

Bay Area Air Quality Management District

375 Beale Street, Suite 600
San Francisco, CA 94105
(415) 749-5000

Final

MAJOR FACILITY REVIEW PERMIT

Issued To:

Republic Services Vasco Road, LLC
Facility #A5095

Facility Address:

4001 North Vasco Road
Livermore, CA 94551

Mailing Address:

4001 North Vasco Road
Livermore, CA 94551

Responsible Official

Rick King, General Manager
(408) 515-1676

Facility Contact

Diana Ratto, Operations Manager
(925) 260-2091

Type of Facility: Landfill Gas
Primary SIC: 4911
Product: Solid Waste Disposal

BAAQMD Engineering Division Contact:
Loi Chau

ISSUED BY THE BAY AREA AIR QUALITY MANAGEMENT DISTRICT

Signed by Damian Breen for Jack P. Broadbent
Jack P. Broadbent, Executive Officer/Air Pollution Control Officer

February 4, 2019
Date

TABLE OF CONTENTS

I.	STANDARD CONDITIONS	3
II.	EQUIPMENT	7
III.	GENERALLY APPLICABLE REQUIREMENTS.....	11
IV.	SOURCE-SPECIFIC APPLICABLE REQUIREMENTS.....	15
V.	SCHEDULE OF COMPLIANCE.....	29
VI.	PERMIT CONDITIONS.....	31
VII.	APPLICABLE LIMITS & COMPLIANCE MONITORING REQUIREMENTS.....	50
VIII.	TEST METHODS	67
IX.	PERMIT SHIELD.....	72
X.	REVISION HISTORY.....	73
XI.	GLOSSARY	78

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 12/6/17);
SIP Regulation 2, Rule 1 - Permits, General Requirements
(as approved by EPA through 8/1/16);
BAAQMD Regulation 2, Rule 2 - Permits, New Source Review
(as amended by the District Board on 12/6/17);
SIP Regulation 2, Rule 2 - Permits, New Source Review and Prevention of Significant
Deterioration
(as approved by EPA through 8/1/16);
BAAQMD Regulation 2, Rule 4 - Permits, Emissions Banking
(as amended by the District Board on 12/6/17);
SIP Regulation 2, Rule 4 - Permits, Emissions Banking
(as approved by EPA through 12/4/17);
BAAQMD Regulation 2, Rule 5 - Permits, New Source Review of Toxic Air Contaminants
(as amended by the District Board on 12/7/16);
BAAQMD Regulation 2, Rule 6 - Permits, Major Facility Review
(as amended by the District Board on 12/6/17); and
SIP Regulation 2, Rule 6 - Permits, Major Facility Review
(as approved by the District Board on 6/23/95).

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

1. This Major Facility Review Permit was issued on February 4, 2019 and expires on February 3, 2024. The permit holder shall submit a complete application for renewal of this Major Facility Review Permit no later than August 3, 2023 and no earlier than February 3, 2023. **If a complete application for renewal has not been submitted in accordance with this deadline, the facility may not operate after February 3, 2024.** If the permit renewal has not been issued by February 3, 2024, 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)
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

I. Standard Conditions

- 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 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)
 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 of whether it acts through employees, agents, contractors, or subcontractors. (Regulation 2-6-307)

I. Standard Conditions

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. Reports shall be for the following periods: August 1st through January 31st and February 1st through July 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 facility shall submit a written report including the probable cause of non-compliance and any corrective or preventative actions. The reports shall be sent by e-mail to compliance@baaqmd.gov or by postal mail to the following address:

Director of Compliance and Enforcement
Bay Area Air Quality Management District
375 Beale Street, Suite 600
San Francisco, CA 94105
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 February 1st through January 31st. The certification shall be submitted by February 28th of each year (or February 29th during leap

I. Standard Conditions

years). 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 by e-mail to r9.aeo@epa.gov or postal mail to the Environmental Protection Agency at the following address:

Director
Enforcement Division, TRI & Air Section (ENF-2-1)
USEPA Region 9
75 Hawthorne Street
San Francisco, California 94105

(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 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	Vasco Road Landfill – Waste Decomposition Process with Main Gas Collection System and Intermittent GCS	Active solid waste disposal site that accepts non-hazardous wastes including: MSW, commercial, industrial, and construction wastes. Active system equipped with 2 blowers.		Maximum Waste Acceptance Rate = 2518 tons/day Maximum Design Capacity = 31.65 E6 yd ³ Maximum Cumulative Waste = 23.8 E6 tons 115 vertical wells and 6 horizontal collectors 4 wells, 0 collectors, VR12GT4R and VR12GT05
S-7	Non-Retail Gasoline Dispensing Facility G#9551 (Phase I is Coaxial, Phase II is Vapor Balance)	1 Gasoline Tank 1 Gasoline Nozzle 1 Diesel Tank (exempt) 1 Diesel Nozzle (exempt)	Above-ground OPW 11V	1000 gallon capacity (unleaded gasoline) 10,000 gallon capacity
S-12	Vasco Road Landfill – Waste and Cover Material Dumping	Wastes: MSW, commercial, industrial, and construction waste. Cover Materials: clean soil, and non-hazardous VOC-laden soil.		Maximum Waste Acceptance Rate = 2518 tons/ day
S-13	Vasco Road Landfill – Excavating, Bulldozing, and Compacting Activities			

II. Equipment

Table II A - Permitted Sources

S-#	Description	Make or Type	Model	Capacity
S-14	Green Waste Processing Operation	Active green waste processing facility. Operations are based on seasonal weather conditions		Maximum Green Waste Acceptance Rate = 16,000 tons/ year
S-15	Wood Waste Processing Operation	Active green waste processing facility. Operations are based on seasonal weather conditions		Maximum Wood Waste Acceptance Rate = 5,000 tons/ year

B. Abatement Device List

Table II B – Abatement Devices

A-#	Description	Source(s) Controlled	Applicable Requirement	Operating Parameters	Limit or Efficiency
A-4	Landfill Gas Flare, 120 MM BTU/hour, fired on landfill gas (or propane during start-up)	S-1	BAAQMD Regulation 8-34-301.3, see also Table IV-A	Minimum combustion zone temperature of 1402 °F, see also Table VII-A	Either $\geq 98\%$ by weight destruction of NMOC, or Outlet Concentration < 30 ppmv NMOC (as CH ₄ at 3% O ₂ , dry)
A-14	Water Spray System	S-14	BAAQMD Regulation 6-1-301	See Table VII-C	No more than 3 minutes per hour of visible emissions darker than No. 1 on the Ringlemann Chart or opacity to obscure an observer's view to an equal or greater degree.

II. Equipment

Table II B – Abatement Devices

A-#	Description	Source(s) Controlled	Applicable Requirement	Operating Parameters	Limit or Efficiency
A-15	Water Spray System	S-15	BAAQMD Regulation 6-1-301	See Table VII-C	No more than 3 minutes per hour of visible emissions darker than No. 1 on the Ringlemann Chart or opacity to obscure an observer's view to an equal or greater degree.

II. Equipment

C. Exempt Equipment List

Each of the following devices is exempt from major facility review permitting pursuant to the requirements of BAAQMD Regulation 2, Rule 6: Permits, Major Facility Review. The applicable exemption for each device is identified in the table below. Registered portable engines and non-road engines are exempt from BAAQMD Regulation 2, Rule 6 pursuant to BAAQMD Regulation 2-6-113 and 2-6-114, respectively, even though these engines may be required to have a BAAQMD permit to operate pursuant to BAAQMD Regulation 2, Rule 1, Permit, General Requirements. This table may include other types of equipment that are exempt from the requirement to have a BAAQMD permit to operate pursuant to BAAQMD Regulation 2, Rule 1. Equipment that is exempt from BAAQMD permitting requirements does not need to be included in this permit unless the equipment is a significant source, as defined in BAAQMD, Regulation 2-6-239. Any source that must be included in this permit because it is a significant source will be listed in a separate section II table.

Table II C – Exempt Equipment

S-#	Description	Type or Make and Model	Capacity	Comments
S-9	Portable Diesel Engine (powering truck tipper)	Perkins	94 bhp, 740 in ³ displacement, 4.8 gallons/hour diesel oil, 675,000 BTU/hour	Exempt per 2-6-114
Exempt	Portable Horizontal Grinder (Diesel Engine Powered)	John Deere Model 4045HF	125 bhp	Exempt from permits per 2-1-105; Exempt from MFR Review per 2-6-113
Exempt	Portable Horizontal Grinder (Diesel Engine Powered)	Wildcat Manufacturing Co. Model 626	200 cubic yards/hr	Exempt from permits per 2-1-105; Exempt from MFR Review per 2-6-113

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 are posted on the EPA Region 9 website. The address is:

<https://www.epa.gov/sips-ca/epa-approved-bay-area-air-district-regulations-california-sip>

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 (12/6/17)	N
BAAQMD Regulation 2-1-429	Permits – Federal Emissions Statement (12/21/04)	N
SIP Regulation 2, Rule 1	Permits – General Requirements (8/1/16)	Y

III. Generally Applicable Requirements

**Table III
 Generally Applicable Requirements**

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)
SIP Regulation 2-1-429	Permits – Federal Emissions Statement (4/3/95)	Y
BAAQMD Regulation 2, Rule 5	Permits – New Source Review of Toxic Air Contaminants (12/7/16)	N
BAAQMD Regulation 4	Air Pollution Episode Plan (3/20/91)	N
SIP Regulation 4	Air Pollution Episode Plan (8/06/90)	Y
BAAQMD Regulation 5	Open Burning (6/19/13)	N
SIP Regulation 5	Open Burning (9/4/98)	Y
BAAQMD Regulation 6, Rule 1	Particulate Matter – General Requirements (8/1/18)	N
SIP Regulation 6	Particulate Matter and Visible Emissions (9/4/98)	Y
BAAQMD Regulation 6, Rule 6	Particulate Matter – Prohibition of Trackout	N
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 Regulation 8-40-116	Exemption, Small Volume	Y
BAAQMD Regulation 8-40-117	Exemption, Accidental Spills	Y
SIP Regulation 8, Rule 40	Organic Compounds – Aeration of Contaminated Soil and Removal of Underground Storage Tanks (4/9/01)	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

III. Generally Applicable Requirements

**Table III
 Generally Applicable Requirements**

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)
BAAQMD Regulation 8, Rule 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
SIP Regulation 8, Rule 51	Organic Compounds – Adhesive and Sealant Products (2/26/02)	Y
BAAQMD Regulation 9, Rule 1	Inorganic Gaseous Pollutants – Sulfur Dioxide (3/15/95)	N
SIP Regulation 9, Rule 1	Inorganic Gaseous Pollutants – Sulfur Dioxide (6/8/99)	Y
BAAQMD Regulation 9, Rule 2	Inorganic Gaseous Pollutants – 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 11, Rule 18	Hazardous Pollutants – Reduction of Risk from Air Toxic Emissions at Existing Facilities (11/15/17)	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
BAAQMD Regulation 14, Rule 1	Mobile Source Emission Reduction Methods – Bay Area Commuter Benefits Program (3/19/14)	N
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 Health and Safety Code, Title 17, Section 93105	Asbestos Airborne Toxic Control Measure for Construction, Grading, Quarrying and Surface Mining Operations (7/26/01)	N
California Health and Safety Code, Title 17, Section 93106	Asbestos Airborne Toxic Control Measure for Asbestos Containing Serpentine (7/20/00)	N

III. Generally Applicable Requirements

Table III
Generally Applicable Requirements

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)
California Health and Safety Code, Title 17, Section 93116	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

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:

<https://www.epa.gov/sips-ca/epa-approved-bay-area-air-district-regulations-california-sip>

Table IV – A
Source-Specific Applicable Requirements
S-1 VASCO ROAD LANDFILL – WASTE DECOMPOSITION PROCESS, EQUIPPED WITH GAS COLLECTION SYSTEM; ABATED BY A-4 LANDFILL GAS FLARE;
S-12 VASCO ROAD LANDFILL – WASTE AND COVER MATERIAL DUMPING;
S-13 VASCO ROAD LANDFILL – EXCAVATING, BULLDOZING, AND COMPACTING ACTIVITIES

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)		
1-523	Parametric Monitoring and Recordkeeping Procedures	N	
1-523.1	Reporting requirement for periods of inoperation > 24 hours	Y	
1-523.2	Limit on duration of inoperation	Y	
1-523.3	Reporting requirement for violations of any applicable limits	N	
1-523.4	Records of inoperation, tests, calibrations, adjustments, & maintenance	Y	
1-523.5	Maintenance and calibration	N	
SIP Regulation 1	General Provisions and Definitions (6/28/99)		

IV. Source-Specific Applicable Requirements

Table IV – A
Source-Specific Applicable Requirements
S-1 VASCO ROAD LANDFILL – WASTE DECOMPOSITION PROCESS, EQUIPPED WITH GAS
COLLECTION SYSTEM; ABATED BY A-4 LANDFILL GAS FLARE;
S-12 VASCO ROAD LANDFILL – WASTE AND COVER MATERIAL DUMPING;
S-13 VASCO ROAD LANDFILL – EXCAVATING, BULLDOZING, AND COMPACTING
ACTIVITIES

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
1-523	Parametric Monitoring and Recordkeeping Procedures	Y	
1-523.3	Reports of Violations	Y	
BAAQMD Regulation 6, Rule 1	Particulate Matter – General Requirements (8/1/18)		
6-1-301	Ringelmann No. 1 Limitation	N	
6-1-305	Visible Particles	N	
6-1-310.1	Total Suspended Particulate (TSP) Concentration Limits (applies to flare only)	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	Particle Weight Limitation (applies to flare only)	Y	
6-401	Appearance of Emissions	Y	
BAAQMD Regulation 6, Rule 6	Particulate Matter – Prohibition of Trackout (8/1/18)		
6-6-301	Prohibition of Trackout onto Paved Roadways	N	7/1/19
6-6-302	Prohibition of Visible Emissions During Cleanup of Trackout	N	7/1/19
6-6-501	Monitoring and Recordkeeping	N	7/1/19
BAAQMD Regulation 8, Rule 2	Organic Compounds – Miscellaneous Operations (7/20/05)		
8-2-301	Miscellaneous Operations (applies to low VOC soil handling and disposal activities only)	Y	

IV. Source-Specific Applicable Requirements

Table IV – A
Source-Specific Applicable Requirements
S-1 VASCO ROAD LANDFILL – WASTE DECOMPOSITION PROCESS, EQUIPPED WITH GAS
COLLECTION SYSTEM; ABATED BY A-4 LANDFILL GAS FLARE;
S-12 VASCO ROAD LANDFILL – WASTE AND COVER MATERIAL DUMPING;
S-13 VASCO ROAD LANDFILL – EXCAVATING, BULLDOZING, AND COMPACTING
ACTIVITIES

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
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	
8-34-113.2	Shutdown Time Limitation	Y	
8-34-113.3	Recordkeeping Requirement	Y	
8-34-116	Limited Exemption, Well Raising	Y	
8-34-116.1	New Fill	Y	
8-34-116.2	Limits on Number of Wells Shutdown	Y	
8-34-116.3	Shutdown Duration Limit	Y	
8-34-116.4	Capping Well Extensions	Y	
8-34-116.5	Well Disconnection Records	Y	
8-34-117	Limited Exemption, Gas Collection System Components	Y	
8-34-117.1	Necessity of Existing Component Repairs/Adjustments	Y	
8-34-117.2	New Components are Described in Collection and Control System Design Plan	Y	
8-34-117.3	Meets Section 8-34-118 Requirements	Y	
8-34-117.4	Limits on Number of Wells Shutdown	Y	
8-34-117.5	Shutdown Duration Limit	Y	
8-34-117.6	Well Disconnection Records	Y	
8-34-118	Limited Exemption, Construction Activities	Y	
8-34-118.1	Construction Plan	Y	
8-34-118.2	Activity is Required to Maintain Compliance with this Rule	Y	
8-34-118.3	Required or Approved by Other Enforcement Agencies	Y	
8-34-118.4	Emission Minimization Requirement	Y	
8-34-118.5	Excavated Refuse Requirements	Y	
8-34-118.6	Covering Requirements for Exposed Refuse	Y	
8-34-118.7	Installation Time Limit	Y	

IV. Source-Specific Applicable Requirements

Table IV – A
Source-Specific Applicable Requirements
S-1 VASCO ROAD LANDFILL – WASTE DECOMPOSITION PROCESS, EQUIPPED WITH GAS
COLLECTION SYSTEM; ABATED BY A-4 LANDFILL GAS FLARE;
S-12 VASCO ROAD LANDFILL – WASTE AND COVER MATERIAL DUMPING;
S-13 VASCO ROAD LANDFILL – EXCAVATING, BULLDOZING, AND COMPACTING
ACTIVITIES

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
8-34-118.8	Capping Required for New Components	Y	
8-34-118.9	Construction Activity Records	Y	
8-34-301	Landfill Gas Collection and Emission Control System Requirements	Y	
8-34-301.1	Continuous Operation	Y	
8-34-301.2	Collection and Control Systems Leak Limitations	Y	
8-34-301.3	Limits for Enclosed Flares	Y	
8-34-303	Landfill Surface Requirements	Y	
8-34-304	Gas Collection System Installation Requirements	Y	
8-34-304.1	Based on Waste Age For Inactive or Closed Areas	Y	
8-34-304.2	Based on Waste Age For Active Areas	Y	
8-34-304.3	Based on Amount of Decomposable Waste Accepted	Y	
8-34-304.4	Based on NMOC Emission Rate	Y	
8-34-305	Wellhead Requirements	Y	
8-34-305.1	Wellhead Vacuum Requirement	Y	
8-34-305.2	Wellhead Temperature Limit	Y	
8-34-305.3	Nitrogen Concentration Limit for Wellhead Gas or	Y	
8-34-305.4	Oxygen Concentration Limit for Wellhead Gas	Y	
8-34-404	Less Than Continuous Operation Petition	Y	
8-34-405	Design Capacity Reports	Y	
8-34-408	Collection and Control System Design Plans	Y	
8-34-408.2	Sites With Existing Collection and Control Systems	Y	
8-34-411	Annual Report	Y	
8-34-412	Compliance Demonstration Tests	Y	
8-34-413	Performance Test Report	Y	
8-34-414	Repair Schedule for Wellhead Excesses	Y	
8-34-414.1	Records of Excesses	Y	
8-34-414.2	Corrective Action	Y	
8-34-414.3	Collection System Expansion	Y	
8-34-414.4	Operational Due Date for Expansion	Y	

IV. Source-Specific Applicable Requirements

Table IV – A
Source-Specific Applicable Requirements
S-1 VASCO ROAD LANDFILL – WASTE DECOMPOSITION PROCESS, EQUIPPED WITH GAS
COLLECTION SYSTEM; ABATED BY A-4 LANDFILL GAS FLARE;
S-12 VASCO ROAD LANDFILL – WASTE AND COVER MATERIAL DUMPING;
S-13 VASCO ROAD LANDFILL – EXCAVATING, BULLDOZING, AND COMPACTING
ACTIVITIES

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
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	Y	
8-34-501.4	Testing	Y	
8-34-501.5	Landfill Gas Flow Rate and Well Concentration Records for Components Operating Less Than Continuously	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	
8-34-505	Well Head Monitoring	Y	

IV. Source-Specific Applicable Requirements

Table IV – A
Source-Specific Applicable Requirements
S-1 VASCO ROAD LANDFILL – WASTE DECOMPOSITION PROCESS, EQUIPPED WITH GAS
COLLECTION SYSTEM; ABATED BY A-4 LANDFILL GAS FLARE;
S-12 VASCO ROAD LANDFILL – WASTE AND COVER MATERIAL DUMPING;
S-13 VASCO ROAD LANDFILL – EXCAVATING, BULLDOZING, AND COMPACTING
ACTIVITIES

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
8-34-506	Landfill Surface Monitoring	Y	
8-34-507	Continuous Temperature Monitor and Recorder (applies to flare)	Y	
8-34-508	Gas Flow Meter	Y	
8-34-510	Cover Integrity Monitoring	Y	
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	
40 CFR Part 60, Subpart A	Standards of Performance for New Stationary Sources – General Provisions (9/13/10)		
60.4(b)	Requires Submission of Requests, Reports, Applications, and Other Correspondence to the Administrator	Y	
60.7	Notification and Record Keeping	Y	
60.8	Performance Tests	Y	
60.11	Compliance with Standards and Maintenance Requirements	Y	
60.11(a)	Compliance determined by performance tests	Y	
60.11(d)	Control devices operated using good air pollution control practice	Y	
60.12	Circumvention	Y	
60.13	Monitoring Requirements	Y	
60.13(a)	Applies to all continuous monitoring systems	Y	
60.13(b)	Monitors shall be installed and operational before performing performance tests	Y	

IV. Source-Specific Applicable Requirements

Table IV – A
Source-Specific Applicable Requirements
S-1 VASCO ROAD LANDFILL – WASTE DECOMPOSITION PROCESS, EQUIPPED WITH GAS
COLLECTION SYSTEM; ABATED BY A-4 LANDFILL GAS FLARE;
S-12 VASCO ROAD LANDFILL – WASTE AND COVER MATERIAL DUMPING;
S-13 VASCO ROAD LANDFILL – EXCAVATING, BULLDOZING, AND COMPACTING
ACTIVITIES

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
60.13(e)	Continuous monitors shall operate continuously	Y	
60.13(f)	Monitors shall be installed in proper locations	Y	
60.13(g)	Requires multiple monitors for multiple stacks	Y	
60.14	Modification	Y	
60.15	Reconstruction	Y	
60.19	General Notification and Reporting Requirements	Y	
40 CFR Part 60, Subpart Cc	Standards of Performance for New Stationary Sources – Emission Guidelines and Compliance Times for Municipal Solid Waste Landfills (2/24/99)		
60.36c(a)	Collection and Control Systems in Compliance by 30 months after Initial NMOC Emission Rate Report Shows NMOC Emissions \geq 50 MG/year	Y	
40 CFR Part 60, Subpart Cf	Standards of Performance for New Stationary Sources – Emission Guidelines and Compliance Times for Municipal Solid Waste Landfills (8/29/16)		
60.32f	Collection and Control Systems in Compliance by 30 months after NMOC Emission Rate Report Shows NMOC Emissions \geq 50 MG/year	Y	
40 CFR Part 62, Subpart F	Approval and Promulgation of State Plans for Designated Facilities and Pollutants – California (4/20/06)		
62.1100	Identification of Plan	Y	
62.1115	Identification of Sources – Existing Municipal Solid Waste Landfills	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	

IV. Source-Specific Applicable Requirements

Table IV – A
Source-Specific Applicable Requirements
S-1 VASCO ROAD LANDFILL – WASTE DECOMPOSITION PROCESS, EQUIPPED WITH GAS
COLLECTION SYSTEM; ABATED BY A-4 LANDFILL GAS FLARE;
S-12 VASCO ROAD LANDFILL – WASTE AND COVER MATERIAL DUMPING;
S-13 VASCO ROAD LANDFILL – EXCAVATING, BULLDOZING, AND COMPACTING
ACTIVITIES

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
63.5(b)	Requirements for existing, newly constructed, and reconstructed sources	Y	
63.6(e)	Operation and maintenance requirements and SSM Plan	Y	
63.6(f)	Compliance with non-opacity emission standards	Y	
63.10(b)(2)(i-v)	Records for startup, shutdown, malfunction, and maintenance	Y	
63.10(d)(5)	Startup, Shutdown, and Malfunction (SSM) Reports	Y	
40 CFR Part 63, Subpart AAAA	National Emission Standards for Hazardous Air Pollutants – Municipal Solid Waste Landfills (4/20/06)		
63.1945	When do I have to comply with this subpart?	Y	
63.1945(b)	Compliance date for existing affected landfills	Y	
63.1955	What requirements must I meet?	Y	
63.1955(a)	Comply with either 63.1955(a)(1) or (a)(2)	Y	
63.1955(a)(2)	Comply with State Plan that implements 40 CFR Part 60, Subpart Cc	Y	
63.1955(b)	Comply with 63.1960-63.1985, if a collection and control system is required by 40 CFR Part 60, Subpart WWW or a State Plan implementing 40 CFR Part 60, Subpart Cc	Y	
63.1955(c)	Comply with all approved alternatives to standards for collection and control systems plus all SSM requirements and 6 month compliance reporting requirements	Y	
63.1960	How is compliance determined?	Y	
63.1965	What is a deviation?	Y	
63.1975	How do I calculate the 3-hour block average used to demonstrate compliance?	Y	
63.1980	What records and reports must I keep and submit?	Y	

IV. Source-Specific Applicable Requirements

Table IV – A
Source-Specific Applicable Requirements
S-1 VASCO ROAD LANDFILL – WASTE DECOMPOSITION PROCESS, EQUIPPED WITH GAS
COLLECTION SYSTEM; ABATED BY A-4 LANDFILL GAS FLARE;
S-12 VASCO ROAD LANDFILL – WASTE AND COVER MATERIAL DUMPING;
S-13 VASCO ROAD LANDFILL – EXCAVATING, BULLDOZING, AND COMPACTING
ACTIVITIES

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
63.1980(a)	Comply with all record keeping and reporting requirements in 40 CFR Part 60, Subpart WWW or the State Plan implementing 40 CFR Part 60, Subpart Cc, except that the annual report required by 40 CFR 60.757(f) must be submitted every 6 months	Y	
63.1980(b)	Comply with all record keeping and reporting requirements in 40 CFR Part 60, Subpart A and 40 CFR Part 63, Subpart A, including SSM Plans and Reports	Y	
BAAQMD Condition # 818			
Part 1	Control requirements for collected landfill gas (Regulations 8-34-301 and 8-34-303)	Y	
Part 2	Landfill gas collection system description (Regulations 2-1-301, 8-34-301.1, 8-34-304, and 8-34-305)	Y	
Part 3	Landfill gas collection system operating requirements (Regulations 8-34-301.1, 8-34-301.2, 8-34-303, and 8-34-305)	Y	
Part 4	Combustion zone temperature monitoring (Regulations 8-34-501.3 and 8-34-507)	Y	
Part 5	Flare temperature limit (RACT for CO and Regulations 2-5-301 and 8-34-301.3)	Y	
Part 6	Flare equipment requirements (RACT for CO and Regulation 8-34-301)	Y	
Part 7	Flare fuel restrictions (Cumulative Increase)	Y	
Part 8	Outlet NOx concentration limit for flare (RACT)	Y	
Part 9	deleted		
Part 10	Outlet CO concentration limit for flare (RACT)	Y	
Part 11	deleted		
Part 12	Landfill gas total reduced sulfur compounds concentration limit (RACT for SO ₂ and Regulation 9-1-302)	Y	

IV. Source-Specific Applicable Requirements

Table IV – A
Source-Specific Applicable Requirements
S-1 VASCO ROAD LANDFILL – WASTE DECOMPOSITION PROCESS, EQUIPPED WITH GAS
COLLECTION SYSTEM; ABATED BY A-4 LANDFILL GAS FLARE;
S-12 VASCO ROAD LANDFILL – WASTE AND COVER MATERIAL DUMPING;
S-13 VASCO ROAD LANDFILL – EXCAVATING, BULLDOZING, AND COMPACTING
ACTIVITIES

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
Part 13	Flare heat input limits and calculation procedures (Offsets, Cumulative Increase, and Regulation 2-1-301)	Y	
Part 14	Design capacity, waste acceptance, cumulative decomposable materials, and vehicle traffic limits (Regulations 2-1-301 and 2-1-234.3)	Y	
Part 15	Contaminated soil acceptance restrictions (Regulation 8-40-301)	Y	
Part 16	Usage limits for VOC-laden and metal-laden soils (Offsets and Regulations 2-5-302 and 8-2-301)	Y	
Part 17	deleted		
Part 18	Record keeping requirements for VOC and metal laden soils (Offsets and Regulations 2-5-302 and 8-2-301)	Y	
Part 19	Particulate emission control measures (Regulations 2-1-403, 6-1-301, and 6-1-305)	Y	
Part 20	Flare source test requirements (RACT, Offsets, Cumulative Increase, and Regulations 2-5-301, 2-5-302, 8-34-301.3 and 8-34-412)	Y	
Part 21	Annual landfill gas characterization test (AB-2588 Air Toxic Hot Spots Act, RACT for SO ₂ , and Regulations 2-5-302, 8-34-412, and 9-1-302)	Y	
Part 22	Record keeping requirements (RACT, Offsets, Cumulative Increase, and Regulations 2-1-301, 2-5-301, 2-5-302, 2-6-501, 6-1-301, 6-1-305, 8-2-301, 8-34-301, 8-34-304, and 8-34-501)	Y	
Part 23	Reporting periods and report submittal due dates for the Regulation 8, Rule 34 report (Regulation 8-34-411 and 40 CFR 63.1980(a))	Y	

IV. Source-Specific Applicable Requirements

Table IV – B
Source-Specific Applicable Requirements
S-7 NON-RETAIL GASOLINE DISPENSING FACILITY

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
BAAQMD Regulation 8, Rule 5	Organic Compounds – Storage of Organic Liquids (10/18/06)		
8-5-116	Exemption, Gasoline Storage Tanks at Gasoline Dispensing Facilities	N	
SIP Regulation 8, Rule 5	Organic Compounds – Storage of Organic Liquids (6/5/03)		
8-5-301	Storage Tank Control Requirements	Y	
8-5-303	Requirements for Pressure Vacuum Valves	Y	
8-5-501	Records	Y	
8-5-501.1	Types and amounts of materials stored	Y	
BAAQMD Regulation 8, Rule 7	Organic Compounds – Gasoline Dispensing Facilities (11/6/02)		
8-7-113	Tank Gauging and Inspection Exemption	Y	
8-7-114	Stationary Tank Testing Exemption	Y	
8-7-116	Periodic Testing Requirements Exemption	Y	
8-7-301	Phase I Requirements	Y	
8-7-301.1	Requirements for Transfers into Stationary Tanks, Cargo Tanks, and Mobile Refuelers	Y	
8-7-301.2	CARB Certification Requirements	Y	
8-7-301.3	Submerged Fill Pipe Requirement	Y	
8-7-301.5	Maintenance and Operating Requirement	Y	
8-7-301.6	Leak-Free and Vapor Tight Requirement for Components	Y	
8-7-301.7	Fitting Requirements for Vapor Return Line	Y	
8-7-301.10	Vapor Recovery Efficiency Requirements for New and Modified Systems	Y	
8-7-301.13	Annual Vapor Tightness Test Requirement	Y	
8-7-302	Phase II Requirements	Y	
8-7-302.1	Requirements for Transfers into Motor Vehicle Fuel Tanks	Y	
8-7-302.2	Maintenance Requirement	Y	

IV. Source-Specific Applicable Requirements

Table IV – B
Source-Specific Applicable Requirements
S-7 NON-RETAIL GASOLINE DISPENSING FACILITY

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
8-7-302.3	Proper Operation and Free of Defects Requirements	Y	
8-7-302.4	Repair Time Limit for Defective Components	Y	
8-7-302.5	Leak-Free and Vapor Tight Requirement for Components	Y	
8-7-302.6	Requirements for Bellows Nozzles	Y	
8-7-302.7	Requirements for Vapor Recovery Nozzles on Balance Systems	Y	
8-7-302.8	Minimum Liquid Removal Rate	Y	
8-7-302.9	Coaxial Hose Requirement	Y	
8-7-302.10	Construction Materials Specifications	Y	
8-7-302.12	Liquid Retain Limitation	Y	
8-7-302.13	Nozzle Spitting Limitation	Y	
8-7-302.14	Annual Back Pressure Test Requirements for Balance Systems	Y	
8-7-303	Topping Off	Y	
8-7-304	Certification Requirements	Y	
8-7-306	Prohibition of Use	Y	
8-7-307	Posting of Operating Instructions	Y	
8-7-308	Operating Practices	Y	
8-7-309	Contingent Vapor Recovery Requirement	Y	
8-7-313	Requirements for New or Modified Phase II Installations	Y	
8-7-316	Pressure Vacuum Valve Requirements, Aboveground Storage Tanks and Vaulted Below Grade Storage Tanks	Y	
8-7-401	Equipment Installation and Modification	Y	
8-7-406	Testing Requirements, New and Modified Installations	Y	
8-7-407	Periodic Testing Requirements	Y	
8-7-408	Periodic Testing Notification and Submission Requirements	Y	
8-7-501	Burden of Proof	Y	
8-7-502	Right of Access	Y	
8-7-503	Record Keeping Requirements	Y	
8-7-503.1	Gasoline Throughput Records	Y	
8-7-503.2	Maintenance Records	Y	
8-7-503.3	Records Retention Time	Y	
BAAQMD Condition # 7523	Gasoline Throughput Limit (Regulation 2-5-302)	N	

IV. Source-Specific Applicable Requirements

Table IV – B
Source-Specific Applicable Requirements
S-7 NON-RETAIL GASOLINE DISPENSING FACILITY

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
State of California, ARB, EO G-70-116-F	Certification of ConVault, Inc. Aboveground Filling/Dispensing Vapor Recovery System (11/30/95)		
Paragraph 9	Tank Design Configuration Limitations	N	
Paragraph 10	Emergency Vent and Manway Requirement	N	
Paragraph 11	Requirement to Use ARB Certified Phase I and Phase II Systems	N	
Paragraph 12	Requirements for Phase I Components and Piping Configurations	N	
Paragraph 13	Requirements for the Routing of the Coaxial Hose and for Liquid Traps	N	
Paragraph 14	P/V Valve Requirements	N	
Paragraph 15	Tank Insulation Requirements	N	
Paragraph 16	Tank Exterior Surface Requirements	N	
Paragraph 17	Requirement to Comply with Local Air District Rules	N	
Paragraph 18	Requirements for Deliveries from a Cargo Truck	N	
Paragraph 19	Leak Checking Requirements	N	
Paragraph 20	Requirement to Comply with Local Fire Official's Requirements	N	
Paragraph 21	Requirement to Comply with Other Specified Rules and Regulations	N	
Paragraph 22	Prohibition on Alteration of Equipment, Parts, Design, or Operation	N	
Paragraph 23	This Order Supersedes EO G-70-116-E (4/1/95)	N	

IV. Source-Specific Applicable Requirements

Table IV – C
Source-Specific Applicable Requirements
S-14 GREEN WASTE PROCESSING OPERATIONS
A-14 WATER SPRAYER

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
BAAQMD Regulation 6, Rule 1	Particulate Matter – General Requirements (8/1/18)		
6-1-301	Ringelmann No. 1 Limitation	N	
6-1-305	Visible Particles	N	
6-1-311.1	Total Suspended Particulate (TSP) Weight Limits	N	
6-1-401	Appearance of Emissions	N	
SIP Regulation 6	Particulate Matter and Visible Emissions (9/4/98)		
6-1-301	Ringelmann No. 1 Limitation	Y	
6-1-305	Visible Particles	Y	
6-1-311	General Operations	Y	
6-1-401	Appearance of Emissions	Y	
BAAQMD Regulation 8, Rule 2	Organic Compounds – Miscellaneous Operations (7/20/05)		
8-2-301	Miscellaneous Operations	Y	
BAAQMD Condition # 25515			
Part 1	Waste Processing Limitations (Cumulative Increase)	Y	
Part 2	Operating requirements for water spray system (Cumulative Increase and Regulation 6-1-301)	Y	
Part 3 (a-b)	Record keeping requirements (Cumulative Increase and Regulations 1-441)	Y	

Table IV – D
Source-Specific Applicable Requirements
S-15 WOOD WASTE PROCESSING OPERATIONS
A-15 WATER SPRAYER

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
BAAQMD Regulation 6, Rule 1	Particulate Matter – General Requirements (8/1/18)		
6-1-301	Ringelmann No. 1 Limitation	N	
6-1-305	Visible Particles	N	
6-1-311	Total Suspended Particulate (TSP) Weight Limits	N	
6-1-401	Appearance of Emissions	N	
SIP Regulation 6	Particulate Matter and Visible Emissions (9/4/98)		
6-1-301	Ringelmann No. 1 Limitation	Y	
6-1-305	Visible Particles	Y	
6-1-311	General Operations	Y	
6-1-401	Appearance of Emissions	Y	
BAAQMD Condition # 25516			
Part 1	Waste Processing Limitations (Cumulative Increase)	Y	
Part 2	Operating requirements for water spray system (Cumulative Increase and Regulation 6-1-301)	Y	
Part 3 (a-b)	Record keeping requirements (Cumulative Increase and Regulations 1-441)	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 # 818

**FOR: S-1 VASCO ROAD LANDFILL – WASTE DECOMPOSITION PROCESS WITH GAS COLLECTION SYSTEM; ABATED BY A-4 LANDFILL GAS FLARE;
S-12 VASCO ROAD LANDFILL – WASTE AND COVER MATERIAL DUMPING;
S-13 VASCO ROAD LANDFILL – EXCAVATING, BULLDOZING, AND COMPACTING ACTIVITIES**

1. All collected landfill gas shall either be abated by the on-site Landfill Gas Flare (A-4) or shall be vented to both A-4 and to the off-site Ameresco Vasco Road, LLC Facility (Plant # 20432) for processing and use as fuel in this off-site energy plant.
 - a. During any time that the landfill gas flow rate to the off-site energy plant is less than or equal to 1200 scfm, the A-4 Flare shall operate concurrently with the off-site energy plant on a continuous basis and in compliance with all applicable limits for this flare.
 - b. During any time that landfill gas is diverted to the off-site energy plant, the owner/operator may operate the A-4 Flare on a less than continuous basis, provided that the owner/operator demonstrates that all of the following criteria have been satisfied:
 - (i) the landfill gas flow rate to the off-site energy plant is greater than 1200 scfm;
 - (ii) the remaining amount of landfill gas available for flaring is less than 800 scfm or the equivalent heat input rate for this excess landfill gas is less than 24 MM BTU/hour;
 - (iii) a sufficient amount of landfill gas is collected and controlled at all times to prevent violation of any applicable landfill surface leak limits;
 - (iv) the owner/operator shall measure the methane concentration in the landfill gas at the main header at least once per month (during routine wellfield monitoring) and shall calculate the average methane content for each rolling 3-month period. If this average landfill gas methane content exceeds 50%, the owner/operator shall attempt to restart the A-4 flare within one week of discovery of this excess. If the restart is successful, A-4 shall operate continuously until the criteria in Part 1(b)(ii) occur. The owner/operator shall attempt to restart the A-4 flare once per week until the rolling average methane content calculated above is below 50% methane.

VI. Permit Conditions

Condition # 818

**FOR: S-1 VASCO ROAD LANDFILL – WASTE DECOMPOSITION PROCESS WITH GAS COLLECTION SYSTEM; ABATED BY A-4 LANDFILL GAS FLARE;
S-12 VASCO ROAD LANDFILL – WASTE AND COVER MATERIAL DUMPING;
S-13 VASCO ROAD LANDFILL – EXCAVATING, BULLDOZING, AND COMPACTING ACTIVITIES**

- (v) the owner/operator shall maintain records of landfill gas flow rate data, landfill gas methane concentration measurements, equivalent heat input rates and calculation procedures, flare restart attempts, and flare operating times to demonstrate compliance with Parts 1b(i-iv).
 - c. Raw landfill gas shall not be vented to the atmosphere except for unavoidable landfill gas emissions, which occur during collection system installation, maintenance, or repair that is performed in compliance with Regulation 8, Rule 34, Sections 113, 116, 117, or 118 and for inadvertent component or surface leaks that do not violate 8-34-301.2 or 8-34-303.
(basis: Regulations 8-34-301 and 8-34-303)
- 2. The Permit Holder shall apply for and receive a Change of Conditions before altering the landfill gas collection system described in Part 2a below. Increasing or decreasing the number of wells or collectors, changing the length of collectors, or changing the locations of wells or collectors are all considered to be alterations that are 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 2b as evidenced by start-up/shut-down notification letters submitted to the District.
 - a. The Permit Holder has been issued a Permit to Operate for the landfill gas collection system components listed below.
 - (i) Main Gas Collection System

	<u>Required Components</u>
Total Number of Vertical Wells:	115
Total Number of Horizontal Collectors:	6
 - (ii) Intermittent Gas Collection System

Leachate Recirculation Wells:	4
Leachate Recirculation Horizontal Collectors:	0
Horizontal Collectors: VR12GT4R and VR12GT05	

VI. Permit Conditions

Condition # 818

**FOR: S-1 VASCO ROAD LANDFILL – WASTE DECOMPOSITION PROCESS WITH GAS COLLECTION SYSTEM; ABATED BY A-4 LANDFILL GAS FLARE;
S-12 VASCO ROAD LANDFILL – WASTE AND COVER MATERIAL DUMPING;
S-13 VASCO ROAD LANDFILL – EXCAVATING, BULLDOZING, AND COMPACTING ACTIVITIES**

- b. The Permit Holder has been issued a Change of Conditions (Application Number: 29010) for the gas collection system alterations listed below.

Installation of Vertical Wells:	92
Installation of Horizontal Collectors:	20
Decommissioning of Vertical Wells:	147
Decommissioning of Horizontal Collectors:	14

Wells installed or permanently shut down pursuant to subpart b shall be added to or removed from subpart a in accordance with the procedures identified in Regulations 2-6-414 or 2-6-415. The Permit Holder shall notify the District of the expected installation or shut-down date prior to commencing any component alterations pursuant to subpart b and shall maintain records of the initial operation date for each new well and the permanent decommissioning date for each shut-down well.

(basis: Regulations 2-1-301, 8-34-301.1, 8-34-304, 8-34-305)

3. The permit holder shall comply with the following landfill gas collection system operating requirements.
- a. The landfill gas collection system described in Part 2a(i) shall be operated continuously, as defined in Regulation 8-34-219 and Part 3b below. Wells shall not be shut off, disconnected or removed from operation without written authorization from the APCO, unless the Permit Holder complies with all applicable requirements of Regulation 8, Rule 34, Sections 113, 116, 117, and 118. (basis: Regulation 8-34-301.1)

VI. Permit Conditions

Condition # 818

**FOR: S-1 VASCO ROAD LANDFILL – WASTE DECOMPOSITION PROCESS WITH GAS COLLECTION SYSTEM; ABATED BY A-4 LANDFILL GAS FLARE;
S-12 VASCO ROAD LANDFILL – WASTE AND COVER MATERIAL DUMPING;
S-13 VASCO ROAD LANDFILL – EXCAVATING, BULLDOZING, AND COMPACTING ACTIVITIES**

- b. For the specified wells and collectors listed below, the gas collection system operating requirements listed in Parts 3b(i-ii) shall replace the wellhead requirements identified in Regulation 8-34-305.2 through 8-34-305.4. All wells and collectors remain subject to the Regulation 8-34-305.1 requirement to maintain vacuum on each wellhead and to the Regulation 8-34-505 monthly monitoring requirements. The specified wells and collectors shall be deemed to be operating continuously, if the components are complying with Regulation 8-34-305.1 and any applicable limits in Part 3b(i-ii). In addition, Part 3b(iii) clarifies the applicable limits for vaults containing gas collection system components. If the Permit Holder discovers an excess of a Part 3b(i-iii) limit and corrects the excess in accordance with the Regulation 8-34-414 repair schedule, the excess shall not be deemed a violation of this part. (basis: Regulations 8-34-301.1, 8-34-301.2, 8-34-303, and 8-34-305)
- i. The Regulation 8-34-305.2 temperature limit shall not apply to the wells or collectors listed below. The landfill gas temperature in each of the components listed below shall not exceed 140 degrees F.
EW-9, EW-33A, and EW-44.
- ii. The Regulation 8-34-305.3 nitrogen concentration limit and the Regulation 8-34-305.4 oxygen concentration limit shall not apply to the wells listed below, provided that the oxygen concentration in the landfill gas at the main header does not exceed 5% O₂ by volume (dry basis) and the methane concentration in the landfill gas at the main header is not less than 35% CH₄ by volume (dry basis). The permit holder shall monitor the landfill gas from the main header for oxygen and methane on a monthly basis to demonstrate compliance with this part.
EW-9, EW-27, EW-31A, EW-33A, EW-41R, 09-04, 09-06, 09-07 and 09-08.

VI. Permit Conditions

Condition # 818

**FOR: S-1 VASCO ROAD LANDFILL – WASTE DECOMPOSITION PROCESS WITH GAS COLLECTION SYSTEM; ABATED BY A-4 LANDFILL GAS FLARE;
S-12 VASCO ROAD LANDFILL – WASTE AND COVER MATERIAL DUMPING;
S-13 VASCO ROAD LANDFILL – EXCAVATING, BULLDOZING, AND COMPACTING ACTIVITIES**

- iii. This subpart applies to vaults containing gas collection system equipment, where the top of the vault is located at or near the surface of the landfill. The vault shall be monitored at both 1 cm from the vault (for comparison to the component leak limit of Regulation 8-34-301.2) and 2 inches above the vault (for comparison to the surface leak limit of Regulation 8-34-303).
 - (a) If during an inspection the District's monitored readings show compliance with both the component leak limit and the surface leak limit, the vault and components within shall be deemed to be in compliance with Regulations 8-34-301.2 and 8-34-303. No further testing is necessary.
 - (b) If the District's monitored readings show an excess of either the component leak limit or the surface leak limit, the operator shall comply with the Regulation 8-34-415 Repair Schedule for Landfill Surface Leak Excesses, until the source of the leak can be identified. The vault shall be opened and allowed to air out for at least 10 minutes. The collection system components within the vault shall be re-monitored at 1 cm from the components and the landfill surface surrounding the vault shall be re-monitored at 2 inches above the surface.
 - (c) If the re-monitoring (after airing the vault for 10 minutes) shows no component leaks and no surface leaks, the vault and components within shall be deemed to be in compliance with Regulations 8-34-301.2 and 8-34-303.
 - (d) If the re-monitoring shows a component leak, or the operator's further evaluation determines that the source of the emissions excess was a collection system component, then a violation of 8-34-301.2 shall be deemed to have occurred; and the operator shall take all necessary corrective action and shall comply with all applicable reporting requirements.

VI. Permit Conditions

Condition # 818

**FOR: S-1 VASCO ROAD LANDFILL – WASTE DECOMPOSITION PROCESS WITH GAS COLLECTION SYSTEM; ABATED BY A-4 LANDFILL GAS FLARE;
S-12 VASCO ROAD LANDFILL – WASTE AND COVER MATERIAL DUMPING;
S-13 VASCO ROAD LANDFILL – EXCAVATING, BULLDOZING, AND COMPACTING ACTIVITIES**

- (e) If the re-monitoring shows a surface leak but not a component leak, the operator shall continue to comply with all applicable provisions of the Regulation 8-34-415 Repair Schedule for Landfill Surface Leak Excesses.
- c. The landfill gas collection system described in Part 2a(ii) is not required to be operated continuously and is subject to the alternative wellhead standards described below, as allowed under Regulation 8-34-305. The CCR, Title 17, Section 95464(c) Wellhead Gauge Pressure Requirement continues to apply to these components.
 - (i) These components shall be connected to the vacuum system as needed to prevent violation of applicable surface and component leak limits.
 - (ii) This subsection applies to these components instead of the limits in Regulations 8-34-305.3 or 305.4. The oxygen concentration in each wellhead shall not exceed 15% by volume. Regulation 8-34-414 and subpart 3(c)(iv) below may be used in conjunction with this alternative wellhead limit.
 - (iii) The owner/operator shall monitor each component on a monthly basis for gauge pressure, oxygen, methane, and temperature, regardless of whether the component is connected to vacuum or not.
 - (iv) The component may be disconnected from the vacuum system if any of the following are detected: oxygen > 15% or temperature > 131 °F.
 - (v) The component shall be connected to vacuum if any pressure is detected.
 - (vi) The permit holder shall renew the petition for less than continuous operation every 3 years.

(basis: Regulation 8-34-404 and CCR, Title 17, 95468(a)(1))

VI. Permit Conditions

Condition # 818

**FOR: S-1 VASCO ROAD LANDFILL – WASTE DECOMPOSITION PROCESS WITH GAS COLLECTION SYSTEM; ABATED BY A-4 LANDFILL GAS FLARE;
S-12 VASCO ROAD LANDFILL – WASTE AND COVER MATERIAL DUMPING;
S-13 VASCO ROAD LANDFILL – EXCAVATING, BULLDOZING, AND COMPACTING ACTIVITIES**

4. A temperature monitor with readout display and continuous recorder shall be installed and maintained on the Flare (A-4). One or more thermocouples shall be placed in the primary combustion zone of the flare and shall accurately indicate flare combustion temperature at all times. Temperature charts showing continuous combustion zone temperature shall be retained for at least five years and made readily available to District staff upon request.
(basis: Regulations 8-34-501.3 and 8-34-507)
5. The combustion temperature of the Flare (A-4) shall be maintained at a minimum of 1402 degrees F, averaged over any 3-hour period. If a source test demonstrates compliance with all applicable requirements at a different temperature, the APCO may revise the minimum combustion zone temperature limit, in accordance with the procedures identified in Regulation 2-6-414 or 2-6-415, based on the following criteria. The minimum combustion zone temperature for the flare shall be equal to the average combustion zone temperature measured during the most recent complying source test minus 50 degrees F, provided that the minimum combustion zone temperature shall not be less than 1400 degrees F. (basis: RACT for CO and Regulations 2-5-301 and 8-34-301.3)
6. The Flare (A-4) shall be equipped with auto restart capability, a local alarm system, and automatic temperature controlled louvers.
(basis: Regulation 8-34-301 and RACT for CO)
7. The A-4 Flare shall be fired on landfill gas. No landfill gas condensate or leachate may be burned in the A-4 Flare. Propane or other similar clean burning fuels may be used during flare start-up. (basis: Cumulative Increase)
8. The concentration of nitrogen oxides (NO_x) in the flue gas from the Landfill Gas Flare (A-4) shall not exceed 11 ppmv of NO_x, corrected to 15% oxygen, dry basis. This is equivalent to 0.049 pounds of NO_x (calculated as NO₂) per million BTU. (basis: RACT)
9. DELETED

VI. Permit Conditions

Condition # 818

**FOR: S-1 VASCO ROAD LANDFILL – WASTE DECOMPOSITION PROCESS WITH GAS COLLECTION SYSTEM; ABATED BY A-4 LANDFILL GAS FLARE;
S-12 VASCO ROAD LANDFILL – WASTE AND COVER MATERIAL DUMPING;
S-13 VASCO ROAD LANDFILL – EXCAVATING, BULLDOZING, AND COMPACTING ACTIVITIES**

10. The concentration of carbon monoxide (CO) in the flue gas from the Landfill Gas Flare (A-4) shall not exceed 73 ppmv of CO, corrected to 15% oxygen, dry basis. This is equivalent to 0.19 pounds of CO per million BTU. (basis: RACT)

11. ~~DELETED~~12. Total reduced sulfur compounds in the collected landfill gas shall be monitored as a surrogate for monitoring sulfur dioxide in the exhaust from the flare. The concentration of total reduced sulfur compounds in the collected landfill gas shall not exceed an annual average of 320 ppmv, reported as H₂S, dry basis. (basis: RACT for SO₂ and Regulation 9-1-302)
 - a. To demonstrate compliance with this limit, the Permit Holder shall monitor the collected landfill gas for sulfur content on a quarterly basis using a combination of field testing and laboratory analytical results.
 - b. When using the field testing procedure, the Permit Holder shall measure the hydrogen sulfide (H₂S) content in the landfill gas using a Draeger tube. The total reduced sulfur concentration shall be calculated based on the field test results by multiplying the measured H₂S concentration by 1.2.
 - c. For laboratory analyses, the sample shall be a composite sample collected over a period of no less than 30 minutes and analyzed for the sulfur compounds identified in Part 21.
 - d. The Permit Holder shall record the date and results of all field tests, the calculated TRS concentration based on these field tests, and the date and results of the annual laboratory analyses in a District approved log. The annual average TRS concentration shall be calculated and recorded for each rolling 4-quarter period based on the TRS data recorded above.

VI. Permit Conditions

Condition # 818

**FOR: S-1 VASCO ROAD LANDFILL – WASTE DECOMPOSITION PROCESS WITH GAS COLLECTION SYSTEM; ABATED BY A-4 LANDFILL GAS FLARE;
S-12 VASCO ROAD LANDFILL – WASTE AND COVER MATERIAL DUMPING;
S-13 VASCO ROAD LANDFILL – EXCAVATING, BULLDOZING, AND COMPACTING ACTIVITIES**

13. The Heat Input to the A-4 Landfill Gas Flare shall not exceed 2880 million BTU per day and shall not exceed 1,051,200 million BTU during any consecutive 12-month period. In order to demonstrate compliance with this part, the Permit Holder shall calculate and record on a monthly basis the maximum daily and total monthly heat input to the flare based on the landfill gas flow rate recorded pursuant to Part 22g, the monthly methane concentration measurements conducted pursuant to Part 3b(ii), and a high heating value for methane of 1013 BTU/ft³ at 60 degrees F. (basis: Offsets, Cumulative Increase, and Regulation 2-1-301)
14. The Permit Holder shall comply with the following waste acceptance and disposal limits and shall obtain the appropriate New Source Review permit, if one of the following limits is exceeded:
 - a. Total amount of solid waste (as defined in Regulation 8-34-202) accepted at the landfill shall not exceed 2,518 tons in any day (except during temporary emergency situations approved by the Local Enforcement Agency). Vehicle traffic that is transporting incoming or outgoing solid waste or other materials shall not exceed 625 vehicles per day. (Basis: Regulation 2-1-301)
 - b. The total cumulative amount of all decomposable materials placed in the landfill shall not exceed 23.8 million tons. Exceedance of this cumulative tonnage limit is not a violation of the permit and does not trigger the requirement to obtain a New Source review permit, if the operator can, within 30 days of the date of discovery of the exceedance, provide documentation to the District demonstrating, in accordance with BAAQMD Regulation 2-1-234.3, that the limit should be higher. (Basis: Regulation 2-1-234.3)
 - c. The maximum design capacity of the landfill (total volume of all wastes and cover materials placed in the landfill, excluding final cover) shall not exceed 31.65 million cubic yards. (Basis: Regulation 2-1-301)

VI. Permit Conditions

Condition # 818

**FOR: S-1 VASCO ROAD LANDFILL – WASTE DECOMPOSITION PROCESS WITH GAS COLLECTION SYSTEM; ABATED BY A-4 LANDFILL GAS FLARE;
S-12 VASCO ROAD LANDFILL – WASTE AND COVER MATERIAL DUMPING;
S-13 VASCO ROAD LANDFILL – EXCAVATING, BULLDOZING, AND COMPACTING ACTIVITIES**

15. This facility is not subject to Regulation 8, Rule 40 because the landfill does not accept contaminated soil (soil containing more than 50 ppmw of volatile organic compounds, VOCs). The following types of materials may be accepted:
- a. Metal-laden soil (soil containing metals above naturally occurring background concentrations), VOC-laden soil (soil containing VOCs that is not “contaminated” soil), or other materials for which the Permit Holder has appropriate documentation demonstrating that either the organic content of the soil or the organic concentration above the soil is below the “contaminated” level (as defined in Regulation 8, Rule 40, Sections 205, 207, and 211).
 - b. Materials for which the Permit Holder has no documentation to prove that soil is not contaminated, but the source of the soil is known and there is no reason to suspect that the soil might contain organic compounds or metal compounds at other than naturally occurring background concentrations.
 - c. Materials which the Permit Holder plans to test in order to determine the VOC contamination level in the soil, provided that the material is sampled within 24 hours of receipt by this site and is handled as if the soil were contaminated until the Permit Holder receives the test results. The Permit Holder shall collect soil samples in accordance with Regulation 8-40-601. The organic content of the collected soil samples shall be determined in accordance with Regulation 8-40-602.
 - i. If these test results indicate that the soil is contaminated or if the soil was not sampled within 24 hours of receipt by the facility, the Permit Holder must continue to handle the soil in accordance with Regulation 8, Rule 40, until the soil has been removed from this site. For the purposes of Regulations 8-40-306.3-306.5, storing soil in a temporary stockpile or pit and co-mingling, blending, or mixing of soil lots are not considered treatment.
 - ii. If these test results indicate that the soil, as received at this site, has an organic content of 50 ppmw or less, then the soil may be considered to be not contaminated and need not be handled in accordance with Regulation 8, Rule 40 any longer.

(basis: Regulation 8-40-301)

VI. Permit Conditions

Condition # 818

**FOR: S-1 VASCO ROAD LANDFILL – WASTE DECOMPOSITION PROCESS WITH GAS COLLECTION SYSTEM; ABATED BY A-4 LANDFILL GAS FLARE;
S-12 VASCO ROAD LANDFILL – WASTE AND COVER MATERIAL DUMPING;
S-13 VASCO ROAD LANDFILL – EXCAVATING, BULLDOZING, AND COMPACTING ACTIVITIES**

16. The total amount of metal-laden and VOC-laden soil used as cover material shall not exceed 180,000 tons during any consecutive 12 month period. The metal concentrations of any metal-laden soil shall not exceed the following limits:

<u>Metals</u>	<u>Maximum Concentration (ppmw)</u>
Arsenic	130
Beryllium	75
Cadmium	100
Chromium VI	7
Copper	2500
Lead	1000
Mercury	20
Nickel	2000
Selenium	100
Zinc	5000

Parts a. and b. below identify the maximum usage rates and maximum allowed concentrations of toxic compounds that may be present in the two types of VOC-laden soil used that may be used as cover material at this site.

- a. For soil containing high concentrations of certain chlorinated compounds, the amount used as cover material shall not exceed 10,000 tons during any consecutive 12 month period. Soil shall be subject to this throughput limit if the soil contains chlorinated compounds in amounts exceeding any of the following concentrations:
- 0.05 ppmw of carbon tetrachloride,
 - 0.05 ppmw of chloroform,
 - 0.40 ppmw of 1,4 dichlorobenzene,
 - 0.05 ppmw of 1,2 dichloroethane,
 - 0.40 ppmw of tetrachloroethylene, or
 - 0.05 ppmw of vinyl chloride.

VI. Permit Conditions

Condition # 818

**FOR: S-1 VASCO ROAD LANDFILL – WASTE DECOMPOSITION PROCESS WITH GAS COLLECTION SYSTEM; ABATED BY A-4 LANDFILL GAS FLARE;
S-12 VASCO ROAD LANDFILL – WASTE AND COVER MATERIAL DUMPING;
S-13 VASCO ROAD LANDFILL – EXCAVATING, BULLDOZING, AND COMPACTING ACTIVITIES**

Under no circumstances shall the Permit Holder use soil for cover, which contains organic compounds in excess of the following concentrations:

- 0.50 ppmw of benzene,
- 0.50 ppmw of carbon tetrachloride,
- 6.00 ppmw of chloroform,
- 7.50 ppmw of 1,4 dichlorobenzene,
- 0.50 ppmw of 1,2 dichloroethane,
- 0.70 ppmw of tetrachloroethylene,
- 0.50 ppmw of trichloroethylene, or
- 0.20 ppmw of vinyl chloride.

- b. For soil containing low concentrations of certain chlorinated compounds, the amount used as cover material shall not exceed 170,000 tons during any consecutive 12 month period. Soil shall be subject to this throughput limit if the soil contains organic compounds in amounts less than or equal to all of the following concentrations:

- 0.50 ppmw of benzene,
- 0.05 ppmw of carbon tetrachloride,
- 0.05 ppmw of chloroform,
- 0.40 ppmw of 1,4 dichlorobenzene,
- 0.05 ppmw of 1,2 dichloroethane,
- 0.40 ppmw of tetrachloroethylene,
- 0.50 ppmw of trichloroethylene, and
- 0.05 ppmw of vinyl chloride.

(basis: Offsets and Regulations 2-5-302 and 8-2-301)

17. DELETED

VI. Permit Conditions

Condition # 818

**FOR: S-1 VASCO ROAD LANDFILL – WASTE DECOMPOSITION PROCESS WITH GAS COLLECTION SYSTEM; ABATED BY A-4 LANDFILL GAS FLARE;
S-12 VASCO ROAD LANDFILL – WASTE AND COVER MATERIAL DUMPING;
S-13 VASCO ROAD LANDFILL – EXCAVATING, BULLDOZING, AND COMPACTING ACTIVITIES**

18. In order to demonstrate compliance with Parts 15 and 16, the Permit Holder shall maintain the following records in an APCO approved log book.
- a. For any metal-laden or VOC-laden soil that will be used as daily or intermediate cover material, the Permit Holder shall record the following:
 - (i) soil lot number (or other means of tracking the soil on-site),
 - (ii) date and time the soil was received,
 - (iii) amount of soil received,
 - (iv) total VOC content measured by the waste generator, and
 - (v) concentrations in the soil of benzene, carbon tetrachloride, chloroform, 1,4 dichlorobenzene, 1,2 dichloroethane, tetrachloroethylene, trichloroethylene and vinyl chloride,
 - b. For any material subject to Part 15c:
 - (i) soil lot number,
 - (ii) date and time that the soil was resampled on-site,
 - (iii) total VOC concentration in the resampled soil.
 - c. For each soil lot number of metal-laden or VOC-laden soil received at the landfill, the owner/operator of S-1 shall record the following.
 - (i) date and time that any of the soil in the lot was used for cover material,
 - (ii) describe the location where the soil was placed,
 - (iii) specify whether the soil was used for daily or intermediate cover,
 - (iv) record, on a daily basis, the amount of soil placed as cover material,
 - (v) summarize, on a daily basis, the total amount of metal-laden and VOC-laden soil used for cover (if multiple soil lots were placed during any one day), and
 - (vi) summarize, on a monthly basis, the total amount of metal-laden and VOC-laden soil used for daily or intermediate cover.

All logs, sampling records, analytical results, and notification records shall be made available to District staff upon request and shall be kept on site for a minimum of 5 years from the date of entry. (basis: Offsets and Regulations 2-5-302 and 8-2-301)

VI. Permit Conditions

Condition # 818

**FOR: S-1 VASCO ROAD LANDFILL – WASTE DECOMPOSITION PROCESS WITH GAS COLLECTION SYSTEM; ABATED BY A-4 LANDFILL GAS FLARE;
S-12 VASCO ROAD LANDFILL – WASTE AND COVER MATERIAL DUMPING;
S-13 VASCO ROAD LANDFILL – EXCAVATING, BULLDOZING, AND COMPACTING ACTIVITIES**

19. Water and/or dust suppressants shall be applied to all unpaved roadways and active soil removal and fill areas associated with this landfill as necessary to prevent visible particulate emissions. Paved roadways at the facility shall be kept sufficiently clear of dirt and debris as necessary to prevent visible particulate emissions from vehicle traffic or wind. (basis: Regulations 2-1-403, 6-1-301, and 6-1-305)

20. In order, to demonstrate compliance with Parts 5 and 8-13 and Regulation 8, Rule 34, Sections 301.3 and 412, the Permit Holder shall ensure that a District approved source test is conducted annually on the Landfill Gas Flare (A-4). The annual source test shall determine the following:
 - a. landfill gas flow rate to the flare (dry basis);
 - b. concentrations (dry basis) of carbon dioxide (CO₂), nitrogen (N₂), oxygen (O₂), methane (CH₄), and total non-methane organic compounds (NMOC) in the landfill gas;
 - c. stack gas flow rate from the flare (dry basis);
 - d. concentrations (dry basis) of NO_x, CO, CH₄, NMOC, and O₂ in the flare stack gas;
 - e. the NMOC destruction efficiency achieved by the flare; and
 - f. the average combustion temperature in the flare during the test period.Each annual source test shall be conducted no later than 12 months after the previous source test. The Source Test Section of the District shall be contacted to obtain approval of the source test procedures at least 14 days in advance of each source test. The Source Test Section shall be notified of the scheduled test date at least 7 days in advance of each source test. The source test report shall be submitted to the Compliance and Enforcement Division within 45 days of the test date. (basis: RACT, Offsets, Cumulative Increase and Regulations 2-5-301, 2-5-302, 8-34-301.3 and 8-34-412)

VI. Permit Conditions

Condition # 818

**FOR: S-1 VASCO ROAD LANDFILL – WASTE DECOMPOSITION PROCESS WITH GAS COLLECTION SYSTEM; ABATED BY A-4 LANDFILL GAS FLARE;
S-12 VASCO ROAD LANDFILL – WASTE AND COVER MATERIAL DUMPING;
S-13 VASCO ROAD LANDFILL – EXCAVATING, BULLDOZING, AND COMPACTING ACTIVITIES**

21. To demonstrate compliance with Part 12 above and Regulations 8-34-412 and 9-1-302, the Permit Holder shall conduct a characterization of the landfill gas concurrent with the annual source test required by Part 20 above. The landfill gas sample shall be drawn from the main landfill gas header. In addition to the compounds listed in part 20b, the landfill gas shall be analyzed for all the organic and sulfur compounds listed below. All concentrations shall be reported on a dry basis. The test report shall be submitted to the Compliance and Enforcement Division within 45 days of the test date.

(basis: AB-2588 Air Toxic Hot Spots Act, RACT for SO₂, and Regulations 2-5-302, 8-34-412, and 9-1-302)

Organic Compounds

acrylonitrile
benzene
benzyl chloride
carbon tetrachloride
chlorobenzene
chloroethane
chloroform
1,1 dichloroethane
1,1 dichlorethene
1,2 dichloroethane
1,4 dichlorobenzene
ethylbenzene

Organic Compounds

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

Sulfur Compounds

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

VI. Permit Conditions

Condition # 818

**FOR: S-1 VASCO ROAD LANDFILL – WASTE DECOMPOSITION PROCESS WITH GAS COLLECTION SYSTEM; ABATED BY A-4 LANDFILL GAS FLARE;
S-12 VASCO ROAD LANDFILL – WASTE AND COVER MATERIAL DUMPING;
S-13 VASCO ROAD LANDFILL – EXCAVATING, BULLDOZING, AND COMPACTING ACTIVITIES**

22. The Permit Holder shall maintain the following records in an APCO approved log book.
- a. Record the total amount of solid waste received at S-1 and the total number of vehicles transporting solid waste or other materials to and from the site on a daily basis. Summarize these daily waste acceptance and vehicle traffic records for each calendar month.
 - b. For each area or cell that is not controlled by a landfill gas collection system, maintain a record of the date that waste was initially placed in the area or cell. Record the cumulative amount of waste placed in each uncontrolled area or cell on a monthly basis.
 - c. If the Permit Holder plans to exclude an uncontrolled area or cell from the collection system requirement, the Permit Holder shall also record the types and amounts of all non-decomposable waste placed in the area and the percentage (if any) of decomposable waste placed in the area.
 - d. Record of the dates, locations, and frequency per day of all watering activities on unpaved roads or active soil or fill areas. Record the dates, locations, and type of any dust suppressant applications. Record the dates and description of all paved roadway cleaning activities. Written documentation of standard watering procedures combined with completion of daily check lists may satisfy these daily record keeping requirements. All records shall be summarized on monthly basis.
 - e. Record the initial operation date for each new landfill gas well and collector.
 - f. Maintain an accurate map of the landfill, which indicates the locations of all refuse boundaries and the locations of all wells and collectors (using unique identifiers) that are required to be operating continuously pursuant to part 2a. Any areas containing only non-decomposable waste shall be clearly identified. This map shall be updated at least once a year to indicate changes in refuse boundaries and to include any newly installed wells and collectors.
 - g. Record the operating times and the landfill gas flow rate to the A-4 Landfill Gas Flare on a daily basis. Summarize these records on a monthly basis. Calculate and record the heat input to A-4, pursuant to Part 13. Summarize the heat input rate to the A-4 Landfill Gas Flare for each consecutive rolling 12-month period.

VI. Permit Conditions

Condition # 818

**FOR: S-1 VASCO ROAD LANDFILL – WASTE DECOMPOSITION PROCESS WITH GAS COLLECTION SYSTEM; ABATED BY A-4 LANDFILL GAS FLARE;
S-12 VASCO ROAD LANDFILL – WASTE AND COVER MATERIAL DUMPING;
S-13 VASCO ROAD LANDFILL – EXCAVATING, BULLDOZING, AND COMPACTING ACTIVITIES**

- h. Maintain records of all test dates and test results performed to maintain compliance Parts 3, 8-13, 15-16, or 20-21 or to maintain compliance with any applicable rule or regulation.

All records shall be maintained on site or shall be made readily available to District staff upon request for a period of at least 5 years from the date of entry. These record keeping requirements do not replace the record keeping requirements contained in any applicable rules or regulations. (basis: RACT, Offsets, Cumulative Increase, Regulations 2-1-301, 2-5-301, 2-5-302, 2-6-501, 6-1-301, 6-1-305, 8-2-301, 8-34-301, 8-34-304, and 8-34-501)

23. The annual report required by BAAQMD Regulation 8-34-411 shall be submitted in two semi-annual increments. The reporting period for the first increment of the Regulation 8-34-411 annual report that is submitted subsequent to the issuance of the MFR Permit for this site shall be from December 1, 2003 through June 30, 2004. This first increment report shall be submitted by July 31, 2003. The reporting periods and report submittal due dates for all subsequent increments of the Regulation 8-34-411 report and for all semi-annual increments of MSW Landfill NESHAP report (required pursuant to 40 CFR Part 63.1980(a)) shall be synchronized with the reporting periods and report submittal due dates for the semi-annual MFR Permit monitoring reports that are required by Section I.F. of the MFR Permit for this site. A single report may be submitted to satisfy the requirements of Section I.F, Regulation 8-34-411, and 40 CFR Part 63.1980(a), provided that all items required by each applicable reporting requirement are included in the single report.
(basis: Regulation 8-34-411 and 40 CFR Part 63.1980(a))

VI. Permit Conditions

Condition # 7523

FOR: S-7 NON-RETAIL GASOLINE DISPENSING FACILITY G#9551

1. Pursuant to BAAQMD Toxic Section Policy, this facility's annual gasoline throughput shall not exceed 400,000 gallons in any consecutive 12 month period.
(Basis: Regulation 2-5-302)

Condition # 25515

FOR: S-14 GREEN WASTE PROCESSING OPERATIONS; ABATED BY A-14 WATER SPRAY SYSTEMS

1. The owner/operator shall not process more than 16,000 tons of green waste in any consecutive 12-month period.
(Basis: Cumulative Increase)
2. The owner/operator of S-14 Green Waste Grinder shall use A-14 Water Spray as necessary to prevent dust emissions from the grinder from violating any applicable provisions of District Regulation 6, Rule 1, Section 301.
(Basis: Cumulative Increase and Regulation 6-1-301)
3. To determine compliance with the above conditions, the owner/operator shall maintain the following records and shall provide all of the data necessary to evaluate compliance with the above conditions.
 - a. Daily hours of operation.
 - b. Hours of operation and amount of wood processed shall be totaled on rolling consecutive 12-month basis.

The owner/operator shall record all records in a District-approved log. The owner/operator shall retain the records with the equipment for two years, from the date of entry, and shall make them available for inspection by District staff upon request. These record-keeping requirements shall not replace the record-keeping requirements contained in any applicable District Regulations.
(Basis: Cumulative Increase and Regulation 1-441)

VI. Permit Conditions

Condition # 25516

**FOR: S-15 WOOD WASTE PROCESSING OPERATIONS; ABATED BY
A-15 WATER SPRAY SYSTEMS**

1. The owner/operator shall not process more than 5,000 tons of wood waste in any consecutive 12-month period.
(Basis: Cumulative Increase)
2. The owner/operator of S-15 Wood Waste Grinder shall use A-15 Water Spray as necessary to prevent dust emissions from the grinder from violating any applicable provisions of District Regulation 6, Rule 1, Section 301.
(Basis: Cumulative Increase and Regulation 6-1-301)
3. To determine compliance with the above conditions, the owner/operator shall maintain the following records and shall provide all of the data necessary to evaluate compliance with the above conditions.
 - a. Daily hours of operation.
 - b. Hours of operation and amount of wood processed shall be totaled on rolling consecutive 12-month basis.The owner/operator shall record all records in a District-approved log. The owner/operator shall retain the records with the equipment for two years, from the date of entry, and shall make them available for inspection by District staff upon request. These record-keeping requirements shall not replace the record-keeping requirements contained in any applicable District Regulations.
(Basis: Cumulative Increase and Regulation 1-441)

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 conflict with any requirement in Section I-VI, the preceding sections take precedence over Section VII.

Table VII – A
Applicable Limits and Compliance Monitoring Requirements
S-1 VASCO ROAD LANDFILL – WASTE DECOMPOSITION PROCESS WITH GAS
COLLECTION SYSTEM; ABATED BY A-4 LANDFILL GAS FLARE;
S-12 VASCO ROAD LANDFILL – WASTE AND COVER MATERIAL DUMPING;
S-13 VASCO ROAD LANDFILL – EXCAVATING, BULLDOZING, AND COMPACTING
ACTIVITIES

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
Collection System Installation Dates	BAAQMD 8-34-304.1	Y		For Inactive/Closed Areas: collection system components must be installed and operating by 2 years + 60 days after initial waste placement	BAAQMD 8-34-501.7 and 501.8 and BAAQMD Condition # 818, Parts 22b-c and 22e-g	P/E	Records

VII. Applicable Limits and Compliance Monitoring Requirements

Table VII – A
Applicable Limits and Compliance Monitoring Requirements
S-1 VASCO ROAD LANDFILL – WASTE DECOMPOSITION PROCESS WITH GAS
COLLECTION SYSTEM; ABATED BY A-4 LANDFILL GAS FLARE;
S-12 VASCO ROAD LANDFILL – WASTE AND COVER MATERIAL DUMPING;
S-13 VASCO ROAD LANDFILL – EXCAVATING, BULLDOZING, AND COMPACTING
ACTIVITIES

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
Collection System Installation Dates	BAAQMD 8-34-304.2	Y		For Active Areas: Collection system components must be installed and operating by 5 years + 60 days after initial waste placement	BAAQMD 8-34-501.7 and 501.8 and BAAQMD Condition # 818, Parts 22a-c and 22e-g	P/E	Records
Collection System Installation Dates	BAAQMD 8-34-304.3	Y		For Any Uncontrolled Areas or Cells: collection system components must be installed and operating within 60 days after the uncontrolled area or cell accumulates 1,000,000 tons of decomposable waste	BAAQMD 8-34-501.7 and 501.8 and BAAQMD Condition # 818, Parts 22a-c and 22e-g	P/E	Records
Gas Flow	BAAQMD 8-34-301 and 301.1	Y		Landfill gas collection system shall operate continuously and all collected gases shall be vented to a properly operating control system	BAAQMD 8-34-501.10 and 508	C	Gas Flow Meter and Recorder (every 15 minutes)

VII. Applicable Limits and Compliance Monitoring Requirements

Table VII – A
Applicable Limits and Compliance Monitoring Requirements
S-1 VASCO ROAD LANDFILL – WASTE DECOMPOSITION PROCESS WITH GAS
COLLECTION SYSTEM; ABATED BY A-4 LANDFILL GAS FLARE;
S-12 VASCO ROAD LANDFILL – WASTE AND COVER MATERIAL DUMPING;
S-13 VASCO ROAD LANDFILL – EXCAVATING, BULLDOZING, AND COMPACTING
ACTIVITIES

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
Gas Flow	BAAQMD Condition # 818, Parts 1-3	Y		Landfill gas collection system shall operate continuously and all collected gases shall be vented to a properly operating control system; Except That Flare A-4 May Operate Less Than Continuously If: LFG Flow to Energy Plant is > 1200 scfm AND Remaining LFG Flow Available for A-4 is < 800 scfm (< 24 MM BTU/hour)	BAAQMD 8-34-404, 8-34-501.1, 8-34-501.2, 8-34-501.5, 8-34-501.10, 8-34-508, and BAAQMD Condition # 818, Part 22g	P/D	Records of Landfill Gas Flow Rates, Collection and Control Systems Downtime, and Collection System Components
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
Periods of Inoperation for Parametric Monitors	BAAQMD 1-523.2	Y		≤ 15 consecutive days per incident and ≤ 30 calendar days per 12-month period	BAAQMD 1-523.4	P/D	Operating Records for All Parametric Monitors

VII. Applicable Limits and Compliance Monitoring Requirements

Table VII – A
Applicable Limits and Compliance Monitoring Requirements
S-1 VASCO ROAD LANDFILL – WASTE DECOMPOSITION PROCESS WITH GAS
COLLECTION SYSTEM; ABATED BY A-4 LANDFILL GAS FLARE;
S-12 VASCO ROAD LANDFILL – WASTE AND COVER MATERIAL DUMPING;
S-13 VASCO ROAD LANDFILL – EXCAVATING, BULLDOZING, AND COMPACTING
ACTIVITIES

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
Continuous Monitors	40 CFR 60.13(e)	Y		Requires Continuous Operation except for breakdowns, repairs, calibration, and required span adjustments	40 CFR 60.7(b)	P/D	Operating Records for All Continuous Monitors
Wellhead Pressure	BAAQMD 8-34-305.1	Y		< 0 psig	BAAQMD 8-34-414, 501.9 and 505.1	P/M	Monthly Inspection and Records
Temperature of Gas at Wellhead	BAAQMD 8-34-305.2	Y		< 55 °C (< 131 °F), except for components identified in Condition # 818, Part 3b(i)	BAAQMD 8-34-414, 501.9 and 505.2	P/M	Monthly Inspection and Records
Temperature of Gas at Specified Wellheads	BAAQMD Condition # 818, Part 3b(i)	Y		≤ 140 °F	BAAQMD 8-34-414, 501.9 and 505.2	P/M	Monthly Inspection and Records
Gas Concentrations in LFG at Wellhead	BAAQMD 8-34-305.3 or 305.4	Y		N ₂ < 20% (by volume, dry basis) OR O ₂ < 5% (by volume, dry basis), except for components identified in Condition # 818, Part 3b(ii)	BAAQMD 8-34-414, 501.9 and 505.3 or 505.4	P/M	Monthly Inspection and Records

VII. Applicable Limits and Compliance Monitoring Requirements

Table VII – A
Applicable Limits and Compliance Monitoring Requirements
S-1 VASCO ROAD LANDFILL – WASTE DECOMPOSITION PROCESS WITH GAS
COLLECTION SYSTEM; ABATED BY A-4 LANDFILL GAS FLARE;
S-12 VASCO ROAD LANDFILL – WASTE AND COVER MATERIAL DUMPING;
S-13 VASCO ROAD LANDFILL – EXCAVATING, BULLDOZING, AND COMPACTING
ACTIVITIES

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
Gas Concentrations in LFG at Header	BAAQMD Condition # 818, Part 3b(ii)	Y		O ₂ ≤ 5% (by volume, dry basis) and CH ₄ ≥ 35% (by volume, dry basis)	BAAQMD 8-34-414 and 8-34-501.4 and BAAQMD Condition # 818, Part 3b(ii)	P/M	Monthly Inspection and Records
Well Shutdown Limits	BAAQMD 8-34-116.2	Y		≤ 5 wells at a time or ≤ 10% of total collection system, whichever is less	BAAQMD 8-34-116.5 and 501.1	P/D	Records
Well Shutdown Limits	BAAQMD 8-34-116.3	Y		≤ 24 hours per well	BAAQMD 8-34-116.5 and 501.1	P/D	Records
Well Shutdown Limits	BAAQMD 8-34-117.4	Y		≤ 5 wells at a time or ≤ 10% of total collection system, whichever is less	BAAQMD 8-34-117.6 and 501.1	P/D	Records
Well Shutdown Limits	BAAQMD 8-34-117.5	Y		≤ 24 hours per well	BAAQMD 8-34-117.6 and 501.1	P/D	Records

VII. Applicable Limits and Compliance Monitoring Requirements

Table VII – A
Applicable Limits and Compliance Monitoring Requirements
S-1 VASCO ROAD LANDFILL – WASTE DECOMPOSITION PROCESS WITH GAS
COLLECTION SYSTEM; ABATED BY A-4 LANDFILL GAS FLARE;
S-12 VASCO ROAD LANDFILL – WASTE AND COVER MATERIAL DUMPING;
S-13 VASCO ROAD LANDFILL – EXCAVATING, BULLDOZING, AND COMPACTING
ACTIVITIES

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
TOC (Total Organic Compounds Plus Methane)	BAAQMD 8-34-301.2	Y		Component Leak Limit: ≤ 1000 ppmv as methane	BAAQMD 8-34-501.6 and 503 and BAAQMD Condition # 818, Part 3b(iii)	P/Q	Quarterly Inspection of collection and control system components with OVA and Records
TOC	BAAQMD 8-34-303	Y		Surface Leak Limit: ≤ 500 ppmv as methane at 2 inches above surface	BAAQMD 8-34-415, 416, 501.6, 506 and 510 and BAAQMD Condition # 818, Part 3b(iii)	P/M, Q, and E	Monthly Visual Inspection of Cover, Quarterly Inspection with OVA of Surface, Various Reinspec- tion Times for Leaking Areas, and Records

VII. Applicable Limits and Compliance Monitoring Requirements

Table VII – A
Applicable Limits and Compliance Monitoring Requirements
S-1 VASCO ROAD LANDFILL – WASTE DECOMPOSITION PROCESS WITH GAS
COLLECTION SYSTEM; ABATED BY A-4 LANDFILL GAS FLARE;
S-12 VASCO ROAD LANDFILL – WASTE AND COVER MATERIAL DUMPING;
S-13 VASCO ROAD LANDFILL – EXCAVATING, BULLDOZING, AND COMPACTING
ACTIVITIES

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
Non-Methane Organic Compounds (NMOC)	BAAQMD 8-34-301.3	Y		NMOC Destruction Efficiency: ≥ 98% removal by weight OR NMOC Outlet Concentration: < 30 ppmv, dry basis @ 3% O ₂ , expressed as methane (applies to flare only)	BAAQMD 8-34-412 and 8-34-501.4 and BAAQMD Condition # 818, Part 20	P/A	Annual Source Tests and Records
Temperature of Combustion Zone (CT)	BAAQMD Condition # 818, Part 5	Y		Flare CT ≥ 1402 °F, averaged over any 3-hour period	BAAQMD 8-34-501.3, 8-34-507, and BAAQMD Condition # 818, Part 4	C	Temperature Sensor and Recorder (continuous)
Opacity	BAAQMD 6-1-301 and SIP 6-301	Y		≤ Ringelmann No. 1 for 3 minutes/hour (applies to active landfill operations)	BAAQMD Condition # 818, Part 22d	P/E, M	Records of all site watering and road cleaning events
Opacity	BAAQMD 6-1-301 and SIP 6-301	Y		≤ Ringelmann No. 1 for 3 minutes/hour (applies to flare)	None	N	N/A
TSP	BAAQMD 6-1-310.1 and SIP 6-310	Y		≤ 0.15 grains/dscf (applies to flare only)	None	N	N/A

VII. Applicable Limits and Compliance Monitoring Requirements

Table VII – A
Applicable Limits and Compliance Monitoring Requirements
S-1 VASCO ROAD LANDFILL – WASTE DECOMPOSITION PROCESS WITH GAS
COLLECTION SYSTEM; ABATED BY A-4 LANDFILL GAS FLARE;
S-12 VASCO ROAD LANDFILL – WASTE AND COVER MATERIAL DUMPING;
S-13 VASCO ROAD LANDFILL – EXCAVATING, BULLDOZING, AND COMPACTING
ACTIVITIES

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
NO _x	BAAQMD Condition # 818, Part 8	Y		Flare Outlet Concentration: ≤ 11 ppmv of NO _x @ 15% O ₂ , dry basis OR Flare Outlet Emission Rate: ≤ 0.049 pounds of NO ₂ per MM BTU	BAAQMD Condition # 818, Part 20	P/A	Annual Source Test
CO	BAAQMD Condition # 818, Part 10	Y		Flare Outlet Concentration: ≤ 73 ppmv of CO @ 15% O ₂ , dry basis OR Flare Outlet Emission Rate: ≤ 0.19 pounds of CO per MM BTU	BAAQMD Condition # 818, Part 20	P/A	Annual Source Test
SO ₂	BAAQMD 9-1-301	Y		Property Line Ground Level Limits: ≤ 0.5 ppm for 3 minutes and ≤ 0.25 ppm for 60 min. and ≤ 0.05 ppm for 24 hours (applies to flare only)	None	N	N/A
SO ₂	BAAQMD Regulation 9-1-302	Y		≤ 300 ppm (dry basis) (applies to flare only)	BAAQMD Condition # 818, Parts 12, 21	P/Q	Sulfur analysis of landfill gas
Sulfur Content in Landfill Gas	BAAQMD Condition # 818, Part 12	Y		Annual Average TRS ≤ 320 ppmv, expressed as H ₂ S (dry basis)	BAAQMD Condition # 818, Parts 12, 21	P/Q	Sulfur analysis of landfill gas

VII. Applicable Limits and Compliance Monitoring Requirements

Table VII – A
Applicable Limits and Compliance Monitoring Requirements
S-1 VASCO ROAD LANDFILL – WASTE DECOMPOSITION PROCESS WITH GAS
COLLECTION SYSTEM; ABATED BY A-4 LANDFILL GAS FLARE;
S-12 VASCO ROAD LANDFILL – WASTE AND COVER MATERIAL DUMPING;
S-13 VASCO ROAD LANDFILL – EXCAVATING, BULLDOZING, AND COMPACTING
ACTIVITIES

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
H ₂ S	BAAQMD 9-2-301	N		Property Line Ground Level Limits: ≤ 0.06 ppm, averaged over 3 minutes and ≤ 0.03 ppm, averaged over 60 minutes	None	N	NA
Heat Input	BAAQMD Condition # 818, Part 13	Y		≤ 2880 MM BTU per day and $\leq 1,051,200$ MM BTU per 12-month period	BAAQMD 8-34-501.10 and 508 and BAAQMD Condition # 818, Parts 3b(ii), 13 and 22g	C, P/D, and P/M	Gas Flow Rate Meter, LFG Methane Analyses, Calculations and Records
Vehicle Traffic	BAAQMD Condition # 818, Part 14a	Y		≤ 625 vehicles per day	BAAQMD Condition # 818, Part 22a	P/D	Records
Amount of Material Accepted	BAAQMD Condition # 818, Part 14	Y		≤ 2518 tons per day of solid waste and $\leq 23,800,000$ tons (cumulative) of decomposable materials and $\leq 31,650,000$ yd ³ (cumulative) amount of all wastes and cover materials	BAAQMD Condition # 818, Part 22a	P/D	Records

VII. Applicable Limits and Compliance Monitoring Requirements

Table VII – A
Applicable Limits and Compliance Monitoring Requirements
S-1 VASCO ROAD LANDFILL – WASTE DECOMPOSITION PROCESS WITH GAS
COLLECTION SYSTEM; ABATED BY A-4 LANDFILL GAS FLARE;
S-12 VASCO ROAD LANDFILL – WASTE AND COVER MATERIAL DUMPING;
S-13 VASCO ROAD LANDFILL – EXCAVATING, BULLDOZING, AND COMPACTING
ACTIVITIES

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
Total Carbon Emissions	BAAQMD 8-2-301	Y		≤ 15 pounds per day or ≤ 300 ppmv, dry basis (applies only to aeration of or use as cover soil of soil containing ≤ 50 ppmw of volatile organic compounds)	BAAQMD Condition # 818, Part 18	P/D	Records
Organic Content of Soil	BAAQMD Condition # 818, Part 15	Y		≤ 50 ppmw of VOC in soil or ≤ 50 ppmv of VOC, expressed as C1, measured 3 inches above soil	BAAQMD Condition # 818, Part 18	P/D	Records
Amount of VOC Laden Soil Accepted	BAAQMD Condition # 818, Part 16a-b	Y		≤ 10,000 tons per consecutive 12-month period for soil with high chlorinated compound concentration and ≤ 170,000 tons per consecutive 12-month period for other VOC laden soil	BAAQMD Condition # 818, Part 18	P/E	Records

VII. Applicable Limits and Compliance Monitoring Requirements

Table VII – A
Applicable Limits and Compliance Monitoring Requirements
S-1 VASCO ROAD LANDFILL – WASTE DECOMPOSITION PROCESS WITH GAS
COLLECTION SYSTEM; ABATED BY A-4 LANDFILL GAS FLARE;
S-12 VASCO ROAD LANDFILL – WASTE AND COVER MATERIAL DUMPING;
S-13 VASCO ROAD LANDFILL – EXCAVATING, BULLDOZING, AND COMPACTING
ACTIVITIES

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
TAC Concentration Limits for VOC-laden Soil	BAAQMD Condition # 818, Part 16a-b	N		Compound ≤ ppmw Benzene 0.50 Carbon Tetrachloride 0.50 Chloroform 6.00 1,4 Dichlorobenzene 7.50 1,2 Dichloroethane 0.50 Tetrachloroethylene 0.70 Trichloroethylene 0.50 Vinyl Chloride 0.20	BAAQMD Condition # 818, Part 18	P/E	Records
Amount of Metal Laden Soil Accepted	BAAQMD Condition # 818, Part 16	N		≤ 180,000 tons per consecutive 12-month period	BAAQMD Condition # 818, Part 18	P/E	Records
TAC Concentration Limits for Metal-Laden Soil	BAAQMD Condition # 818, Part 16	N		Arsenic ≤ 130 ppmw Beryllium ≤ 75 ppmw Cadmium ≤ 100 ppmw Chromium VI ≤ 7 ppmw Copper ≤ 2500 ppmw Lead ≤ 1000 ppmw Mercury ≤ 20 ppmw Nickel ≤ 2000 ppmw Selenium ≤ 100 ppmw Zinc ≤ 5000 ppmw	BAAQMD Condition # 818, Part 18	P/E	Records
Startup Shutdown or Mal-function Procedures	40 CFR 63.6(e)	Y		Minimize Emissions by Implementing SSM Plan	40 CFR 63.1980(a-b)	P/E	Records (all occurrences, duration of each, corrective actions)

VII. Applicable Limits and Compliance Monitoring Requirements

Table VII – A
Applicable Limits and Compliance Monitoring Requirements
S-1 VASCO ROAD LANDFILL – WASTE DECOMPOSITION PROCESS WITH GAS
COLLECTION SYSTEM; ABATED BY A-4 LANDFILL GAS FLARE;
S-12 VASCO ROAD LANDFILL – WASTE AND COVER MATERIAL DUMPING;
S-13 VASCO ROAD LANDFILL – EXCAVATING, BULLDOZING, AND COMPACTING
ACTIVITIES

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
Trackout onto Paved Roadways	BAAQMD 6-6-301	N	7/1/19	Trackout causing visible emissions: < 25 linear feet for no more than 4 hours; and Trackout remaining on adjacent paved public roadway or paved shoulder: ≤ 1 quart at end of each workday	BAAQMD 6-6-501	P/D	Records
Visible Emissions from Cleaning Trackout	BAAQMD 6-6-302	N	7/1/19	≤ Ringelmann No. 1 Limitation for no more than 3 minutes in any 60-minute period	BAAQMD 6-6-501	P/D	Records

VII. Applicable Limits and Compliance Monitoring Requirements

Table VII – B
Applicable Limits and Compliance Monitoring Requirements
S-7 NON-RETAIL GASOLINE DISPENSING FACILITY # 9551

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
Gasoline Through-put	BAAQMD Condition # 7523	N		≤ 400,000 gallons per 12-month period	BAAQMD 8-7-503.1	P/A	Records
Exempt Through-put	BAAQMD 8-7-114	Y		≤ 1000 gallons per facility for tank integrity leak checking	BAAQMD 8-7-501 and 8-7-503.2	P/E	Records
Organic Compounds	BAAQMD 8-7-301.6	Y		All Phase I Equipment (except components with allowable leak rates) shall be leak free (≤3 drops/minute) and vapor tight	CARB EO G-70-116-F, paragraph 19 and BAAQMD 8-7-301.13 and 8-7-407	P/A	Annual Check for Vapor Tightness and Proper Operation of Vapor Recovery System
Organic Compounds	BAAQMD 8-7-302.5	Y		All Phase II Equipment (except components with allowable leak rates or at the nozzle/fill-pipe interface) Shall Be: leak free (≤3 drops/minute) and vapor tight	CARB EO G-70-116-F, paragraph 19 and BAAQMD 8-7-301.13 and 8-7-407	P/A	Annual Check for Vapor Tightness and Proper Operation of Vapor Recovery System
Organic Compounds	SIP 8-5-303.2	Y		Tank Pressure Vacuum Valve Shall Be: Gas Tight or ≤ 500 ppmv (expressed as methane) above background for PRVs (as defined in SIP 8-5-206)	SIP 8-5-403 and 8-5-503	P/E	Semi-Annual Inspection with Portable Hydrocarbon Detector

VII. Applicable Limits and Compliance Monitoring Requirements

Table VII – B
Applicable Limits and Compliance Monitoring Requirements
S-7 NON-RETAIL GASOLINE DISPENSING FACILITY # 9551

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
Organic Compounds	CARB EO G-70-116-F, paragraph 10	N		Any Emergency Vent or Manway Shall Be: leak free	CARB EO G-70-116-F, paragraph 19 and BAAQMD 8-7-301.13 and 8-7-407	P/A	Annual Check for Vapor Tightness and Proper Operation of Vapor Recovery System
Defective Component Repair/Replacement Time Limit	BAAQMD 8-7-302.4	Y		≤ 7 days	BAAQMD 8-7-503.2	P/E	Records
Liquid Removal Rate	BAAQMD 8-7-302.8	Y		≥ 5 ml per gallon dispensed, when dispensing rate > 5 gallons/minute	CARB EO G-70-116-F	P/E	CARB Certification Procedures
Liquid Retain from Nozzles	BAAQMD 8-7-302.12	Y		≤ 100 ml per 1000 gallons dispensed	CARB EO G-70-116-F	P/E	CARB Certification Procedures
Nozzle Spitting	BAAQMD 8-7-302.13	Y		≤ 1.0 ml per nozzle per test	CARB EO G-70-116-F	P/E	CARB Certification Procedures

VII. Applicable Limits and Compliance Monitoring Requirements

Table VII – B
Applicable Limits and Compliance Monitoring Requirements
S-7 NON-RETAIL GASOLINE DISPENSING FACILITY # 9551

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
Pressure-Vacuum Valve Settings	BAAQMD 8-7-316 and CARB EO G-70-116-F, paragraph 14	Y		Pressure Setting: ≥ 2.5 inches of water, gauge	CARB EO G-70-116-F	P/E	CARB Certification Procedures
Pressure-Vacuum Valve Settings	SIP 8-5-303.1	Y		Pressure Setting: $\geq 10\%$ of maximum working pressure or ≥ 0.5 psig	SIP 8-5-403 and CARB EO G-70-116-F	P/E	Semi-Annual Inspection and CARB Certification Procedures
Disconnection Liquid Leaks	CARB EO G-70-116-F, paragraph 12	N		≤ 10 ml per disconnect, averaged over 3 disconnect operations	CARB EO G-70-116-F, paragraph 19 and BAAQMD 8-7-301.13 and 8-7-407	P/A	Annual Check for Vapor Tightness and Proper Operation of Vapor Recovery System

VII. Applicable Limits and Compliance Monitoring Requirements

Table VII – C
Applicable Limits and Compliance Monitoring Requirements
S-14 GREEN WASTE PROCESSING OPERATION
A-14 WATER SPRAYER

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
Waste Processing Limit	BAAQMD Condition # 25515 Part 1	Y		≤ 16,000 tons of green waste per 12-month period	BAAQMD Condition # 25515 Part 1	P/A	Records
Opacity	BAAQMD 6-1-301 and SIP 6-301	Y		< Ringelmann 1.0 for 3 minutes in any hour	BAAQMD Condition # 25515, Part 2	P/E	Observation of Source in Operation
TSP	BAAQMD 6-1-311.1 and SIP 6-311	Y		$E = 4.10(P)^{0.67}$ where: E = Allowable Emission Rate (lb/hr); and P = Process Weight Rate (lb/hr) Maximum Allowable Emission Rate = 40 lb/hr For P > 55,116 lb/hr	None	N	NA
Total Carbon Emissions	BAAQMD 8-2-301	Y		≤ 15 pounds/day or ≤ 300 ppm, dry basis	None	N	NA

VII. Applicable Limits and Compliance Monitoring Requirements

Table VII – D
Applicable Limits and Compliance Monitoring Requirements
S-15 WOOD WASTE PROCESSING OPERATION
A-15 – WATER SPRAYER

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
Waste Processing Limit	BAAQMD Condition # 25516 Part 1	Y		≤ 5,000 tons of wood waste per 12-month period	BAAQMD Condition # 25516 Part 1	P/A	Records
Opacity	BAAQMD 6-1-301 and SIP 6-301	Y		< Ringelmann 1.0 for 3 minutes in any hour	BAAQMD Condition # 25516, Part 2	P/E	Observation of Source in Operation
TSP	BAAQMD 6-1-311.1 and SIP 6-311	Y		$E = 4.10(P)^{0.67}$ where: E = Allowable Emission Rate (lb/hr); and P = Process Weight Rate (lb/hr) Maximum Allowable Emission Rate = 40 lb/hr For P > 55,116 lb/hr	None	N	NA

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 included in Section VII, Applicable 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 Reference Method 9, Visual Determination of the Opacity of Emissions from Stationary Sources
BAAQMD 6-1-310 and SIP 6-310	Total Suspended Particulate (TSP) Concentration Limits	Manual of Procedures, Volume IV, ST-15, Particulates Sampling; or For combustion equipment: US EPA Reference Method 5, Determination of Particulate Matter Emissions from Stationary Sources
BAAQMD 8-2-301 and SIP 8-2-301	Total Organic Compound (TOC) Mass and Concentration Limitations for Miscellaneous Operations	Manual of Procedures, Volume IV, ST-7, Organic Compounds; or US EPA Reference Method 25, Determination of Total Gaseous Nonmethane Organic Emissions as Carbon, or US EPA Reference Method 25A, Determination of Total Gaseous Organic Concentration Using a Flame Ionization Analyzer
SIP 8-5-303.2	Gas Tight Requirement for PRV	US EPA Reference Method 21, Determination of Volatile Organic Compound Leaks
BAAQMD 8-7-301.6	Vapor Tightness Requirement	Manual of Procedures, Volume IV, ST-38, Gasoline Dispensing Facility Static Pressure Integrity Test Aboveground Vaulted Tanks or ARB Test Method TP 201.3B Determination of Static Pressure Performance of Vapor Recovery Systems of Dispensing Facilities with Above-Ground Storage Tanks
BAAQMD 8-7-302.5	Vapor Tightness Requirement	Manual of Procedures, Volume IV, ST-38, Gasoline Dispensing Facility Static Pressure Integrity Test Aboveground Vaulted Tanks or ARB Test Method TP 201.3B Determination of Static Pressure Performance of Vapor Recovery Systems of Dispensing Facilities with Above-Ground Storage Tanks
BAAQMD 8-7-302.8	Liquid Removal Rate	Manual of Procedures, Volume IV, ST-37, Gasoline Dispensing Facility Liquid Removal Devices or ARB Test Method TP-201.6 Determination of Liquid Removal of Vapor Recovery Systems of Dispensing Facilities

VIII. Test Methods

Table VIII
Test Methods

Applicable Requirement	Description of Requirement	Acceptable Test Methods
BAAQMD 8-7-302.12	Liquid Retain from Nozzles	CARB Test Procedure TP-201.2E; or CARB determined equivalent
BAAQMD 8-7-302.13	Nozzle Spitting	CARB Test Procedure TP-201.2D; or CARB determined equivalent
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 Emission Limits for Flares	Manual of Procedures, Volume IV, ST-7, Organic Compounds and ST-14, Oxygen, Continuous Sampling; or US EPA Reference Method 18, 25, 25A, or 25C
BAAQMD 8-34-303	Landfill Surface Requirements	US EPA Reference Method 21, Determination of Volatile Organic Compound Leaks
BAAQMD 8-34-305.1	Wellhead Gauge Pressure	APCO Approved Device
BAAQMD 8-34-305.2	Wellhead Temperature Limit	APCO Approved Device
BAAQMD 8-34-305.3	Nitrogen Concentration in Gas at Wellheads	US EPA Reference Method 3C, Determination of Carbon Dioxide, Methane, Nitrogen, and Oxygen from Stationary Sources
BAAQMD 8-34-305.4	Oxygen Concentration in Gas at Wellheads	US EPA Reference Method 3C, Determination of Carbon Dioxide, Methane, Nitrogen, and Oxygen from Stationary Sources
BAAQMD 8-34-412	Compliance Demonstration Test	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 8-40-116.2	Organic Content Limit for Small Volume Exemption	BAAQMD 8-40-601 and US EPA Reference Methods 8015B and 8021B
BAAQMD 8-40-301	Limits on Uncontrolled Aeration of Contaminated Soil	BAAQMD 8-40-601 and US EPA Reference Methods 8015B and 8021B; or US EPA Reference Method 21
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

VIII. Test Methods

**Table VIII
 Test Methods**

Applicable Requirement	Description of Requirement	Acceptable Test Methods
BAAQMD 9-2-301	Limitations on Hydrogen Sulfide	Manual of Procedures, Volume VI, Part 1, Ground Level Monitoring for Hydrogen Sulfide and Sulfur Dioxide
40 CFR 60.8	Performance Tests	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 Condition # 818, Part 3b(i)	Alternative Temperature Limit at Wellheads	APCO Approved Device
BAAQMD Condition # 818, Part 3b(ii)	Alternative Gas Concentration Limits at Header	Landfill Gas Methane and Oxygen Limits: US EPA Reference Method 3C, Determination of Carbon Dioxide, Methane, Nitrogen, and Oxygen from Stationary Sources
BAAQMD Condition # 818, Part 5	Flare Combustion Zone Temperature Limit	APCO Approved Device meeting the requirements of BAAQMD Condition #818, Part 4
BAAQMD Condition # 818, Part 8	NOx Emission and Outlet Concentration Limits for Flare	Manual of Procedure, Volume IV, ST-13A, Oxides of Nitrogen, Continuous Sampling and ST-14, Oxygen, Continuous Sampling
BAAQMD Condition # 818, Part 10	CO Emission and Outlet Concentration Limits for Flare	Manual of Procedure, Volume IV, ST-6, Carbon Monoxide, Continuous Sampling and ST-14, Oxygen, Continuous Sampling

VIII. Test Methods

**Table VIII
 Test Methods**

Applicable Requirement	Description of Requirement	Acceptable Test Methods
BAAQMD Condition # 818, Part 12	Landfill Gas Sulfur Compound Limits	Field Test Procedure: Measurement of Landfill Gas H ₂ S concentration using a Draeger Tube, which is used and interpreted in accordance with manufacturer specifications; and TRS concentration calculated in accordance with BAAQMD Condition # 818, Part 12. Laboratory Analysis Procedures: Manual of Procedures, Volume III, Method 5 Determination of Total Mercaptans in Effluents and Method 25 Determination of Hydrogen Sulfide in Effluents, or Manual of Procedures, Volume III, Method 44 Determination of Reduced Sulfur Gases and Sulfur Dioxide in Effluent Samples by Gas Chromatographic Methods, or US EPA Reference Method 18, Measurement of Gaseous Organic Compound Emissions by Gas Chromatography
BAAQMD Condition # 818, Part 13	Heat Input Limits	APCO approved gas flow meter, Methane concentrations measured in accordance with BAAQMD Condition #818, Part 3b(ii). and APCO approved calculation procedure described in BAAQMD Condition # 818, Part 13
BAAQMD Condition # 818, Part 15	Organic Content in Soils	BAAQMD 8-40-601 and US EPA Reference Methods 8015B and 8021B; or US EPA Reference Method 21
BAAQMD Condition # 818, Part 16	TAC Concentrations in Soils	BAAQMD 8-40-601 and US EPA Reference Methods 8015B and 8021B; or US EPA Reference Method 21
BAAQMD Condition # 818, Part 20	Annual Source Test at Flare	Manual of Procedures, Volume IV, ST-17, Stack Gas Velocity and Volumetric Flow Rate; ST-23 Water Vapor; ST-14, Oxygen, Continuous Sampling; ST-13A, Oxides of Nitrogen, Continuous Sampling; ST-6, Carbon Monoxide, Continuous Sampling; and Manual of Procedures, Volume IV, ST-7, Organic Compounds or US EPA Reference Methods 18, 25, 25A, or 25C

VIII. Test Methods

**Table VIII
 Test Methods**

Applicable Requirement	Description of Requirement	Acceptable Test Methods
BAAQMD Condition # 818, Part 21	Gas Characterization Test	For Organic Compounds: US EPA Reference Method 18, Measurement of Gaseous Organic Compound Emissions by Gas Chromatography and For Sulfur Compounds: Manual of Procedures, Volume III, Method 5 Determination of Total Mercaptans in Effluents and Method 25 Determination of Hydrogen Sulfide in Effluents, or Method 44 Determination of Reduced Sulfur Gases and Sulfur Dioxide in Effluent Samples by Gas Chromatographic Methods
CARB EO G-70-116-F, paragraph 10	Leak Free Emergency Vent or Manway	Manual of Procedures, Volume IV, ST-38, Gasoline Dispensing Facility Static Pressure Integrity Test Aboveground Vaulted Tanks or ARB Test Method TP 201.3B Determination of Static Pressure Performance of Vapor Recovery Systems of Dispensing Facilities with Above-Ground Storage Tanks
CARB EO G-70-116-F, paragraph 12	Disconnection Liquid Leaks for Phase I Systems	BAAQMD Enforcement Division, Policies and Procedures, Regulation 8, Rule 33, Bulk Gasoline Distribution Facilities and Gasoline Delivery Vehicles Guidelines, Section 5.B.1.

IX. PERMIT SHIELD

Not applicable.

X. REVISION HISTORY

Title V Permit Issuance (Application #2631): **February 5, 2004**

Administrative Amendment (Application #2244): **March 12, 2004**

- Updated standard text in Section I.B.1 and Section III.

Significant Revision (Application #2244): **June 17, 2004**

- Revised Condition # 818, Part 2b to allow the installation of new wells approved pursuant to Application # 2244.
- Revised Condition # 818, Part 3 to clarify applicable limits and establish alternatives to the Regulation 8-34-305 wellhead limits for specific components.
- Revised Tables IV-A, VII-A, and VIII to reflect above revisions to Condition # 818, Part 3.
- Added Section X Revision History and revised subsequent section numbers.

Administrative Amendment (Application #15066): **August 15, 2007**

- The reasons for this amendment are to change the Responsible Official to Kevin Finn and the Facility Contact to Dianna Ratto and also to change the mailing address to 3260 Blume Drive, Suite 200, Richmond, CA 94806.

Administrative Amendment (Application #20703): **September 29, 2011**

- Correct the facility name.
- Change the responsible official to Rick King.
- Correct facility contact information.
- Correct mailing address for site.
- Change District permit engineer to Flora Chan.

Title V Permit Renewal (Application #18627): **June 4, 2012**

- Add and revise text in Section I, III, IV, VII, and VIII to conform to current standard text.
- Incorporate source number changes into this permit that were implemented pursuant to the BAAQMD annual permit renewal process. The active landfill, Source S-1, was split into three sources (S-1, S-12, and S-13) that represent different processes and activities that occur at active landfills. The new source numbers were added to Tables II-A, IV-B, VII-B, and Condition #818.

X. Revision History

- Remove sources that have been shut down from Table II-A (S-5, S-6, S-8, and S-10), delete the associated tables (Tables IV-B, VII-B, IV-C, VII-C, IV-E, VII-E, IV-G, and VII-G), and delete the associated conditions (Condition #12203, #12204, #20396, and #20512).
- Create Section II-C Exempt Equipment List, move S-9 from Table II-A to Table II-C pursuant to the non-road engine exemption (BAAQMD Regulation 2-6-114), remove Tables IV-F and VII-F for S-9, and remove Condition #20511 for S-9.
- Renumber Tables IV-D and VII-D for S-7 as Tables IV-B and VII-B.
- In Tables II-A, IV-A, VII-A, and Condition #818, replace the A-3 Landfill Gas Flare with the new A-4 Landfill Gas Flare.
- Correct and update regulatory references and amendment dates throughout the permit.
- In Table III, add several missing or new BAAQMD regulations and add several new California regulations.
- Incorporate changes to SIP Regulation 6 and BAAQMD Regulation 6, Rule 1 in Tables IV-A, VII-A, and VIII and in Condition #818.
- Throughout the permit, replace condition bases citing the Toxic Risk Management Policy (TRMP) with the appropriate regulatory citation from BAAQMD Regulation 2, Rule 5, which was adopted in 2005 and amended in 2010.
- For the landfill (S-1) and associated flare (A-4), update tables (Tables IV-A, VII-A, and VIII) and permit conditions (Condition #818) to incorporate changes made pursuant to new source review (NSR) applications: for the flare replacement (NSR Application #11404) and for gas collection system changes (NSR Applications #21153 and #21690).
- In Table IV-A, correct the descriptions for several applicable requirements and add missing sections from 40 CFR Part 62, Subpart F and 40 CFR Part 63 Subpart AAAA.

X. Revision History

- In Table IV-A, revise the descriptions of Parts 8, 10, 12, 13, 14, 18, and 20 of Condition #818, correct the bases of Parts 5, 10, 13, 16, 18, 19, 20, 21, and 22 of Condition #818, and remove Parts 9, 11, and 17 of Condition #818.
- For the S-7 Non-Retail Gasoline Dispensing Facility # 9551, incorporate the 2006 amendments to Regulation 8, Rule 5 into Tables IV-B, VII-B, and VIII. These amendments exempt the above-ground gasoline storage tank associated with S-7 from BAAQMD Regulation 8, Rule 5; however, this tank is still subject to SIP Regulation 8, Rule 5.
- In Condition #818 for S-1 and S-4, revise Part 2 to make the gas collection system alteration requirements consistent with the requirements for other landfill facilities.
- In Condition #818, Part 5, revise the flare combustion zone temperature limit based on 2009 source test data for A-4 and reflect this change in Tables II-B and VII-A.
- In Condition #818, Parts 8, 10 and 13 and in Table VII-A, identify the correct NO_x and CO concentration and emission limits for A-4, correct the heat input limits for A-4, and clarify the heat input calculation procedure for A-4 based on NSR Application #11404.
- Remove the daily NO_x, CO, and PM₁₀ emission limits for A-3 (from Condition #818, Parts 9-11 and from Table VII-A). NO_x and CO emissions from the A-4 Flare are limited by parts 8, 10, and 13. Since the AP-42 emission factor for PM₁₀ emissions from LFG flares indicates that A-4 will meet the PM₁₀ emission limit for A-4, a daily PM₁₀ emission limit is not necessary.
- Remove the H₂S concentration limit from Condition #818, Part 12 and Table VII-A, because this limit is not needed to demonstrate compliance with the Regulation 9-1-302 sulfur dioxide outlet concentration limit (only the TRS limit is necessary). Change the TRS limit to an annual average limit, add quarterly monitoring requirement, add field test and laboratory analysis procedures, and add annual average calculation procedure.
- Clarify the applicable limit in Condition #818, Part 14b and in Table VII-A.
- Delete Condition #818, Part 17, because this ADC material is no longer produced at this site.

X. Revision History

- Remove obsolete or unnecessary test requirements from Condition #818, Part 20.
- Clarify record keeping requirements in Condition #818, Part 22g-h.
- Add symbols and text to Tables VII-A and VII-B to clarify limits.
- Add several limits from SIP Regulation 8, Rule 5 and BAAQMD Regulation 8, Rule 7 that are missing from Table VII-B.
- For Table VIII, add missing test methods for existing requirements, add test methods for all new limits, and remove obsolete or unnecessary test methods.
- Add this permit renewal to the Section X Revision History.
- Add terms to the Section XI Glossary.
- Remove Section XII State Implementation Plan.

Minor Revision (Application #25908):

January 27, 2015

- In Section I-A, update amendment dates for BAAQMD Regulation 2, Rules 1 and 4.
- In Table II-A, update the landfill gas collection system description for S-1.
- In Table III, update the amendment dates for BAAQMD Regulation 2, Rule 1 and BAAQMD Regulation 5.
- In Table IV-A, add the less than continuous operation provisions for the landfill gas collection and control system and the associated monitoring and record keeping provisions: Regulation 8, Rule 34, Sections 404 and 501.5.
- In Section VI, revise Condition # 818, Parts 1-3 for S-1. These revisions allow landfill gas to be vented to an off-site energy plant for reuse and allow the A-4 Flare to operate on an intermittent basis when landfill gas is being diverted off-site. In addition, these revisions update the landfill gas collection system description and clarify operating requirements for leachate collection system components.
- In Table VII-A, add the landfill gas flow rate criteria that would allow intermittent operation of the A-4 Flare.
- Add this minor revision to the Section X Revision History.
- Add a term to the Section XI Glossary.

X. Revision History

Minor Revision (Application #27950):

February 4, 2019

- In Table II-A, added sources S-14 and S-15.
- In Table II-B, added abatement devices A-14 and A-15.
- In Table II-C, added exempt equipment used with S-14 and S-15.
- Added Table IV-C for source S-14 and Table IV-D for source S-15.
- In Section VI, added Condition # 25515 and # 25516 for sources S-14 and S-15, respectively.
- In Section VII, added Table VII-C for source S-14 and Table VII-D for source S-15.
- Add this permit renewal to the Section X Revision History.

Title V Permit Renewal (Application #28411):

February 4, 2019

- Updated title page.
- Add and revise text in Section I and III to conform to current standard text.
- In Section I-A, updated amendment dates for BAAQMD Regulations.
- In Section VI, revised Condition # 818, Part 2a to update the information for the landfill gas collection system and Part 2b for the number of alterations to the landfill gas collection system.
- Add this permit renewal to the Section X Revision History.

Title V Minor Revision (Application #29141):

February 4, 2019

- In Section VI, revised Condition # 818, Part 2a to update the information for the landfill gas collection system, Part 2b for the number of alterations to the landfill gas collection system, and Part 3 to reflect well shut downs and numbering changes and to include a required petition renewal,
- Add this permit renewal to the Section X Revision History.

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

C5

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

XI. Glossary

C6

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

C₆H₆

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. NO_x 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 CH₄

Methane

CI

Compression Ignition

XI. Glossary

CIWMB

California Integrated Waste Management Board

CO

Carbon Monoxide

CO₂

Carbon Dioxide

CO₂e

Carbon Dioxide Equivalent. A carbon dioxide equivalent emission rate is the emission rate of a greenhouse gas compound that has been adjusted by multiplying the mass emission rate by the global warming potential of the greenhouse gas compound. These adjusted emission rates for individual compounds are typically summed together, and the total is also referred to as the carbon dioxide equivalent (CO₂e) emission rate.

CT

Combustion Zone Temperature

Cumulative Increase

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

District

The Bay Area Air Quality Management District

E6, E9, E12

Very large or very small number values are commonly expressed in a form called scientific notation, which consists of a decimal part multiplied by 10 raised to some power. For example, 4.53E6 equals $(4.53) \times (10^6) = (4.53) \times (10 \times 10 \times 10 \times 10 \times 10 \times 10) = 4,530,000$. 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

GCS

Gas Collection System

GDF

Gasoline Dispensing Facility

GHG

Greenhouse Gas

GLM

Ground Level Monitor

Grains

1/7000 of a pound

GWP

Global Warming Potential. A comparison of the ability of each greenhouse gas to trap heat in the atmosphere relative to that of carbon dioxide over a specific time period.

H₂S or H₂S

Hydrogen Sulfide

H₂SO₄ or H₂SO₄

Sulfuric Acid

XI. Glossary

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

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.

LEA

Local Enforcement Agency

LFG

Landfill gas

LHV

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

Long ton

2200 pounds

Major Facility

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

MAX or Max.

Maximum

MFR

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

XI. Glossary

MIN or Min.

Minimum

MOP

The District's Manual of Procedures.

MSDS

Material Safety Data Sheet

MSW

Municipal solid waste

MW

Molecular weight

N2

Nitrogen

NA

Not Applicable

NAAQS

National Ambient Air Quality Standards

NESHAPS

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

NMHC

Non-methane Hydrocarbons (Same as NMOC)

NMOC

Non-methane Organic Compounds (Same as NMHC)

NO_x or NO_x

Oxides of nitrogen.

NO₂ or NO₂

Nitrogen Dioxide.

NSPS

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

XI. Glossary

NSR

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

O₂ or O₂

Oxygen

Offset Requirement

A New Source Review requirement to provide federally enforceable emission offsets for the emissions from a new or modified source. Applies to emissions of POC, NO_x, PM₁₀, and SO₂.

PERP

Portable Equipment Registration Program

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

PM₁₀ or PM₁₀

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 or PRV

Pressure/Vacuum Relief Valve

RICE

Reciprocating Internal Combustion Engine

XI. Glossary

RMP

Risk Management Plan

RWQCB

Regional Water Quality Control Board

S

Sulfur

SCR

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

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 SO₂

Sulfur dioxide

SO₃ or SO₃

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)

TBACT

Best Available Control Technology for Toxics

XI. Glossary

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.

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 SO₂ that will be present in the combusted fuel gas, since sulfur compounds are converted to SO₂ by the combustion process.

TSP

Total Suspended Particulate

TVP

True Vapor Pressure

VOC

Volatile Organic Compounds

Symbols:

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

XI. Glossary

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
cfm	=	cubic feet per minute
dscf	=	dry standard cubic feet
°F	=	degrees Fahrenheit
ft ³	=	cubic feet
g	=	grams
gal	=	gallon
gpm	=	gallons per minute
gr	=	grains
hp	=	horsepower
hr	=	hour
in	=	inches
kW	=	kilowatts
lb	=	pound
lbmol	=	pound-mole
m ²	=	square meter
m ³	=	cubic meters
min	=	minute
mm	=	millimeter
MM	=	million
MM BTU	=	million BTU
MMcf	=	million cubic feet
Mg	=	mega grams
M scf	=	one thousand standard cubic feet
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