Bay Area Air Quality Management District

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

Proposed

MAJOR FACILITY REVIEW PERMIT

Issued To:

City of Sunnyvale Landfill and SMaRT Station®, Environmental Services Department Facility #A5905

Facility Address:
301 Carl Road
Sunnyvale, CA 94089

Mailing Address:
P.O. Box 3707
Sunnyvale, CA 94088

Responsible Official
John Stufflebean
Environmental Services Director
408-730-7954

Facility Contact
Mark Bowers
Soil Waste Programs Division Manager
408-730-7421

Type of Facility: Active Recycling, Landfill
Primary SIC: 4953
Product: Waste Transfer and Recycling Operations, Closed Landfill with Gas Collection

BAAQMD Permit Division Contact:
Hari Doss / Flora Chan

ISSUED BY THE BAY AREA AIR QUALITY MANAGEMENT DISTRICT

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

Date

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I. STANDARD CONDITIONS

A. Administrative Requirements

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

BAAQMD Regulation 1 - General Provisions and Definitions
(as amended by the District Board on 5/4/11);
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 4/18/12);
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 6/15/05);
SIP Regulation 2, Rule 2 - Permits, New Source Review and Prevention of Significant Deterioration
(as approved by EPA through 1/26/99);
BAAQMD Regulation 2, Rule 4 - Permits, Emissions Banking
(as amended by the District Board on 5/17/00);
SIP Regulation 2, Rule 4 - Permits, Emissions Banking
(as approved by EPA through 1/26/99);
BAAQMD Regulation 2, Rule 5 – Permits, New Source Review of Toxic Air Contaminants
(as amended by the District Board on 1/6/10);
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 [enter issuance date], and expires on [enter 5th anniversary of issuance date]. The permit holder shall submit a complete application for renewal of this Major Facility Review Permit no later than [enter date 6 months prior to expiration date] and no earlier than [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 [enter expiration date].** If the permit renewal has not been issued by [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 Volume II, Part 3, §4.2)

I. Standard Conditions

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

I. Standard Conditions

11. The responsible official shall certify all documents submitted by the facility pursuant to the major facility review permit. The certification shall state that based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete. The certifications shall be signed by a responsible official for the facility. (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; 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 [enter permit issuance date] to [enter date, end of 6th month after permit issuance date]. The report shall be submitted by [enter date, end of month after reporting period end date]. Subsequent reports shall be for the following periods: [enter month] 1st through [enter month] 30th and [enter month] 1st through [enter month] 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 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

I. Standard Conditions

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; 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 [enter issuance month] 1st to [enter month before issuance month] 30th [or 31st]. The certification shall be submitted by [enter month after end date above] 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 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 of the terms and conditions of this permit by applying to the District's Hearing

I. Standard Conditions

Board for a variance pursuant to Health and Safety Code Section 42350. The Hearing Board will determine after notice and hearing whether variance relief should be granted in accordance with the procedures and standards set forth in Health and Safety Code Section 42350 et seq. (MOP Volume II, Part 3, §4.8)

3. The granting by the District of breakdown relief or the issuance by the Hearing Board of a variance will not provide relief from federal enforcement. (MOP Volume II, Part 3, §4.8)

I. Severability

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

J. Miscellaneous Conditions

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

II. EQUIPMENT

A. Permitted Source List

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.

Table II – A
Permitted Sources

S-#	Description	Make or Type	Model	Capacity
S-1	Solid Waste Transfer Station	Transfer Station - refuse sorting, separation, and recycling		1500 tons per day
S-2	Wood Waste Unloading Operation	Yard Waste		298 tons per day
S-3	Wood Shredder	Enclosed Jeffrey Rotary Hog	Model 47WBH	255 tons per day
S-4	Conveyor			255 tons per day
S-5	Wood Chip Processing: Two Hoppers (feeding and loadout)	Composting, storing and material handling		255 tons per day
S-6	Wood Chip Screening Operation	BM&M, single deck, shaker type	Chip Screen	255 tons per day
S-7	Diesel Engine for an Emergency Standby Generator	Detroit Diesel engine for Kohler 350 ROZD generator	Model 8V-92TA Year 1992	540 bhp
S-8	City of Sunnyvale Sanitary Landfill	Closed Class III Solid Waste Disposal Site		Maximum. Design Capacity = 4.203 E6 yd^3 (3.216 E6 m^3) Max. Waste Acceptance Rate = 0 tons/day (Closed Landfill) Max. Cumulative Waste In Place = 2.52 E6 tons
	Gas Collection System	Active		66 vertical gas extraction wells and 13 horizontal collectors.

II. Equipment

B. Abatement Device List

Table II – B
Abatement Devices

A-#	Description	Source(s) Controlled	Applicable Requirement	Operating Parameters	Limit or Efficiency
A-1	Wet Suppression System	S-1	BAAQMD Regulation 6-1-301	None	≤ Ringelmann 1 for 3 minutes in any hour
A-5	Baghouse Dust Collector	S-3	BAAQMD Regulations 6-1-301 and 6-1-310	None	≤ Ringelmann 1 for 3 minutes in any hour and ≤ 0.15 grains/dscf
A-8	Landfill Gas Flare, Sur-Lite, Inc, Model #19805, 45 MM BTU/hour	S-8	BAAQMD 8-34-301.3, see also Table IV-G	Minimum combustion zone temperature of 1400 °F, (3-hour average), see also Table VII-G	Either ≥ 98% destruction of NMOC or < 30 ppmv of NMOC, as CH_4, at 3% O_2, dry
A-9	Landfill Gas Flare, Make and Model to be determined, 600 scfm of waste gas, 18 MM BTU/hour (upon start-up of A-9)	S-8	BAAQMD 8-34-301.3, see also Table IV-G	Minimum combustion zone temperature of 1400 °F, (3-hour average), see also Table VII-G	Either > 98% destruction of NMOC or < 30 ppmv of NMOC, as CH4, at 3% O2, dry

III. GENERALLY APPLICABLE REQUIREMENTS

The permit holder shall comply with all applicable requirements, including those specified in the BAAQMD and SIP rules and regulations and other federal requirements cited below. These requirements apply in a general manner to the facility and/or to sources exempt from the requirement to obtain a District Permit to Operate. The District has determined that these requirements will not be violated under normal, routine operations, and that no additional periodic monitoring or reporting to demonstrate compliance is warranted. In cases where a requirement, in addition to being generally applicable, is also specifically applicable to one or more sources, the requirement and the source are also included in Section IV, Source-Specific Applicable Requirements, of this permit. 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 the SIP requirements is posted on the EPA Region 9 website. The address is:

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

NOTE:

There are differences between the current BAAQMD rules and the versions of the rules in the SIP. All sources must comply with both versions of a 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 (5/4/11)	N
SIP Regulation 1	General Provisions and Definitions (6/28/99)	Y
BAAQMD Regulation 2, Rule 1	Permits – General Requirements (4/18/12)	N
BAAQMD 2-1-429	Federal Emissions Statement (12/21/04)	N
SIP Regulation 2, Rule 1	Permits – General Requirements (1/26/99)	Y
SIP 2-1-429	Federal Emissions Statement (4/3/95)	Y

III. Generally Applicable Requirements

Table III
Generally Applicable Requirements

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)
BAAQMD Regulation 2, Rule 5	Permits – New Source Review of Toxic Air Contaminants (1/6/10)	N
BAAQMD Regulation 5	Open Burning (7/9/08)	N
SIP Regulation 5	Open Burning (9/4/98)	Y
BAAQMD Regulation 6, Rule 1	Particulate Matter – General Requirements (12/5/07)	N
SIP Regulation 6	Particulate Matter and Visible Emissions (9/4/98)	Y
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 (7/20/05)	N
SIP Regulation 8, Rule 2	Organic Compounds – Miscellaneous Operations (3/22/95)	Y
BAAQMD Regulation 8, Rule 3	Organic Compounds – Architectural Coatings (7/1/09)	N
SIP Regulation 8, Rule 3	Organic Compounds – Architectural Coatings (1/2/04)	Y
BAAQMD Regulation 8, Rule 4	Organic Compounds – General Solvent and Surface Coating Operations (10/16/02)	Y
BAAQMD Regulation 8, Rule 15	Organic Compounds – Emulsified and Liquid Asphalts (6/1/94)	Y
BAAQMD Regulation 8, Rule 16	Organic Compounds – Solvent Cleaning Operations (10/16/02)	Y
BAAQMD Regulation 8, Rule 40	Organic Compounds – Aeration of Contaminated Soil and Removal of Underground Storage Tanks (6/15/05)	N
BAAQMD 8-40-116	Exemption, Small Volume	Y
BAAQMD 8-40-117	Exemption, Accidental Spills	Y
SIP Regulation 8, Rule 40	Organic Compounds – Aeration of Contaminated Soil and Removal of Underground Storage Tanks (4/19/01)	Y
BAAQMD Regulation 8, Rule 47	Organic Compounds – Air Stripping and Soil Vapor Extraction Operations (6/15/05)	N
SIP Regulation 8, Rule 47	Organic Compounds – Air Stripping and Soil Vapor Extraction Operations (4/26/95)	Y
BAAQMD Regulation 8, Rule 49	Organic Compounds – Aerosol Paint Products (12/20/95)	N
SIP Regulation 8, Rule 49	Organic Compounds – Aerosol Paint Products (3/22/95)	Y
BAAQMD Regulation 8, Rule 51	Organic Compounds – Adhesive and Sealant Products (7/17/02)	N

III. Generally Applicable Requirements

Table III
Generally Applicable Requirements

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)
SIP Regulation 8, Rule 51	Organic Compounds – Adhesive and Sealant Products (2/26/02)	Y
BAAQMD Regulation 9, Rule 1	Inorganic Compounds – Sulfur Dioxide (3/15/95)	N
SIP Regulation 9, Rule 1	Inorganic Compounds – Sulfur Dioxide (6/8/99)	Y
BAAQMD Regulation 9, Rule 2	Inorganic Compounds – Hydrogen Sulfide (10/6/99)	N
BAAQMD Regulation 11, Rule 1	Hazardous Pollutants – Lead (3/17/82)	N
SIP Regulation 11, Rule 1	Hazardous Pollutants – Lead (9/2/81)	Y
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 Section 41750 et seq.	Portable Equipment	N
California Health and Safety Code Section 44300 et seq.	Air Toxics “Hot Spots” Information and Assessment Act of 1987	N
California Code of Regulations Title 17, Section 93105	Asbestos Airborne Toxic Control Measure for Construction, Grading, Quarrying, and Surface Mining Operations (7/26/01)	N
California Code of Regulations Title 17, Section 93106	Asbestos Airborne Toxic Control Measure for Asbestos-Containing Serpentine (7/20/00)	N
California Code of Regulations Title 17, Section 93116	Asbestos Airborne Toxic Control Measure for Diesel Particulate Matter from Portable Engines Rated at 50 Horsepower and Greater (2/19/11)	N
40 CFR Part 61, Subpart A	National Emission Standards for Hazardous Air Pollutants –General Provisions (9/13/10)	Y
40 CFR Part 61, Subpart M	National Emission Standards for Hazardous Air Pollutants – National Emission Standard for Asbestos (7/20/04)	Y
EPA Regulation 40 CFR 82	Protection of Stratospheric Ozone (6/9/03)	Y
Subpart F, 40 CFR 82.156	Leak Repair	Y

III. Generally Applicable Requirements

Table III
Generally Applicable Requirements

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)
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 the SIP requirements are posted on the EPA Region 9 website. The address is:

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

All other text may be found in the regulations themselves.

IV. Source-Specific Applicable Requirements

Table IV – A
Source-Specific Applicable Requirements
S-1 SOLID WASTE TRANSFER STATION AND A-1 WET SUPPRESSION SYSTEM

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
BAAQMD Regulation 1	**General Provisions and Definitions (5/4/11)**		
1-301	Public Nuisance	N	
BAAQMD Regulation 6, Rule 1	**Particulate Matter – General Requirements (12/5/07)**		
6-1-301	Ringelmann No. 1 Limitation	N	
6-1-305	Visible Particles	N	
6-1-401	Appearance of Emissions	N	
SIP Regulation 6	**Particulate Matter and Visible Emissions (9/4/98)**		
6-301	Ringelmann No. 1 Limitation	Y	
6-305	Visible Particles	Y	
6-401	Appearance of Emissions	Y	
BAAQMD Condition # 5367			
Part 1	Throughput limit (Cumulative Increase)	Y	
Part 2	Particulate emission control measures and visible emissions and dust fallout limitations (Regulations 1-301, 2-1-403, 6-1-301, and 6-1-305)	Y	
Part 3	Visual monitoring and corrective action requirements (Regulation 2-1-403, 6-1-301, and 6-1-305)	Y	
Part 4	Record Keeping (Cumulative Increase)	Y	

IV. Source-Specific Applicable Requirements

Table IV – B
Source-Specific Applicable Requirements
S-2 WOOD WASTE UNLOADING OPERATION

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
BAAQMD Regulation 1	**General Provisions and Definitions (5/4/11)**		
1-301	Public Nuisance	N	
BAAQMD Regulation 6, Rule 1	**Particulate Matter – General Requirements (12/5/07)**		
6-1-301	Ringelmann No. 1 Limitation	N	
6-1-305	Visible Particles	N	
6-1-401	Appearance of Emissions	N	
SIP Regulation 6	**Particulate Matter and Visible Emissions (9/4/98)**		
6-301	Ringelmann No. 1 Limitation	Y	
6-305	Visible Particles	Y	
6-401	Appearance of Emissions	Y	
BAAQMD Condition # 5368			
Part 1	Waste acceptance limitation (Cumulative Increase and Regulation 2-5-110)	Y	
Part 2	Waste handling limitation (Cumulative Increase)	Y	
Part 3	Throughput limit (Cumulative Increase)	Y	
Part 4	Abatement Requirements (Cumulative Increase)	Y	
Part 5	Visual monitoring and corrective action requirements (Regulation 2-1-403, 6-1-301, and 6-1-305)	Y	
Part 6	Record Keeping (Cumulative Increase and Regulation 2-1-403)	Y	

IV. Source-Specific Applicable Requirements

Table IV – C
Source-Specific Applicable Requirements
S-3 WOOD SHREDDER AND A-5 BAGHOUSE DUST COLLECTOR

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
BAAQMD Regulation 1	**General Provisions and Definitions (5/4/11)**		
1-301	Public Nuisance	N	
1-523	Parametric Monitoring and Record keeping 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	
SIP Regulation 1	**General Provisions and Definitions (6/28/99)**		
1-523	Parametric Monitoring and Record keeping Procedures	Y	
1-523.3	Reports of Violations	Y	
BAAQMD Regulation 6, Rule 1	**Particulate Matter – General Requirements (12/5/07)**		
6-1-301	Ringelmann No. 1 Limitation	N	
6-1-305	Visible Particles	N	
6-1-310	Particulate grain loading limitation	N	
6-1-311	General Operations: emission limitation based on processing rate	N	
6-1-401	Appearance of Emissions	N	
SIP Regulation 6	**Particulate Matter and Visible Emissions (9/4/98)**		
6-301	Ringelmann No. 1 Limitation	Y	
6-305	Visible Particles	Y	
6-310	Particulate grain loading limitation	Y	
6-311	General Operations: emission limitation based on processing rate	Y	
6-401	Appearance of Emissions	Y	

IV. Source-Specific Applicable Requirements

Table IV – C
Source-Specific Applicable Requirements
S-3 WOOD SHREDDER AND A-5 BAGHOUSE DUST COLLECTOR

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
BAAQMD Condition # 5369			
Part 1	Waste processing limitation (Cumulative Increase and Regulation 2-5-110)	Y	
Part 2	Enclosure requirement (Cumulative Increase)	Y	
Part 3	Throughput limit (Cumulative Increase)	Y	
Part 4	Baghouse control requirement (Cumulative Increase)	Y	
Part 5	Baghouse pressure monitoring requirement (Regulation 2-1-403)	Y	
Part 6	Baghouse Inspection and Maintenance Records (Regulation 2-1-403)	Y	
Part 7	Wood Waste Throughput Records (Cumulative Increase and Regulation 2-1-403)	Y	

IV. Source-Specific Applicable Requirements

Table IV – D
Source-Specific Applicable Requirements
S-4 CONVEYOR AND
S-5 WOOD CHIP PROCESSING HOPPERS

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
BAAQMD Regulation 1	**General Provisions and Definitions (5/4/11)**		
1-301	Public Nuisance	N	
BAAQMD Regulation 6, Rule 1	**Particulate Matter – General Requirements (12/5/07)**		
6-1-301	Ringelmann No. 1 Limitation	N	
6-1-305	Visible Particles	N	
6-1-311	General Operations: emission limitation based on processing rate	N	
6-1-401	Appearance of Emissions	N	
SIP Regulation 6	**Particulate Matter and Visible Emissions (9/4/98)**		
6-301	Ringelmann No. 1 Limitation	Y	
6-305	Visible Particles	Y	
6-311	General Operations: emission limitation based on processing rate	Y	
6-401	Appearance of Emissions	Y	
BAAQMD Condition # 5370			
Part 1	Throughput limit (Cumulative Increase)	Y	
Part 2	Record Keeping (Cumulative Increase and Regulation 2-1-403)	Y	
Part 3	Visual monitoring and corrective action requirements (Regulation 2-1-403, 6-1-301, and 6-1-305)	Y	

IV. Source-Specific Applicable Requirements

Table IV – E
Source-Specific Applicable Requirements
S-6 WOOD CHIP SCREENING OPERATION

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
BAAQMD Regulation 6, Rule 1	**Particulate Matter – General Requirements (12/5/07)**		
6-1-301	Ringelmann No. 1 Limitation	N	
6-1-305	Visible Particles	N	
6-1-311	General Operations: emission limitation based on processing rate	N	
6-1-401	Appearance of Emissions	N	
SIP Regulation 6	**Particulate Matter and Visible Emissions (9/4/98)**		
6-301	Ringelmann No. 1 Limitation	Y	
6-305	Visible Particles	Y	
6-311	General Operations: emission limitation based on processing rate	Y	
6-401	Appearance of Emissions	Y	
BAAQMD Condition # 5371			
Part 1	Throughput limit (Cumulative Increase)	Y	
Part 2	Operating requirement (Cumulative Increase)	Y	
Part 3	Visual monitoring and corrective action requirements (Regulation 2-1-403, 6-1-301, and 6-1-305)	Y	
Part 4	Record Keeping (Cumulative Increase and Regulation 2-1-403)	Y	

IV. Source-Specific Applicable Requirements

Table IV – F
Source-Specific Applicable Requirements
S-7 DIESEL ENGINE FOR AN EMERGENCY STANDBY GENERATOR

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
BAAQMD Regulation 6, Rule 1	**Particulate Matter – General Requirements (12/5/07)**		
6-1-303	Ringelmann No. 2 Limitation	N	
6-1-303.1	Internal combustion engines below 1500 cubic inches displacement or standby engines	N	
6-1-305	Visible Particles	N	
6-1-310	Particulate grain loading limitation	N	
6-1-401	Appearance of Emissions	N	
SIP Regulation 6	**Particulate Matter and Visible Emissions (9/4/98)**		
6-1-303	Ringelmann No. 2 Limitation	Y	
6-1-303.1	Internal combustion engines below 1500 cubic inches displacement or standby engines	Y	
6-305	Visible Particles	Y	
6-310	Particulate grain loading limitation	Y	
6-401	Appearance of Emissions	Y	
BAAQMD Regulation 8, Rule 1	**Organic Compounds – General Provisions (6/15/94)**		
8-1-110.2	Exemptions – internal combustion engine	Y	
BAAQMD Regulation 9, Rule 1	**Inorganic Gaseous Pollutants – Sulfur Dioxide (3/15/95)**		
9-1-301	Limitations on Ground Level Concentrations	Y	
9-1-304	Liquid and Solid Fuels	Y	
BAAQMD Regulation 9, Rule 8	**Inorganic Gaseous Pollutants – Nitrogen Oxides and Carbon Monoxide from Stationary Internal Combustion Engines (7/25/07)**		
9-8-110	Exemptions (from emission limits only)	N	
9-8-110.5	For Emergency Standby Engines	N	
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 – F
Source-Specific Applicable Requirements
S-7 DIESEL ENGINE FOR AN EMERGENCY STANDBY GENERATOR

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
9-8-330.3	For Reliability-Related Activities	N	
9-8-502	Record keeping	N	
9-8-502.1	For Exempt Engines	N	
9-8-530	Emergency Standby Engines, Monitoring and Record keeping	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	
SIP Regulation 9, Rule 8	**Inorganic Gaseous Pollutants – Nitrogen Oxides and Carbon Monoxide from Stationary Internal Combustion Engines (12/15/97)**		
9-8-110	Exemptions	Y	
9-8-110.2	For Liquid Fueled Engines	Y	
40 CFR Part 63, Subpart A	**National Emission Standards for Hazardous Air Pollutants-General Provisions (9/13/10)**		
63.4	Prohibited activities and circumvention	Y	
63.5	Preconstruction review and notification requirements	Y	
63.5(b)	Requirements for existing, newly constructed, and reconstructed sources	Y	
63.6	Compliance with standards and maintenance requirements	Y	
63.8	Monitoring requirements	Y	
63.10	Record keeping and reporting requirements	Y	
63.10(b)	General record keeping requirements	Y	
63.10(c)	Additional record keeping requirements for sources with continuous monitoring systems	Y	
63.10(d)	General reporting requirements	Y	
63.10(e)	Additional reporting requirements for sources with continuous monitoring systems	Y	
40 CFR Part 63, Subpart ZZZZ	**National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (RICE) (8/20/10)**		
63.6585	Applicability	Y	
63.6585(a)	Applicable to stationary RICE	Y	

IV. Source-Specific Applicable Requirements

Table IV – F
Source-Specific Applicable Requirements
S-7 DIESEL ENGINE FOR AN EMERGENCY STANDBY GENERATOR

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
63.6585(c)	Applicable to area source of HAPs	Y	
63.6590	What parts of my plant does this subpart cover?	Y	
63.6590(a)	Affected source is any existing, new or reconstructed stationary RICE located at area source of HAP emission	Y	
63.6590(a)(1)	Existing stationary RICE is:	Y	
63.6590(a)(1)(iii)	Existing stationary RICE at an area source of HAP emissions	Y	
63.6595	When do I have to comply with this subpart?	Y	
63.6595(a)	Compliance Date for affected sources	Y	
63.6595(a)(1)	Compliance Date for an existing stationary RICE located at an area source of HAP emissions	Y	5/3/13
63.6603	What emission limitations and operating limitations must I meet if I own or operate an existing stationary RICE located at an area source of HAP emissions? See Table 2d	Y	
63.6603(a)	Operating limitations for existing stationary RICE located at an area source of HAP emissions	Y	
63.6625	What are my monitoring, installation, collection, operation, and maintenance requirements?	Y	
63.6625(e)		Y	
63.6625(e)(3)	Operate and maintain the existing stationary RICE according to manufacturer's emission-related written instructions	Y	
63.6625(f)	Install a non-resettable hour meter for an existing emergency stationary RICE located at an area source of HAP emissions	Y	
63.6625(h)	Minimize existing stationary engine idle time, not to exceed 30 minutes	Y	
63.6640	How do I demonstrate continuous compliance with the emission limitations and operating limitations?	Y	
63.6640(f)	Requirements for emergency stationary RICE	Y	
63.6640(f)(i)	No time limit on use during emergency situations	Y	
63.6640(f)(ii)	Maintenance checks and readiness testing annual hour limit	Y	
63.6640(f)(iii)	Non-emergency operation annual hour limit	Y	
63.6645	What notifications must I submit and when?	Y	
63.6645(a)	Submit all notifications that apply	Y	

IV. Source-Specific Applicable Requirements

Table IV – F
Source-Specific Applicable Requirements
S-7 DIESEL ENGINE FOR AN EMERGENCY STANDBY GENERATOR

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
63.6645(a)(5)	Notification requirement do not apply for an existing stationary emergency RICE	Y	
63.6655	What Records must I keep?	Y	5/3/13
63.6655(e)	Keep records of maintenance conducted	Y	5/3/13
63.6655(e)(2)	Maintenance records for an existing stationary emergency RICE	Y	
63.6655(f)	Keep records of hours of operation using non-resettable fuel meter and document emergency hours and purpose of any other operation	Y	5/3/13
63.6655(f)(2)	Hours of Operation for an existing emergency RICE	Y	
63.6660	In what form and how long must I keep records?	Y	5/3/13
63.6665	What parts of the general provisions apply to me?	Y	
Table 2d to Part 63, Subpart ZZZZ	Requirements for Existing Stationary RICE located at Area Sources of HAP Emissions	Y	
Table 2d.4.a.	Schedule for oil and filter change	Y	
Table 2d.4.b.	Schedule for air cleaner inspection	Y	
Table 2d.4.c.	Schedule for hoses and belts inspection	Y	
Table 6 to Part 63, Subpart ZZZZ	Continuous Compliance With Emission Limitations, Operating Limitations, Work Practices, and Management Practices	Y	
Table 6.9.a.	Work or Management practices for existing emergency located at an area source of HAP emissions	Y	
CCR Title 17, Section 93115	**Airborne Toxic Control Measure for Stationary Compression Ignition Engines (10/18/07)**		
§93115.5	Fuel and Fuel Additive Requirements for New and In-Use Stationary CI Engines That Have a Rated Brake Horsepower of Greater Than (>50 bhp)	N	
93115.5(b)	Fuel requirements, in-use emergency standby diesel CI engines	N	
§93115.6	Emergency Standby Diesel-Fueled CI Engine (>50 bhp) Operating Requirements and Emission Standards	N	
§93115.6(b)	For In-Use Emergency Standby Diesel Fueled CI Engines	N	
§93115.6(b)(3)	Emission Standards and Operating Requirements	N	
§93115.6(b)(3)(A)	Diesel PM Standards and Hours of Operation Limitations	N	

IV. Source-Specific Applicable Requirements

Table IV – F
Source-Specific Applicable Requirements
S-7 DIESEL ENGINE FOR AN EMERGENCY STANDBY GENERATOR

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
§93115.6(b)(3)(A)(1)	General Requirements	N	
93115.6(b)(3)(A)(1)(a)	Reliability related operating time limitation	N	
§93115.10	Record keeping, Reporting and Monitoring Requirements	N	
§93115.10(d)	Monitoring Equipment	N	
93115.10(d)(1)	Non-resettable totalizing hour meter	N	
§93115.10(f)	Reporting Requirements for Emergency Standby-Engines	N	
§93115.10(f)(1)	Records and Monthly Summary	N	
§93115.10(f)(2)	Records Retention and Availability	N	
BAAQMD Condition # 22820			
Part 1	Operating Time Limitation (CCR, Title 17, Section 93115.6(b)(3)(A)(1)(a))	N	
Part 2	Other Operational Limitations (CCR, Title 17, Section 93115.6(b)(3)(A)(1)(a))	N	
Part 3	Meter Requirements (CCR, Title 17, Section 93115.10(d)(1))	N	
Part 4	Record Keeping Requirements (CCR, Title 17, Section 93115.10(f) or Regulation 2-6-501)	N	

IV. Source-Specific Applicable Requirements

Table IV – G
Source-Specific Applicable Requirements
S-8 City Of Sunnyvale Sanitary Landfill with Gas Collection System; A-8 Landfill Gas Flare; and A-9 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 (5/4/11)**		
1-301	Public Nuisance	N	
1-523	Parametric Monitoring and Record keeping 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	
SIP Regulation 1	**General Provisions and Definitions (6/28/99)**		
1-523	Parametric Monitoring and Record keeping Procedures	Y	
1-523.3	Reports of Violations	Y	
BAAQMD Regulation 6, Rule 1	**Particulate Matter – General Requirements (12/5/07)**		
6-1-301	Ringelmann No. 1 Limitation (applies to flare only)	N	
6-1-305	Visible Particles (applies to flare only)	N	
6-1-310	Particle Weight Limitation (applies to flare only)	N	
6-1-401	Appearance of Emissions (applies to flare only)	N	
SIP Regulation 6	**Particulate Matter and Visible Emissions (9/4/98)**		
6-301	Ringelmann No. 1 Limitation (applies to flare only)	Y	
6-305	Visible Particles (applies to flare only)	Y	
6-310	Particle Weight Limitation (applies to flare only)	Y	
6-401	Appearance of Emissions (applies to flare only)	Y	
BAAQMD Regulation 8, Rule 34	**Organic Compounds – Solid Waste Disposal Sites (6/15/05)**		
8-34-113	Limited Exemption, Inspection and Maintenance	Y	
8-34-113.1	Emission Minimization Requirement	Y	

IV. Source-Specific Applicable Requirements

Table IV – G
Source-Specific Applicable Requirements
S-8 CITY OF SUNNYVALE SANITARY LANDFILL WITH GAS COLLECTION SYSTEM; A-8 LANDFILL GAS FLARE; AND A-9 LANDFILL GAS FLARE

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
8-34-113.2	Shutdown Time Limitation	Y	
8-34-113.3	Record keeping 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	
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	
8-34-119	Limited Exemption, Inactive or Closed Landfills	Y	
8-34-120	Limited Exemption, Small Design Capacity Landfills	Y	
8-34-301	Landfill Gas Collection and Emission Control System Requirements	Y	
8-34-301.1	Continuous Operation	Y	
8-34-301.2	Collection and Control Systems Leak Limitations	Y	
8-34-301.3	Limits for enclosed flares (applies to flare 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	
8-34-304.3	Based on Amount of Decomposable Waste Accepted	Y	
8-34-304.4	Based on NMOC Emission Rate	Y	
8-34-404	Less Than Continuous Operation Petition	Y	
8-34-405	Design Capacity Reports	Y	

IV. Source-Specific Applicable Requirements

Table IV – G
Source-Specific Applicable Requirements
S-8 City Of Sunnyvale Sanitary Landfill with Gas Collection System; A-8 Landfill Gas Flare; and A-9 Landfill Gas Flare

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
8-34-408	Collection and Control System Design Plans	Y	
8-34-408.2	Sites With Existing Collection and Control Systems	Y	
8-34-411	Annual Report	Y	
8-34-415	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 flare 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	
8-34-504	Portable Hydrocarbon Detector	Y	
8-34-507	Continuous Temperature Monitor and Recorder (applies to flares only)	Y	
8-34-508	Gas Flow Meter	Y	
8-34-510	Cover Integrity Monitoring	Y	

IV. Source-Specific Applicable Requirements

Table IV – G
Source-Specific Applicable Requirements
S-8 City Of Sunnyvale Sanitary Landfill with Gas Collection System; A-8 Landfill Gas Flare; and A-9 Landfill Gas Flare

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
BAAQMD Regulation 9, Rule 1	**Inorganic Gaseous Pollutants – Sulfur Dioxide (3/15/95)**		
9-1-301	Limitations on Ground Level Concentrations (applies to flare only)	Y	
9-1-302	General Emission Limitations (applies to flare only)	Y	
BAAQMD Regulation 9, Rule 2	**Inorganic Gaseous Pollutants – Hydrogen Sulfide (10/6/99)**		
9-2-301	Limitations on Hydrogen Sulfide	N	
BAAQMD Condition # 11586			
Part 1	Waste disposal limitations (Regulation 2-1-301)	Y	
Part 2	Landfill gas collection system operating requirements (Regulations 8-34-301, 8-34-303, 8-34-304)	Y	
Part 3	Landfill gas collection system description and alteration provisions (Regulations 8-34-301 and 8-34-303)	Y	
Part 4	Landfill gas control requirements (Regulations 8-34-301 and 8-34-301.1)	Y	
Part 5	Landfill gas flare operating and maintenance requirements (Regulations 8-34-301 and 8-34-301.1)	Y	
Part 6	Flow meter requirement for flares (Regulations 8-34-301.1 and 8-34-508 and Cumulative Increase)	Y	
Part 7	Alarm requirements for flares (Regulations 8-34-301)	Y	
Part 8	NOx emissions limit for A-9 Flare (RACT)	Y	upon start-up of A-9
Part 9	CO emissions limit for A-9 Flare (RACT)	Y	upon start-up of A-9
Part 10	NMOC emissions limit for A-9 Flare (Cumulative Increase and Regulation 2-1-301.3)	Y	upon start-up of A-9
Part 11	Flare temperature limits and monitoring requirements (Regulations 2-5-301, 8-34-301.3, 8-34-501.3, and 8-34-507)	Y	

IV. Source-Specific Applicable Requirements

Table IV – G
Source-Specific Applicable Requirements
S-8 City Of Sunnyvale Sanitary Landfill with Gas Collection System; A-8 Landfill Gas Flare; and A-9 Landfill Gas Flare

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
Part 12	Flare source test requirements (Cumulative Increase, RACT, and Regulations 2-5-301, 8-34-301.3, 8-34-507, and 9-1-302)	Y	
Part 13	Landfill gas characterization testing requirements (AB-2588 Air Toxic Hot Spots and Regulation 2-5-302)	N	
Part 14	Flare replacement project shut-down and notification requirements (Cumulative Increase)	Y	

V. SCHEDULE OF COMPLIANCE

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

VI. PERMIT CONDITIONS

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

Condition # 5367
FOR: S-1 SOLID WASTE TRANSFER STATION AND A-1 WET SUPPRESSION SYSTEM

1. Daily throughput of refuse shall not exceed 1,500 tons ~~in any consecutive 24 hour period~~on any calendar day. (Basis: Cumulative Increase)

2. The Transfer Station S-1 shall be abated by the A-1 Wet Suppression System as necessary to prevent visible dust emissions from any part of the facility so that Ringelmann 1.0 is not exceeded or result in fallout on adjacent property in such quantities as to cause a public nuisance per Regulation 1-301. (Basis: Regulations 1-301, 2-1-403, 6-1-301, and 6-1-305)

3. Observation for visible particulate emissions is required at all times that material is actively being handled at this source. If visible emissions are detected, the operator of the source shall take the necessary corrective action to stop the emissions. (Basis: Regulations 2-1-403, 6-1-301, and 6-1-305)

4. In order to demonstrate compliance with Part 1, the permit holder shall keep daily records of all refuse received in a District approved log. These daily throughput records shall be summarized on a monthly basis and shall be made available for inspection by District personnel upon request. The records shall be maintained for a period of 5 years from the date on which a record is made. (Basis: Cumulative Increase)

VI. Permit Conditions

Condition # 5368
FOR: S-2 WOOD WASTE UNLOADING OPERATION

1. The owner/operator shall not accept building demolition debris. (Basis: Cumulative Increase~~, BACT, Toxics~~ and Regulation 2-5-110)

2. The owner/operator shall not dispose of wood wastes outside of the wood shredder building. (Basis: Cumulative Increase~~, BACT~~)

3. The owner/operator shall not ~~exceed processing~~ process more than 298 tons of wood waste per calendar day. (Basis: Cumulative Increase~~, BACT~~)

4. The owner/operator shall always control particulate emissions from source S-2 by using water sprays ~~A-2~~ while processing green waste or during unloading or handling of any dry or dusty wood waste loads. (Basis: Cumulative Increase~~, BACT~~)

5. Observation for visible particulate emissions is required at all times that material is actively being handled at this source. If visible emissions are detected, the operator of the source shall take the necessary corrective action to stop the emissions. (Basis: Regulations 2-1-403, 6-1-301, and 6-1-305)

~~5~~6. The owner/operator shall demonstrate compliance with Parts 1 and 3 by maintaining the following records on a daily basis, and ~~provide~~ by keeping ~~all of the~~ any other data necessary to evaluate compliance with Parts 1 and 3 including the following information.
a) Type of waste received
b) Amount of waste processed in tons per day
The owner/operator shall maintain all records in a District-approved log~~. The records,~~ shall ~~be~~ retain~~ed~~ these records on-site for five years from the date of entry, and shall make them available for inspection by District staff upon request. These recordkeeping requirements shall not replace the recordkeeping requirements contained in any applicable District Regulations. (Basis: Cumulative Increase~~, Recordkeeping~~ and Regulation 2-1-403)

VI. Permit Conditions

Condition # 5369
FOR: S-3 WOOD SHREDDER AND A-5 BAGHOUSE DUST COLLECTOR

1. The owner/operator shall not accept building demolition debris. (Basis: Cumulative Increase~~, BACT, Toxics~~ and Regulation 2-5-110).

2. The owner/operator shall ensure that the wood shredder ~~shall be~~ is enclosed and operate~~d~~ within the wood shredder building at all times. (Basis: Cumulative Increase).

3. The owner/operator shall not exceed daily throughput limit of 255 tons of wood waste per calendar day (Basis: Cumulative Increase~~, BACT~~)

4. The owner/operator shall at all times abate S-3 with a properly maintained and properly operated Baghouse, A-5. (Basis: Cumulative Increase)

5. The owner/operator shall equip the A-5 Baghouse with a District approved manometer for measuring the pressure drop across the baghouse. The baghouse exhaust shall be checked weekly for evidence of particulate breakthrough. If breakthrough is evident from plume observations, dust buildup near the stack outlet, or abnormal pressure drops, the filter bags shall be repaired or replaced as needed. (Basis: Cumulative Increase)

6. In order to demonstrate compliance with Parts 4 and 5, the owner/operator shall maintain in a District approv~~al~~ed log, all inspections and maintenance work including bag replacements for the baghouse. Records of each inspection shall consist of the date of inspection and the initials of the personnel that inspect~~s~~ed the baghouse~~s~~. These records shall be kept on site and made available for District inspection for a period of at least five years from the date on which a record is made. (Basis: ~~Recordkeeping~~ Regulation 2-1-403)

7. To determine compliance with Parts 1 and 3, the owner/operator shall maintain the following records on a daily basis:
   a) Type of waste received
   b) Amount of waste processed in tons per day

   The owner/operator shall maintain all records in a District approved log, ~~. The records~~ shall ~~be~~ retain~~ed~~ these records on-site for five years from the date of entry, and shall make them available for inspection by District staff upon request. These recordkeeping requirements shall not replace the recordkeeping requirements contained in any applicable District Regulations. (Basis: Cumulative Increase~~, Recordkeeping~~ and Regulation 2-1-403)

VI. Permit Conditions

Condition # 5370
FOR: S-4 CONVEYOR AND S-5 WOOD CHIP PROCESSING HOPPERS

1. The owner/operator shall not exceed daily throughput limit of 225 tons of wood waste per calendar day (Basis: Cumulative Increase~~, BACT~~)

2. To determine compliance with Part 1, the owner/operator shall maintain the following records on a daily basis~~,~~ and ~~provide~~ shall keep ~~all the~~ any other data necessary to evaluate compliance including the following information:
   a. Type of waste received
   b. Amount of waste processed in tons per day

   The owner/operator shall maintain all records in a District-approved log~~. The records~~ shall ~~be~~ retain~~ed~~ these records on-site for five years from the date of entry, and shall make them available for inspection by District staff upon request. These recordkeeping requirements shall not replace the recordkeeping requirements contained in any applicable District Regulations. (Basis: Cumulative Increase~~, Recordkeeping~~ and Regulation 2-1-403)

3. Observation for visible particulate emissions is required at all times that material is actively being handled at these sources. If visible emissions are detected, the operator of the source shall take the necessary corrective action to stop the emissions. (Basis: Regulations 2-1-403, 6-1-301, and 6-1-305)

VI. Permit Conditions

Condition # 5371
FOR: S-6 WOOD CHIP SCREENING OPERATION

1. The owner/operator shall not exceed a daily throughput limit of 255 tons of wood waste per calendar day. (Basis: Cumulative Increase~~, BACT~~)

2. The owner/operator shall keep the material wet during this screening operation. (Basis: Cumulative Increase~~, BACT~~)

3. Observation for visible particulate emissions is required at all times that material is actively being handled at this source. If visible emissions are detected, the operator of the source shall take the necessary corrective action to stop the emissions. (Basis: Regulations 2-1-403, 6-1-301, and 6-1-305)

~~3~~4. To determine compliance with Part 1, the owner/operator shall maintain the following records on a daily basis and shall keep any other data necessary to evaluate compliance including the following information:
   a. Type of waste received
   b. Amount of waste processed in tons per day

   The owner/operator shall maintain these records in a District approved log, ~~. The records~~ shall ~~be~~ retain~~ed~~ these records on-site for five years from the date of entry, and shall make them available for inspection by District staff upon request. These recordkeeping requirements shall not replace the recordkeeping requirements contained in any applicable District Regulations. (Basis: Cumulative Increase~~, Recordkeeping~~ and Regulation 2-1-403)

VI. Permit Conditions

Condition # 11586
FOR: S-8 CITY OF SUNNYVALE SANITARY LANDFILL WITH GAS COLLECTION SYSTEM; A-8 LANDFILL GAS FLARE; AND A-9 LANDFILL GAS FLARE

1. ~~The owner/operator shall ensure that all landfill gas collected by the landfill gas collection system for the S-8 City of Sunnyvale Sanitary Landfill shall be vented to either the IC Engines (S-14 and S-15) located at Plant #733 and/or to A-9 Landfill Gas Flare located at Plant #5905. If only one IC Engine (S-14 or S-15) is operating, the owner/operator shall ensure that a flare (A-8 or A-9) is operated concurrently with the single operating IC Engines.~~ The S-8 City of Sunnyvale Sanitary Landfill is a closed landfill. The owner/operator must apply for and receive written authorization from the District before any wastes or decomposable materials may be disposed of in this landfill. (Basis: Regulation 2-1-301 ~~Regulations 8-34-301 and 8-34-301.1~~)

2. The S-8 City of Sunnyvale Sanitary Landfill shall be equipped with a landfill gas collection, as described in Part 3. The owner/operator shall operate the~~i~~is landfill gas collection system ~~described in Part 3a below~~ continuously. Wells shall not be disconnected or removed from operation nor shall isolation or control valves be closed without written authorization from the District, unless the Permit Holder complies with all applicable requirements of Regulation 8, Rule 34, Sections 113, 117, and 118. (Basis: Regulations 8-34-301, 8-34-303, and 8-34-304)

3. The owner/operator of S-8 shall apply for and receive ~~an Authority to Construct~~ a Change of Conditions before ~~modifying~~ altering the landfill gas collection system described in Part 3a below. Increasing or decreasing the number of wells or collectors or significantly changing the locations, depths, or lengths of wells or collectors are all considered to be ~~modifications~~ alterations that are subject to ~~the Authority to Construct~~ this requirement. Adding or modifying altering risers, laterals, or header pipes are not subject to this requirement. The authorized number of landfill gas collection system components is the baseline count listed below plus any components added and minus any components decommissioned pursuant to Part 3b as evidenced by start-up/shut-down notification letters submitted to the District. (Basis: Regulations 8-34-30~~3~~1 and 8-34-30~~5~~3)
   a. The ~~Permit Holder~~ owner/operator has been issued a Permit to Operate for the landfill gas collection system components listed below, which includes all start-up/shut-down notifications submitted through June 1, 2012. Well and collector locations, depths, and lengths of associated piping are as described in detail in Permit Application # 2229.

Required Vertical Wells:	66
Required Horizontal Collectors:	13

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b. The owner/operator has not been granted any well or collector alterations at this time. If any gas collection system alterations are granted in the future, the allowed alterations will be described in this subpart. Wells installed or shutdown pursuant to this subpart shall be added to or removed from subpart a in accordance with the procedures identified in Regulations 2-6-414 or 2-6-415. The owner/operator shall maintain records of the decommissioning date for each well that is shut down and the initial operation date for each new well.

4. The owner/operator shall ensure that all landfill gas collected by the landfill gas collection system for the S-8 City of Sunnyvale Sanitary Landfill ~~shall be~~ is vented to either one or more IC Engines (S-14 or S-15) located at Plant #733 ~~and/~~or to a ~~A-9~~ Landfill Gas Flare (A-8 or A-9) located at Plant #5905. ~~If only one IC Engine (S-14 or S-15) is operating, the owner/operator shall ensure that a flare (A-8 or A-9) is operated concurrently with the single operating IC Engines.~~ (Basis: Regulations 8-34-301 and 8-34-301.1)

~~4~~5. The ~~A-9 Landfill Gas Flare~~ owner/operator shall ensure that the ~~A-8 Landfill Gas~~ Flare (A-8 or A-9) ~~shall be~~ is properly operated and properly maintained during all hours ~~of operation~~ that landfill gas is venting to the flare. Digester gas may be blended with landfill gas and vented to ~~A-9~~ the flare, as necessary to maintain proper operation of ~~A-9~~ the flare. Raw landfill gas or raw landfill/digester gas blend shall not be vented to the atmosphere, except for unavoidable gas emissions that occur during collection system installation, maintenance, or repair, which is performed in compliance with Regulation 8, Rule 34, Sections 113, 117, or 118, and for inadvertent component or surface leaks that do not exceed the limits specified in 8-34-301.2 or 8-34-303. (Basis: Regulations 8-34-301 and 8-34-301.1)

~~5. A temperature monitor with readout display and continuous recorder (recording thermocouple) shall be installed and maintained on the A-9 Landfill Gas Flare. One or more thermocouples shall be placed in the primary combustion zone of the A-9 Flare and shall accurately indicate combustion temperature at all times. Temperature charts shall be retained for at least five years and made available at all times for District inspection. (Basis: Regulations 8-34-501.3, 8-34-501.6, and 8-34-507)~~

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6. The owner/operator shall equip ~~A-9 Landfill Gas~~ each Flare (A-8 and A-9) with a flow meter to measure landfill gas and digester gas flow rate into the flare. (Basis: Regulation 8-34-301.1, 8-34-508, and Cumulative Increase)

7. The owner/operator shall equip ~~A-9 Landfill Gas~~ each Flare (A-8 and A-9) with both local and remote alarm systems that automatically notify an operator in the event of power failures, flare temperature excursions, flare restart, failures, and other emission control system operating problems. These alarms need not sound in the event that landfill gas is being diverted to off-site control options as allowed pursuant to Part 4. (Basis: Regulation 8-34-301)

~~8. Deleted~~

~~9~~8. The owner/operator shall ensure that nitrogen oxide (NO_x) emissions from ~~operate~~ the A-9 Landfill Gas Flare shall ~~to~~ not exceed 0.06 pounds per/MM B~~tu~~TU (HHV) ~~of NOX~~, calculated as NO_2, while A-9 is abating landfill gas ~~and/~~or landfill-digester gas blend. Compliance with this limit may be demonstrated by having an outlet concentration of no more than 14 ppmv of NO~~X~~$_x$, expressed as NO_2, at 15% oxygen, dry basis. (Basis: RACT).

~~10~~9. The owner/operator shall ensure that carbon monoxide (CO) emissions from ~~operate~~ the A-9 Landfill Gas Flare ~~t~~do not exceed 0.2 pounds per/MM B~~tu~~TU (HHV) ~~of CO~~, while A-9 is abating landfill gas ~~and/~~or landfill-digester gas blend. Compliance with this limit may be demonstrated by having an outlet concentration of no more than 74 ppmv of CO at 15% oxygen, dry basis. (Basis: RACT)

~~11~~10. The owner/operator shall ensure that non-methane organic compound (NMOC) emissions from the ~~operate~~ A-9 Landfill Gas Flare ~~t~~do not exceed 30 ppmv of ~~non-methane organic compound (~~NMOC~~)~~ ~~emission~~ expressed as methane at 3% oxygen, dry basis, while A-9 is abating landfill gas ~~and/~~or landfill-digester gas blend. (Basis: Regulation 8-34-301.3 and Cumulative Increase)

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~~12~~11. To demonstrate compliance with Parts ~~10~~9 and ~~11~~10 and to ensure adequate destruction of any toxic air contaminants present in the landfill gas, the owner/operator shall maintain the combustion zone temperature of ~~Landfill Gas~~ each ~~F~~flare ~~A-9~~ (A-8 and A-9) at a minimum temperature 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 may revise this temperature limit based on the following criteria. The minimum combustion zone temperature for ~~A-9~~ the 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 is not less than 1400 degrees F. To demonstrate compliance with this requirement, ~~A-9~~ each flare shall be equipped with a continuous temperature monitor, which shall consist of one or more thermocouples located in the primary combustion zone of the flare that accurately indicate combustion zone temperature at all times, and a continuous temperature recorder. (Basis: Regulations 2-5-301, 8-34-301.3, 8-34-501.3, and 8-34-507)

~~13~~12. To demonstrate compliance with Parts ~~9, 10, and 11~~8-10, ~~and~~ Regulations 8-34-301.3~~,~~ and 9-1-302, the CARB landfill methane control rule, and to verify the validity of control device parametric operating parameters, the owner/operator shall conduct a District approved source test on the A-8 Landfill Gas Flare at least once every three years. In addition, the owner/operator shall conduct an initial compliance demonstration test on the A-9 Landfill Gas Flare, within 60 days of initial start-up of A-9 and annually thereafter. If three consecutive years of source testing demonstrate that A-9 is meeting all applicable limits, then the source testing frequency for A-9 may also be reduced to once every three years. 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 to the Source Test Section within 60 days of the test date. ~~This~~ As a minimum, each source test shall measure or determine the following:

a. landfill gas and digester gas flow rate to the flare (dry basis);
b. concentrations (dry basis) of carbon dioxide (CO_2), nitrogen (N_2), oxygen (O_2), methane (CH_4), hydrogen sulfide (H_2S), and total non-methane organic compounds (NMOC) in the landfill gas and digester gas;
c. stack gas flow rate from the flare (dry basis);

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d. concentrations (dry basis) of NO_x, CO, NMOC, CH_4, SO_2, and O_2 in the flare stack gas;
e. NO_x and CO emission rates from the flare in units of pounds per MM BTU;
f. CH_4 and NMOC destruction efficiencyies achieved by the flare;
g. average combustion zone temperature in the flare during the test period.

(Basis: Cumulative Increase, RACT, and Regulations 2-5-301, 8-34-301.3, 8-34-507, and 9-1-302)

*13. The owner/operator shall conduct a characterization of the landfill gas concurrent with the source test required by Part 12 above. All concentrations shall be reported on a dry basis. The test report shall be submitted to the Compliance and Enforcement Division within 60 days of the test date. The landfill gas sample shall be drawn from the main landfill gas header. In addition to the compounds listed in Part 12b, the landfill gas shall be analyzed for the following compounds:

acrylonitrile
benzene
carbon disulfide
carbon tetrachloride
chlorobenzene
chloroethane
chloroform
1,1 dichloroethane
1,1 dichloroethene
1,4 dichlorobenzene
ethylbenzene
ethylene dibromide
ethylene dichloride
hexane
isopropanol
methanol
methyl ethyl ketone
methylene chloride
perchloroethylene
toluene
1,1,1 trichloroethane
1,1,2,2 tetrachloroethane
trichloroethylene

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vinyl chloride
xylenes
(Basis: AB-2588 Air Toxics Hot Spots Act and Regulation 2-5-302)

14. The owner/operator shall ensure that the A-8 Landfill Gas Flare is permanently shut down within 90 days of initial operation of the A-9 Landfill Gas Flare. The owner/operator shall notify the District of the start-up date for the A-9 Landfill Gas Flare at least 7 days before initial operation of A-9. The owner/operator shall notify the District of the final shut down date for the A-8 Landfill Gas Flare within 7 days of permanent shut down of A-8. This part will be deleted upon receipt of the shut-down date for A-8. (Basis: Cumulative Increase)

VI. Permit Conditions

~~**Condition # 18922**~~
~~**FOR: S-7 DIESEL ENGINE FOR AN EMERGENCY STANDBY GENERATOR**~~

~~1. Hours of Operation: S-7 shall only be operated to mitigate emergency conditions or for reliability-related activities. Operation for reliability-related activities shall not exceed 100 hours in any calendar year. Operation while mitigating emergency conditions is unlimited. (Basis: Regulation 9-8-330)~~

~~2. "Emergency Conditions" is defined as any of the following:~~
~~a. Loss of regular natural gas supply.~~
~~b. Failure of regular electric power supply.~~
~~c. Flood mitigation.~~
~~d. Sewage overflow mitigation.~~
~~e. Fire.~~
~~f. Failure of a primary motor, but only for such time as needed to repair or replace the primary motor.~~
~~(Basis: Regulation 9-8-231)~~

~~3. "Reliability-related activities" is defined as any of the following:~~
~~a. Operation of an emergency standby engine to test its ability to perform for an emergency use, or~~
~~b. Operation of an emergency standby engine during maintenance of a primary motor.~~
~~(Basis: Regulation 9-8-232)~~

~~4. The emergency standby engine shall be equipped with a non-resettable totalizing meter that measures and records the hours of operation for the engine. (Basis: Regulation 9-8-530)~~

~~5. Records: The following monthly records shall be maintained in a District-approved log for at least 2 years and shall be made available for District inspection upon request:~~
~~a. Total hours of operation.~~
~~b. Hours of operation under emergency conditions and a description of the nature of each emergency condition.~~
~~c. Fuel usage.~~
~~(Basis: Regulation 9-8-530, 1-441)~~

VI. Permit Conditions

Condition # 22820
FOR: S-7 DIESEL ENGINE FOR AN EMERGENCY STANDBY GENERATOR

*1. The owner/operator shall not exceed 20 hours per year per engine for reliability-related testing. [Basis: "Stationary Diesel Engine ATCM" section 93115, title 17, CA Code of Regulations, subsection 93115.6 (b)(3)(A)(1)(a)]

*2. 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: "Stationary Diesel Engine ATCM" section 93115, title 17, CA Code of Regulations, subsection 93115.6 (b)(3)(A)(1)(a)]

*3. 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: "Stationary Diesel Engine ATCM" section 93115, title 17, CA Code of Regulations, subsection 93115.10 (d)(1)]

*4. Records: The owner/operator shall maintain the following monthly records in a District-approved log for at least 6 months from the date of entry (60 months if the facility has been issued a Title V Major Facility Review Permit or a Synthetic Minor Operating Permit). 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.

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 (emergency).
d. For each emergency, the nature of the emergency condition.
e. Fuel usage for each engine(s).

[Basis: "Stationary Diesel Engine ATCM" section 93115, title 17, CA Code of Regulations, subsection 93115.10 (f) (or, Regulation 2-6-501)]

VII. APPLICABLE LIMITS & COMPLIANCE MONITORING REQUIREMENTS

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

This section is only a summary of the limits and monitoring requirements. In the case of a conflict with any requirement in Sections I-VI, the preceding sections take precedence over Section VII.

Table VII – A
Applicable Limits and Compliance Monitoring Requirements
S-1 SOLID WASTE TRANSFER STATION AND A-1 WET SUPPRESSION SYSTEM

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
Opacity	BAAQMD 6-1-301, SIP 6-301, and BAAQMD Condition # 5367, Part 2	Y		≤ Ringelmann No. 1 for 3 minutes/hour	BAAQMD Condition # 5367, Part 3	P/E	Visual Observation of Operations
Refuse Throughput	BAAQMD Condition # 5367, Part 1	Y		≤ 1500 tons per calendar day	BAAQMD Condition # 5367, Part 4	P/D	Records

VII. Applicable Limits and Compliance Monitoring Requirements

Table VII – B
Applicable Limits and Compliance Monitoring Requirements
S-2 WOOD WASTE UNLOADING OPERATION

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
Opacity	BAAQMD 6-1-301 and SIP 6-301	Y		$\leq$ Ringelmann No. 1 for 3 minutes/hour	BAAQMD Condition # 5368, Part 5	P/E	Visual Observation of Operations
Wood Waste Throughput	BAAQMD Condition # 5368, Part 3	Y		$\leq$ 298 tons per calendar day	BAAQMD Condition # 5368, Part 6	P/D	Records

VII. Applicable Limits and Compliance Monitoring Requirements

Table VII – C
Applicable Limits and Compliance Monitoring Requirements
S-3 WOOD SHREDDER AND A-5 BAGHOUSE DUST COLLECTOR

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
Periods of In-operation for Parametric Monitors	BAAQMD 1-523.2	Y		$\leq$ 15 consecutive days per incident and $\leq$ 30 calendar days per 12-month period	BAAQMD 1-523.4	P/E	Operating Records for All Parametric Monitors (manometer at baghouse)
Opacity	BAAQMD 6-1-301 and SIP 6-301	Y		$\leq$ Ringelmann No. 1 for 3 minutes/hour	BAAQMD Condition # 5369, Parts 5 and 6	C and P/W	Continuous Pressure Drop Across Baghouse, Weekly Inspections, and Records
Filterable Particulate (FP)	BAAQMD 6-1-310 and SIP 6-310	Y		$\leq$ 0.15 grains/dscf	None	N	NA
Particulate Matter (PM)	BAAQMD 6-1-311 and SIP 6-311	Y		$E = 0.026(P)^{0.67}$ where: E = Allowable Emission Rate (lb/hr); and P = Process Weight Rate (lb/hr) Maximum Allowable Emission Rate = 40 lb/hr For P >57,320 lb/hr (or P > 28.66 tons/hr)	BAAQMD Condition # 5369, Part 7	P/D	Calculations and Records
Wood Waste Throughput	BAAQMD Condition # 5369, Part 3	Y		$\leq$ 255 tons per calendar day	BAAQMD Condition # 5369, Part 7	P/D	Records

VII. Applicable Limits and Compliance Monitoring Requirements

Table VII – D
Applicable Limits and Compliance Monitoring Requirements
S-4 CONVEYOR AND
S-5 WOOD CHIP PROCESSING HOPPERS

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
Opacity	BAAQMD 6-1-301 and SIP 6-30	Y		≤ Ringelmann No. 1 for 3 minutes/hour	BAAQMD Condition # 5370, Part 3	P/E	Visual Observation of Operations
Particulate Matter (PM)	BAAQMD 6-1-311 and SIP 6-311	Y		E = 0.026(P)0.67 where: E = Allowable Emission Rate (lb/hr); and P = Process Weight Rate (lb/hr) Maximum Allowable Emission Rate = 40 lb/hr For P >57,320 lb/hr (or P > 28.66 tons/hr)	BAAQMD Condition # 5370, Part 2	P/D	Calculations and Records
Wood Waste Throughput	BAAQMD Condition # 5370, Part 1	Y		≤ 255 tons per calendar day	BAAQMD Condition # 5370, Part 2	P/D	Records

VII. Applicable Limits and Compliance Monitoring Requirements

Table VII – E
Applicable Limits and Compliance Monitoring Requirements
S-6 WOOD CHIP SCREENING OPERATION

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
Opacity	BAAQMD 6-1-301 and SIP 6-301	Y		$\leq$ Ringelmann No. 1 for 3 minutes/hour	BAAQMD Condition # 5371, Part 3	P/E	Visual Observation of Operations
Particulate Matter (PM)	BAAQMD 6-1-311 and SIP 6-311	Y		$E = 0.026(P)^{0.67}$ where: E = Allowable Emission Rate (lb/hr); and P = Process Weight Rate (lb/hr) Maximum Allowable Emission Rate = 40 lb/hr For P >57,320 lb/hr (or P > 28.66 tons/hr)	BAAQMD Condition # 5371, Part 4	P/D	Calculations and Records
Wood Waste Throughput	BAAQMD Condition # 5371, Part 1	Y		$\leq$ 255 tons per calendar day	BAAQMD Condition # 5371, Part 4	P/D	Records

VII. Applicable Limits and Compliance Monitoring Requirements

Table VII – F
Applicable Limits and Compliance Monitoring Requirements
S-7 DIESEL ENGINE FOR AN 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 6-1-303 and SIP 6-303	Y		$\leq$ Ringelmann 2.0 for 3 minutes in any hour	None	N	NA
FP	BAAQMD 6-1-310 and SIP 6-310	Y		$\leq$ 0.15 grains/dscf	None	N	NA
SO_2	BAAQMD 9-1-301	Y		Property Line Ground Level Limits: $\leq$ 0.5 ppm for 3 minutes and $\leq$ 0.25 ppm for 60 minutes and $\leq$ 0.05 ppm for 24 hours	None	N	NA
SO_2	BAAQMD 9-1-302	Y		$\leq$ 300 ppm (dry basis)	CCR Title 13 Title 13, Section 2281(a) (2 and 5), CCR, Title 17, Sections 93115.5 and 93115.10	P/E	CARB Diesel Fuel Sulfur Content Limits, Sales Restrictions, Usage Requirement and Records

VII. Applicable Limits and Compliance Monitoring Requirements

Table VII – F
Applicable Limits and Compliance Monitoring Requirements
S-7 DIESEL ENGINE FOR AN 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
Liquid Fuel Sulfur Content	BAAQMD 9-1-304	Y		≤ 0.5 % sulfur by weight	CCR Title 13 Title 13, Section 2281(a) (2 and 5), CCR, Title 17, Sections 93115.5 and 93115.10	P/E	CARB Diesel Fuel Sulfur Content Limits, Sales Restrictions, Usage Requirement and Records
Liquid Fuel Sulfur Content	CCR Title 17, Section 93115.5 (b) and CCR, Title 13, Section 2281(a) (2 and 5)	N		Standby Engines must use CARB Diesel Fuel or other CARB Approved Alternative Fuel, which has Fuel Sulfur Limits of: ≤ 15 ppmw of S	CCR, Title 17, Sections 93115.5 and 93115.10	P/E	CARB Diesel Fuel Sulfur Content Limits, Sales Restrictions, Usage Requirement and Records

VII. Applicable Limits and Compliance Monitoring Requirements

Table VII – F
Applicable Limits and Compliance Monitoring Requirements
S-7 DIESEL ENGINE FOR AN 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 Hours	BAAQMD 9-8-330.3 and CCR, Title 17, Section 93115.6 (b)(3)(A)(1)(a) and BAAQMD Condition # 22820, Part 1	N		Operating Hours for Reliability-Related Activities: ≤ 20 hours in a calendar year	BAAQMD 9-8-530 and CCR, Title 17, Section 93115.10 (d)(1) and (f)(1) and BAAQMD Condition # 22820, Parts 3-4	C & P/M	Hour Meter and Records
Operating Hours	40 CFR 63.6640 (f)(1)(ii)	Y	5/3/13	Operating Hours for Maintenance Checks, Readiness Testing, and Other Non-Emergency Operation: ≤ 100 hours in a calendar year	40 CFR 63.6625(f) and 63.6655(f)(2)		Hour Meter and Records
Operating Hours	40 CFR 63.6640 (f)(1)(iii)	Y	5/3/13	Operating Hours for Non-Emergency Operation: ≤ 50 hours in a calendar year	40 CFR 63.6625(f) and 63.6655(f)(2)		Hour Meter and Records
Idle Time	40 CFR 63.6625(h)	Y	5/3/13	≤30 minutes for start-up	None	N	N/A

VII. Applicable Limits and Compliance Monitoring Requirements

Table VII – F
Applicable Limits and Compliance Monitoring Requirements
S-7 DIESEL ENGINE FOR AN 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
Maintenance Events	40 CFR, Part 63, Subpart ZZZZ, Table 2d 4.a.	Y	5/3/13	Change Oil and Filter: Every 500 hours of operation or annually, whichever comes first	40 CFR 63.6655(e)	P/E	Records
Maintenance Events	40 CFR, Part 63, Subpart ZZZZ, Table 2d 4.b.	Y	5/3/13	Inspect Air Cleaner: Every 1,000 hours of operation or annually, whichever comes first	40 CFR 63.6655(e)	P/E	Records
Maintenance Events	40 CFR, Part 63, Subpart ZZZZ, Table 2d 4.c.	Y	5/3/13	Inspect Hoses and Belts and (if necessary) Replace Hoses and Belts: Every 500 hours of operation or annually, whichever comes first	40 CFR 63.6655(e)	P/E	Records

VII. Applicable Limits and Compliance Monitoring Requirements

Table VII – G
Applicable Limits and Compliance Monitoring Requirements
S-8 CITY OF SUNNYVALE SANITARY LANDFILL WITH GAS COLLECTION SYSTEM; A-8 LANDFILL GAS FLARE; AND A-9 LANDFILL GAS FLARE

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
Periods of In-operation for Parametric Monitors	BAAQMD 1-523.2	Y		≤ 15 consecutive days per incident and ≤ 30 calendar days per 12-month period	BAAQMD 1-523.4	P/D	Operating Records for All Parametric Monitors (gas flow and temperature)
Opacity	BAAQMD 6-1-301 and SIP 6-301	Y		For Flare: Ringelmann No. 1 for < 3 minutes/hr	None	N	NA
FP	BAAQMD 6-1-310 and SIP 6-310	Y		For Flare: ≤ 0.15 grains/dscf	None	N	NA
Gas Flow	BAAQMD 8-34-301 and 301.1 and BAAQMD Condition # 11586, Parts 2-5	Y		Landfill gas collection system shall operate continuously and all collected gases shall be vented to a properly operating control system	BAAQMD 8-34-501.1, 8-34-501.2, 8-34-501.10, 8-34-508, and BAAQMD Condition # 11586, Parts 3, 6, and 7	C P/D	Gas Flow Meter and Recorder (every 15 minutes), and Records of Landfill Gas Flow Rates, Collection and Control Systems Downtime, and Collection System Components

VII. Applicable Limits and Compliance Monitoring Requirements

Table VII – G
Applicable Limits and Compliance Monitoring Requirements
S-8 City of Sunnyvale Sanitary Landfill with Gas Collection System; A-8 Landfill Gas Flare; and A-9 Landfill Gas Flare

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
Collection and Control Systems Shutdown Time	BAAQMD 8-34-113.2	Y		≤ 240 hours per year and ≤ 5 consecutive days	BAAQMD 8-34-501.1	P/D	Operating Records
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 Compounds Plus Methane)	BAAQMD 8-34-301.2	Y		Component Leak Limit: ≤ 1000 ppmv as methane	BAAQMD 8-34-501.6 and 503	P/Q	Quarterly Inspection of collection and control system components with portable analyzer and Records

VII. Applicable Limits and Compliance Monitoring Requirements

Table VII – G
Applicable Limits and Compliance Monitoring Requirements
S-8 City of Sunnyvale Sanitary Landfill with Gas Collection System; A-8 Landfill Gas Flare; and A-9 Landfill Gas Flare

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
TOC	BAAQMD 8-34-303	Y		Surface Leak Limit ≤ 500 ppmv as methane at 2 inches above surface	BAAQMD 8-34-415, 416, 501.4, 501.6, and 510	P/M, Q, and E	Monthly Visual Inspection of Cover, Quarterly Inspection of Surface with Portable Analyzer, Various Reinspec-tion Times for Leaking Areas, and Records
NMOC	BAAQMD 8-34-301.3	Y		Flare Destruction Efficiency: ≥ 98% removal by weight OR Flare Outlet Concentration: < 30 ppmv, expressed as methane, dry basis @ 3% O_2	BAAQMD 8-34-501.4 and BAAQMD Condition # 11586, Part 12	P/A	Source Test and Records
NMOC	BAAQMD Condition # 11586, Part 10	Y	Upon Start-Up of A-9	Flare Outlet Concentration (A-9 only): ≤ 30 ppmv, expressed as methane, dry basis @ 3% O_2	BAAQMD Condition # 11586, Part 12	P/A	Source Test and Records

VII. Applicable Limits and Compliance Monitoring Requirements

Table VII – G
Applicable Limits and Compliance Monitoring Requirements
S-8 City of Sunnyvale Sanitary Landfill with Gas Collection System; A-8 Landfill Gas Flare; and A-9 Landfill Gas Flare

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
SO_2	BAAQMD 9-1-301	Y		Property Line Ground Level Limits: $\leq$ 0.5 ppm for 3 minutes and $\leq$ 0.25 ppm for 60 minutes and $\leq$ 0.05 ppm for 24 hours	None	N	NA
SO_2	BAAQMD 9-1-302	Y		For Flare: $\leq$ 300 ppm (dry basis)	BAAQMD Condition # 11586, Parts 12-13	P/A	Source Tests, Sulfur Analysis of Landfill Gas and Records
H_2S	BAAQMD 9-2-301	N		Property Line Ground Level Limits: $\leq$ 0.06 ppm, averaged over 3 minutes and $\leq$ 0.03 ppm, averaged over 60 minutes	None	N	NA
NO_x	BAAQMD Condition # 11586, Part 8	Y	Upon Start-Up of A-9	A-9 Flare: $\leq$ 0.06 pounds NO_x (calculated as NO_2) per MM BTU	BAAQMD Condition # 11586, Part 12	P/A	Source Test and Records
CO	BAAQMD Condition # 11586, Part 9	Y	Upon Start-Up of A-9	A-9 Flare: $\leq$ 0.20 pounds CO per MM BTU	BAAQMD Condition # 11586, Part 12	P/A	Source Test and Records

VII. Applicable Limits and Compliance Monitoring Requirements

Table VII – G
Applicable Limits and Compliance Monitoring Requirements
S-8 City of Sunnyvale Sanitary Landfill with Gas Collection System; A-8 Landfill Gas Flare; and A-9 Landfill Gas Flare

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
Temperature of Combustion Zone (CT)	BAAQMD Condition # 11586, Part 11	Y		Flare CT: $\geq$ 1400 °F averaged over any 3-hour period	BAAQMD 8-34-501.3, 8-34-507, and BAAQMD Condition # 11586, Part 11	C	Temperature Sensor and Recorder (continuous)
Shut Down Date	BAAQMD Condition # 11586, Part 14	Y	Upon Start-Up of A-9	A-8 Shall Be Permanently Shut Down Within 90 days of Start-up of A-9	BAAQMD Condition # 11586, Part 14	P/E	Notification 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 in Section VII, Applicable Emission Limits & Compliance Monitoring Requirements, of this permit.

Table VIII
Test Methods

Applicable Requirement	Description of Requirement	Acceptable Test Methods
BAAQMD 6-1-301 and SIP 6-301	Ringelmann No. 1 Limitation	Manual of Procedures, Volume I, Evaluation of Visible Emissions; or US EPA Method 9, Visual Determination of the Opacity of Emissions from Stationary Sources
BAAQMD 6-1-303 and SIP 6-303	Ringelmann No. 2 Limitation	Manual of Procedures, Volume I, Evaluation of Visible Emissions; or US EPA Method 9, Visual Determination of the Opacity of Emissions from Stationary Sources
BAAQMD 6-1-310 and SIP 6-310	Particulate Weight Limitation	Manual of Procedures, Volume IV, ST-15, Particulates Sampling; or US EPA Reference Method 5, Determination of Particulate Matter Emissions from Stationary Sources
BAAQMD 6-1-311 and SIP 6-311	Process Weight Rate Based Emissions Limits	Manual of Procedures, Volume IV, ST-15, Particulates Sampling, or US EPA Reference Method 5, Determination of Particulate Matter Emissions from Stationary Sources or BAAQMD Approved Emission Calculation Procedures
BAAQMD 8-34-301.2	Collection and Control System Component Leak Limitations	US EPA Reference Method 21, Determination of Volatile Organic Compound Leaks
BAAQMD 8-34-301.3	NMOC Limits for Flares	Manual of Procedures, Volume IV, ST-7, Organic Compounds and ST-14, Oxygen, Continuous Sampling; or US EPA Reference Method 18, Measurement of Gaseous Organic Compound Emissions by Gas Chromatography, Method 25, Determination of Total Gaseous Nonmethane Organic Emissions as Carbon, Method 25A, Determination of Total Gaseous Organic Concentration Using a Flame Ionization Analyzer, or Method 25C, Determination of Nonmethane Organic Compounds (NMOC) in MSW Landfill Gases
BAAQMD 8-34-303	Landfill Surface Leak Limit	US EPA Reference Method 21, Determination of Volatile Organic Compound Leaks

VIII. Test Methods

Table VIII
Test Methods

Applicable Requirement	Description of Requirement	Acceptable Test Methods
BAAQMD 9-1-301	Limitations on Ground Level Concentrations (SO_2)	Manual of Procedures, Volume VI, Part 1, Ground Level Monitoring for Hydrogen Sulfide and Sulfur Dioxide
BAAQMD 9-1-302	General Emission Limitation (SO_2)	Manual of Procedures, Volume IV, ST-19A, Sulfur Dioxide, Continuous Sampling,
BAAQMD 9-1-304	Liquid Fuel Sulfur Content Limit	Manual of Procedures, Volume III, Method 10, Determination of Sulfur Content in Fuel Oil, or ASTM D2622-94 CARB Approved Equivalent
BAAQMD 9-2-301	Limitations on Hydrogen Sulfide	Manual of Procedures, Volume VI, Part 1, Ground Level Monitoring for Hydrogen Sulfide and Sulfur Dioxide
CCR Title 13, Section 2281, (a)(2 and 5)	Liquid Fuel Sulfur Content Limit	ASTM D2622-94 or CARB Approved Equivalent
BAAQMD Condition # 5367, Part 2	Ringelmann No. 1 Limitation	Manual of Procedures, Volume I, Evaluation of Visible Emissions
BAAQMD Condition # 11586, Part 8	A-9 Flare NO_x Limit	Manual of Procedure, Volume IV, ST-13A, Oxides of Nitrogen, Continuous Sampling; and Manual of Procedure, Volume IV, ST-14, Oxygen, Continuous Sampling
BAAQMD Condition # 11586, Part 9	A-9 Flare CO Limit	Manual of Procedure, Volume IV, ST-6, Carbon Monoxide, Continuous Sampling; and Manual of Procedure, Volume IV, ST-14, Oxygen, Continuous Sampling
BAAQMD Condition # 11586, Part 10	A-9 Flare NMOC Limit	Manual of Procedures, Volume IV, ST-14, Oxygen, Continuous Sampling; and Manual of Procedures, Volume IV, ST-7, Organic Compounds; or US EPA Reference Method 18, 25, 25A, or 25C
BAAQMD Condition # 11586, Part 11	Flare Combustion Zone Temperature Limit	APCO Approved Thermocouples Located in Primary Combustion Zone of the Flare
BAAQMD Condition # 11586, Part 12	Flare Source Test Requirements	Manual of Procedures, Volume IV, ST-17, Stack Gas Velocity and Volumetric Flow Rate; ST-23 Water Vapor; ST-14, Oxygen, Continuous Sampling; ST-13A, Oxides of Nitrogen, Continuous Sampling; ST-6, Carbon Monoxide, Continuous Sampling; ST-7, Organic Compounds or US EPA Reference Methods 18, 25, 25A, or 25C; and ST-19A, Sulfur Dioxide, Continuous Sampling,

IX. PERMIT SHIELD

Not Applicable.

X. REVISION HISTORY

Title V Permit Issuance (Application # 7364): [enter issuance date]

- Incorporate all permitted equipment and permit conditions in effect as of March 1, 2013.
- Modify Condition # 5367 by incorporating A-1, adding bases to all parts, and adding visual monitoring and record keeping requirements.
- Modify Condition # 5368 by correcting bases, clarifying the throughput limit and abatement requirement, and adding visual monitoring requirements.
- Modify Condition # 5369 by correcting bases and citation references and clarifying the throughput limit.
- Modify Condition # 5370 by correcting basis, clarifying the throughput limit, and adding visual monitoring requirements.
- Modify Condition # 5371 by correcting bases, clarifying the throughput limit, and adding visual monitoring requirements.
- Replace Condition # 18922 for the S-7 Diesel Engine for an Emergency Standby Generator with a new template Condition # 22820. The new condition includes the revised operating time limit for reliability related activities of 20 hours per year for this engine from the California ATCM that applies to stationary diesel engines.
- Modify Condition # 11586 by adding Part 1 to indicate this landfill is closed and may not accept any decomposable materials for disposal and moving the control system description to Part 4.
- Modify Condition # 11586 by clarifying the gas collection system operating requirements and description in Parts 2-3.
- Modify Condition # 11586, Parts 4-14 by including requirements for a new flare (A-9) that will be replacing the existing flare (A-8).
- Modify Condition # 11586 by moving flare temperature monitoring requirements from Part 5 to Part 11.
- Modify Condition # 11586, Parts 11-12 and add Part 13 to clarify source testing and landfill gas analyses requirements for the flares and to correct bases for these parts.
- Add Condition # 11586, Part 14 to require the shut-down of A-8 to verify compliance with requirements related to on-site emission reduction credits.

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 (same as CARB)

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.

C1
An organic chemical compound with one carbon atom, for example: methane

C3
An organic chemical compound with three carbon atoms, for example: propane

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

C_6H_6
Benzene

CAA
The federal Clean Air Act

CAAQS
California Ambient Air Quality Standards

CAPCOA
California Air Pollution Control Officers Association

CARB
California Air Resources Board (same as ARB)

CCR
California Code of Regulations

CEC
California Energy Commission

CEQA
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_4
Methane

XI. Glossary

CI
Compression Ignition

CIWMB
California Integrated Waste Management Board

CO
Carbon Monoxide

CO2 or CO_2
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) x (10^6) = (4.53) x (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.

XI. Glossary

Excluded
Not subject to any District regulations.

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

GLM
Ground Level Monitor

Grains
1/7000 of a pound
GDF
Gasoline Dispensing Facility

H2S or H_2S
Hydrogen Sulfide

H2SO4 or H_2SO_4
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^{o}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

MW
Molecular weight

N2 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_2
Nitrogen Dioxide

NOx or NO_x
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.

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.)

XI. Glossary

O2 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, NOx, PM10, and SO2.

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

POC
Precursor Organic Compounds

PM
Particulate Matter

PM2.5 or $PM_{2.5}$
Particulate matter with aerodynamic equivalent diameter of less than or equal to 2.5 microns

PM10 or PM_{10}
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

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 operation, for refinery marine terminals, regulated organic liquids are defined as “organic liquids” in Regulation 8, Rule 44.

XI. Glossary

RMP
Risk Management Plan

RWQCB
Regional Water Quality Control Board

S
Sulfur

Short ton
2000 pounds

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_2
Sulfur dioxide

SO3 or SO_3
Sulfur trioxide

SSM
Startup, Shutdown, or Malfunction

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

TAC
Toxic Air Contaminant (as identified by CARB)

THC
Total Hydrocarbons (NMHC + Methane)

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.

XI. Glossary

TOC
Total Organic Compounds (NMOC + Methane, Same 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_2 that will be present in the combusted fuel gas, since sulfur compounds are converted to SO_2 by the combustion process.

TSP
Total Suspended Particulate

TVP
True Vapor Pressure

VMT
Vehicle Miles Traveled

VOC
Volatile Organic Compounds

Symbols:

<	=	less than
>	=	greater than
$\leq$	=	less than or equal to
$\geq$	=	greater than or equal to

Units of Measure:

atm	=	atmospheres
bbl	=	barrel of liquid (42 gallons)
bhp	=	brake-horsepower
btu	=	British Thermal Unit
BTU	=	British Thermal Unit
°C	=	degrees Centigrade

XI. Glossary

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
lb	=	pound
lbmol	=	pound-mole
in	=	inches
kW	=	kilowatts
m^2	=	square meter
m^3	=	cubic meters
min	=	minute
mm	=	million
MM	=	million
MM BTU	=	million BTU
Mcf	=	on thousand cubic feet
MMcf	=	million cubic feet
Mg	=	mega grams
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