicable Limits and Compliance Monitoring Requirements S-11 DIESEL ENGINE FOR EMERGENCY STANDBY GENERATOR S-14 DIESEL ENGINE FOR EMERGENCY STANDBY GENERATOR

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
Operating	BAAQMD	N		For S-11 Diesel Engine:	BAAQMD	P/C, M	<u>Hour</u> Meter
Hours	Regulation			Operating Hours for	Regulation		to Record
	<del>9-8-330.2</del>			Reliability-Related	9-8-530		either
	and			Activities:	and		<del>Operating</del>
	BAAQMD			≤ 10030 hours	BAAQMD		Hours or
	Condition #			in a calendar year	Condition #		Fuel Usage
	<del>19210</del>				<del>19210</del> <u>24175</u> ,		and Records
	<u>24175</u> ,				Parts 4 and		
	Part 1				5a- <u>de and</u>		
	<u>and</u>				CCR Title 17,		
	<u>CCR</u>				<u>Section</u>		
	<u>Title 17,</u>				93115.10(e)		
	Section				(1)&(g)(1)		
	93115.6(b)						
	(3)(A)(1)(b)						
Operating	<u>BAAQMD</u>	<u>N</u>	<b>Expires</b>	For S-14 Diesel Engine:	<u>BAAQMD</u>	<u>P/C, M</u>	Hour Meter
<u>Hours</u>	Regulation		<u>1/1/12</u>	Operating Hours for	<u>Regulation</u>		and Records
	<u>9-8-330.2</u>			Reliability-Related	<u>9-8-530</u>		
	<u>and</u>			Activities:	<u>and</u>		
	<u>BAAQMD</u>			< 100 hours	<u>BAAQMD</u>		
	Condition			in a calendar year	<b>Condition</b>		
	<u>#24175,</u>				#24175, Parts		
	Part 2a				4 and 5a-d		
					<u>and</u>		
					CCR Title 17,		
					<u>Section</u>		
					93115.10(e)		
					(1)&(g)(1)		

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## VII. Applicable Limits and Compliance Monitoring Requirements

# Table VII – B Applicable Limits and Compliance Monitoring Requirements S-11 DIESEL ENGINE FOR EMERGENCY STANDBY GENERATOR S-14 DIESEL ENGINE FOR EMERGENCY STANDBY GENERATOR

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
Operating	BAAQMD	<u>N</u>	<b>Effective</b>	For S-14 Diesel Engine:	<u>BAAQMD</u>	<u>P/C, M</u>	Hour Meter
<u>Hours</u>	Regulation		<u>1/1/12</u>	Operating Hours for	<u>Regulation</u>		and Records
	<u>9-8-330.3</u>			Reliability-Related	<u>9-8-530</u>		
	<u>and</u>			Activities:	and		
	<u>BAAQMD</u>			< 50 hours	BAAQMD		
	Condition			in a calendar year	Condition		
	<u>#24175,</u>				#24175, Parts		
	Part 2b				4 and 5a-d		
					and		
					CCR Title 17,		
					Section		
					93115.10(e)		
					(1)&(g)(1)		

## VII. Applicable Limits and Compliance Monitoring Requirements

Table VII – C
Applicable Limits and Compliance Monitoring Requirements
S-12 MICROTURBINE AND S-13 MICROTURBINE

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
TOC (Total Organic Com- pounds Plus	BAAQMD 8-34-301.2	Y		≤ 1000 ppmv as methane (component leak limit)	BAAQMD 8-34-501.6 and 503 and BAAQMD Condition # 16065,	P/Q	Quarterly Inspection of control system components with
Methane)					Part 15c		Portable Analyzer and Records
Non- Methane Organic Com- pounds (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 501.4 and BAAQMD Condition #23579, Parts 3 and 4	P/A	Source Tests and Records
Opacity	BAAQMD 6- <u>1-</u> 301	Y		Ringelmann No. 1 for < 3 minutes/hour	None	N	NA
FP	BAAQMD 6- <u>1-</u> 310	Y		≤ 0.15 grains/dscf	None	N	NA
SO <sub>2</sub>	BAAQMD 9-1-301	Y		Property Line Ground Level Limits: $\leq 0.5$ ppm for 3 minutes and $\leq 0.25$ ppm for 60 min. and $\leq 0.05$ ppm for 24 hours	None	N	NA
SO <sub>2</sub>	BAAQMD Regulation 9-1-302	Y		≤ 300 ppm (dry basis)	BAAQMD Condition # 16065, Parts 1312 and 15c or Parts 14 and 15c	P/ <u>A</u> Q	Annual Source Test at Flare; or Sulfur Analysis of Landfill Gas at Header and Records

## VII. Applicable Limits and Compliance Monitoring Requirements

## Table VII – C Applicable Limits and Compliance Monitoring Requirements S-12 MICROTURBINE AND S-13 MICROTURBINE

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
$H_2S$	BAAQMD	N		Property Line Ground	None	N	NA
	9-2-301			Level Limits:			
				$\leq$ 0.06 ppm,			
				averaged over 3 minutes			
				and $\leq 0.03$ ppm,			
				averaged over 60 minutes			
$NO_x$	BAAQMD	Y		$\leq$ 10 pounds per day or	BAAQMD	P/A	Source Tests
	Condition #			<u>&lt;</u> 62 ppmv,	Condition		and Records
	23579,			at 15% O <sub>2</sub> , dry basis	#23579,		
	Part 1				Parts 3 and 4		
CO	BAAQMD	Y		$\leq$ 10 pounds per day or	BAAQMD	P/A	Source Tests
	Condition #			$\leq$ 100 ppmv,	Condition		and Records
	23579,			at 15% O <sub>2</sub> , dry basis	#23579,		
	Part 2				Parts 3 and 4		

## VII. Applicable Limits and Compliance Monitoring Requirements

Table VII D

Applicable Limits and Compliance Monitoring Requirements
S-14 Diesel Engine for Emergency Standby Generator

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
<del>Opacity</del>	BAAQMD Regulation 6-303	¥		Ringelmann No. 2  for < 3 minutes/hour	<del>None</del>	<del>N</del>	<del>NA</del>
FP	BAAQMD Regulation 6-310	¥		≤ 0.15 grains/dsef	<del>None</del>	<del>N</del>	<del>NA</del>
<del>SO</del> <sub>2</sub>	BAAQMD Regulation 9-1-301	¥		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	<del>None</del>	H	<del>NA</del>
SO <sub>2</sub>	BAAQMD Regulation 9-1-304	¥		<del>Fuel Sulfur Limit:</del> <del>0.5%</del>	BAAQMD Condition # 21195, Part 4d	<del>P/E</del>	Vendor Certification
<del>SO</del> <sub>2</sub>	BAAQMD Condition # 21195, Part 1	¥		<del>Fuel Sulfur Limit:</del> <u>≤ 0.05%</u>	BAAQMD Condition # 21195, Part 4d	<del>P/E</del>	Vendor Certification
Operating Hours	BAAQMD Regulation 9-8-330.2 and BAAQMD Condition # 21195, Part 2b	¥ 4		Operating Hours for Reliability Related Activities: ≤ 100 hours in a calendar year	BAAQMD Regulation 9-8-530 and BAAQMD Condition # 21195, Parts 3 and 4a-c	<del>P/C, M</del>	Meter to Record either Operating Hours or Fuel Usage and Records

#### 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 <u>included</u> in Section VII, Applicable <del>Emission</del> Limits & Compliance Monitoring Requirements, of this permit.

#### Table VIII Test Methods

Applicable Requirement	Description of Requirement	Acceptable Test Methods
BAAQMD	Ringelmann No. 1 Limitation	Manual of Procedures, Volume I, Evaluation of Visible
6- <u>1-</u> 301		Emissions; or
		EPA Reference Method 9, Visual Determination of the Opacity of
		Emissions from Stationary Sources
BAAQMD	Ringelmann No. 2 Limitation	Manual of Procedures, Volume I, Evaluation of Visible
6- <u>1-</u> 303		Emissions; or
		EPA Reference Method 9, Visual Determination of the Opacity of
		Emissions from Stationary Sources
BAAQMD	Particulate Weight Limitation	Manual of Procedures, Volume IV, ST-15, Particulate: or EPA
6- <u>1-</u> 310		Reference Method 5, Determination of Particulate Matter
		Emissions from Stationary Sources
BAAQMD	Collection and Control System	EPA Reference Method 21, Determination of Volatile Organic
8-34-301.2	Leak Limit	Compound Leaks
BAAQMD	NMOC Emission Limits for	Manual of Procedures, Volume IV, ST-14, Oxygen, Continuous
8-34-301.3	Flares	Sampling; and
		Manual of Procedures, Volume IV, ST-7, Organic Compounds; or
		EPA Reference Method 18, 25, 25A, or 25C
BAAQMD	NMOC Emission Limits for	Manual of Procedures, Volume IV, ST-14, Oxygen, Continuous
8-34-301.4	Other Emission Control Systems	Sampling; and
		Manual of Procedures, Volume IV, ST-7, Organic Compounds; or
		EPA Reference Method 18, 25, 25A, or 25C
BAAQMD	Landfill Surface Leak Limit	EPA Reference Method 21, Determination of Volatile Organic
8-34-303		Compound Leaks
BAAQMD	Gauge Pressure Limit at	APCO Approved Device
8-34-305.1	Wellheads	
BAAQMD	Temperature Limit for Gas at	APCO Approved Device
8-34-305.2	Wellheads	
BAAQMD	Nitrogen Concentration in Gas at	EPA Reference Method 3C, Determination of Carbon Dioxide,
8-34-305.3	Wellheads	Methane, Nitrogen, and Oxygen from Stationary Sources
BAAQMD	Oxygen Concentration in Gas at	EPA Reference Method 3C, Determination of Carbon Dioxide,
8-34-305.4	Wellheads	Methane, Nitrogen, and Oxygen from Stationary Sources

## VIII. Test Methods

### Table VIII Test Methods

Applicable Requirement	Description of Requirement	Acceptable Test Methods
BAAQMD	Compliance Demonstration Test	EPA Reference Method 18, Measurement of Gaseous Organic
8-34-412		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	Limitations on Ground Level	Manual of Procedures, Volume VI, Part 1, Ground Level
9-1-301	Concentrations (SO <sub>2</sub> )	Monitoring for Hydrogen Sulfide and Sulfur Dioxide
BAAQMD	General Emission Limitation	Manual of Procedures, Volume IV, ST-19A, Sulfur Dioxide,
9-1-302	(SO <sub>2</sub> )	Continuous Sampling, or
		ST-19B, Total Sulfur Oxides, Integrated Sample
BAAQMD	<u>Liquid</u> Fuel Sulfur Content Limit	Manual of Procedures, Volume III, Method 10, Determination of
9-1-304		Sulfur in Fuel Oil, or
		ASTM D2622-94 or CARB Approved Equivalent
BAAQMD	Limitations on Hydrogen Sulfide	Manual of Procedures, Volume VI, Part 1, Ground Level
9-2-301		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
CCR, Title 13,	<u>Liquid Fuel Sulfur Content Limit</u>	ASTM D2622-94 or CARB Approved Equivalent
Section 2281		
(a)(1 and 2)		
BAAQMD	Temperature Limit for Gas at	APCO Approved Device
Condition #	Wellheads	
16065, Part 5a		
BAAQMD	Oxygen Concentration Limit for	EPA Reference Method 3C, Determination of Carbon Dioxide,
Condition #	Landfill Gas at Main Header	Methane, Nitrogen, and Oxygen from Stationary Sources
16065, Part 5b		
BAAQMD	Methane Concentration Limit for	EPA Reference Method 3C, Determination of Carbon Dioxide,
Condition #	Landfill Gas at Main Header	Methane, Nitrogen, and Oxygen from Stationary Sources
16065, Part 5b		

## VIII. Test Methods

### Table VIII Test Methods

Applicable Requirement	Description of Requirement	Acceptable Test Methods
BAAQMD	Combustion Zone Temperature	APCO Approved Device
Condition #	Limits for Flares	
16065, Part 7		
BAAQMD	Landfill Gas Throughput Limit	APCO Approved Gas Flow Meter and Recorder
Condition #	for Flares	
<del>16065, Part 8</del>		
BAAQMD	NO <sub>x</sub> Emission Limits for Flares	Manual of Procedures, Volume IV, ST-13A, Oxides of Nitrogen,
Condition #		Continuous Sampling and ST-14, Oxygen, Continuous Sampling:
16065, Part 9		or EPA Reference Method 20, Determination of Nitrogen Oxides,
		Sulfur Dioxide, and Diluent Emissions from Stationary Gas
		<u>Turbines</u>
BAAQMD	CO Emission Limits for Flares	Manual of Procedures, Volume IV, ST-6, Carbon Monoxide,
Condition #		Continuous Sampling and ST-14, Oxygen, Continuous Sampling:
16065, Part 10		or EPA Reference Method 10, Determination of Carbon
		Monoxide Emissions from Stationary Sources
BAAQMD	Vinyl Chloride Limit for Flares	EPA Reference Method 18, Measurement of Gaseous Organic
Condition #		Compound Emissions by Gas Chromatography; or
<del>16065, Part 11</del>		Manual of Procedures, Volume IV, ST-29, Vinyl Chloride
BAAQMD	Landfill Gas Sulfur Content	Draeger Tube measuring H <sub>2</sub> S: used in accordance with
Condition #	Limit	manufacturer's recommended procedures Manual of Procedures,
16065, Part 12		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
		<u>Methods</u>
BAAQMD	Compliance Demonstration Test	Manual of Procedures, Volume IV, ST-17, Stack Gas Velocity
Condition #		and Volumetric Flow Rate; ST-23 Water Vapor; ST-14, Oxygen,
16065, Part 13		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 10 and 20; and Methods 18, 25, 25A, or
		25C; and Method 44
BAAQMD	Gas Characterization Analyses	EPA Reference Method 18, Measurement of Gaseous Organic
Condition #		Compound Emissions by Gas Chromatography; and Method 44
16065, Part 14		Determination of Reduced Sulfur Gases and Sulfur Dioxide in
		Effluent Samples by Gas Chromatographic Methods

## VIII. Test Methods

### Table VIII Test Methods

Applicable Requirement	Description of Requirement	Acceptable Test Methods
BAAQMD	NO <sub>x</sub> Emission Limits for	Manual of Procedures, Volume IV, ST-13A, Oxides of Nitrogen,
Condition #	Microturbines	Continuous Sampling and ST-14, Oxygen, Continuous Sampling:
23579, Part 1		or EPA Reference Method 20, Determination of Nitrogen Oxides,
		Sulfur Dioxide, and Diluent Emissions from Stationary Gas
		<u>Turbines</u>
BAAQMD	CO Emission Limits for	Manual of Procedures, Volume IV, ST-6, Carbon Monoxide,
Condition #	Microturbines	Continuous Sampling and ST-14, Oxygen, Continuous Sampling:
23579, Part 2		or EPA Reference Method 10, Determination of Carbon
		Monoxide Emissions from Stationary Sources
BAAQMD	Compliance Demonstration Test	Manual of Procedures, Volume IV, ST-17, Stack Gas Velocity
Condition #		and Volumetric Flow Rate; ST-23 Water Vapor; ST-14, Oxygen,
23579, Part 3		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; and Methods 10
		<u>and 20</u>

## IX. PERMIT SHIELD

Not applicable

#### X. REVISION HISTORY

#### **Title V Permit Issuance (Application # 2620):**

July 28, 2003

#### **Administrative Revision (no application):**

**September 10, 2003** 

• Add applicable permit term dates and due dates to Sections I.B, I.F, and I.G

#### **Administrative Revision (Application #8445):**

**April 1, 2004** 

- Update standard text in Section I.B.1 and Section III
- Switch the order of Sections IX and X for consistency with other MFR permits

#### **Minor Revision (Application #8445):**

June 17, 2004

- Add S-14 to Table II-A in Section II
- Add Table IV-D for S-14 in Section IV
- Add Condition # 21195 for S-14 in Section VI
- Add Table VII-D for S-14 in Section VII
- Delete future effective dates that have passed from Tables IV-A, IV-C, VII-A, and VII-C
- Update Revision History in Section X

#### **Minor Revision (Application # 11467):**

March 16, 2006

- Delete future effective dates and other text in Tables II-A, IV-C, and VII-C to reflect that the S-12 and S-13 Microturbines are now installed and operating.
- Update the Regulation 8, Rule 34 amendment date in Tables IV-A and IV-C.
- Add a custom Schedule of Compliance to Section V for the gas collection system shutdown events that are necessary to complete the installation and initial commissioning of the ALZA landfill gas treatment and compression station and associated process control systems.
- Modify Condition # 16065, Part 2 to allow landfill gas to be burned in off-site IC engines.
- Modify Condition # 20297, Part 1, Table VII-C, and Table VIII to clarify the applicability of the landfill gas throughput limit and to correct the related monitoring requirements and calculation procedures.

#### X. Revision History

- Revise Condition # 20297, Parts 5-7 and Table VII-C by inserting the specific combustion zone temperature limit established by the initial compliance demonstration tests and by deleting obsolete text.
- Update Revision History in Section X.
- Update website address in Section XII.

#### **Significant Revision (Application # 15609):**

**September 19, 2007** 

- In Table II-A, increase the maximum firing rate for the S-12 and S-13 Microturbines from 1.27 MM BTU/hr to 1.6 MM BTU/hr.
- Revise the NO<sub>x</sub> and CO outlet concentration limits that results from this firing capacity increase in Condition # 20297 Parts 3 and 4 (renumbered as Condition # 23579 Parts 1 and 2) and in Table VII-C.
- Delete all federal requirements (40 CFR Part 60, Subparts A and Cc; Part 62, and Part 63, Subparts A and AAAA) from Tables IV-C and VII-C, because this site is meeting the requirements of 40 CFR Part 60,752(b)(2)(iii) by using an EPA approved landfill gas treatment system upstream of the microturbines.
- Remove the BAAQMD Regulation 8-34-508 landfill gas flow rate monitoring requirement from Table IV-C, because this monitoring requirement applies to the whole landfill gas control system and not to each individual control device.
- Remove the BAAQMD and SIP Regulation 1 parametric monitoring requirements from Table IV-C and Table VII-C, because all monitoring requirements that triggered this regulation will be removed from the applicable requirements for S-12 and S-13.
- Delete the Part 1 landfill gas flow rate limit and monitoring requirements from Condition # 20297 and from Tables IV-C, VII-C, and VIII, because this limit is unnecessary.
- Delete the Part 4 NMOC emission limit from Condition # 20297 and from Tables IV-C, VII-C, and VIII, because this limit is redundant.

#### X. Revision History

- Delete the Parts 5 and 7 combustion zone temperature limit and monitoring requirements from Condition # 20297 and from Tables IV-C, VII-C, and VIII, because this requirement is burdensome and should be replaced by the existing annual source test requirement for NMOC outlet concentration. Add Regulation 8-34-509 to the basis of Condition # 20297 Parts 6 and 8 (renumbered as Condition # 23579 Parts 3 and 4).
- Renumber the remaining parts of Condition # 20297 as Condition # 23579 Parts 1-4. Correct all related citations in Section VI and in Tables IV-C, VII-C, and VIII.
- Remove unnecessary source testing requirements from Condition # 23579 Part 3.
- Correct the descriptions for sulfur dioxide limits in Table VII-C.
- Delete the custom schedule of compliance from Section V, because it expired in July 2006 and is now obsolete.
- Update the revision history.

#### Title V Permit Renewal (Application # 17127): [Enter Approval Date]

- Correct Mailing Address and Facility Contact on the Title
- Correct and update regulatory amendment dates in Section I.
- Add and revise text in Sections I, III, IV, VII, and VIII to conform to current standard text, and remove Section XII to conform to current standard MFR permit format.
- Update regulatory amendment dates, remove obsolete SIP citations, and add additional applicable requirements to Table III.
- Update regulatory amendment dates and descriptions and delete unnecessary future effective dates in Tables IV-A, IV-B, IV-C, VII-A, VII-B, VII-C, and VIII.
- In Condition #16065, Part 2a, clarify that operation of the microturbines is optional.
- In Condition #16065, Part 4, clarify that adding and removing wells are alterations that require a Change of Conditions rather than an Authority to Construct and that redrilling and replacement of an existing well does not require a Change of Conditions.

#### X. Revision History

- In Condition #16065, Part 5, add wells to the list of wells subject to alternative temperature and O2/N2 concentration limits.
- Delete the Condition #16065, Part 8 gas flow rate limit to the flares, because it is redundant. This flow rate limit is equivalent to the three flares operating at maximum capacity. Remove this limit from Tables IV-A, VII-A, and VIII.
- In Condition #16065, Parts 9 and 10, add alternative NO<sub>x</sub> and CO limits, expressed as emission rates in lbs/MMBTU, which are equivalent to the exhaust concentration limits listed in these parts. Add these alternative emission limits to Table VII-A.
- Delete the Condition #16065, Part 11 vinyl chloride limit and Part 13d vinyl chloride testing requirement, because the vinyl chloride limit is unnecessary. Test results for vinyl chloride at the flare outlet have been non-detect for vinyl chloride, and the inlet vinyl chloride concentration is far below this outlet limit. Remove the vinyl chloride limit from Tables IV-A, VII-A, and VIII.
- In Condition #16065, Part 12, reduce the frequency of the total reduced sulfur content monitoring requirement for landfill gas from quarterly to annual, based on test data that shows that the LFG sulfur content is very low. Remove the Draeger Tube monitoring requirements from Part 12 and from Tables VII-A and VIII, and clarify the applicable annual monitoring procedures.
- In Condition #16065, Parts 13g and 14, add annual sulfur dioxide testing at the flare exhaust as an optional compliance demonstration alternative to annual sulfur content testing of the landfill gas. Add appropriate SO<sub>2</sub> test methods to Table VIII.
- Make editorial corrections to Condition #16065, Part 15.
- For the S-11 and S-14 Diesel Engines for Emergency Standby Generators: combine Tables IV-B and IV-D into Table IV-B, combine Tables VII-B and VII-D into Table VII-B, delete Tables IV-D and VII-D, and combine the permit conditions for these engines by deleting Condition #19210 for S-11, deleting Condition #21195 for S-14, and adding Condition #24175 for both engines.

#### X. Revision History

- For the S-11 and S-14 Diesel Engines, add new applicable provisions of BAAQMD Regulation 9, Rule 8 to Tables IV-B and VII-B and to the bases for Condition #24175, Parts 2-5.
- For S-11 and S-14, add the applicable provisions of the CARB ATCM for Stationary Compression Ignition Engines to Tables IV-B and VII-B and to the bases of Condition # 24175, Parts 1-5.
- In Condition #24175, Part 1 for S-11: Revise the operating hour limit for reliability-related testing from 100 hours/year to 30 hours/year based on the CARB ATCM and a CARB certified PM emission rate of 0.4 g/bhp-hr, and correct this limit in Table VII-B.
- In Condition #24175, Part 2 for S-14: Include the current CARB ATCM exemption for this engine and the future effective provision of Regulation 9-8-330.3 that reduces operating hours for reliability-related activities from 100 hours/year to 50 hours/year, effective January 1, 2012. Add these limits to Table VII-B.
- Replace the obsolete definitions in Conditions #19210 and #21195 with the Condition #24175, Part 3 operating restrictions that are consistent with the CARB ATCM.
- Remove the optional meters and fuel records in Conditions #19210 and #21195, and add the CARB ATCM required hour meter to Condition #24175, Part 4.
- Remove the record keeping requirements in Condition #19210, Part 5 and Condition #21195, Part 4. Add new record keeping provisions to Condition #24175, Part 5, for consistency with the CARB ATCM and Regulation 9, Rule 8. In Part 5f, include the vendor fuel sulfur content certification that is necessary to demonstrate compliance with Regulation 9-1-304.
- Add the CARB diesel fuel sulfur content limits to Table VII-B and the CARB test method for diesel fuel sulfur content to Table VIII.
- Add symbols (< and >) to Tables VII-A, VII-B, and VII-C to clarify applicable limits.
- Add several missing EPA reference methods to Table VIII.
- In Section X, update the revision history adding a description of these renewal permit revisions.
- In Section XI, add numerous terms to the glossary.

## X. Revision History

• Remove Section XII from the permit and from the Table of Contents.

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#### XI. GLOSSARY

#### **ACT**

Federal Clean Air Act

#### **AP-42**

An EPA Document "Compilation of Air Pollution Emission Factors" that is used to estimate emissions from numerous source types. It is available electronically from EPA's web site at: http://www.epa.gov/ttn/chief/ap42/index.html

#### **APCO**

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

#### **ARB**

Air Resources Board

#### **ASTM**

American Society for Testing and Materials

#### **ATC**

**Authority to Construct** 

#### **ATCM**

Airborne Toxic Control Measure

#### **BAAQMD**

Bay Area Air Quality Management District

#### **BACT**

Best Available Control Technology

#### **BARCT**

Best Available Retrofit Control Technology

#### **Basis**

The underlying authority that allows the District to impose requirements.

#### <u>C1</u>

An organic chemical compound with one carbon atom, for example: methane

#### <u>C3</u>

An organic chemical compound with three carbon atoms, for example: propane

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### XI. Glossary

#### **C5**

An organic chemical compound with five carbon atoms, for example: pentane

#### **C6**

An organic chemical compound with six carbon atoms, for example: hexane

#### **CAA**

The federal Clean Air Act

#### **CAAOS**

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

#### **CEC**

California Energy Commission

#### **CEOA**

California Environmental Quality Act

#### **CEM**

A "continuous emission monitor" is a monitoring device that provides a continuous direct measurement of some pollutant (e.g. NOx concentration) in an exhaust stream.

#### **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.

#### CH4 or CH<sub>4</sub>

Methane

#### CI

**Compression Ignition** 

#### XI. Glossary

#### **CIWMB**

California Integrated Waste Management Board

#### CO

Carbon Monoxide

#### CO2 or 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

#### E6, E9, E12

Very large or very small number values are commonly expressed in a form called scientific notation, which consists of a decimal part multiplied by 10 raised to some power. For example, 4.53E6 equals  $(4.53) \times (10^6) = (4.53) \times (10x10x10x10x10x10) = 4,530,000$ . Scientific notation is used to express large or small numbers without writing out long strings of zeros.

#### 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.

#### FR

Federal Register

#### **GDF**

Gasoline Dispensing Facility

#### **GLM**

**Ground Level Monitor** 

#### **Grains**

1/7000 of a pound

#### H2S or H2S

Hydrogen Sulfide

#### H2SO4 or H<sub>2</sub>SO<sub>4</sub>

Sulfuric Acid

#### H&SC

Health and Safety Code

#### **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.

#### Hg

Mercury

#### XI. Glossary

#### **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

#### **LHV**

Lower Heating Value. Similar to the higher heating value (see HHV) except that the water produced by the combustion is not condensed but retained as vapor at 60°F.

#### Long ton

2200 pounds

#### **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

#### **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.

#### **MSDS**

Material Safety Data Sheet

#### **MSW**

Municipal solid waste

### XI. Glossary

#### **MTBE**

Methyl tertiary-butyl ether

#### MW

Molecular weight

#### $N2 \text{ or } N_2$

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)

#### NO2 or NO<sub>2</sub>

Nitrogen Dioxide

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

Oxides of nitrogen.

#### **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.

#### XI. Glossary

#### **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.)

#### $O2 \text{ or } O_2$

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,  $NO_x$ ,  $PM_{10}$ , and  $SO_2$ .

#### **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** 

#### $\mathbf{PM}$

Particulate Matter

#### **PM10 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.

#### PV or P/V Valve

Pressure / Vacuum Valve

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#### XI. Glossary

#### **Regulated Organic Liquid**

"Regulated organic liquids" are those liquids which require permits, or which are subject to some regulation, when processed at a liquid-handling operation. For example, for refinery marine terminals, regulated organic liquids are defined as "organic liquids" in Regulation 8, Rule 44.

#### **RMP**

Risk Management Plan

#### RWOCB

Regional Water Quality Control Board

#### $\mathbf{S}$

Sulfur

#### **SCR**

A "selective catalytic reduction" unit is an abatement device that reduces NOx concentrations in the exhaust stream of a combustion device. SCRs utilize a catalyst, which operates within a specific temperature range, and injected ammonia to promote the conversion of NOx compounds to nitrogen gas.

#### **Short ton**

<u>2000 pounds</u>

#### 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.

#### SO2 or SO<sub>2</sub>

Sulfur dioxide

#### **SO3** or **SO**<sub>3</sub>

Sulfur trioxide

#### SSM

Startup, Shutdown, or Malfunction

#### XI. Glossary

#### **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 + Mplus methane) (same as TOC).

#### therm

100,000 British Thermal Units

#### 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 includes all (NMOC + Mmethane, (Ssame as THC).

#### **TPH**

**Total Petroleum Hydrocarbons** 

#### **TRMP**

Toxic Risk Management Policy

#### **TRS**

Total Reduced Sulfur, which is a measure of the amount of sulfur-containing compounds in a gas stream, typically a fuel gas stream, including, but not limited to, hydrogen sulfide. The TRS content of a fuel gas determines the concentration of SO<sub>2</sub> that will be present in the combusted fuel gas, since sulfur compounds are converted to SO<sub>2</sub> by the combustion process.

#### **TSP**

**Total Suspended Particulate** 

#### TVP

True Vapor Pressure

## XI. Glossary

#### **VMT**

Vehicle Miles Traveled

#### **VOC**

Volatile Organic Compounds

### **Symbols:**

<	=	less than
>	=	greater than
<u>&lt;</u>	=	less than or equal to
>	=	greater than or equal to

#### **Units of Measure:**

atm	=	<u>atmospheres</u>
<u>bbl</u>	=	barrel of liquid (42 gallons)
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
$ft^3$	=	cubic feet
g	=	grams
gal	=	gallon
gpm	=	gallons per minute
gr	=	grains
hp	=	horsepower
hr	=	hour
in	=	inches
kW	=	kilowatts
lb	=	pound
lbmol	=	pound-mole
$m^2$	=	square meter
$m^3$	=	cubic meters
Mg	=	mega grams
min	=	minute
mm	=	millimeter
MM	=	million
MM BTU	=	million BTU
M cf	=	one thousand cubic feet
MMcf	=	one million cubic feet

## XI. Glossary

MW	=	megawatts
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
$yd^3$	=	cubic yards
yr	=	year

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#### 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:

 $\frac{http://yosemite.epa.gov/r9/r9sips.nsf/Agency?ReadForm&count=500\&state=California\&cat=Bay+Area+Air+Quality+Management+District-Agency-Wide+Provisions}{(Agency-Wide+Provisions)}$ 

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