# **Bay Area Air Quality Management District**

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

## **Final**

## **MAJOR FACILITY REVIEW PERMIT**

Issued To:
Redwood Landfill, Inc.
Facility #A1179

**Facility Address:** 

8950 Redwood Highway Novato CA 94948

**Mailing Address:** 

P. O. Box 793 Novato CA 94948

**Responsible Official** 

Jessica Jones District Manager 415-892-2851 **Facility Contact** 

Alisha McCutcheon Environmental Protection Manager 415-892-2851

Type of Facility:	Landfill for Solid Waste Disposal	BAAQMD Engineering Division Contact
<b>Primary SIC:</b>	4953	Carol S. Allen

**Product:** Refuse and Sludge Disposal

ISSUED BY THE BAY AREA AIR QUALITY MANAGEMENT DISTRICT

Signed by Jeff McKay for Jack P. Broadbent	April 5, 2012
Jack P. Broadbent, Executive Officer/Air Pollution Control Officer	Date

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### I. STANDARD CONDITIONS

### A. Administrative Requirements

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

BAAQMD Regulation 1 - General Provisions and Definitions

(as amended by the District Board on 5/4/11);

SIP Regulation 1 - General Provisions and Definitions

(as approved by EPA through 6/28/99);

BAAQMD Regulation 2, Rule 1 - Permits, General Requirements

(as amended by the District Board on 3/4/09);

SIP Regulation 2, Rule 1 - Permits, General Requirements

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

BAAQMD Regulation 2, Rule 2 - Permits, New Source Review

(as amended by the District Board on 6/15/05);

SIP Regulation 2, Rule 2 - Permits, New Source Review and Prevention of Significant Deterioration

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

BAAQMD Regulation 2, Rule 4 - Permits, Emissions Banking

(as amended by the District Board on 12/21/04);

SIP Regulation 2, Rule 4 - Permits, Emissions Banking

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

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

(as amended by the District Board on 1/6/10);

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

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

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

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

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

1. This Major Facility Review Permit was issued on April 5, 2012 and expires on April 4, 2017. The permit holder shall submit a complete application for renewal of this Major Facility Review Permit no later than October 4, 2017 and no earlier than April 4, 2016. If a complete application for renewal has not been submitted in accordance with this deadline, the facility may not operate after April 4, 2017. If the permit renewal has not been issued by April 4, 2017, but a complete application for renewal has been submitted in accordance with the above deadlines, the existing permit will continue in force until the district takes final action on the renewal application. (Regulation 2-6-307, 404.2, 407, & 409.6; MOP Volume II, Part 3, §4.2)

### I. Standard Conditions

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

#### I. Standard Conditions

- 11. The responsible official shall certify all documents submitted by the facility pursuant to the major facility review permit. The certification shall state that based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete. The certifications shall be signed by a responsible official for the facility. (Regulation 2-6-409.20, MOP Volume II, Part 3, §4.11)
- 12. The permit holder is responsible for compliance, and certification of compliance, with all conditions of the permit, regardless whether it acts through employees, agents, contractors, or subcontractors. (Regulation 2-6-307)

#### C. Requirement to Pay Fees

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

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

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

#### E. Records

- 1. The permit holder must provide any information, records, and reports requested or specified by the APCO. (Regulation 1-441, Regulation 2-6-409.4)
- 2. Notwithstanding the specific wording in any requirement, all records for federally enforceable requirements shall be maintained for at least five years from the date of creation of the record. (Regulation 2-6-501; 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: May 1st through October 31st and November 1st through April 30th, and are due on the last day of the month after the end of the reporting period. All instances of non-compliance shall be clearly identified in these reports. The reports shall be certified by the responsible official as true, accurate, and complete. In addition, all instances of non-compliance with the permit shall be reported in writing to the District's Compliance and Enforcement Division within 10 calendar days of the discovery of the incident. Within 30 calendar

#### I. Standard Conditions

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

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

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

### **G.** Compliance Certification

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

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

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

#### **H.** Emergency Provisions

1. The permit holder may seek relief from enforcement action in the event of a breakdown, as defined by Regulation 1-208 of the District's Rules and Regulations, by following the procedures contained in Regulations 1-431 and 1-432. The District will thereafter determine whether breakdown relief will be granted in accordance with Regulation 1-433. (MOP Volume II, Part 3, §4.8)

### I. Standard Conditions

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-2	Sewage Sludge Storage,			106 dry tons (528 wet
	Main Pond			tons) per day and
				21,120 dry tons (105,600
				wet tons) per year
S-5	Redwood Landfill – Waste	Types of waste accepted		Max. Design Capacity =
	Decomposition Process	include municipal,		25.0 E6 yd <sup>3</sup>
		commercial, industrial,		Max. Cumulative
		construction, designated,		Decomposable Materials
		and special wastes.		In Place = 23.185 E6 tons
				in place
				Max. Decomposable
				Material Acceptance Rate
				= 541,140 tons/year
	Landfill Gas Collection	With well and collector		95 vertical wells and
	System, Active	counts updated pursuant to		7 horizontal collectors
		Condition #19867, Part		
		17b		
S-34	Compost Facility Operations	Uncontrolled Windrows		50,000 tons/year
		and Associated Windrow		
		Formation and Turning		
		Activities, Curing Piles,		
		and Product Stockpiles		
S-39	Trommel Screening	Powered by Electric		50,000 tons/year
	Processes	Motors or S-62		
S-41	Temporary Stockpiles for	Temporary Stockpiles from		80 tons/hour,
	Yard and Green Waste	CARB registered portable		820 tons/day, and
	Shredding Operation	tub grinder		200,000 tons/year
S-42	Soil and Cover Material			1,160 tons/day and
	Stockpiles			105,500 tons/year

# II. Equipment

Table II - A
Permitted Sources

S-#	Description	Make or Type	Model	Capacity
S-49	Diesel Engine for	Cummins	6BT-5.9	166 bhp, 360 in <sup>3</sup> ,
	Emergency Back-Up			7.9 gallons/hour diesel
	Generator			oil, 1.1 E6 BTU/hour
S-55	Non-Retail Gasoline	1 Above Ground Tank		1000 gallon capacity
	Dispensing Facility	1 Gasoline Nozzle	Emco	10 gallons/minute
	G # 8573		Wheaton	
	(Phase I is Two Point,		4005	
	Phase II is Vapor Balance)			
S-56	Portable Horizontal Grinder;	Peterson Pacific	Model	80 tons/hour
	equipped with integral water	Corporation	HC5400	
	sprays; CARB Portable			
	Equipment Registration			
	Permit # 117378			
S-58	Aerated Leachate Pond;	Custom Design; 10 acres		4500 gallons/hour
	equipped with up to eight			leachate influent,
	solar powered aeration units			5 scfm of air per aeration
				unit
S-76	Redwood Landfill – Waste	Wastes: MSW, commercial,		Max. Waste Acceptance
	and Cover Material	industrial, construction,		Rate = $2,310 \text{ tons/day}$
	Dumping	designated, and special		Max. Cover Placement
		wastes.		Rate = $1,160 \text{ tons/day}$
		Cover Materials: clean soil,		
		non-hazardous VOC-laden		
		soil, compost, co-compost,		
		and shredded green waste.		
S-77	Redwood Landfill –	No. and Type of Vehicles:		36 hours/day total for all
	Excavating, Bulldozing, and	1 Backhoe		vehicles (annual average),
	Compacting Activities	3 Bulldozers		311 operating days/year,
		2 Compactor		11,196 hours/year
				(maximum)

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Facility Name: Republic Services Vasco Road, LLC Permit for Facility #: A5095

# II. Equipment

### **B.** Abatement Device List

Table II – B Abatement Devices

		Source(s)	Applicable	Operating	Limit or Efficiency
<b>A-</b> #	Description	Controlled	Requirement	Parameters	
A-18	Water Sprays	S-34, S-39,	BAAQMD	None	Ringelmann No. 1
		S-41, S-42,	6-1-301		
		S-76 and			
		S-77			
A-51	Landfill Gas Flare,	S-5	BAAQMD	Minimum	≥ 98% destruction of NMOC
	Perennial Energy,		8-34-301.3,	combustion zone	or < 30 ppmv of NMOC, as
	Inc., FL-144-38-E,		see also	temperature of	$CH_4$ , at 3% $O_2$ , dry
	90 E6 BTU/hour		Table IV-B	1400 °F, see also	
				Table VII-B	
A-60	Landfill Gas Flare,	S-5	BAAQMD	Minimum	≥ 98% destruction of NMOC
	Perennial Energy,		8-34-301.3,	combustion zone	or < 30 ppmv of NMOC, as
	Inc., FL-144-40-E,		see also	temperature for	CH4, at 3% O2, dry
	90 E6 BTU/hour		Table IV-B	both Zone A and	
				Zone B of	
				1400 °F, see also	
				Table VII-B	

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### 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 table.

Table II C – Exempt Equipment

S-#	Description	Type or	Capacity	Comments
		Make and Model		
S-57	PERP Diesel Engine for	Caterpillar,	860 bhp, 1649 in <sup>3</sup> ,	Exempt per 2-6-113
	Portable Horizontal	Model 3412E,	44.8 gallons/hr diesel oil,	and 2-6-114
	Grinder	Model Year 2002	6.14 E6 BTU/hour	
S-61	Portable Diesel Engine for	S-61: John Deere,	125 bhp, 275 in <sup>3</sup> ,	Exempt per 2-6-114
	Waste Tipper; abated by	4045HF285,	6.76 gallons/hr diesel oil,	
	A-61, Catalyzed Diesel PM	Model Year 2008;	0.9 E6 BTU/hour;	
	Filter	A-61: CleanAir,	≥ 85% removal of diesel	
		Permit FDA126	PM	
S-62	Portable Diesel Engine for	S-62: John Deere,	125 bhp, 275 in <sup>3</sup> ,	Exempt per 2-6-114
	Power Screens; abated by	4045HF285,	6.76 gallons/hr diesel oil,	
	A-62, Catalyzed Diesel PM	Model Year 2008;	0.9 E6 BTU/hour;	
	Filter	A-62: CleanAir,	$\geq$ 85% removal of diesel	
		Permit FDA126	PM	

### 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:

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

#### **NOTE:**

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

Table III
Generally Applicable Requirements

		Federally
Applicable	Regulation Title or	Enforceable
Requirement	Description of Requirement	(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 (3/4/09)	N
BAAQMD 2-1-429	Federal Emissions Statement (12/21/04)	N
SIP Regulation 2, Rule 1	Permits – General Requirements (1/26/99)	Y

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# III. Generally Applicable Requirements

Table III Generally Applicable Requirements

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)
SIP 2-1-429	Federal Emissions Statement (4/3/95)	Y
BAAQMD Regulation 2, Rule 5	Permits – New Source Review of Toxic Air Contaminants (1/6/10)	N
BAAQMD Regulation 4	Air Pollution Episode Plan (3/20/91)	N
SIP Regulation 4	Air Pollution Episode Plan (8/6/90)	Y
BAAQMD Regulation 5	Open Burning (7/9/08)	N
SIP Regulation 5	Open Burning (9/4/98)	Y
BAAQMD Regulation 6, Rule 1	Particulate Matter – General Requirements (12/5/07)	N
SIP Regulation 6	Particulate Matter and Visible Emissions (9/4/98)	Y
BAAQMD Regulation 7	Odorous Substances (3/17/82)	N
BAAQMD Regulation 8, Rule 1	Organic Compounds – General Provisions (6/15/94)	Y
BAAQMD Regulation 8, Rule 2	Organic Compounds – Miscellaneous Operations (7/20/05)	N
SIP Regulation 8, Rule 2	Organic Compounds – Miscellaneous Operations (3/22/95)	Y
BAAQMD Regulation 8, Rule 3	Organic Compounds – Architectural Coatings (7/1/09)	N
SIP Regulation 8, Rule 3	Organic Compounds – Architectural Coatings (1/2/04)	Y
BAAQMD Regulation 8, Rule 4	Organic Compounds – General Solvent and Surface Coating Operations (10/16/02)	Y
BAAQMD Regulation 8, Rule 15	Organic Compounds – Emulsified and Liquid Asphalts (6/1/94)	Y
BAAQMD Regulation 8, Rule 16	Organic Compounds – Solvent Cleaning Operations (10/16/02)	Y
BAAQMD Regulation 8, Rule 40	Organic Compounds – Aeration of Contaminated Soil and Removal of Underground Storage Tanks (6/15/05)	N
BAAQMD 8-40-116	Exemption, Small Volume (12/15/99)	Y
BAAQMD 8-40-117	Exemption, Accidental Spills (12/15/99)	Y
SIP Regulation 8, Rule 40	Organic Compounds – Aeration of Contaminated Soil and Removal of Underground Storage Tanks (4/19/01)	Y
BAAQMD Regulation 8, Rule 47	Organic Compounds – Air Stripping and Soil Vapor Extraction Operations (6/15/05)	N
SIP Regulation 8, Rule 47	Organic Compounds – Air Stripping and Soil Vapor Extraction Operations (4/26/95)	Y
BAAQMD Regulation 8, Rule 49	Organic Compounds – Aerosol Paint Products (12/20/95)	N
SIP Regulation 8, Rule 49	Organic Compounds – Aerosol Paint Products (3/22/95)	Y
BAAQMD Regulation 8, Rule 51	Organic Compounds – Adhesive and Sealant Products (7/17/02)	N

# III. Generally Applicable Requirements

Table III Generally Applicable Requirements

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)
SIP Regulation 8, Rule 51	Organic Compounds – Adhesive and Sealant Products (2/26/02)	Y
BAAQMD Regulation 9, Rule 1	Inorganic 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 12, Rule 4	Miscellaneous Standards of Performance – Sandblasting (7/11/90)	N
SIP Regulation 12, Rule 4	Miscellaneous Standards of Performance – Sandblasting (9/2/81)	Y
California Health and Safety Code Section 41750 et seq.	Portable Equipment	N
California Health and Safety Code Section 44300 et seq.	Air Toxics "Hot Spots" Information and Assessment Act of 1987	N
California 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
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

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### IV. SOURCE-SPECIFIC APPLICABLE REQUIREMENTS

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

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

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

The full text of each permit condition cited is included in Section VI, Permit Conditions, of this permit. The full language of the SIP requirements are posted on the EPA Region 9 website. The address is:

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

All other text may be found in the regulations themselves.

Table IV – A
Source-Specific Applicable Requirements
S-2 Sewage Sludge Storage, Main Pond

		Federally	Future
Applicable	Regulation Title or	Enforceable	Effective
Requirement	Description of Requirement	(Y/N)	Date
BAAQMD Regulation 8, Rule 2	Organic Compounds – Miscellaneous Operation (7/20/05)		
8-2-301	Miscellaneous Operations	Y	
BAAQMD Regulation 9, Rule 2	Inorganic Gaseous Pollutants – Hydrogen Sulfide (10/6/99)		
9-2-301	Limitations on Hydrogen Sulfide	N	
BAAQMD Condition #96			
Part 1	Odor Abatement Requirements (Regulation 1-301)	N	

### IV. Source Specific Applicable Requirements

### Table IV – B Source-Specific Applicable Requirements

S-5 REDWOOD LANDFILL – WASTE DECOMPOSITION PROCESS, EQUIPPED WITH GAS COLLECTION SYSTEM; ABATED BY A-51 LANDFILL GAS FLARE; AND A-60 LANDFILL GAS FLARE;

S-76 REDWOOD LANDFILL – WASTE AND COVER MATERIAL DUMPING; ABATED BY A-18 WATER SPRAYS;

S-77 REDWOOD LANDFILL – EXCAVATING, BULLDOZING, AND COMPACTING ACTIVITIES; ABATED BY A-18 WATER SPRAYS

Applicable	Regulation Title or	Federally Enforceable	Future Effective
Requirement	Description of Requirement	(Y/N)	Date
BAAQMD	General Provisions and Definitions (5/4/11)		
Regulation 1	Description Maritaria, and Describe Description	N	
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)		
1-523	Parametric Monitoring and Recordkeeping Procedures	Y	
1-523.3	Reports of Violations	Y	
BAAQMD Regulation 6, Rule 1	Particulate Matter – General Requirements (12/5/07)		
6-1-301	Ringelmann No. 1 Limitation	N	
6-1-305	Visible Particles	N	
6-1-310	Particle Weight Limitation (applies to flares 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 flares only)	Y	
6-401	Appearance of Emissions	Y	
BAAQMD Regulation 8, Rule 2	Organic Compounds – Miscellaneous Operation (7/20/05)	Y	

## **IV. Source Specific Applicable Requirements**

# Table IV – B Source-Specific Applicable Requirements

S-5 REDWOOD LANDFILL – WASTE DECOMPOSITION PROCESS, EQUIPPED WITH GAS COLLECTION SYSTEM; ABATED BY A-51 LANDFILL GAS FLARE; AND A-60 LANDFILL GAS FLARE;

S-76 REDWOOD LANDFILL – WASTE AND COVER MATERIAL DUMPING; ABATED BY A-18 WATER SPRAYS;

S-77 REDWOOD LANDFILL – EXCAVATING, BULLDOZING, AND COMPACTING ACTIVITIES; ABATED BY A-18 WATER SPRAYS

Applicable Requirement	Regulation Title or  Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
8-2-301	Miscellaneous Operations	Y	
BAAQMD Regulation 8, Rule 34	Organic Compounds – Solid Waste Disposal Sites (6/15/05)		
8-34-113	Limited Exemption, Inspection and Maintenance	Y	
8-34-113.1	Emission Minimization Requirement	Y	
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	

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# Table IV – B Source-Specific Applicable Requirements

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Amaliashla	December Title on	Federally Enforceable	Future Effective
Applicable Requirement	Regulation Title or  Description of Requirement	(Y/N)	Date
8-34-118.7	Installation Time Limit	Y	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 (applies to flares)	Y	
8-34-303	Landfill Surface Requirements	Y	
8-34-304	Gas Collection System Installation Requirements	Y	
8-34-304.1	Based on Waste Age For Inactive or Closed Areas	Y	
8-34-304.2	Based on Waste Age For Active Areas	Y	
8-34-304.3	Based on Amount of Decomposable Waste Accepted	Y	
8-34-304.4	Based on NMOC Emission Rate	Y	
8-34-305	Wellhead Requirements	Y	
8-34-305.1	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	
8-34-405	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	

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		Federally	Future
Applicable	Regulation Title or	Enforceable	Effective
Requirement	Description of Requirement	(Y/N)	Date
8-34-414.4	Operational Due Date for Expansion	Y	
8-34-415	Repair Schedule for Surface Leak Excesses	Y	
8-34-415.1	Records of Excesses	Y	
8-34-415.2	Corrective Action	Y	
8-34-415.3	Re-monitor Excess Location Within 10 Days	Y	
8-34-415.4	Re-monitor Excess Location Within 1 Month	Y	
8-34-415.5	If No More Excesses, No Further Re-Monitoring	Y	
8-34-415.6	Additional Corrective Action	Y	
8-34-415.7	Re-monitor Second Excess Within 10 days	Y	
8-34-415.8	Re-monitor Second Excess Within 1 Month	Y	
8-34-415.9	If No More Excesses, No Further Re-monitoring	Y	
8-34-415.10	Collection System Expansion for Third Excess in a Quarter	Y	
8-34-415.11	Operational Due Date for Expansion	Y	
8-34-416	Cover Repairs	Y	
8-34-501	Operating Records	Y	
8-34-501.1	Collection System Downtime	Y	
8-34-501.2	Emission Control System Downtime	Y	
8-34-501.3	Continuous Temperature Records for Enclosed Combustors	Y	
	(applies to flares)		
8-34-501.4	Testing	Y	
8-34-501.6	Leak Discovery and Repair Records	Y	
8-34-501.7	Waste Acceptance Records	Y	
8-34-501.8	Non-decomposable Waste Records	Y	
8-34-501.9	Wellhead Excesses and Repair Records	Y	
8-34-501.10	Gas Flow Rate Records for All Emission Control Systems	Y	
8-34-501.12	Records Retention for 5 Years	Y	
8-34-503	Landfill Gas Collection and Emission Control System Leak Testing	Y	
8-34-504	Portable Hydrocarbon Detector	Y	

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Applicable	Regulation Title or	Federally Enforceable	Future Effective
Requirement 8-34-505	Description of Requirement  Well Head Monitoring	(Y/N) Y	Date
8-34-506	Landfill Surface Monitoring	Y	
		<u>т</u> Ү	
8-34-507 8-34-508	Continuous Temperature Monitor and Recorder (applies to flares)  Gas Flow Meter	Y	
8-34-510 BAAQMD	Cover Integrity Monitoring  Organic Compounds – Aeration of Contaminated Soil and Removal	Y	
Regulation 8, Rule 40	of Underground Storage Tanks (6/15/05)		
8-40-110	Exemption, Storage Pile	Y	
8-40-112	Exemption, Sampling	Y	
8-40-113	Exemption, Non-Volatile Hydrocarbons	Y	
8-40-116	Exemption, Small Volume	Y	
8-40-116.1	Volume does not exceed 1 cubic yard	Y	
8-40-116.2	Volume does not exceed 8 cubic yards, organic content does not exceed 500 ppmw, may be used only once per quarter	Y	
8-40-117	Exemption, Accidental Spills	Y	
8-40-118	Exemption, Aeration Projects of Limited Impact	Y	
8-40-301	Uncontrolled Contaminated Soil Aeration	Y	
8-40-304	Active Storage Piles	Y	
8-40-305	Inactive Storage Piles	Y	
BAAQMD Regulation 9, Rule 1	Inorganic Gaseous Pollutants – Sulfur Dioxide (3/15/95)		
9-1-301	Limitations on Ground Level Concentrations (applies to flares only)	Y	
9-1-302	General Emission Limitations (applies to flares only)	Y	
BAAQMD Regulation 9, Rule 2	Inorganic Gaseous Pollutants – Hydrogen Sulfide (10/6/99)		
9-2-301	Limitations on Hydrogen Sulfide	N	

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Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
40 CFR Part 60, Subpart A	Standards of Performance for New Stationary Sources – General Provisions (9/13/10)		
60.4	Address	Y	
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	
60.13(e)	Continuous monitors shall operate continuously	Y	
60.13(f)	Monitors shall be installed in proper locations	Y	
60.13(g)	Multiple monitors are required for multiple stacks	Y	
60.14	Modification	Y	
60.15	Reconstruction	Y	
60.19	General Notification and Reporting Requirements	Y	
40 CFR Part 60, Subpart WWW	Standards of Performance for New Stationary Sources – Standards of Performance for Municipal Solid Waste Landfills (9/21/06)		
60.752	Standards for Air Emissions from Municipal Solid Waste Landfills	Y	
60.752(b)	Requirements for MSW Landfills with Design Capacity equal to or greater than 2.5 million Mg and 2.5 million m³ (Large Designated Facilities)	Y	

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Applicable	Regulation Title or	Federally Enforceable	Future Effective
Requirement	Description of Requirement	(Y/N)	Date
60.752(b)(2)	Comply with all requirements in sections (b)(2)(i through iv)	Y	
60.752	Submit a Collection and Control System Design Plan	Y	
(b)(2)(i)			
60.752	The collection and control system in the Design Plan shall	Y	
(b)(2)(i)(A)	comply with 60.752(b)(2)(ii)		
60.752	Design Plan shall include all proposed alternatives to 60.753	Y	
(b)(2)(i)(B)	through 60.758		
60.752	Design Plan shall conform to 60.759 (active collection system)	Y	
(b)(2)(i)(C)	or demonstrate sufficiency of proposed alternatives		
60.752	Install a collection and control system	Y	
(b)(2)(ii)			
60.752	Route collected gases to a control system.	Y	
(b)(2)(iii)			
60.752	Reduce NMOC emissions by 98% by weight or reduce NMOC	Y	
(b)(2)(iii)(B)	outlet concentration to less than 20 ppmv as hexane at 3% $O_2$ ,		
	dry basis, as demonstrated by initial performance test within		
	180 days of start-up. (applies to flares)		
60.752	Operate in accordance with 60.753, 60.755, and 60.756	Y	
(b)(2)(iv)			
60.752(c)	Title V Operating Permit Requirements	Y	
60.752(c)(1)	Subject date is June 10, 1996 for Landfills new or modified	Y	
	between May 30, 1991 and March 12, 1996		
60.753	Operational Standards for Collection and Control Systems	Y	
60.753(a)	Operate a Collection System in each area or cell in which:	Y	
60.753(a)(1)	Active Cell – solid waste in place for 5 years or more	Y	
60.753(a)(2)	Closed/Final Grade – solid waste in place for 2 years or more	Y	
60.753(b)	Operate each wellhead under negative pressure unless:	Y	
60.753(b)(1)	Fire or increased well temperature or to prevent fire	Y	

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Applicable Requirement	Regulation Title or  Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
60.753(b)(2)	Use of geomembrane or synthetic cover (subject to alternative pressure limits)	Y	
60.753(b)(3)	Decommissioned well after approval received for shut-down	Y	
60.753(c)	Operate each wellhead at $<$ 55 °C, and either $<$ 20% $N_2$ or $<$ than 5% $O_2$ (or other approved alternative levels)	Y	
60.753(c)(1)	N <sub>2</sub> determined by Method 3C	Y	
60.753(c)(2)	O <sub>2</sub> determined by 3A and as described in (2)(i-v)	Y	
60.753(d)	Surface Leak Limit is less than 500 ppm methane above background at landfill surface. This section also describes some surface monitoring procedures.	Y	
60.753(e)	Vent all collected gases to a control system complying with 60.752(b)(2)(iii). If collection or control system inoperable, shut down gas mover and close all vents within 1 hour	Y	
60.753(f)	Operate the control system at all times when collected gas is routed to the control system	Y	
60.753(g)	If monitoring demonstrates that 60.753(b), (c), or (d) are not being met, corrective action must be taken	Y	
60.754	Test Methods and Procedures	Y	
60.754(c)	For PSD, NMOC emissions shall be calculated using AP-42	Y	
60.754(d)	Test Methods for Performance Test (Method 18 or 25C)	Y	
60.755	Compliance Provisions	Y	
60.755(a)	For Gas Collection Systems	Y	
60.755(a)(1)	Calculation procedures for maximum expected gas generation flow rate	Y	
60.755 (a)(1)(i)	Equation for unknown year-to-year waste acceptance rate	Y	
60.755 (a)(1)(ii)	Equation for known year-to-year waste acceptance rate	Y	

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ABATED BY A-18 WATER SPRAYS; S-77 REDWOOD LANDFILL – EXCAVATING, BULLDOZING, AND COMPACTING ACTIVITIES; ABATED BY A-18 WATER SPRAYS

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

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

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Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
60.757(a)(3)	Amended Design Capacity Report required within 90 days of receiving a permitted increase in design capacity or within 90 days of an annual density calculation that results in a design capacity over the thresholds.	Y	
60.757(b)(3)	Sites with collection and control systems operating in compliance with this subpart are exempt from (b)(1) and (b)(2) above.	Y	
60.757(c)	Submit a Collection and Control System Design Plan within 1 year of first NMOC emission rate report showing NMOC > 50 MG/year, except as follows	Y	
60.757(f)	Submit Annual Reports containing information required by (f)(1) through (f)(6)	Y	
60.757(f)(1)	Value and length of time for exceedance of parameters monitored per 60.756(a), (b) or (d)	Y	
60.757(f)(2)	Description and duration of all periods when gas is diverted from the control device by a by-pass line	Y	
60.757(f)(3)	Description and duration of all periods when control device was not operating for more than 1 hour	Y	
60.757(f)(4)	All periods when collection system was not operating for more than 5 days.	Y	
60.757(f)(5)	Location of each surface emission excess and all re-monitoring dates and concentrations.	Y	
60.757(f)(6)	Location and installation dates for any wells or collectors added as a result of corrective action for a monitored excess.	Y	
60.757(g)	Initial Performance Test Report Requirements (g)(1-6)	Y	
60.757(g)(1)	Diagram of collection system showing positions of all existing collectors, proposed positions for future collectors, and areas to be excluded from control.	Y	
60.757(g)(2)	Basis for collector positioning to meet sufficient density req.	Y	

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Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
60.757(g)(3)	Documentation supporting percentage of asbestos or non-	Y	
60.757(g)(4)	degradable material claims for areas without a collection system.  For areas excluded from collection due to non-productivity, calculations and gas generation rates for each non-productive area	Y	
60.757(g)(5)	and the sum for all nonproductive areas.  Provisions for increasing gas mover equipment if current system is inadequate to handle maximum projected gas flow rate.	Y	
60.757(g)(6)	Provisions for control of off-site migration	Y	
60.758	Recordkeeping Requirements	Y	
60.758(a)	Design Capacity and Waste Acceptance Records (retain 5 years)	Y	
60.758(b)	Collection and Control Equipment Records (retain for life of control equipment except 5 years for monitoring data)	Y	
60.758(b)(1)	Collection System Records	Y	
60.758 (b)(1)(i)	Maximum expected gas generation flow rate.	Y	
60.758 (b)(1)(ii)	Density of wells and collectors	Y	
60.758(b)(2)	Control System Records - enclosed combustors other than boilers or process heaters with heat input > 44 MW	Y	
60.758 (b)(2)(i)	Combustion temperature measured every 15 minutes and averaged over the same time period as the performance test	Y	
60.758 (b)(2)(ii)	Percent NMOC reduction achieved by the control device	Y	
60.758(c)	Records of parameters monitored pursuant to 60.756 and periods of operation when boundaries are exceeded (retain for 5 years).	Y	
60.758(c)(1)	Exceedances subject to record keeping are	Y	
60.758 (c)(1)(i)	All 3-hour periods when average combustion temperature was more than 28 C below the average combustion temperature during the most recent complying performance test	Y	

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S-77 REDWOOD LANDFILL – EXCAVATING, BULLDOZING, AND COMPACTING ACTIVITIES; ABATED BY A-18 WATER SPRAYS

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
60.758(c)(2)	Records of continuous flow to control device or monthly inspection records if seal and lock for bypass valves	Y	
60.758(d)	Plot map showing location of all existing and planned collectors with a unique label for each collector (retain for life of collection system)	Y	
60.758(d)(1)	Installation date and location of all newly installed collectors	Y	
60.758(d)(2)	Records of nature, deposition date, amount, and location of asbestos or non-degradable waste excluded from control	Y	
60.758(e)	Records of any exceedance of 60.753, location of exceedance and remonitoring dates and data (for wellheads and surface). Retain for 5 years.	Y	
60.759	Specifications for Active Collection Systems	Y	
60.759(a)	Active wells and collectors shall be at sufficient density	Y	
60.759(a)(1)	Collection System in refuse shall be certified by PE to achieve comprehensive control of surface gas emissions	Y	
60.759(a)(2)	Collection Systems (active or passive) outside of refuse shall address migration control	Y	
60.759(a)(3)	All gas producing areas shall be controlled except as described below (i-iii).	Y	
60.759(b)	Gas Collection System Components	Y	
60.759(b)(1)	Must be constructed of PVC, HDPE, fiberglass, stainless steel, or other approved material and of suitable dimensions to convey projected gas amounts and withstand settling, traffic, etc.	Y	
60.759(b)(2)	Collectors shall not endanger liner, shall manage condensate and leachate, and shall prevent air intrusion and surface leaks.	Y	
60.759(b)(3)	Header connection assemblies shall include positive closing throttle valve, seals and couplings to prevent leaks, at least one sampling port, and shall be constructed of PVC, HDPE, fiberglass, stainless steel, or other approved materials.	Y	

## IV. Source Specific Applicable Requirements

# Table IV – B Source-Specific Applicable Requirements

S-5 REDWOOD LANDFILL – WASTE DECOMPOSITION PROCESS, EQUIPPED WITH GAS COLLECTION SYSTEM; ABATED BY A-51 LANDFILL GAS FLARE; AND A-60 LANDFILL GAS FLARE;

S-76 REDWOOD LANDFILL – WASTE AND COVER MATERIAL DUMPING; ABATED BY A-18 WATER SPRAYS;

S-77 REDWOOD LANDFILL – EXCAVATING, BULLDOZING, AND COMPACTING ACTIVITIES; ABATED BY A-18 WATER SPRAYS

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
60.759(c)	Gas Mover Equipment shall be sized to handle maximum expected gas generation rate over the intended period of use.	Y	
60.759(c)(1)	For existing systems, flow data shall be used to project maximum flow rate.	Y	
60.759(c)(2)	For new systems, gas generation rate shall be calculated per 60.755(a)(1)	Y	
40 CFR Part 63, Subpart A	National Emission Standards for Hazardous Air Pollutants — General Provisions (9/13/10)		
63.4	Prohibited activities and circumvention	Y	
63.5	Preconstruction review and notification requirements	Y	
63.5(b)	Requirements for existing, newly constructed, and reconstructed sources	Y	
63.6	Compliance with standards and maintenance requirements	Y	
63.6(e)	Operation and maintenance requirements and SSM Plan	Y	
63.6(f)	Compliance with non-opacity emission standards	Y	
63.10	Record Keeping and reporting requirements	Y	
63.10(b)	General record keeping requirements	Y	
63.10(b)(2)	For affected sources, maintain relevant records of:	Y	
63.10(b)(2) (i-v)	Records for startup, shutdown, malfunction, and maintenance	Y	
63.10(d)	General reporting requirements	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)		
63.1955	What requirements must I meet?	Y	
63.1955(a)	Comply with either 63.1955(a)(1) or (a)(2)	Y	
63.1955(a)(1)	Comply with 40 CFR Part 60, Subpart WWW	Y	

## IV. Source Specific Applicable Requirements

### Table IV – B Source-Specific Applicable Requirements

S-5 REDWOOD LANDFILL – WASTE DECOMPOSITION PROCESS, EQUIPPED WITH GAS COLLECTION SYSTEM; ABATED BY A-51 LANDFILL GAS FLARE; AND A-60 LANDFILL GAS FLARE;

S-76 REDWOOD LANDFILL – WASTE AND COVER MATERIAL DUMPING; ABATED BY A-18 WATER SPRAYS;

S-77 REDWOOD LANDFILL – EXCAVATING, BULLDOZING, AND COMPACTING ACTIVITIES; ABATED BY A-18 WATER SPRAYS

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
63.1955(b)	Comply with 63.1960-63.1985, if a collection and control system is required by 40 CFR Part 60, Subpart WWW or a State Plan implementing 40 CFR Part 60, Subpart Cc	Y	
63.1955(c)	Comply with all approved alternatives to standards for collection and control systems plus all SSM requirements and 6 month compliance reporting requirements	Y	
63.1960	How is compliance determined?	Y	
63.1965	What is a deviation?	Y	
63.1975	How do I calculate the 3-hour block average used to demonstrate compliance?	Y	
63.1980	What records and reports must I keep and submit?	Y	
63.1980(a)	Comply with all record keeping and reporting requirements in 40 CFR Part 60, Subpart WWW or the State Plan implementing 40 CFR Part 60, Subpart Cc, except that the annual report required by 40 CFR 60.757(f) must be submitted every 6 months	Y	
63.1980(b)	Comply with all record keeping and reporting requirements in 40 CFR Part 60, Subpart A and 40 CFR Part 63, Subpart A, including SSM Plans and Reports	Y	
BAAQMD Condition # 19867			
Part 1	Design capacity limit (Regulation 2-1-301)	Y	
Part 2	Cumulative decomposable waste limit (Regulations 2-1-301 and 2-5-302, Cumulative Increase and Offsets)	Y	
Part 3	Waste acceptance rate limits (Regulation 2-1-301)	Y	
Part 4	Cover materials usage limits (Regulation 2-1-301)	Y	
Part 5	Record keeping requirements for Parts 1-4 (Regulations 2-1-301, 8-34-501, and 40 CFR 60.758)	Y	
Part 6	Off-site vehicle fleet weight limit (Regulation 2-1-301)	Y	

## **IV. Source Specific Applicable Requirements**

# Table IV – B Source-Specific Applicable Requirements

S-5 REDWOOD LANDFILL – WASTE DECOMPOSITION PROCESS, EQUIPPED WITH GAS COLLECTION SYSTEM; ABATED BY A-51 LANDFILL GAS FLARE; AND A-60 LANDFILL GAS FLARE;

S-76 REDWOOD LANDFILL – WASTE AND COVER MATERIAL DUMPING; ABATED BY A-18 WATER SPRAYS;

S-77 REDWOOD LANDFILL – EXCAVATING, BULLDOZING, AND COMPACTING ACTIVITIES; ABATED BY A-18 WATER SPRAYS

Applicable	Regulation Title or	Federally Enforceable	Future Effective
Requirement	Description of Requirement	(Y/N)	Date
Part 7	On-site vehicle fleet weight limit (Regulation 2-1-301)	Y	
Part 8	Limit on vehicle miles traveled for off-site vehicle fleet	Y	
	(Regulation 2-1-301)		
Part 9	Limit on vehicle miles traveled for on-site vehicle fleet	Y	
	(Regulation 2-1-301)		
Part 10	Record keeping requirements for Parts 6-9	Y	
	(Regulations 2-1-301, 8-34-501, and 40 CFR 60.758)		
Part 11	Particulate emissions control measures	Y	
	(Regulations 1-301, 2-1-301, and 6-1-301)		
Part 12	Public nuisance consequences (Regulation 1-301)	N	
Part 13	Handling procedures for non-hazardous materials with no or low VOC	N	
	Content (Regulation 2-5-302)		
Part 14	Usage limits and record keeping requirements for VOC laden soil.	Y	
	(Offsets and Regulation 8-2-301)		
Part 15	Handling procedures VOC contaminated soil	Y	
	(Offsets and Regulations 8-40-301, 8-40-304, and 8-40-305)		
Part 16	Control requirements for collected landfill gas	Y	
	(Regulations 8-34-301.1 and 8-34-301.3 and 40 CFR 60.752(b)(2)(iii))		
Part 17	Landfill gas collection system description	Y	
	(Regulations 2-1-301, 8-34-301.1, 8-34-304, 8-34-305, and 2-6-413)		
Part 18	Permit requirements if landfill gas concentrations exceed listed levels	Y	
	(Cumulative Increase, Offsets, RACT, AB-2588 Air Toxics Hot Spots		
	Act, and Regulations 2-5-302.3, 9-1-302, and 9-2-301)		
Part 19	Allowable fuels for flares (RACT and Regulation 2-2-112)	Y	
Part 20	Landfill gas throughput limits and gas flow meter requirement for	Y	
	flares (Cumulative Increase and 40 CFR 60.756(b)(2)(i))		
Part 21	[deleted]	¥	

## **IV. Source Specific Applicable Requirements**

# Table IV – B Source-Specific Applicable Requirements

S-5 REDWOOD LANDFILL – WASTE DECOMPOSITION PROCESS, EQUIPPED WITH GAS COLLECTION SYSTEM; ABATED BY A-51 LANDFILL GAS FLARE; AND A-60 LANDFILL GAS FLARE;

S-76 REDWOOD LANDFILL – WASTE AND COVER MATERIAL DUMPING; ABATED BY A-18 WATER SPRAYS;

S-77 REDWOOD LANDFILL – EXCAVATING, BULLDOZING, AND COMPACTING ACTIVITIES; ABATED BY A-18 WATER SPRAYS

Applicable	Regulation Title or	Federally Enforceable	Future Effective
Requirement	Description of Requirement	(Y/N)	Date
Part 22	Combustion zone temperature limits and monitoring requirements for	Y	
	flares (Regulations 2-5-302, 8-34-301.1 and 8-34-501.3, and 40 CFR		
	60.756(b)(1))		
Part 23	NMOC limit for flares (Cumulative Increase, Regulation 8-34-301.3,	Y	
	and 40 CFR 60.752(b)(2)(iii)(B))		
Part 24	[deleted]		
Part 25	NOx emission limit for flares (RACT and Offsets)	Y	
Part 26	CO emission limits for flares (RACT and Cumulative Increase)	Y	
Part 27	[deleted]		
Part 28	[deleted]		
Part 29	Record keeping and reporting requirements for flares	Y	
	(Regulations 2-6-501, 8-34-501, and 40 CFR 60.758)		
Part 30	Annual source test requirements (Cumulative Increase, RACT, Offsets,	Y	
	Regulations 2-5-501, 8-34-301.3 and 8-34-412, and 40 CFR 60.8 and		
	60.752(b)(2)(iii)(B))		
Part 31	Annual landfill gas characterization test requirements	Y	
	(AB-2588 Air Toxic Hot Spots Act and Regulations 2-5-302, 8-34-		
	412, 9-1-302, and 9-2-301)		
Part 32	Reporting periods and report submittal due dates for the Regulation 8,	Y	
	Rule 34 report (Regulation 8-34-411 and 40 CFR 63.1980(a))		
Part 33	Hydrogen Sulfide Monitoring Plan (Regulation 9-2-301)	N	

## IV. Source Specific Applicable Requirements

### Table IV – C Source-Specific Applicable Requirements

S-34 Compost Facility Operations; S-39 Trommel Screening Processes; and A-18 Water Sprays

		Federally	Future
Applicable	Regulation Title or	Enforceable	Effective
Requirement BAAQMD	Description of Requirement	(Y/N)	Date
Regulation 6, Rule 1	Particulate Matter – General Requirements (12/5/07)		
6-1-301	Ringelmann No. 1 Limitation	N	
6-1-305	Visible Particles	N	
6-1-311	General Operations: Emission Limit Based on Process Weight Rate	N	
6-1-401	Appearance of Emissions	N	
SIP Regulation 6	Particulate Matter and Visible Emissions (9/4/98)		
6-301	Ringelmann No. 1 Limitation	Y	
6-305	Visible Particles	Y	
6-311	General Operations: Emission Limit Based on Process Weight Rate	Y	
6-401	Appearance of Emissions	Y	
BAAQMD Regulation 8, Rule 2	Organic Compounds – Miscellaneous Operations (7/20/05)		
8-2-301	Miscellaneous Operations	Y	
BAAQMD Regulation 9, Rule 2	Inorganic Gaseous Pollutants – Hydrogen Sulfide (10/6/99)		
9-2-301	Limitations on Hydrogen Sulfide	N	
BAAQMD Condition # 13123	, ,		
Part 1	Throughput Limits (Cumulative Increase)	Y	
Part 2	Record Keeping Requirements (Cumulative Increase)	Y	
Part 3	Watering Requirements for Material Handling Operations (Regulations 1-301 and 6-1-305)	Y	
Part 4	Maintenance Requirements for Roadways (Regulations 1-301 and 6-1-305)	Y	
Part 5	Particulate Emission Limits and Monitoring Requirements (Regulations 1-301, 6-1-301, and 6-1-305)	Y	
Part 6	Odor Control Requirements (Regulation 1-301)	N	
Part 7	Stockpile Storage Time Limitations (Regulation 1-301)	N	
Part 8	Public Nuisance Violation Consequences (Regulation 1-301)	N	

## **IV. Source Specific Applicable Requirements**

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

S-41 TEMPORARY STOCKPILES FOR YARD AND GREEN WASTE SHREDDING OPERATIONS; AND A-18 WATER SPRAYS

		Federally	Future
Applicable	Regulation Title or	Enforceable	Effective
Requirement	Description of Requirement	(Y/N)	Date
BAAQMD	Particulate Matter – General Requirements (12/5/07)		
Regulation 6,			
Rule 1			
6-1-301	Ringelmann No. 1 Limitation	N	
6-1-305	Visible Particles	N	
6-1-311	Process Weight Limitation	N	
6-1-401	Appearance of Emissions	N	
SIP	Particulate Matter and Visible Emissions (9/4/98)		
Regulation 6			
6-301	Ringelmann No. 1 Limitation	Y	
6-305	Visible Particles	Y	
6-311	Process Weight Limitation	Y	
6-401	Appearance of Emissions	Y	
BAAQMD			
Condition #			
19865			
Part 1	Waste Material Throughput Limits (Cumulative Increase)	Y	
Part 2	Record Keeping Requirements (Cumulative Increase)	Y	
Part 3	Particulate Emission Limit and Abatement Requirement for Material	Y	
	Handling Operations (Regulations 6-1-301 and 6-1-305)		
Part 4	Monitoring Requirements for Material Handling Operations	Y	
	(Regulations 2-1-403, 6-1-301, and 6-1-305)		

## IV. Source Specific Applicable Requirements

### Table IV – E Source-Specific Applicable Requirements

S-42 SOIL AND COVER MATERIAL STOCKPILES; AND A-18 WATER SPRAYS

Applicable	Regulation Title or	Federally Enforceable	Future Effective
Requirement	Description of Requirement	(Y/N)	Date
BAAQMD Regulation 6, Rule 1	Particulate Matter – General Requirements (12/5/07)		
6-1-301	Ringelmann No. 1 Limitation	Y	
6-1-305	Visible Particles	Y	
6-1-401	Appearance of Emissions	Y	
SIP Regulation 6	Particulate Matter and Visible Emissions (9/4/98)		
6-301	Ringelmann No. 1 Limitation	Y	
6-305	Visible Particles	Y	
6-401	Appearance of Emissions	Y	
BAAQMD Regulation 8, Rule 2	Organic Compounds – Miscellaneous Operation (7/20/05)		
8-2-301	Miscellaneous Operations	Y	
BAAQMD Condition # 19866			
Part 1	Throughput Limits (Cumulative Increase)	Y	
Part 2	Record Keeping Requirements (Cumulative Increase)	Y	
Part 3	Particulate Emission Limits and Abatement Requirements for Material Handling Operations (Regulations 6-1-301 and 6-1-305)	Y	
Part 4	Monitoring Requirements for Material Handling Operations (Regulations 2-1-403, 6-1-301, and 6-1-305)	Y	

## IV. Source Specific Applicable Requirements

### Table IV – F Source-Specific Applicable Requirements

S-49 DIESEL ENGINE FOR EMERGENCY BACK-UP GENERATOR

Applicable	Regulation Title or	Federally Enforceable	Future Effective
Requirement	Description of Requirement	(Y/N)	Date
BAAQMD Regulation 6, Rule 1	Particulate Matter – General Requirements (12/5/07)		
6-1-303	Ringelmann No. 2 Limitation	N	
6-1-303.1	Internal combustion engines below 1500 cubic inches displacement or standby engines	N	
6-1-305	Visible Particles	N	
6-1-310	Particulate Weight Limitation	N	
6-1-401	Appearance of Emissions	N	
SIP Regulation 6	Particulate Matter and Visible Emissions (9/4/98)		
6-303	Ringelmann No. 2 Limitation	Y	
6-303.1	Internal combustion engines below 1500 cubic inches displacement or standby engines	Y	
6-305	Visible Particles	Y	
6-310	Particulate Weight Limitation	Y	
6-401	Appearance of Emissions	Y	
BAAQMD Regulation 8, Rule 1	Organic Compounds – General Provisions (6/15/94)		
8-1-110.2	Exemptions – internal combustion engine	Y	
BAAQMD Regulation 9, Rule 1	Inorganic Gaseous Pollutants – Sulfur Dioxide (3/15/95)		
9-1-301	Limitations on Ground Level Concentrations	Y	
9-1-304	Liquid and Solid Fuels	Y	
BAAQMD Regulation 9 Rule 8	Inorganic Gaseous Pollutants – Nitrogen Oxides and Carbon Monoxide from Stationary Internal Combustion Engines (7/25/07)		
9-8-110	Exemptions	N	
9-8-110.1	For <250 hp Engines	N	Expires 1/1/12
9-8-110.3	For Liquid Fuel Fired Engines	N	Expires 1/1/12

# IV. Source Specific Applicable Requirements

## Table IV – F Source-Specific Applicable Requirements

S-49 DIESEL ENGINE FOR EMERGENCY BACK-UP GENERATOR

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
9-8-110.5	For Emergency Standby Engines	N	
9-8-330	Emergency Standby Engines, Hours of Operation	N	
9-8-330.1	For Emergency Use	N	
9-8-330.2	For Reliability-Related Activities	N	Expires 1/1/12
9-8-330.3	For Reliability-Related Activities	N	1/1/12
9-8-502	Recordkeeping	N	
9-8-502.1	For Exempt Engines	N	
9-8-530	Emergency Standby Engines, Monitoring and Recordkeeping	N	
9-8-530.1	Hours of Operation (total)	N	
9-8-530.2	Hours of Operation (emergency)	N	
9-8-530.3	Nature of Each Emergency Condition	N	
40 CFR Part 63, Subpart A	National Emission Standards for Hazardous Air Pollutants – General Provisions (9/13/10)		
63.4	Prohibited activities and circumvention	Y	
63.5	Preconstruction review and notification requirements	Y	
63.5(b)	Requirements for existing, newly constructed, and reconstructed sources	Y	
63.6	Compliance with standards and maintenance requirements	Y	
63.8	Monitoring requirements	Y	
63.10	Record keeping and reporting requirements	Y	
63.10(b)	General record keeping requirements	Y	
63.10(c)	Additional record keeping requirements for sources with continuous monitoring systems	Y	
63.10(d)	General reporting requirements	Y	
63.10(e)	Additional reporting requirements for sources with continuous monitoring systems	Y	
40 CFR Part 63 Subpart ZZZZ	National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (3/10/2010)		
63.6585	Am I subject to this part?	Y	
63.6585(a)	Applicable to stationary RICE	Y	
63.6585(c)	Applicable to area source of HAPs	Y	

# IV. Source Specific Applicable Requirements

## Table IV – F Source-Specific Applicable Requirements

S-49 DIESEL ENGINE FOR EMERGENCY BACK-UP GENERATOR

Applicable	Regulation Title or	Federally Enforceable	Future Effective
Requirement	Description of Requirement	(Y/N)	Date
63.6590	What parts of my plant does this subpart cover?	Y	
63.6590(a)	Affected source	Y	
63.6590(a)(1)	Threshold Date for Existing stationary RICE	Y	
(iii)			
63.6595	When do I have to comply with this subpart?	Y	
63.6595(a)	Compliance Date for affected sources	Y	5/3/13
63.6603	What emission limitations and operating limitations must I meet if I	Y	
	own or operate and existing stationary RICE located at an area source		
	of HAP emissions?		
63.6603(a)	Operating limitations for existing stationary RICE located at an area	Y	5/3/13
	source of HAP emissions		
63.6625	What are my monitoring, installation, collection, operation, and	Y	
	maintenance requirements?		
63.6625(h)	Minimize engine idle time, not to exceed 30 minutes	Y	5/3/13
63.6640	How do I demonstrate continuous compliance with the emission	Y	
	limitations and operating limitations?		
63.6640(f)	Requirements for emergency stationary RICE	Y	5/3/13
63.6640(f)(1)	No time limit on use during emergency situations	Y	5/3/13
(i)			
63.6640(f)(1)	Maintenance checks and readiness testing annual hour limit	Y	5/3/13
(ii)			
63.6640(f)(1)	Non-emergency operation annual hour limit	Y	5/3/13
(iii)			
63.6645	What notifications must I submit and when?	Y	
63.6645(a)(5)	Notification requirements do not apply to this source	Y	
63.6655	What Records must I keep?	Y	5/3/13
63.6655(e)(2)	Maintenance	Y	5/3/13
63.6655(f)(2)	Hours of operation	Y	5/3/13
63.6660	In what form and how long must I keep records?	Y	5/3/13
Table 2d to	Requirements for existing Stationary RICE Located at Area Sources of	Y	5/3/13
Subpart ZZZZ	HAP Emissions		
Table 2d 4.a.	Schedule for oil and filter change	Y	5/3/13
Table 2d 4.b.	Schedule for air cleaner inspection	Y	5/3/13
Table 2d 4.c.	Schedule for hose and belt inspection	Y	5/3/13

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# IV. Source Specific Applicable Requirements

## Table IV – F Source-Specific Applicable Requirements

S-49 DIESEL ENGINE FOR EMERGENCY BACK-UP GENERATOR

		Federally	Future
Applicable	Regulation Title or	Enforceable	Effective
Requirement	Description of Requirement	(Y/N)	Date
Table 6 to	Continuous Compliance with Emission Limitations, Operating	Y	5/3/13
Subpart ZZZZ	Limitations, Work Practices, and Management Practices		
Table 6 9.a.	Work or Management Practices	Y	5/3/13
CCR, Title 17, Section 93115	Airborne Toxic Control Measure for Stationary Compression Ignition Engines (5/19/11)		
§93115.5	Fuel and Fuel Additive Requirements for New and In-Use Stationary	N	
3,0110.0	CI Engines That Have a Rated Brake Horsepower of Greater Than (>50 bhp)		
§93115.5(b)	For In-Use Emergency Standby CI Engines	N	
§93115.6	Emergency Standby Diesel-Fueled CI Engine (>50 bhp) Operating Requirements and Emission Standards	N	
§93115.6(b)	For In-Use Emergency Standby Diesel Fueled CI Engines	N	
§93115.6(b)	Emission Standards and Operating Requirements	N	
§93115.6(b)	Diesel PM Standards and Hours of Operation Limitations	N	
(3)(A) §93115.6(b) (3)(A)(1)	General Requirements	N	
§93115.6(b)	For Engines That Emit Diesel PM Greater Than or Equal to	N	
(3)(A)(1)(a)	0.40 g/bhp-hr:  Operating Hour Limit for Reliability Related Activities  (Note that HC, NOx, NMHC+NOx, and CO are not limited for this engine)		
§93115.10	Recordkeeping, Reporting and Monitoring Requirements	N	
§93115.10(d)	Monitoring Equipment	N	
§93115.10(d) (1)	Non-Resettable Hour Meter	N	
§93115.10(f)	Reporting Requirements for Emergency Standby-Engines	N	
\$93115.10(f) (1)	Records and Monthly Summary	N	
§93115.10(f) (2)	Records Retention and Availability	N	

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# IV. Source Specific Applicable Requirements

## Table IV – F Source-Specific Applicable Requirements

S-49 DIESEL ENGINE FOR EMERGENCY BACK-UP GENERATOR

		Federally	Future
Applicable	Regulation Title or	Enforceable	Effective
Requirement	Description of Requirement	(Y/N)	Date
BAAQMD Condition # 22820			
Part 1	Operating Time Limitation (CCR, Title 17, Section 93115.6(b)(3)(A)(1)(a))	N	
Part 2	Other Operational Limitations (CCR, Title 17, Section 93115.6(b)(3)(A)(1)(a))	N	
Part 3	Meter Requirements (CCR, Title 17, Section 93115.10(d)(1))	N	
Part 4	Record Keeping Requirements (CCR, Title 17, Section 93115.10(f) or Regulation 2-6-501)	N	
Part 5	At School and Near School Operating Limitations (CCR, Title 17, Section 93115.6(b)(2))	N	

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# IV. Source Specific Applicable Requirements

## Table IV – G Source-Specific Applicable Requirements

S-55 Non-Retail Gasoline Dispensing Facility #8573

Applicable	Regulation Title or	Federally Enforceable	Future Effective
Requirement	Description of Requirement	(Y/N)	Date
BAAQMD Regulation 8, Rule 5	Organic Compounds – Storage of Organic Liquids (10/18/06)	(212.)	
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)		
8-5-206	Gas Tight	Y	
8-5-301	Storage Tank Control Requirements	Y	
8-5-303	Requirements for Pressure Vacuum Valves	Y	
8-5-303.1	Pressure Setting	Y	
8-5-303.2	Gas Tight	Y	
8-5-403	Inspection Requirements for Pressure Vacuum Valves	Y	
8-5-501	Records	Y	
8-5-501.1	Types and amounts of materials stored	Y	
8-5-503	Portable Hydrocarbon Detector	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	
8-7-301.12	Spill Box Drain Valve Limitation	Y	
8-7-301.13	Annual Vapor Tightness Test Requirement	Y	
8-7-302	Phase II Requirements	Y	
	Requirements for Transfers into Motor Vehicle Fuel Tanks	Y	

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# IV. Source Specific Applicable Requirements

## Table IV – G Source-Specific Applicable Requirements

S-55 Non-Retail Gasoline Dispensing Facility #8573

		Federally	Future
Applicable	Regulation Title or	Enforceable	Effective
Requirement	Description of Requirement	(Y/N)	Date
8-7-302.2	Maintenance Requirement	Y	
8-7-302.3	Proper Operation and Free of Defects Requirements	Y	
8-7-302.4	Repair Time Limit for Defective Components	Y	
8-7-302.5	Leak-Free and Vapor Tight Requirement for Components	Y	
8-7-302.6	Requirements for Bellows Nozzles	Y	
8-7-302.7	Requirements for Vapor Recovery Nozzles on Balance Systems	Y	
8-7-302.8	Minimum Liquid Removal Rate	Y	
8-7-302.9	Coaxial Hose Requirement	Y	
8-7-302.10	Construction Materials Specifications	Y	
8-7-302.12	Liquid Retain Limitation	Y	
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	Y	
	and Vaulted Below Grade Storage Tanks		
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 # 14098	Gasoline Throughput Limit (Regulation 2-5-302)	N	

# IV. Source Specific Applicable Requirements

## Table IV – G Source-Specific Applicable Requirements

S-55 Non-Retail Gasoline Dispensing Facility #8573

		Federally	Future
Applicable	Regulation Title or	Enforceable	Effective
Requirement	Description of Requirement	(Y/N)	Date
BAAQMD Condition # 16516	Annual Leak Test (Regulation 8-7-407)	Y	
CARB Executive Order G-70-17-AD	Modification of Certification of the Emco Wheaton Balance Phase II Vapor Recovery System (5/6/93)		
Paragraph 9	Piping and Component Configurations	N	
Paragraph 10	Nozzle Type Requirements for New Installations	N	
Paragraph 11	Dispensing Rate Limit	N	
Paragraph 12	Restrictions on Use of Nozzle Extenders	N	
Paragraph 13	Requirement to Comply with Other Agencies' Rules and Regulations	N	
Paragraph 14	Nozzle Performance Shall Conform to Certification	N	
Paragraph 15	Prohibition on Alteration of Equipment, Parts, Design, or Operation	N	
Paragraph 16	Operating and Maintenance Requirements	N	
CARB Executive Order G-70-160	Certification of Above Ground Tank Vault, Aboveground Tank Filling/Dispensing Vapor Recovery System (11/9/94)		
Paragraph 9	Tank Design Configuration Limitations	N	
Paragraph 10	Emergency Vent Leak Limit	N	
Paragraph 11	Requirement to Use ARB Certified Phase I and Phase II Systems	N	
Paragraph 12	Phase I Piping Configuration Requirements and Disconnection Leak Limit	N	
Paragraph 13	Coaxial Hose Routing Requirements for Liquid Trap Limitations	N	
Paragraph 14	P/V Valve Requirements	N	
Paragraph 15	Tank Insulation Requirements	N	
Paragraph 16	Tank Exterior Surface Requirements	N	
Paragraph 17	Requirement to Comply with Local Air District Rules	N	
Paragraph 18	Requirements for Deliveries from a Cargo Truck	N	
Paragraph 19	Leak Checking Requirements	N	
Paragraph 20	Requirement to Comply with Local Fire Official's Requirements	N	
Paragraph 21	Requirement to Comply with Other Agencies' Rules and Regulations	N	
Paragraph 22	Prohibition on Alteration of Equipment, Parts, Design, or Operation	N	

# IV. Source Specific Applicable Requirements

# Table IV – H Source-Specific Applicable Requirements S-56 PORTABLE HORIZONTAL GRINDER

		Federally	Future
Applicable	Regulation Title or	Enforceable	Effective
Requirement	Description of Requirement	(Y/N)	Date
BAAQMD Baculation 6	Particulate Matter – General Requirements (12/5/07)		
Regulation 6, Rule 1			
6-1-301	Ringelmann No. 1 Limitation	N	
6-1-305	Visible Particles	N	
6-1-311	Process Weight Limitation	N	
6-1-401	Appearance of Emissions	N	
SIP	Particulate Matter and Visible Emissions (9/4/98)		
Regulation 6			
6-301	Ringelmann No. 1 Limitation	Y	
6-305	Visible Particles	Y	
6-311	Process Weight Limitation	Y	
6-401	Appearance of Emissions	Y	
BAAQMD Condition # 22940			
Part 1	Incorporation of Conditions for CARB Portable Equipment	N	
	Registration Permit # 117378 (CARB PERP)		
CARB	Registration Permit # 117378		
Part 1	Locations Where the Registration Permit is not Valid	N	
Part 2	General Operating and Maintenance Requirements for Grinder	N	
Part 3	Registration Permit Identification	N	
Part 4	US EPA Notification Requirements	N	
Part 5	Residence Time Limitation for This Equipment and Any Replacement Units	N	
Part 6	Limitations on the Validity of the Registration Permit	N	
Part 7	Public Nuisance Restriction	N	
Part 8	Permit Applicability Restrictions	N	
Part 9	Change of Ownership Requirements	N	
Part 10	District Authorization Requirement for Non-Valid Locations	N	
Part 11	Prohibited Materials	N	
Part 12	Visible Emission Limitation	N	
Part 13	Ringelmann 1 and Opacity Limitations	N	

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# IV. Source Specific Applicable Requirements

## Table IV – H Source-Specific Applicable Requirements

S-56 PORTABLE HORIZONTAL GRINDER

		Federally	Future
Applicable	Regulation Title or	Enforceable	Effective
Requirement	Description of Requirement	(Y/N)	Date
Part 14	Daily PM10 Emission Limit	N	
Part 15	Watering Requirements	N	
Part 16	Annual PM10 Emission Limit	N	
Part 17	Daily Throughput Limitations and Records	N	
Part 18	Annual Throughput Limitation	N	
Part 19	Road Paving and Watering Requirements	N	
Part 20	Wood Waste Watering Requirements	N	
Part 21	General Operating and Maintenance Requirements for Water Sprays	N	
Part 22	Daily Records Requirements	N	
Part 23	Records Availability and Retention	N	
Part 24	District Notification Requirements	N	
Part 25	Exemption from District Notification Requirements	N	
Part 26	Notification Requirements for Equipment Replacements	N	

# IV. Source Specific Applicable Requirements

## Table IV – I Source-Specific Applicable Requirements

S-58 AERATED LEACHATE POND

Applicable	Regulation Title or	Federally Enforceable	Future Effective
Requirement	Description of Requirement	(Y/N)	Date
BAAQMD	Organic Compounds – Wastewater Collection and Separation		
Regulation 8,	Systems (9/15/04)		
Rule 8			
8-8-113	Exemption, Secondary Wastewater Treatment Processes and	Y	
	Stormwater Sewer Systems		
BAAQMD Condition # 23052			
Part 1	Throughput Limit for Leachate Influent (POC Offsets and NSR for TAC)	Y	
Part 2	POC Concentration Limit for Leachate Influent (POC Offsets)	Y	
Part 3	TAC Concentration Limits for Leachate Influent (NSR for TAC)	N	
Part 4	Analytical Testing Requirements for Leachate Influent (POC Offsets and NSR for TAC)	Y	
Part 5	Record Keeping Requirements (POC Offsets and NSR for TAC)	Y	

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## V. SCHEDULE OF COMPLIANCE

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

#### VI. PERMIT CONDITIONS

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

#### Condition # 96

FOR: S-2 SEWAGE SLUDGE STORAGE, MAIN POND

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

#### **Condition # 13123**

FOR: S-34 COMPOST FACILITY OPERATIONS; S-39 TROMMEL SCREENING PROCESSES; AND A-18 WATER SPRAYS

- 1. The total amount of material produced by the S-34 Compost Facility Operations shall not exceed 50,000 tons during any consecutive 12-month period, and the total amount of material processed by the S-39 Trommel Screens shall not exceed 50,000 tons during any consecutive 12-month period. (Basis: Cumulative Increase)
- 2. In order to demonstrate compliance with Part 1, the Permit Holder shall keep a dated record of the material throughput in a District approved logbook. Material throughput shall be totaled on a monthly basis, and shall be made available to the District staff for inspection. (Basis: Cumulative Increase)
- 3. The material handling operations associated with S-34 and S-39 such as loading, unloading, stockpiling, mixing, turning, and screening shall be abated by water sprays (A-18), as necessary to comply with Part 5. Dry, dusty material shall be wetted down before unloading from truck beds, as necessary to comply with Part 5. (Basis: Regulations 1-301 and 6-1-305)
- 4. All roadways associated with this facility shall be maintained in a clean or wetted condition, as necessary to comply with Part 5. (Basis: Regulations 1-301 and 6-1-305)
- 5. Visible dust emissions from any operation of this facility shall not exceed Ringelmann 1.0 or result in fallout on adjacent property in such quantities as to cause a public nuisance per Regulation 1-301. To ensure compliance with this part, the Permit Holder shall visually observe all material handling operations and roadways associated with these sources and shall immediately initiate corrective actions, if any visible dust emissions are detected that persist for longer than 3 minutes in an hour. (Basis: Regulations 1-301, 6-1-301 and 6-1-305)

#### VI. Permit Conditions

#### **Condition # 13123**

FOR: S-34 COMPOST FACILITY OPERATIONS; S-39 TROMMEL SCREENING PROCESSES; AND A-18 WATER SPRAYS

- \*6. All measures including but not limited to proper housekeeping and management practices, contained and dry storage piles, and dust minimization shall be implemented, as necessary to control odors from these sources. (Basis: Regulation 1-301)
- \*7. During normal operations, the yard waste material shall be processed within 72 hours of receipt so that it does not decompose in the storage piles and generate odor on-site. In the event of an equipment breakdown or other unforeseeable circumstance that would prevent the processing of yard waste within 72 hours, yard waste may be stored for no more than 7 days. If any stockpile that has been stored for longer than 72 hours is deemed to be odorous by a District inspector, then the allowable stockpile storage time shall be reduced from 7 days back to 72 hours. Any stockpile that is deemed to be odorous by a District inspector shall be removed within 24 hours. (Basis: Regulation 1-301)
- \*8. If the plant receives two or more Violation Notices from the District for "Public Nuisance" in any consecutive 12 month period, the Permit Holder for these sources shall implement the following control measures, as applicable, or any other measures that the District deems necessary and appropriate within the time period specified by the District. If requested by the District, the Permit Holder shall submit to the District an application to modify the Permit to Operate and/or these permit conditions within 30 days of notification. (Basis: Regulation 1-301)
  - a. Enclose nuisance operations in a warehouse-like building.
  - b. Pave roadways associated with the nuisance operation.
  - c. Use chemical suppressants to control fugitive dust emissions from roadways associated with the nuisance operation.
  - d. Apply odor inhibitor solutions to odorous operations.
  - e. Install an odor abatement system.
  - f. Reduce the stockpile time allowed by Part 7.
  - g. Reduce the throughput rates allowed by Part 1.
  - h. Discontinue odorous co-composting operations (no use of sewage sludge) during the ozone season or other appropriate time period.

#### VI. Permit Conditions

#### **Condition # 14098**

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

Pursuant to BAAQMD Toxic Section Policy, this facility's annual gasoline throughput shall not exceed 940,000 gallons in any consecutive 12-month period. (Basis: Regulation 2-5-302)

#### **Condition # 16516**

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

For each aboveground gasoline storage tank, the Static Pressure Performance Test (Leak Test) ST-38 shall be successfully conducted at least once in each twelve consecutive month period after the date of successful completion of the startup Static Pressure Performance Test.

The applicant shall notify Source Test by email at gdfnotice@baaqmd.gov or by FAX at (510) 758-3087, at least 48 hours prior to any testing required for permitting. Test results for all performance tests shall be submitted within thirty (30) days of testing. Start-up test results submitted to the District must include the application number and the GDF number. (For annual test results submitted to the District, enter "Annual" in lieu of the application number.) Test results may be submitted by email (gdfresults@baaqmd.gov), FAX (510) 758-3087, or mail (BAAQMD Source Test Section, Attention Hiroshi Doi, 939 Ellis Street, San Francisco CA 94109). (Basis: Regulation 8-7-407)

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#### VI. Permit Conditions

#### **Condition # 19865**

FOR: S-41 TEMPORARY STOCKPILES FOR YARD AND GREEN WASTE SHREDDING OPERATIONS; AND A-18 WATER SPRAYS

- 1. The total amount of waste material processed at the S-41 Temporary Stockpiles for Yard and Green Waste Shredding Operations shall not exceed 820 tons per day and shall not exceed 200,000 tons per year. (Basis: Cumulative Increase)
- 2. In order to demonstrate compliance with Part 1, the Permit Holder shall maintain daily records, summarized on a monthly and annual basis, of the total amount of waste material processed at S-41. All records shall be maintained in an APCO approved log book, retained on site for a minimum of five years from the date of entry, and made available to District staff upon request. (Basis: Cumulative Increase)
- 3. Particulate emissions from the waste material unloading operations, waste material stockpiles, and shredded material stockpiles shall be abated by water sprays from water trucks (A-18) as necessary to prevent visible emissions and to prevent exceedance of the Regulation 6-1-301 Ringelmann 1.0 limit. (Basis: Regulations 6-1-301 and 6-1-305)
- 4. In order to demonstrate compliance with Part 3 and Regulations 6-1-301 and 6-1-305, the Permit Holder shall observe all material loading or unloading operations. If visible emissions are detected that persist for longer than 3 minutes in an hour, the operator of this source shall take the necessary corrective action to stop the emissions. (Basis: Regulations 2-1-403, 6-1-301, and 6-1-305)

#### VI. Permit Conditions

#### **Condition # 19866**

### FOR: S-42 SOIL AND COVER MATERIAL STOCKPILES; AND A-18 WATER SPRAYS

- 1. The total amount material received at the S-42 Soil and Cover Material Stockpiles shall not exceed 1160 tons per day and shall not exceed 105,500 tons per year. (Basis: Cumulative Increase)
- 2. In order to demonstrate compliance with Part 1, the Permit Holder shall maintain daily records, summarized on a monthly and annual basis, of the total amount of material received at S-42. All records shall be maintained in an APCO approved log book, retained on site for a minimum of five years from the date of entry, and made available to District staff upon request. (Basis: Cumulative Increase)
- 3. Particulate emissions from the stockpiles and the material loading and unloading operations shall be abated by water sprays (A-18), as necessary, to prevent visible emissions and to prevent exceedance of the Regulation 6-1-301 Ringelmann 1.0 limit. (Basis: Regulations 6-1-301 and 6-1-305)
- 4. In order to demonstrate compliance with Part 3 and Regulations 6-1-301 and 6-1-305, the Permit Holder shall observe all material loading or unloading operations. If visible emissions are detected that persist for longer than 3 minutes in an hour, the operator of this source shall take the necessary corrective action to stop the emissions. (Basis: Regulations 2-1-403, 6-1-301, and 6-1-305)

#### VI. Permit Conditions

#### **Condition # 19867**

FOR: S-5 REDWOOD LANDFILL – WASTE DECOMPOSITION PROCESS; EQUIPPED WITH GAS COLLECTION SYSTEM; ABATED BY A-51 LANDFILL GAS FLARE; AND A-60 LANDFILL GAS FLARE

S-76 REDWOOD LANDFILL – WASTE AND COVER MATERIAL DUMPING; ABATED BY A-18 WATER SPRAYS; AND

- 1. The maximum design capacity of the landfill (total volume of all wastes and cover materials placed in the landfill, excluding final cover) shall not exceed 25.0 million cubic yards, unless the Permit Holder can demonstrate that an increase of this design capacity limit will not result in any increases in the maximum permitted emission rates for the S-5 Redwood Landfill, A-51 Landfill Gas Flare, and A-60 Landfill Gas Flare, which are identified in the Engineering Evaluations for Applications #19098 and #20607. (Basis: Regulation 2-1-301)
- 2. The total cumulative amount of all decomposable materials placed in the landfill (total weight of all decomposable wastes and all decomposable cover materials placed in the landfill, excluding final cover) shall not exceed 541,140 tons per calendar year and shall not exceed 23.185 million tons, unless the Permit Holder can demonstrate that increases of these limits will not result in increases in waste decomposition related emissions. The maximum permitted fugitive precursor organic compound (POC) emission rate is 26.380 tons per year of POC from the S-5 Redwood Landfill. The maximum permitted residual POC emission rate is 7.716 tons per year from the flares (A-51 and A-60). Any changes in waste acceptance rates, types of waste accepted, or other practices that will result in an increase in the maximum permitted POC, NPOC, or toxic air contaminant emission rates for S-5or A-51 or A-60, which are identified in the Engineering Evaluations for Applications #19098 and #20607, shall be considered a modification of S-5, A-51, or A-60, pursuant to Regulation 2-1-234. (Basis: Regulations 2-1-301 and 2-5-302, Cumulative Increase, and Offsets)

#### VI. Permit Conditions

#### **Condition # 19867**

FOR: S-5 REDWOOD LANDFILL – WASTE DECOMPOSITION PROCESS; EQUIPPED WITH GAS COLLECTION SYSTEM; ABATED BY A-51 LANDFILL GAS FLARE; AND A-60 LANDFILL GAS FLARE

S-76 REDWOOD LANDFILL – WASTE AND COVER MATERIAL DUMPING; ABATED BY A-18 WATER SPRAYS; AND

- 3. Total particulate emissions from Redwood Landfill and the associated waste and cover material delivery, placement, and compaction operations shall not exceed 992.5 pounds of PM10 per day and shall not exceed 154.25 tons of PM10 per year. Compliance with these emission limits shall be demonstrated by meeting the requirements of Parts 3-11. The total amount of all materials accepted at the landfill (total waste for disposal, total materials for composting, total materials for recycling, and total decomposable cover materials, but excluding nondecomposable cover and construction materials, which are also excluded from the equivalent limit in the SWFP) shall not exceed 2310 tons per day (except during temporary emergency situations approved by the Local Enforcement Agency) and shall not exceed 718,410 tons per calendar year. The total amount of sewage sludge accepted at the landfill shall not exceed 310 wet tons per day (except during temporary emergency situations approved by the Local Enforcement Agency) and shall not exceed 96,410 wet tons per calendar year. (Basis: Regulation 2-1-301)
- 4. The total amount of all cover materials (excluding final cover) placed in the landfill shall not exceed 1160 tons per day, with no more than 350 tons per day to consist of decomposable cover materials, and shall not exceed 360,760 tons per calendar year, with no more than 108,850 tons per calendar year from decomposable cover materials. (Basis: Regulation 2-1-301)
- 5. In order to demonstrate compliance with Parts 1-4 above, the Permit Holder shall maintain the following records in an APCO approved log book:
  - a. Record on a daily basis the type and amount of all materials received at the landfill.

#### VI. Permit Conditions

#### **Condition # 19867**

FOR: S-5 REDWOOD LANDFILL – WASTE DECOMPOSITION PROCESS; EQUIPPED WITH GAS COLLECTION SYSTEM; ABATED BY A-51 LANDFILL GAS FLARE; AND A-60 LANDFILL GAS FLARE

S-76 REDWOOD LANDFILL – WASTE AND COVER MATERIAL DUMPING; ABATED BY A-18 WATER SPRAYS; AND

S-77 REDWOOD LANDFILL – EXCAVATING, BULLDOZING, AND COMPACTING ACTIVITIES; ABATED BY A-18 WATER SPRAYS

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

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

#### VI. Permit Conditions

#### **Condition # 19867**

FOR: S-5 REDWOOD LANDFILL – WASTE DECOMPOSITION PROCESS; EQUIPPED WITH GAS COLLECTION SYSTEM; ABATED BY A-51 LANDFILL GAS FLARE; AND A-60 LANDFILL GAS FLARE

S-76 REDWOOD LANDFILL – WASTE AND COVER MATERIAL DUMPING; ABATED BY A-18 WATER SPRAYS; AND

S-77 REDWOOD LANDFILL – EXCAVATING, BULLDOZING, AND COMPACTING ACTIVITIES; ABATED BY A-18 WATER SPRAYS

- 6. The mean vehicle fleet weight for all off-site vehicles traveling on paved roads shall not exceed 15.31 tons. The mean vehicle fleet weight for all off-site vehicles traveling on gravel or dirt roads shall not exceed 16.63 tons. (Basis: Regulation 2-1-301)
- 7. The mean vehicle fleet weight for all on-site landfilling and construction related vehicles (bulldozers, scrapers, back hoes, compactors, road graders, loaders, dump trucks, soil trucks, water trucks, fuel trucks, or maintenance vehicles, etc.) shall not exceed 28.37 tons. (Basis: Regulation 2-1-301)
- 8. The total vehicle miles traveled (VMT) by the off-site vehicle fleet shall not exceed the following limits:
  - a. 280 VMT per day on gravel roads
  - b. 639 VMT per day on dirt roads
  - c. 662 VMT per day on paved roads
  - d. 87,080 VMT per calendar year on gravel roads
  - e. 198,650 VMT per calendar year on dirt roads
  - f. 205,880 VMT per calendar year on paved roads

(Basis: Regulation 2-1-301)

- 9. The total vehicle miles traveled (VMT) by the on-site vehicle fleet shall not exceed the following limits:
  - a. 61 VMT per day (all travel is assumed to occur on dirt roads)
  - b. 19,080 VMT per calendar year (all travel is assumed to occur on dirt roads)

(Basis: Regulation 2-1-301)

#### VI. Permit Conditions

#### **Condition # 19867**

FOR: S-5 REDWOOD LANDFILL – WASTE DECOMPOSITION PROCESS; EQUIPPED WITH GAS COLLECTION SYSTEM; ABATED BY A-51 LANDFILL GAS FLARE; AND A-60 LANDFILL GAS FLARE

S-76 REDWOOD LANDFILL – WASTE AND COVER MATERIAL DUMPING; ABATED BY A-18 WATER SPRAYS; AND

- 10. In order to demonstrate compliance with Parts 6-9, the Permit Holder shall maintain the following records in an APCO approved log book:
  - a. For each type of vehicle fleet (off-site vehicles and on-site construction equipment) maintain a list of all the types of vehicles in the fleet. For each vehicle type, record the empty vehicle weight, maximum load weight, and average vehicle weight (average of full and empty weights). This list shall be reviewed annually and updated whenever necessary to ensure that the list accurately reflects the types of vehicles that may be present at the landfill during any calendar year.
  - b. For the off-site vehicle fleet, record on a daily basis and summarize on a monthly basis: the number of vehicle trips (round trips to/from the landfill) for each type of vehicle in the fleet.
  - c. For the on-site vehicle fleet, record on a daily basis and summarize on a monthly basis: the number of vehicle trips for each type of vehicle in the fleet. For construction vehicles like bulldozers or compactors that have no set travel route but instead make many small trips across the active face, the number of vehicle trips can be estimated from operating times and procedures or odometer readings and the maximum round trip travel distance (see subpart f. below). If no data is available for estimating vehicle trips, the vehicle trips shall be recorded as 1 vehicle trip per day per vehicle used during that day.

#### VI. Permit Conditions

#### **Condition # 19867**

FOR: S-5 REDWOOD LANDFILL – WASTE DECOMPOSITION PROCESS; EQUIPPED WITH GAS COLLECTION SYSTEM; ABATED BY A-51 LANDFILL GAS FLARE; AND A-60 LANDFILL GAS FLARE

S-76 REDWOOD LANDFILL – WASTE AND COVER MATERIAL DUMPING; ABATED BY A-18 WATER SPRAYS; AND

- d. At least once per calendar year, the Permit Holder shall calculate and record the mean vehicle fleet weight for each type of vehicle fleet. For each vehicle fleet, the mean vehicle fleet weight shall be calculated using the vehicle trip data for: (i) the day with the highest number of vehicle trips during the previous calendar year; and (ii) the day with the highest total amount of waste accepted during the previous calendar year. Mean vehicle fleet weights shall also be recalculated whenever new vehicle types are added to a vehicle fleet. The mean vehicle fleet weight (MVFW) is a weighted average calculated by multiplying the average vehicle weight for each vehicle type (AVWi) times the number of vehicle trips per day for that vehicle type (DVTi), summing AVWi\*DVTi for all vehicle types, and dividing the resulting sum by the total number of vehicle trips for that day (DVT).
- e. For the off-site vehicle fleet, the Permit Holder shall determine (using odometer measurements, maps, or other appropriate means) the maximum round trip distance traveled on-site by each vehicle type in the fleet on gravel roads, dirt roads, and paved roads (VMT per round trip per vehicle type per road type). Alternatively, the Permit Holder may determine a maximum round trip distance per road type for one or more groups of vehicle types, if all vehicle types in the group travel essentially the same roads and distances. This distance shall be determined at least once per calendar year and whenever significant changes to on-site travel routes have occurred.
- f. For the on-site vehicle fleet, the Permit Holder shall determine (using odometer measurements, maps, or other appropriate means) the maximum round trip distance traveled by each vehicle type in the fleet on dirt roads (VMT per round trip per vehicle type). Alternatively, the Permit Holder may determine a maximum round trip distance per road type for one or more groups of vehicle types, if all vehicle types in the group travel essentially the same roads and distances. This distance shall be determined at least once per calendar year and whenever significant changes to travel routes have occurred.

#### VI. Permit Conditions

#### **Condition # 19867**

FOR: S-5 REDWOOD LANDFILL – WASTE DECOMPOSITION PROCESS; EQUIPPED WITH GAS COLLECTION SYSTEM; ABATED BY A-51 LANDFILL GAS FLARE; AND A-60 LANDFILL GAS FLARE

S-76 REDWOOD LANDFILL – WASTE AND COVER MATERIAL DUMPING; ABATED BY A-18 WATER SPRAYS; AND

S-77 REDWOOD LANDFILL – EXCAVATING, BULLDOZING, AND COMPACTING ACTIVITIES; ABATED BY A-18 WATER SPRAYS

g. For each vehicle fleet type, the Permit Holder shall calculate and record the total vehicle miles traveled (VMT) per day on each type of road (dirt, gravel, and paved for off-site vehicles and dirt only for on-site vehicles) using the data recorded pursuant to subparts b., c., d., and f. The daily VMT per road type shall be summarized for each calendar month and for each calendar year.

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

- 11. Particulate emissions from any operation of the landfill shall be abated by A-18 Water Sprays in such a manner that visible dust emissions shall not exceed Ringelmann 1.0 or result in fallout on adjacent property in such quantities as to cause a public nuisance per Regulation 1-301. The Permit Holder shall meet the following minimum watering requirements:
  - a. On any dry operating days, water shall be applied to unpaved roads and parking areas at a rate of 0.5 gallons per square yard or more.
  - b. On any dry operating days, water shall be applied to unpaved roads at a frequency of at least once every three hours of operation.
  - c. On any dry operating days, water shall be applied to unpaved parking areas or infrequently traveled unpaved roads at least twice per day or at least once per every 150 vehicle trips (whichever is more frequent).
  - d. On any dry operating days, water shall be applied to the active landfill face, the active area of stockpiles, composting operations, or other dust prone areas at least twice per day.
  - e. On any operating day when rain fall is not sufficient to prevent visible emissions, additional water shall be applied to any road, parking area, active face, stockpile, or dusty area as frequently as necessary to prevent visible emissions that persist for longer than 3 minutes in an hour.

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S-76 REDWOOD LANDFILL – WASTE AND COVER MATERIAL DUMPING; ABATED BY A-18 WATER SPRAYS; AND

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

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

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

- \*12. If the plant receives two or more violation notices from the District for "Public Nuisance" in any consecutive 12 month period, the Permit Holder shall implement the following control measures, as applicable, or any other measures that the District deems necessary and/or appropriate, within the time period specified by the District. If requested by the District, the Permit Holder shall submit to the District a permit application to modify the Permit to Operate and/or these permit conditions, within 30 days of notification. (Basis: Regulation 1-301)
  - a. Pave main haul roads and parking areas associated with the nuisance operation such as roads for landfilling, composting, recycling, or sludge handling operations.
  - b. Add gravel or other aggregate based surfacing to dirt roads and parking areas that are associated with the nuisance operation.
  - c. Use chemical suppressants on unpaved roads and unpaved parking areas that are associated with the nuisance operation.
  - d. Increase the frequency of water application on unpaved roads, parking areas, the active face of the landfill, stockpiles, or any other dust prone areas that are associated with the nuisance operation.
  - e. Use frequent sweeping and/or water flushing, during the dry season, on paved areas that are associated with the nuisance operation.

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- \*13. The Permit Holder may use non-hazardous contaminated materials containing no more than 50 ppm by weight of Volatile Organic Compounds (VOC) as daily or interim cover material, provided that these materials are properly handled and disposed of in accordance with this part and any other applicable requirements.
  - a. Any metal laden materials (materials that have been contaminated with arsenic, asbestos, beryllium, cadmium, hexavalent chromium, nickel, copper, lead, mercury, selenium, or zinc) shall be properly handled at all times and shall be abated by appropriate dust mitigation measures including: the use of covers during on-site transport, the use of frequent water sprays during active handling (loading, unloading, spreading, etc.) of these materials, and the use of water sprays, covers, or chemical dust suppressants on inactive storage areas.
  - b. If metal laden materials are used as interim cover, the metal laden material shall be covered with a non-contaminated material such as clean soil or compacted green waste prior to subjecting the area to frequent vehicle or construction equipment traffic.
  - c. Metal laden materials shall not be used in the construction of unpaved roadways or parking lots.

(Basis: Regulation 2-5-302)

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- 14. This part applies to the acceptance, handling, storage, and on-site reuse of VOCladen soil. VOC-laden soil is any soil that contains volatile organic compounds, as defined in Regulation 8-40-213, other than contaminated soil. As defined in Regulation 8-40-205, contaminated soil contains more than 50 ppmw of VOC or has a surface concentration greater than 50 ppmv of VOC as C1, and contaminated soil is subject to Part 15 below instead of this part. Materials containing only non-volatile hydrocarbons and materials meeting the requirements of Regulation 8-40-113 are not subject to this part. For each lot of VOC-laden soil accepted at this site, the Permit Holder shall comply with the daily limits identified in either subpart a or subpart b below and shall comply with the annual emissions limit identified in subpart c below. To demonstration compliance with the daily and annual emission limits, the Permit Holder shall comply with the monitoring procedures listed in subpart a(i-v). If the Permit Holder opts to comply with the daily concentration limit in subpart b rather than the daily emission limit in subpart a, then the Permit Holder shall also comply with the soil screening procedures listed in subpart b(i-v).
  - a. Unless the Permit Holder demonstrates compliance with Regulation 8-2-301 in accordance with subpart b below, the Permit Holder shall limit the quantity of VOC laden soil handled per day such that no more than 15 pounds of total carbon could be emitted to the atmosphere per day. In order to demonstrate compliance with this subpart and the annual emissions limit specified in subpart c, the Permit Holder shall maintain the following records in a District approved log for all VOC-laden soil accepted at the landfill.
    - i. Record on a daily basis the amount of VOC laden soil accepted for each truckload or each soil lot, as appropriate. This amount (in units of pounds per day) is Q in the equation in subpart a(iii) below.
    - ii. Record on a daily basis the VOC content for each truckload or each soil lot, as appropriate. This VOC Content (C in the equation below) should be expressed as parts per million by weight as total carbon (or C1).

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- iii. Calculate and record on a daily basis the VOC Emission Rate (E) using the following equation: E = Q \* C / 1E6

  This equation may be applied to each truckload or to each soil lot received per day depending on the amount of soil that is represented by the VOC Content data. If the equation is applied to multiple loads per day, the VOC Emission Rate shall be totaled for all loads received each day.
- iv. Summarize all daily emission rates on a monthly and calendar year basis.
- v. All records shall be maintained on site or shall be made readily available to District staff upon request for at least 5 years from the date of entry.
- b. Unless the Permit Holder demonstrates compliance with Regulation 8-2-301 in accordance with subpart a above, the Permit Holder shall screen each lot of VOC laden soil accepted per day for VOC surface emissions to show that each lot of VOC laden soil is not contaminated soil.
  - i. The Permit Holder shall use the testing procedures outlined in Regulation 8-40-604.
  - ii. The screening test shall be representative of the entire lot of VOC-laden soil. The soil surface shall be disturbed prior to screening to ensure that the screening is representative of the entire load.
  - iii. The Permit Holder shall maintain records of all testing conducted to satisfy this subpart and shall record the amount of VOC-laden soil accepted and the highest surface concentration measured pursuant to this subpart. These records shall be maintained for each truckload or each soil lot accepted, as appropriate, provided that the records are made or summarized on at least a daily basis.
  - iv. Summarize the daily waste acceptance rates and the weighted average of the surface concentration records on a monthly basis and for each calendar year.

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- v. All records shall be maintained on site or shall be made readily available to District staff upon request for at least 5 years from the date of entry.
- c. The Permit Holder shall limit the quantity of VOC laden soil handled per year such that annual VOC emissions due to on-site handling, storage, disposal, or reuse of VOC laden soil shall not exceed 10,530 pounds per calendar year. The Permit Hold shall comply with the monitoring procedures in subpart a(i-v) above to demonstrate compliance with this annual emissions limit.

(Basis: Offsets and Regulation 8-2-301)

- 15. Handling Procedures for Soil Containing Volatile Organic Compounds:
  - a. The procedures listed below in subparts b-l do not apply if the following criteria are satisfied. However, the record keeping requirements in subpart m below are applicable.
    - i. The Permit Holder has appropriate documentation demonstrating that either the organic content of the soil or the organic concentration above the soil is below the "contaminated" level (as defined in Regulation 8, Rule 40, Sections 205, 207, and 211). The handling of soil containing VOCs in concentrations below the "contaminated" level is subject to Part 14 above.
    - ii. The Permit Holder has no documentation to prove that soil is not contaminated, but source of the soil is known and there is no reason to suspect that the soil might contain organic compounds.
  - b. The Permit Holder shall provide notification to the Compliance and Enforcement Division of the Permit Holder's intention to accept contaminated soil at the facility at least 24 hours in advance of receiving the contaminated soil. The Permit Holder shall provide an estimate of the amount of contaminated soil to be received, the degree of contamination (range and average VOC Content), and the type or source of contamination.

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

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

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

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- viii. Ensure that contaminated soil spread on the active face is completely covered on all sides with one of the following approved coverings: at least 6 inches of clean compacted soil, at least 12 inches of compacted garbage, or at least 12 inches of compacted green waste.
- ix. Ensure that covering of soil on the active face is completed within one hour of the time that the soil was first dumped from a truck at the tipping area.
- k. Contaminated soil shall not be used as daily, intermediate, or final cover material for landfill waste operations unless the requirements of Regulation 8, Rule 40, Sections 116 or 117 have been satisfied.
- 1. Contaminated soil is considered to be a decomposable solid waste pursuant to Regulation 8, Rule 34. All contaminated soil disposed of at a site shall be included in any calculations of the amount of decomposable waste in place for annual reporting requirements or for purposes of Regulation 8-34-111 or 8-34-304.
- m. The Permit Holder shall keep the following records for each lot of soil received, in order to demonstrate on-going compliance with the applicable provisions of Regulation 8, Rule 40 and this part.
  - For all soil received by the facility (including soil with no known contamination), record the arrival date at the facility, the soil lot number, the amount of soil in the lot, the organic content or organic concentration of the lot (if known), the type of contamination (if any), and keep copies of any test data or other information that documents whether the soil is contaminated (as defined in 8-40-205) or not contaminated, with what, and by how much.
  - ii. If the soil is tested for organic content after receipt by the facility, a report with the sampling date, test results, and the date results were received.

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- iii. For all on-site handling of contaminated soil, use a checklist or other approved method to demonstrate that appropriate procedures were followed during all on-site handling activities. One checklist shall be completed for each day and for each soil lot (if multiple lots are handled per day).
- iv. For soil aerated in accordance with 8-40-116 or 117 record the soil lot number, the amount of soil in the lot, the organic content, the final placement date, the final placement location, and describe how the soil was handled or used on-site.
- v. For final disposal at a landfill, record on a daily basis the soil lot number, the amount of soil placed in the landfill, the disposal date, and the disposal location.
- vi. Summarize the total amount of contaminated soil disposed of at this site on a monthly and calendar year basis to demonstrate compliance with subpart g.

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

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

16. During all times that the landfill gas collection system is operating, all collected landfill gas shall be vented to one of the following control system configurations: A-51 Landfill Gas Flare operating alone, A-60 Landfill Gas Flare operating alone, or A-51 and A-60 operating concurrently. In order to assure compliance with this condition, A-51 and A-60 shall be equipped with local and remote alarms and auto restart capabilities. (Basis: 8-34-301.1, 8-34-301.3, and 40 CFR 60.752(b)(2)(iii))

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- 17. The landfill gas collection system described in subpart a below shall be operated continuously as defined in Regulation 8-34-219. Wells, collectors, and adjustment valves shall not be shut off, disconnected, or removed from operation without written authorization from the District, unless the Permit Holder complies with all applicable requirements of Regulation 8, Rule 34, Sections 113, 116, 117, and 118. The Permit Holder shall apply for and receive a Change of Conditions before altering the landfill gas collection system described in subpart a below. Increasing or decreasing the number of wells or collectors, or significantly changing the length of collectors or the locations of wells or collectors are alterations that are subject to this requirement. Adding or altering risers, laterals, or header pipes is not subject to this requirement. The authorized number of landfill gas collection system components is the baseline count listed below plus any components added and minus any components decommissioned pursuant to Part 17b 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, which includes all start-up/shut-down notifications submitted through February 1, 2010. Well and collector locations, depths, and lengths are as described in detail in Permit Application #21623.

**Required Components** 

Total Number of Vertical Wells: 95
Total Number of Horizontal Collectors: 7

b. The Permit Holder has been issued an Authority to Construct for the landfill gas collection system components listed below. Specific well and collector locations, depths, and lengths of associated piping are as described in detail in Permit Application #21623.

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	Minimum	Maximum
Install New Vertical Wells:	0	25
Decommission Vertical Wells:	0	14
Install New Horizontal Collectors	0	10
<b>Decommission Horizontal Collectors</b>	0	5
Replace Vertical Wells *	0	15

<sup>\*</sup> one-for-one well replacement at new optimal locations

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

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

- 18. The concentrations of non-methane organic compounds (NMOC), toxic air contaminants (TAC), and total reduced sulfur (TRS) compounds in landfill gas collected from the S-5 Redwood Landfill shall not exceed the limits listed below.
  - a. Total Non-Methane Organic Compounds: 360 ppmv (calculated as hexane equivalent)
     (Basis: Cumulative Increase and Offsets)

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

Compound	Concentration
Acrylonitrile	300 ppbv
Benzene	1,500 ppbv
Benzyl Chloride	500 ppbv
Carbon Tetrachloride	200 ppbv
Chlorobenzene	200 ppbv
Chloroethane	500 ppbv
Chloroform	200 ppbv
1,4 Dichlorobenzene	1,000 ppbv
Ethylene Dibromide	200 ppbv
Ethylene Dichloride	200 ppbv
Ethylidene Dichloride	500 ppbv
Hexane	2,000 ppbv
Isopropyl Alcohol	10,000 ppbv
Methyl Alcohol	300,000 ppbv
Methyl Ethyl Ketone	15,000 ppbv
Methylene Chloride	1,000 ppbv
Methyl tert-Butyl Ether	500 ppbv
Perchloroethylene	1,000 ppbv
Styrene	500 ppbv
1,1,2,2 Tetrachloroethane	200 ppbv
Toluene	20,000 ppbv
1,1,1 Trichloroethane	200 ppbv
Trichloroethylene	500 ppbv
Vinyl Chloride	2,000 ppbv
Vinylidene Chloride	500 ppbv
Xylenes	20,000 ppbv
D 1.0 0.5.200\	- 1

(Basis: Regulation 2-5-302)

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c. The concentration of total reduced sulfur compounds (TRS) in collected landfill gas shall not exceed an annual average of 350 ppmv (calculated as H2S) and shall not exceed the following peak limits during any single test:

505 ppmv of TRS (calculated as H2S), during 2011-2014;

450 ppmv of TRS (calculated as H2S), during 2015-2018;

410 ppmv of TRS (calculated as H2S), during 2019-2022; and

370 ppmv of TRS (calculated as H2S), during 2023 and later.

The peak and annual average TRS concentrations shall be measured and calculated in accordance with Parts 31a and 31b. (Basis: Cumulative Increase, RACT, AB-2588 Air Toxics Hot Spots Act, and Regulations 2-5-302.3, 9-1-302, and 9-2-301)

- 19. The A-51 and A-60 Landfill Gas Flares shall be fired on landfill gas. (Basis: RACT and Regulation 2-2-112)
- 20. The throughput of landfill gas (with an HHV of 500 BTU/scf) to the A-51 Landfill Gas Flare shall not exceed 4,320,000 scf during any one day. The throughput of landfill gas (with an HHV of 500 BTU/scf) to the A-60 Landfill Gas Flare shall not exceed 4,320,000 scf during any one day. The total throughput of landfill gas (with an HHV of 500 BTU/scf) to the A-51 and A-60 Flares combined shall not exceed 2,207,520,000 scf during any consecutive 12-month period. In order to demonstrate compliance with this condition, the A-51 and A-60 Flares shall each be equipped with a one or more properly operating continuous gas flow meters. (Basis: Cumulative Increase, 40 CFR 60.756(b)(2)(i))
- 21. [deleted]

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FOR: S-5 REDWOOD LANDFILL – WASTE DECOMPOSITION PROCESS; EQUIPPED WITH GAS COLLECTION SYSTEM; ABATED BY A-51 LANDFILL GAS FLARE; AND A-60 LANDFILL GAS FLARE

S-76 REDWOOD LANDFILL – WASTE AND COVER MATERIAL DUMPING; ABATED BY A-18 WATER SPRAYS; AND

- 22. The temperature in the combustion zone of each flare shall be maintained at the minimum temperature listed below, averaged over any 3-hour period. In order to demonstrate compliance with this condition, A-51 and A-60 shall each be equipped with a continuous temperature monitor and recorder. The A-60 Flare shall be equipped with a continuous temperature monitor in each operating zone of the stack (Zone A and Zone B). The temperature recorder for A-60 shall continuously record either the Zone A or Zone B temperature, compatible with the zone the flare is operating in. If a source test demonstrates compliance with all applicable requirements at a different temperature, the APCO may revise these temperature limits, in accordance with the procedures identified in Regulation 2-6-414 or 2-6-415, based on the following criteria. The minimum combustion zone temperature for the flare shall be equal to the average combustion zone temperature determined during the most recent complying source test minus 50 degrees F, provided that the minimum combustion zone temperature is not less than 1400 degrees F. (Basis: Regulations 2-5-302, 8-34-301.3 and 8-34-501.3, and 40 CFR 60.756(b)(1))
  - a. The minimum combustion zone temperature for A-51 is 1400 degrees F, averaged over any 3-hour period.
  - b. The minimum combustion zone temperature for each stack zone at A-60 (Zone A or Zone B) is 1400 degrees F, averaged over any 3-hour period.
- 23. The A-51 and A-60 Landfill Gas Flares shall comply with the NMOC emission limit in Regulation 8-34-301.3. (Basis: Cumulative Increase, 8-34-301.3, and 40 CFR 60.752(b)(2)(iii)(B))
- \*24. [deleted]

#### VI. Permit Conditions

#### **Condition # 19867**

FOR: S-5 REDWOOD LANDFILL – WASTE DECOMPOSITION PROCESS; EQUIPPED WITH GAS COLLECTION SYSTEM; ABATED BY A-51 LANDFILL GAS FLARE; AND A-60 LANDFILL GAS FLARE

S-76 REDWOOD LANDFILL – WASTE AND COVER MATERIAL DUMPING; ABATED BY A-18 WATER SPRAYS; AND

- 25. Nitrogen oxides (NO<sub>x</sub>) emissions from each enclosed flare (A-51 and A-60) shall not exceed 0.06 pounds of NO<sub>x</sub>, calculated as NO<sub>2</sub>, per million BTU. Compliance with this emission limit may be demonstrated by not exceeding the following flue gas concentration limit: 15 ppmv of NO<sub>x</sub>, corrected to 15% oxygen, dry basis. (Basis: RACT and Offsets)
- 26. Carbon monoxide (CO) emissions from each enclosed flare (A-51 and A-60) shall not exceed 0.20 pounds of CO per million BTU. Compliance with these emission limits may be demonstrated by not exceeding the following flue gas concentration limit: 82 ppmv of CO, corrected to 15% oxygen, dry basis. (Basis: RACT and Cumulative Increase)
- 27. [deleted]
- 28. [deleted]
- 29. The Permit Holder shall maintain records of all planned and unanticipated shut downs of the A-51 and A-60 Flares and of any temperature excursions. The records shall include the date, time, duration, and reason for any shut down or excursion. Any unanticipated shut downs or temperature excursions shall be reported to the Enforcement Division immediately. All inspection and maintenance records, records of shut downs and excursions, gas flow records, temperature records, analytical results, source test results, and any other records required to demonstrate compliance with the above permit conditions, Regulation 8 Rule 34, or 40 CFR Part 60 Subpart WWW shall be retained on site for a minimum of five years and shall be made available to District staff upon request. (Basis: 2-6-501, 8-34-501, 40 CFR 60.758)

## VI. Permit Conditions

#### **Condition # 19867**

FOR: S-5 REDWOOD LANDFILL – WASTE DECOMPOSITION PROCESS; EQUIPPED WITH GAS COLLECTION SYSTEM; ABATED BY A-51 LANDFILL GAS FLARE; AND A-60 LANDFILL GAS FLARE

S-76 REDWOOD LANDFILL – WASTE AND COVER MATERIAL DUMPING; ABATED BY A-18 WATER SPRAYS; AND

- 30. In order to demonstrate compliance with Parts 22, 23, 25, and 26 above, Regulation 8, Rule 34, Sections 301.3 and 412, and 40 CFR 60.8 and 60.752(b)(2)(iii)(B), the Permit Holder shall ensure that a District approved source test is conducted annually on the A-51 Landfill Gas Flare and the A-60 Landfill Gas Flare. Each annual source test shall determine the following:
  - a. landfill gas flow rate to the flare (dry basis);
  - b. concentrations (dry basis) of carbon dioxide  $(CO_2)$ , nitrogen  $(N_2)$ , oxygen  $(O_2)$ , methane  $(CH_4)$ , 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, NMOC, and  $O_2$  in the flare stack gas:
  - e. NMOC destruction efficiency achieved by the flare;
  - f.  $NO_x$  and CO emission rates from the flare in units of pounds per million BTU.
  - g. average combustion zone temperature in the flare during the test period. Annual source tests shall be conducted no later than 12 months after the previous test. The annual source test at A-60 may be conducted while it is operating in either zone, provided that each operating zone is tested at least once every five years. The Source Test Section of the District shall be contacted to obtain approval of the source test procedures at least 14 days in advance of each source test. The Source Test Section shall be notified of the scheduled test date at least 7 days in advance of each source test. The source test report shall be submitted to the Compliance and Enforcement Division and the Source Test Section within 60 days of the test date. (Basis: Cumulative Increase, RACT, Offsets, Regulations 2-5-501, 8-34-301.3, 8-34-412, 40 CFR 60.8 and 40 CFR 60.752(b)(2)(iii)(B))

## VI. Permit Conditions

#### **Condition # 19867**

FOR: S-5 REDWOOD LANDFILL – WASTE DECOMPOSITION PROCESS; EQUIPPED WITH GAS COLLECTION SYSTEM; ABATED BY A-51 LANDFILL GAS FLARE; AND A-60 LANDFILL GAS FLARE

S-76 REDWOOD LANDFILL – WASTE AND COVER MATERIAL DUMPING; ABATED BY A-18 WATER SPRAYS; AND

S-77 REDWOOD LANDFILL – EXCAVATING, BULLDOZING, AND COMPACTING ACTIVITIES; ABATED BY A-18 WATER SPRAYS

## 31. Landfill Gas Testing:

a. The Permit Holder shall conduct a characterization of the landfill gas on a quarterly basis with one test concurrent with one of the annual source tests required by Part 30 above. The landfill gas sample shall be drawn from the main landfill gas header. Each quarterly landfill gas sample shall be analyzed for the sulfur compounds listed below. Once per year (concurrent with a Part 30 annual source test) the landfill gas shall be analyzed for all the organic and sulfur compounds listed below. All concentrations shall be reported on a dry basis. The laboratory analysis report for the annual organic and sulfur compound gas characterization test shall be included with the Part 30 source test report and shall be submitted to the Compliance and Enforcement Division and the Source Test Section within 60 days of the test date. (Basis: AB-2588 Air Toxics Hot Spots Act, and Regulations 2-5-302, 8-34-412, 9-1-302, and 9-2-301)

#### Sulfur Compounds

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

## VI. Permit Conditions

#### **Condition # 19867**

FOR: S-5 REDWOOD LANDFILL – WASTE DECOMPOSITION PROCESS; EQUIPPED WITH GAS COLLECTION SYSTEM; ABATED BY A-51 LANDFILL GAS FLARE; AND A-60 LANDFILL GAS FLARE

S-76 REDWOOD LANDFILL – WASTE AND COVER MATERIAL DUMPING; ABATED BY A-18 WATER SPRAYS; AND

S-77 REDWOOD LANDFILL – EXCAVATING, BULLDOZING, AND COMPACTING ACTIVITIES; ABATED BY A-18 WATER SPRAYS

## Organic Compounds

acrylonitrile

benzene

benzyl chloride

carbon tetrachloride

chlorobenzene

chloroethane

chloroform

1,1 dichloroethane

1,1 dichlorethene

1,2 dichlorethane

1,4 dichlorobenzene

ethylbenzene

ethylene dibromide

hexane

isopropyl alcohol

methyl alcohol

methyl ethyl ketone

methylene chloride

methyl tert-butyl ether

perchloroethylene

styrene

toluene

1,1,2,2 tetrachloroethane

1,1,1 trichloroethane

trichloroethylene

vinyl chloride

xylenes

#### VI. Permit Conditions

#### **Condition # 19867**

FOR: S-5 REDWOOD LANDFILL – WASTE DECOMPOSITION PROCESS; EQUIPPED WITH GAS COLLECTION SYSTEM; ABATED BY A-51 LANDFILL GAS FLARE; AND A-60 LANDFILL GAS FLARE

S-76 REDWOOD LANDFILL – WASTE AND COVER MATERIAL DUMPING; ABATED BY A-18 WATER SPRAYS; AND

- b. Once per week, beginning no later than March 31, 2005, the Permit Holder shall analyze the landfill gas for hydrogen sulfide (H2S) concentration using a Draeger tube to further demonstrate compliance with Part 18c and Regulation 9-1-302. The landfill gas sample shall be drawn from the main landfill gas header. The Permit Holder shall follow the manufacturer's procedures for using the Draeger tube and interpreting the results. The total reduced sulfur (TRS) content of the landfill gas shall be calculated using the average ratio of TRS/H2S for this site according to the following equation: TRS = 1.015 \* H2S measured by Draeger tube. The Permit Holder shall maintain records of all Draeger tube test dates and test results and shall summarize the average H2S concentrations and the calculated TRS content of the landfill gas on a quarterly basis. Each Draeger tube test result (after conversion to TRS content) and the quarterly laboratory analysis in Part 31a shall be compared to the Peak TRS Limit in Part 18c. On a rolling quarterly basis, the Permit Holder shall determine the annual average TRS content for comparison to the Annual Average TRS Limit in Part 18c. (Basis: Cumulative Increase, RACT, and Regulations 9-1-302 and 9-2-301).
- 32. The annual report required by BAAQMD Regulation 8-34-411 shall be submitted in two semi-annual increments. The reporting period for the first increment of the Regulation 8-34-411 annual report that is submitted subsequent to the issuance of the MFR Permit for this site shall be from December 1, 2003 through April 30, 2004. This first increment report shall be submitted by May 31, 2004. The reporting periods and report submittal due dates for all subsequent increments of the Regulation 8-34-411 report shall be synchronized with the reporting periods and report submittal due dates for the semi-annual MFR Permit monitoring reports that are required by Section I.F of the MFR Permit for this site. A single report may be submitted to satisfy the requirements of Section I.F, Regulation 8-34-411, and 40 CFR Part 63.1980(a), provided that all items required by each applicable reporting requirement are included in the single report. (Basis: Regulation 8-34-411 and 40 CFR Part 63.1980(a))

## VI. Permit Conditions

#### **Condition # 19867**

FOR: S-5 REDWOOD LANDFILL – WASTE DECOMPOSITION PROCESS; EQUIPPED WITH GAS COLLECTION SYSTEM; ABATED BY A-51 LANDFILL GAS FLARE; AND A-60 LANDFILL GAS FLARE

S-76 REDWOOD LANDFILL – WASTE AND COVER MATERIAL DUMPING; ABATED BY A-18 WATER SPRAYS; AND

S-77 REDWOOD LANDFILL – EXCAVATING, BULLDOZING, AND COMPACTING ACTIVITIES; ABATED BY A-18 WATER SPRAYS

\*33. Within 3 months of approval of the permit condition changes pursuant to Application # 20607, the Permit Holder shall submit a proposal for monitoring ground level hydrogen sulfide concentrations at or near the fence line or property boundary for this facility and a proposal that identifies all feasible hydrogen sulfide emission reduction measures that could be implemented at this site if necessary. The Permit Holder shall initiate hydrogen sulfide monitoring within 3 months of receiving District approval for the monitoring protocol. If a measured hydrogen sulfide concentration at the fence line or property boundary exceeds a concentration limit in Regulation 9-2-301 (0.03 ppmv averaged over 60 minutes or 0.06 ppmv averaged over 3 minutes), the Permit Holder shall notify the District of the excess and shall implement any hydrogen sulfide emission reduction measures required by the District at that time. Ground level hydrogen sulfide monitoring may be discontinued five years after this facility ceases waste disposal activities or when the TRS content in the collected landfill gas (measured pursuant to Part 31b) is less than 110 ppmv of TRS for at least 8 consecutive quarters, whichever occurs sooner. (Basis: Regulation 9-2-301)

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## VI. Permit Conditions

#### **Condition # 22820**

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

- 1. The owner/operator shall not exceed 20 hours per year per engine for reliability-related testing. [Basis: "Stationary Diesel Engine ATCM" section 93115, title 17, CA Code of Regulations, subsection 93115.6 (b)(3)(A)(1)(a)]
- 2. The owner/operator shall operate each emergency standby engine only for the following purposes: to mitigate emergency conditions, for emission testing to demonstrate compliance with a District, State or Federal emission limit, or for reliability-related activities (maintenance and other testing, but excluding emission testing). Operating while mitigating emergency conditions or while emission testing to show compliance with District, State or Federal emission limits is not limited. [Basis: "Stationary Diesel Engine ATCM" section 93115, title 17, CA Code of Regulations, subsection 93115.6 (b)(3)(A)(1)(a)]
- 3. The owner/operator shall operate each emergency standby engine only when a non-resettable totalizing meter (with a minimum display capability of 9,999 hours) that measures the hours of operation for the engine is installed, operated and properly maintained. [Basis: "Stationary Diesel Engine ATCM" section 93115, title 17, CA Code of Regulations, subsection 93115.10 (d)(1)]
- 4. Records: The owner/operator shall maintain the following monthly records in a District-approved log for at least 6 months from the date of entry (60 months if the facility has been issued a Title V Major Facility Review Permit or a Synthetic Minor Operating Permit). Log entries shall be retained on-site, either at a central location or at the engine's location, and made immediately available to the District staff upon request.
  - a. Hours of operation for reliability-related activities (maintenance and testing).
  - b. Hours of operation for emission testing to show compliance with emission limits.
  - c. Hours of operation (emergency).
  - d. For each emergency, the nature of the emergency condition.

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e. Fuel usage for each engine(s).

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

## VI. Permit Conditions

#### **Condition # 22820**

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

5. At School and Near-School Operation:

If the emergency standby engine is located on school grounds or within 500 feet of any school grounds, the following requirements shall apply:

The owner/operator shall not operate each stationary emergency standby dieselfueled engine for non-emergency use, including maintenance and testing, during the following periods:

- a. Whenever there is a school sponsored activity (if the engine is located on school grounds)
- b. Between 7:30 a.m. and 3:30 p.m. on days when school is in session. School" or "School Grounds" means any public or private school used for the purposes of the education of more than 12 children in kindergarten or any of grades 1 to 12, inclusive, but does not include any private school in which education is primarily conducted in a private home(s). "School" or "School Grounds" includes any building or structure, playground, athletic field, or other areas of school property but does not include unimproved school property.

[Basis: "Stationary Diesel Engine ATCM" section 93115, title 17, CA Code of Regulations, subsection 93115.6 (b)(2)]

## VI. Permit Conditions

#### **Condition # 22940**

#### FOR: S-56 PORTABLE HORIZONTAL GRINDER

\*1. The conditions issued by CARB with Portable Equipment Registration Permit # 117378 are hereby incorporated by reference. (Basis: CARB PERP)

#### CARB PERP # 117378

- 1. This registration is not valid for operation within the boundaries of the California Outer Continental Shelf and State Territorial Waters.
- 2. The equipment unit shall be properly maintained and kept in good operating condition at all times,
- 3. The registration identification device shall be affixed in a visible location on the registered portable equipment unit at all times and a legible copy of the registration certificate shall be kept on site with the portable equipment unit, and shall be made accessible to the Air Resources Board or district representative upon request.
- 4. The owner or operator must notify the United States Environmental Protection Agency and comply with 40 CFR 52.21 if:
  - a. the portable equipment unit is part of a facility defined as a major source under 40 CFR 51.166 or 52.21, and
    - i. the facility is located within 10 kilometers of a Class I area; or
    - ii. the portable equipment unit, operating in conjunction with other registered portable equipment units, is part of a the stationary source and would be defined as a major modification to the stationary source under 40 CFR 51.166 or 52.21; or
  - b. the portable equipment unit, operating in conjunction with other registered portable equipment units, would be defined as a major stationary source, as defined under 40 CFR 51.166 or 52.21.
- 5. The equipment unit and any replacement equipment unit shall not reside at the same location for more than 12 consecutive months.

#### VI. Permit Conditions

#### CARB PERP # 117378

- 6. The registration certificate is not valid for operation at any given location where a local air district has issued a permit to operate for the same equipment unit or where other air contaminant emitting equipment, excluding engines, is operating as a stationary source and the operation of this equipment unit would qualify as part of the stationary source. A stationary source is any building, structure, facility, of installation which emits any affected pollutant directly or as a fugitive emission. Building, structure, facility, or installation includes all pollutant emitting activities which are under the same ownership operation, or which are owned or operated by entities which are under common control; belong to the same two-digit standard industrial classification code or by virtue of being part of a common industrial process, manufacturing process, or connected process involving a common raw material; and are located on one or more contiguous or adjacent properties.
- 7. The operation of this equipment unit shall not cause a public nuisance.
- 8. The portable equipment unit shall not be operated under both statewide registration and a district permit at any specific location.
- 9. When this equipment unit is sold, the new owner shall submit a change of ownership application. The existing registration is not valid for the new owner until the application has been filed and all applicable fees have been paid.
- 10. The operator of a portable engine or equipment unit shall obtain district authorization prior to operation at any specific location where the Statewide registration is not valid.
- 11. Materials containing hazardous waste or materials that may potentially lead to emissions of toxic air contaminants shall not be processed by this unit. Hazardous wastes and toxic air contaminants are any substances that may cause or contribute to an increase in serious illness, or may pose a potential hazard to human health. Examples of such materials include, but are not limited to: wood railroad ties, serpentine rock, chemically treated wood, construction or demolition debris containing asbestos, and contaminated soil.
- 12. There shall be no visible emissions beyond the property line on which the equipment is being operated.
- 13. No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in anyone hour which is as dark or darker than Ringelmann 1 or equivalent 20 percent opacity.
- 14. Emissions shall not exceed 82 pounds per day of PM10.

#### VI. Permit Conditions

#### CARB PERP # 117378

- 15. Open areas shall be maintained adequately wet to prevent fugitive emissions in excess of 20 percent opacity or Ringelmann 1.
- 16. Emissions of particulate matter less than 10 microns (PM 10), exclusive of emissions emitted directly from the associated portable engine, shall not exceed 10 tons per year per district.
- 17. Maximum daily throughput shall not exceed 820 tons per day when the equipment unit is operated by itself. When operating together with other equipment units as part of an onshore project, the daily throughput shall be tracked to ensure that total project PMI 0 emissions do not exceed 82 pounds per day. Compliance with this provision shall be determined daily by monitoring and recording total throughput of all registered equipment units operating as part of a project. Records shall include running totals of material throughput for each equipment unit multiplied by the corresponding PM10 emission factor included on each registration. The PM10 emission factor for this unit is 0.1 pounds PM10 per ton of material processed. These records are to be made accessible to the Air Resources Board or district representative upon request. An onshore project is one or more registered engines or equipment units operated at one location under the same or common ownership or control, and used to perform a single activity.
- 18. Maximum annual throughput shall not exceed 200,000 tons per year.
- 19. All roads subject to vehicular traffic shall be either paved or adequately watered to minimize fugitive particulate matter emissions.
- 20. The wood waste shall be kept sufficiently moist to prevent dust emissions.
- 21. Water spray equipment shall be properly maintained and used whenever the unit is in operation, unless there are no visible emissions.
- 22. Daily records shall include a log of date, registration number, location(s) at which the equipment was operated (identified by district, county or specific location), type of material processed, and throughput of material processed.
- 23. Daily records shall be maintained at a central place of business for five years, and made accessible to the Executive Officer or district upon request.

## VI. Permit Conditions

#### CARB PERP # 117378

- 24. If a registered portable equipment unit will be in a district for more than five days, the operator shall notify the district in writing, facsimile, electronic mail, or telephone within two working days of coming into the district. Notification shall include: the registration number of the equipment unit, name and phone of the responsible official, and estimated number of days the equipment unit will be located in the district. If the district has not been notified because the owner or operator did not expect the duration of operation to trigger notification, the operator shall notify the district within 12 hours of determining the portable equipment unit will be operating in the district more than five days.
- 25. District notification is not required when operating within the boundaries of the Bay Area Air Quality Management District.
- 26. The owner of a registered portable equipment unit shall notify the Executive Officer in writing within five days of replacing the registered portable equipment unit with an identical replacement. The notification shall include: company name, responsible official, phone number, registration number, make, model, throughput, and description of the mechanical breakdown, serial number of the identical replacement, and applicable fees.

#### VI. Permit Conditions

#### **Condition # 23052**

#### FOR: S-58 AERATED LEACHATE POND

- 1. The total leachate influent rate to the S-58 Aerated Leachate Pond, excluding non-contact storm water runoff, shall not exceed 39.42 million gallons during any consecutive 12-month period. (Basis: POC Offsets and NSR for TAC)
- 2. The average concentration of POC in the leachate influent to S-58 shall not exceed 500 ppb by weight. (Basis: POC Offsets)
- \*3. The average concentrations of specified toxic air contaminants in the leachate influent to S-58 shall not exceed the limits identified in subparts a-c below. (Basis: NSR for TAC)
  - a. no more than 19 ppb by weight of benzene
  - b. no more than 48 ppb by weight of 1,4-dichlorobenzene
  - c. no more than 7 ppb by weight of vinyl chloride
- 4. To demonstrate compliance with Parts 2 and 3 above, the Permit Holder shall conduct annual analyses on the leachate influent to the S-58 Aerated Leachate Pond in accordance with the following procedures. (Basis: POC Offsets and NSR for TAC)
  - a. Leachate samples shall be collected from at least two leachate wells per year on a rotating basis in accordance with Waste Discharge Requirement Order Number 95-110.
  - b. Each leachate sample shall be analyzed for the concentration by weight of critical organic compounds (COC), benzene, 1,4-dichlorobenzene, and vinyl chloride. These concentrations shall be determined using Regional Water Quality Control Board methods that measure wastewater for the concentration of each organic compound having a carbon number of C-14 or less using gas chromatography. The COC concentration is equal to the sum of all detected concentrations minus the concentration of any compound excluded from COC pursuant to Regulation 8-8-210. Alternatively, COC concentration may be determined in accordance with Regulation 8-8-601.
  - c. For each sample analyzed, the concentration of POC shall be calculated by subtracting the detected concentration for any non-precursor organic compounds (NPOC) from the total COC concentration determined above. NPOC are defined in Regulation 2-1-207 and include but are not limited to: acetone, methylene chloride, perchloroethylene, 1,1,1 trichloroethane, many chlorofluorocarbons, and most perfluorocarbons compounds.

## VI. Permit Conditions

#### **Condition # 23052**

FOR: S-58 AERATED LEACHATE POND

- d. For each annual wastewater testing event, the Permit Holder shall calculate and record the average concentrations (in ppb by weight) of POC, benzene, 1,4-dichlorobenzene, and vinyl chloride for all of the samples analyzed pursuant to subpart a. If a concentration is reported as non-detect for a compound, the detection limit for that compound shall be used for this average concentration computation.
- e. The Permit Holder shall retain all analytical results, calculations, and records required by this part for at least five years from the date of entry. All records shall be kept on site or made available to District staff upon request.
- 5. To demonstrate compliance with Part 1, the Permit Holder shall calculate and record the total leachate flow rate to S-58 for each month (gallons/month) and the total cumulative flow rate to S-58 for each rolling 12-month period (millions of gallons/year). The monthly leachate flow rate records shall clearly identify each leachate pump station that contributed to the total monthly flow rate, the procedures used to calculate the monthly leachate flow rate to S-58, and any records necessary to verify these calculated flow rates. These records shall be retained for at least five years from the date of entry. All records shall be kept on site or made available to District staff upon request. (Basis: POC Offsets and NSR for TAC)

## VII. APPLICABLE LIMITS & COMPLIANCE MONITORING REQUIREMENTS

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

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

Table VII – A

Applicable Limits and Compliance Monitoring Requirements
S-2 Sewage Sludge Storage, Main Pond

T. 6	Gu u	EE	Future		Monitoring	Monitoring	3.5
Type of	Citation of	FE	Effective		Requirement	Frequency	Monitoring
Limit	Limit	Y/N	Date	Limit	Citation	(P/C/N)	Type
Total	BAAQMD	Y		≤ 15 pounds/day or	None	N	N/A
Carbon	8-2-301			$\leq$ 300 ppm, dry basis			
Emissions							
$H_2S$	BAAQMD	N		Property Line Ground	None	N	N/A
	9-2-301			Level Limits:			
				≤ 0.06 ppm,			
				averaged over 3 minutes			
				and $\leq$ 0.03 ppm,			
				averaged over 60 minutes			

## VII. Applicable Limits and Compliance Monitoring Requirements

## Table VII – B

## **Applicable Limits and Compliance Monitoring Requirements**

S-5 Redwood Landfill – Waste Decomposition Process; Equipped with Gas Collection System; Abated by A-51 Landfill Gas Flare; and A-60 Landfill Gas Flare;

S-76 REDWOOD LANDFILL – WASTE AND COVER MATERIAL DUMPING; ABATED BY A-18 WATER SPRAYS; AND

S-77 REDWOOD LANDFILL – EXCAVATING, BULLDOZING, AND COMPACTING ACTIVITIES; ABATED BY A-18 WATER SPRAYS

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

## VII. Applicable Limits and Compliance Monitoring Requirements

## Table VII - B

## **Applicable Limits and Compliance Monitoring Requirements**

S-5 REDWOOD LANDFILL – WASTE DECOMPOSITION PROCESS; EQUIPPED WITH GAS COLLECTION SYSTEM; ABATED BY A-51 LANDFILL GAS FLARE; AND A-60 LANDFILL GAS FLARE;

S-76 REDWOOD LANDFILL – WASTE AND COVER MATERIAL DUMPING; ABATED BY A-18 WATER SPRAYS; AND

S-77 REDWOOD LANDFILL – EXCAVATING, BULLDOZING, AND COMPACTING ACTIVITIES; ABATED BY A-18 WATER SPRAYS

			Future		Monitoring	Monitoring	
Type of	Citation	FE	Effective		Requiremen	Frequency	Monitoring
Limit	of Limit	Y/N	Date	Limit	t Citation	(P/C/N)	Туре
Collection	40 CFR	Y		For Active Areas:	40 CFR	P/E	Records
System	60.753			Collection system	60.758(a),		
Installa-tion	(a)(1) and			components must be	(d)(1) and		
Dates	60.755			installed and operating by	(d)(2)		
	(b)(1)			5 years + 60 days			
				after initial waste placement			
Gas Flow	BAAQMD	Y		Landfill gas collection	BAAQMD	C	Gas Flow
	8-34-301			system shall operate	8-34-501.1,		Meter and
	and 301.1			continuously and all	8-34-501.2,		Recorder
	and			collected gases shall be	8-34-501.10,		(every 15
	BAAQMD			vented to a properly	8-34-508,		minutes),
	Condition			operating control system	and		and
	# 19867,				BAAQMD	P/D	Records of
	Parts 16				Condition #		Landfill Gas
	and 17				19867, Parts		Flow Rates,
					20 and 29		Collection
							and Control
							Systems
							Downtime,
							and
							Collection
							System
							Components
Gas Flow	40 CFR	Y		Operate a Collection System	40 CFR	C or P/M	Gas Flow
	60.753(a)			in each area or cell and vent	60.756(b)(2)		Meter and
	and (e)			all collected gases to a	(i or ii) and		Recorder
				properly operating control	60.758(c)(2)		(every 15
				system			minutes) or
							Monthly
							Inspection
							of Bypass
							Valve and
							Lock and
							Records

## VII. Applicable Limits and Compliance Monitoring Requirements

## Table VII - B

## **Applicable Limits and Compliance Monitoring Requirements**

S-5 REDWOOD LANDFILL – WASTE DECOMPOSITION PROCESS; EQUIPPED WITH GAS COLLECTION SYSTEM; ABATED BY A-51 LANDFILL GAS FLARE; AND A-60 LANDFILL GAS FLARE;

S-76 REDWOOD LANDFILL – WASTE AND COVER MATERIAL DUMPING; ABATED BY A-18 WATER SPRAYS; AND

S-77 REDWOOD LANDFILL – EXCAVATING, BULLDOZING, AND COMPACTING ACTIVITIES; ABATED BY A-18 WATER SPRAYS

			Future		Monitoring	Monitoring	
Type of	Citation	FE	Effective		Requiremen	Frequency	Monitoring
Limit	of Limit	Y/N	Date	Limit	t Citation	(P/C/N)	Type
Gas Flow	BAAQMD	Y		Vent all collected gases to a	BAAQMD	С	Gas Flow
	8-34-301,			properly operating control	8-34-501.10		Meter and
	301.1,			system and operate control	and 508 and		Recorder
	301.3, and			system continuously.	BAAQMD		(every 15
	301.4, and				Condition #		minutes);
	BAAQMD				19867, Parts		Alarms; and
	Condition				16 and 29	P/E	Records
	# 19867,						
	Part 16						
Gas Flow	40 CFR	Y		Vent all collected gases to a	40 CFR	C or P/M	Gas Flow
	60.752			properly operating control	60.756(b)(2)		Meter and
	(b)(2)(iii)			system and operate control	(i or ii) and		Recorder
	and			system at all times when gas	60.758(c)(2)		(every 15
	60.753(e)			is vented to it			minutes) or
	and (f)						Monthly
							Inspection
							of Bypass
							Valve and
							Lock and
							Records
Landfill	BAAQMD	Y		For A-51:	BAAQMD	C	Gas Flow
Gas	Condition			$\leq$ 4,320,000 scf per day	Condition #		Meter and
Through-	# 19867,			and	19867, Parts		Recorder
put	Part 20			For A-60:	20 and 29		
				$\leq$ 4,320,000 scf per day			
				and for			
				A-51 and A-60 Combined:			
				$\leq$ 2,207,520,000 scf per			
				12-month period			
Collection	BAAQMD	Y		$\leq$ 240 hours per year and	BAAQMD	P/D	Operating
and Control	8-34-			$\leq$ 5 consecutive days	8-34-501.1		Records
Systems	113.2						
Shutdown							
Time							

## VII. Applicable Limits and Compliance Monitoring Requirements

## Table VII - B

## **Applicable Limits and Compliance Monitoring Requirements**

S-5 REDWOOD LANDFILL – WASTE DECOMPOSITION PROCESS; EQUIPPED WITH GAS COLLECTION SYSTEM; ABATED BY A-51 LANDFILL GAS FLARE; AND A-60 LANDFILL GAS FLARE;

S-76 REDWOOD LANDFILL – WASTE AND COVER MATERIAL DUMPING; ABATED BY A-18 WATER SPRAYS; AND

S-77 REDWOOD LANDFILL – EXCAVATING, BULLDOZING, AND COMPACTING ACTIVITIES; ABATED BY A-18 WATER SPRAYS

Tomas	C'4a4'an	FE	Future Effective		Monitoring	Monitoring	Manitanina
Type of	Citation			T	Requiremen	Frequency	Monitoring
Limit	of Limit	Y/N	Date	Limit	t Citation	(P/C/N)	Type
Collection	40 CFR	Y		$\leq$ 5 days per event	40 CFR	P/D	Operating
System	60.755(e)				60.7(b),		Records (all
Startup					60.757(f)(2)		occurrences
Shutdown					and (f)(4)		and duration
or Malfunc-							of each)
tion							
Control	40 CFR	Y		$\leq 1$ hour per event	40 CFR	P/D	Operating
System	60.755(e)				60.7(b),		Records (all
Startup					60.757(f)(2)		occurrences
Shutdown					and (f)(3)		and duration
or Mal-							of each)
function							
Startup	40 CFR	Y		Minimize Emissions by	40 CFR	P/E	Records (all
Shutdown	63.6(e)			Implementing SSM Plan	63.1980(a-b)		occurrences,
or Mal-							duration of
function							each,
Pro-cedures							corrective
							actions)
Periods of	BAAQMD	Y		≤ 15 consecutive days	BAAQMD	P/D	Operating
Inopera-	1-523.2			per incident and	1-523.4		Records for
tion for				≤ 30 calendar days per			All
Parametric				12-month period			Parametric
Monitors				•			Monitors
							(for gas flow
							and
							temperature
							monitors)

## VII. Applicable Limits and Compliance Monitoring Requirements

## Table VII - B

## **Applicable Limits and Compliance Monitoring Requirements**

S-5 REDWOOD LANDFILL – WASTE DECOMPOSITION PROCESS; EQUIPPED WITH GAS COLLECTION SYSTEM; ABATED BY A-51 LANDFILL GAS FLARE; AND A-60 LANDFILL GAS FLARE;

S-76 REDWOOD LANDFILL – WASTE AND COVER MATERIAL DUMPING; ABATED BY A-18 WATER SPRAYS; AND

S-77 REDWOOD LANDFILL – EXCAVATING, BULLDOZING, AND COMPACTING ACTIVITIES; ABATED BY A-18 WATER SPRAYS

Type of	Citation	FE	Future Effective		Monitoring Requiremen	Monitoring Frequency	Monitoring
Limit	of Limit	Y/N	Date	Limit	t Citation	(P/C/N)	Type
Contin- uous Monitors	40 CFR 60.13(e)	Y	Date	Requires Continuous Operation except for breakdowns, repairs, calibration, and required span adjustments	40 CFR 60.7(b)	P/D	Operating Records for All Continuous Monitors (for gas flow and temperature
Wellhead Pressure	BAAQMD 8-34- 305.1	Y		< 0 psig	BAAQMD 8-34-414, 501.9 and 505.1	P/M	monitors)  Monthly Inspection and Records
Wellhead Pressure	40 CFR 60.753(b)	Y		< 0 psig	40 CFR 60.755(a)(3), 60.756(a)(1), and 60.758(c) and (e)	P/M	Monthly Inspection and Records
Temper- ature of Gas at Wellhead	BAAQMD 8-34- 305.2	Y		< 55 °C	BAAQMD 8-34-414, 501.9 and 505.2	P/M	Monthly Inspection and Records
Temper- ature of Gas at Wellhead	40 CFR 60.753(c)	Y		< 55 °C	40 CFR 60.755(a)(5), 60.756(a)(3), and 60.758(c) and (e)	P/M	Monthly Inspection and Records
Gas Concen- trations at Wellhead	BAAQMD 8-34- 305.3 or 305.4	Y		$N_2 < 20\%$ OR $O_2 < 5\%$	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 - B

## **Applicable Limits and Compliance Monitoring Requirements**

S-5 REDWOOD LANDFILL – WASTE DECOMPOSITION PROCESS; EQUIPPED WITH GAS COLLECTION SYSTEM; ABATED BY A-51 LANDFILL GAS FLARE; AND A-60 LANDFILL GAS FLARE;

S-76 REDWOOD LANDFILL – WASTE AND COVER MATERIAL DUMPING; ABATED BY A-18 WATER SPRAYS; AND

S-77 REDWOOD LANDFILL – EXCAVATING, BULLDOZING, AND COMPACTING ACTIVITIES; ABATED BY A-18 WATER SPRAYS

			Future		Monitoring	Monitoring	
Type of	Citation	FE	Effective		Requiremen	Frequency	Monitoring
Limit	of Limit	Y/N	Date	Limit	t Citation	(P/C/N)	Type
Gas	40 CFR	Y		N <sub>2</sub> < 20% OR O <sub>2</sub> < 5%	40 CFR	P/M	Monthly
Concen-	60.753(c)				60.755(a)(5),		Inspection
trations at					60.756(a)(2),		and Records
Wellhead					and		
					60.758(c)		
					and (e)		
Well	BAAQMD	Y		No more than 5 wells at a	BAAQMD	P/D	Records
Shutdown	8-34-			time or 10% of total	8-34-116.5		
Limits	116.2			collection system,	and 501.1		
				whichever is less			
Well	BAAQMD	Y		≤ 24 hours per well	BAAQMD	P/D	Records
Shutdown	8-34-				8-34-116.5		
Limits	116.3				and 501.1		
Well	BAAQMD	Y		No more than 5 wells at a	BAAQMD	P/D	Records
Shutdown	8-34-			time or 10% of total	8-34-117.6		
Limits	117.4			collection system,	and 501.1		
				whichever is less			
Well	BAAQMD	Y		$\leq$ 24 hours per well	BAAQMD	P/D	Records
Shutdown	8-34-				8-34-117.6		
Limits	117.5				and 501.1		
Total	BAAQMD	Y		$\leq$ 15 pounds/day or	BAAQMD	P/D	Records and
Carbon	8-2-301			$\leq$ 300 ppm, dry basis	Condition #		Emission
Emissions				(applies to soil containing	19867,		Calculations
				$\leq$ 50 ppmw of VOC during	Part 14	OR	OR
				aeration or use as cover)		P/E	Soil Surface
							Screening
							and Records
Volatile	BAAQMD	Y		$\leq$ 10,530 pounds per	BAAQMD	P/E, M	Soil VOC
Organic	Condition			calendar year	Condition #		Analysis,
Compound	# 19867,			(applies to soil containing	19867,		Records,
(VOC)	Part 14			≤ 50 ppmw of VOC during	Part 14		and
Emissions				aeration or use as cover)			Emission
							Calculations

## VII. Applicable Limits and Compliance Monitoring Requirements

## Table VII - B

## **Applicable Limits and Compliance Monitoring Requirements**

S-5 REDWOOD LANDFILL – WASTE DECOMPOSITION PROCESS; EQUIPPED WITH GAS COLLECTION SYSTEM; ABATED BY A-51 LANDFILL GAS FLARE; AND A-60 LANDFILL GAS FLARE;

S-76 REDWOOD LANDFILL – WASTE AND COVER MATERIAL DUMPING; ABATED BY A-18 WATER SPRAYS; AND

S-77 REDWOOD LANDFILL – EXCAVATING, BULLDOZING, AND COMPACTING ACTIVITIES; ABATED BY A-18 WATER SPRAYS

Type of	Citation	FE	Future Effective		Monitoring Requiremen	Monitoring Frequency	Monitoring
				T * */	_		_
Limit	of Limit	Y/N	Date	Limit	t Citation	(P/C/N)	Туре
TOC	BAAQMD	Y		$\leq$ 1000 ppmv as methane	BAAQMD	P/Q	Quarterly
(Total	8-34-			(component leak limit)	8-34-501.6		Inspection
Organic	301.2				and 503		of collection
Com-							and control
pounds Plus							system
Methane)							components
							with
							portable
							analyzer and
							Records
TOC	BAAQMD	Y		$\leq$ 500 ppmv as methane	BAAQMD	P/M, Q, and	Monthly
	8-34-303			at 2 inches above surface	8-34-415,	Е	Visual
					416, 501.6,		Inspection
					506 and 510		of Cover,
							Quarterly
							Inspection
							with
							Portable
							Analyzer of
							Surface,
							Various
							Reinspec-
							tion Times
							for Leaking
							Areas, and
							Records

## VII. Applicable Limits and Compliance Monitoring Requirements

## Table VII - B

## **Applicable Limits and Compliance Monitoring Requirements**

S-5 REDWOOD LANDFILL – WASTE DECOMPOSITION PROCESS; EQUIPPED WITH GAS COLLECTION SYSTEM; ABATED BY A-51 LANDFILL GAS FLARE; AND A-60 LANDFILL GAS FLARE;

S-76 REDWOOD LANDFILL – WASTE AND COVER MATERIAL DUMPING; ABATED BY A-18 WATER SPRAYS; AND

S-77 REDWOOD LANDFILL – EXCAVATING, BULLDOZING, AND COMPACTING ACTIVITIES; ABATED BY A-18 WATER SPRAYS

			Future		Monitoring	Monitoring	
Type of	Citation	FE	Effective		Requiremen	Frequency	Monitoring
Limit	of Limit	Y/N	Date	Limit	t Citation	(P/C/N)	Type
TOC	40 CFR	Y		<500 ppmv as methane at 5-	40 CFR	P/M, Q and	Monthly
	60.753(d)			10 cm from surface	60.755(c)(1),	E	Visual
					(4) and (5),		Inspection
					60.756(f),		of Cover,
					and		Quarterly
					60.758(c)		Inspection
					and (e)		with
							Portable
							Analyzer of
							Surface,
							Various
							Reinspec-
							tion Times
							for Leaking
							Areas, and
							Records
Non-	BAAQMD	Y		≤ 360 ppmv	BAAQMD	P/A	Annual
Methane	Condition			in landfill gas	Condition #		Landfill Gas
Organic	# 19867,			(calculated as hexane	19867,		Characteri-
Com-	Part 18a			equivalent)	Part 31		zation
pounds							Analysis
(NMOC)							
NMOC	BAAQMD	Y		≥ 98% removal by weight	BAAQMD	P/A	Annual
	8-34-			OR	8-34-412 and		Source Tests
	301.3			< 30 ppmv,	8-34-501.4		and Records
	and			dry basis @ 3% O <sub>2</sub> ,	and		
	BAAQMD			expressed as methane	BAAQMD		
	Condition			(applies to Flares)	Condition #		
	# 19867,				19867,		
	Part 23				Part 30		

## VII. Applicable Limits and Compliance Monitoring Requirements

## Table VII - B

## **Applicable Limits and Compliance Monitoring Requirements**

S-5 REDWOOD LANDFILL – WASTE DECOMPOSITION PROCESS; EQUIPPED WITH GAS COLLECTION SYSTEM; ABATED BY A-51 LANDFILL GAS FLARE; AND A-60 LANDFILL GAS FLARE;

S-76 REDWOOD LANDFILL – WASTE AND COVER MATERIAL DUMPING; ABATED BY A-18 WATER SPRAYS; AND

S-77 REDWOOD LANDFILL – EXCAVATING, BULLDOZING, AND COMPACTING ACTIVITIES; ABATED BY A-18 WATER SPRAYS

			Future		Monitoring	Monitoring	
Type of	Citation	FE	Effective		Requiremen	Frequency	Monitoring
Limit	of Limit	Y/N	Date	Limit	t Citation	(P/C/N)	Type
NMOC	40 CFR	Y		≥ 98% removal by weight	40 CFR 60.8	P/E	Initial
	60.752(b)			OR	and		Source Test
	(2)(iii)(B)			$< 20$ ppmv dry @ 3% $O_2$ ,	60.752(b)		and Records
				expressed as hexane	(2)(iii)(B)		
				(applies to Flares)	and 60.758		
					(b)(2)(ii)		
Temper-	BAAQMD	Y		A-51:	BAAQMD	C	Temperature
ature of	Condition			$CT \ge 1400 \text{ °F},$	8-34-501.3,		Sensor and
Combus-	# 19867,			averaged over	8-34-507,		Recorder
tion Zone	Part 22a			any 3-hour period	and		(continuous)
(CT)					BAAQMD		
					Condition #		
					19867,		
					Part 22		
Temper-	BAAQMD	Y		A-60, Zone A or Zone B:	BAAQMD	C	Temperature
ature of	Condition			$CT \ge 1400 ^{\circ}\text{F}$	8-34-501.3,		Sensor and
Combus-	# 19867,			averaged over	8-34-507,		Recorder
tion Zone	Part 22b			any 3-hour period	and		(continuous)
(CT)					BAAQMD		
					Condition #		
					19867,		
					Part 22		

## VII. Applicable Limits and Compliance Monitoring Requirements

## Table VII - B

## **Applicable Limits and Compliance Monitoring Requirements**

S-5 REDWOOD LANDFILL – WASTE DECOMPOSITION PROCESS; EQUIPPED WITH GAS COLLECTION SYSTEM; ABATED BY A-51 LANDFILL GAS FLARE; AND A-60 LANDFILL GAS FLARE;

S-76 REDWOOD LANDFILL – WASTE AND COVER MATERIAL DUMPING; ABATED BY A-18 WATER SPRAYS; AND

S-77 REDWOOD LANDFILL – EXCAVATING, BULLDOZING, AND COMPACTING ACTIVITIES; ABATED BY A-18 WATER SPRAYS

			Future		Monitoring	Monitoring	
Type of	Citation	FE	Effective		Requiremen	Frequency	Monitoring
Limit	of Limit	Y/N	Date	Limit	t Citation	(P/C/N)	Type
CT	40 CFR 60.758 (c)(1)(i)	Y	Date	A-51: $CT \geq 1400 \text{ °F}$ $(3\text{-hour average});$ $A-60, \text{ Zone A:}$ $CT \geq 1400 \text{ °F}$ $(3\text{-hour average});$ $A-60, \text{ Zone B:}$ $CT \geq 1400 \text{ °F}$ $(3\text{-hour average})$ $from$ $(CT \geq CT_{PF} - 28 \text{ °C}),$ where $CT_{PF}$ is the average combustion temperature during the most recent complying performance test	40 CFR 60.756(b)(1) and 60.758 (b)(2)(i)	C	Temperature Sensor and Recorder (measured every 15 minutes and averaged over 3 hours)
Opacity	BAAQMD 6-1-301, SIP 6-301, and BAAQMD Condition # 19867, Part 11	Y		Ringelmann No. 1 for < 3 minutes/hour (applies to S-76 and S-77)	BAAQMD Condition # 19867 Part 11	P/E, D	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 Flares)	None	N	NA
FP	BAAQMD 6-1-310 and SIP 6-310	Y		$\leq$ 0.15 grains/dscf (applies to Flares)	None	N	NA

## VII. Applicable Limits and Compliance Monitoring Requirements

## Table VII - B

## **Applicable Limits and Compliance Monitoring Requirements**

S-5 REDWOOD LANDFILL – WASTE DECOMPOSITION PROCESS; EQUIPPED WITH GAS COLLECTION SYSTEM; ABATED BY A-51 LANDFILL GAS FLARE; AND A-60 LANDFILL GAS FLARE;

S-76 REDWOOD LANDFILL – WASTE AND COVER MATERIAL DUMPING; ABATED BY A-18 WATER SPRAYS; AND

S-77 REDWOOD LANDFILL – EXCAVATING, BULLDOZING, AND COMPACTING ACTIVITIES; ABATED BY A-18 WATER SPRAYS

			Future		Monitoring	Monitoring	
Type of	Citation	FE	Effective		Requiremen	Frequency	Monitoring
Limit	of Limit	Y/N	Date	Limit	t Citation	(P/C/N)	Type
FP	BAAQMD	Y		$E = 0.026(P)^{0.67}$	None	N	NA
	6-1-311			where:			
	and			E = Allowable			
	SIP 6-311			Emission Rate			
				(lb/hr); and			
				P = Process Weight			
				Rate (lb/hr)			
				Maximum Allowable			
				Emission Rate			
				=40  lb/hr			
				For P >57,320 lb/hr			
PM10	BAAQMD	Y		≤ 992.5 pounds/day	BAAQMD	P/D	Records
	Condition			and	Condition #		
	# 19867,			≤ 154.25 tons/year	19867,		
	Part 3			(from fugitive road dust,	Parts 5 and		
				S-76 and S-77)	10		
NOx	BAAQMD	Y		From Each Flare:	BAAQMD	P/A	Annual
	Condition			$\leq$ 0.06 pounds	Condition #		Source Test
	# 19867,			per MM BTU,	19867,		
	Part 25			calculated as NO2, or	Part 30		
				$\leq$ 15 ppmv @ 15% O <sub>2</sub> , dry			
CO	BAAQMD	Y		From Each Flare:	BAAQMD	P/A	Annual
	Condition			$\leq$ 0.20 pounds	Condition #		Source Test
	# 19867,			per MM BTU, or	19867,		
	Part 26			$\leq$ 82 ppmv @ 15% $O_2$ , dry	Part 30		
$SO_2$	BAAQMD	Y		Property Line Ground Level	None	N	NA
	9-1-301			Limits:			
				$\leq$ 0.5 ppm for 3 minutes and			
				$\leq$ 0.25 ppm for 60 min. and			
				$\leq 0.05$ ppm for 24 hours			
				(applies to Flares)			

## VII. Applicable Limits and Compliance Monitoring Requirements

## Table VII - B

## **Applicable Limits and Compliance Monitoring Requirements**

S-5 REDWOOD LANDFILL – WASTE DECOMPOSITION PROCESS; EQUIPPED WITH GAS COLLECTION SYSTEM; ABATED BY A-51 LANDFILL GAS FLARE; AND A-60 LANDFILL GAS FLARE;

S-76 REDWOOD LANDFILL – WASTE AND COVER MATERIAL DUMPING; ABATED BY A-18 WATER SPRAYS; AND

S-77 REDWOOD LANDFILL – EXCAVATING, BULLDOZING, AND COMPACTING ACTIVITIES; ABATED BY A-18 WATER SPRAYS

	~ <b>.</b>		Future		Monitoring	Monitoring	
Type of	Citation	FE	Effective		Requiremen	Frequency	Monitoring
Limit	of Limit	Y/N	Date	Limit	t Citation	(P/C/N)	Type
$SO_2$	BAAQMD	Y		$\leq$ 300 ppm, dry basis	BAAQMD	P/W, Q	Weekly
	9-1-302			(applies to A-50	Condition #		Draeger
				and A-51, each)	19867, Parts		Tube
					18c and 31		Analysis and
							Quarterly
							Laboratory
							Analysis of
							Landfill Gas
$H_2S$	BAAQMD	N		Property Line Ground Level	BAAQMD	P/E	Portable
	9-2-301			Limits:	Condition		Analyzer at
	and			≤ 0.06 ppm,	#19867,		Fence Line
	BAAQMD			averaged over 3 minutes and	Part 33		and Records
	Condition			≤ 0.03 ppm,			
	#19867,			averaged over 60 minutes			
	Part 33						
Total	BAAQMD	Y		Peak TRS Limit	BAAQMD	P/W, Q	Weekly
Reduced	Condition			(any single test):	Condition #		Draeger
Sulfur	# 19867,			≤ 505 ppmv TRS in 2011-2014	19867,		Tube
(TRS)	Part 18c			≤ 450 ppmv TRS in 2015-2018	Part 31		Analysis and
				≤ 410 ppmv TRS in 2019-2022			Quarterly
				$\leq$ 370 ppmv TRS in 2023 +			Laboratory
				and			Analysis of
				Annual Average			Landfill Gas
				TRS Limit:			and Records
				$\leq$ 350 ppmv of TRS			
				in landfill gas			
				(expressed as H <sub>2</sub> S)			
Cumula-	BAAQMD	Y		$\leq$ 25.0 million cubic yards	BAAQMD	P/D	Records
tive Waste	Condition			of all wastes and cover	Condition #		
Disposal	# 19867,			materials (excluding final	19867,		
	Part 1			cover)	Part 5		

## VII. Applicable Limits and Compliance Monitoring Requirements

## Table VII - B

## **Applicable Limits and Compliance Monitoring Requirements**

S-5 Redwood Landfill – Waste Decomposition Process; Equipped with Gas Collection System; Abated by A-51 Landfill Gas Flare; and A-60 Landfill Gas Flare;

S-76 REDWOOD LANDFILL – WASTE AND COVER MATERIAL DUMPING; ABATED BY A-18 WATER SPRAYS; AND

S-77 REDWOOD LANDFILL – EXCAVATING, BULLDOZING, AND COMPACTING ACTIVITIES; ABATED BY A-18 WATER SPRAYS

			Future		Monitoring	Monitoring	
Type of	Citation	FE	Effective		Requiremen	Frequency	Monitoring
Limit	of Limit	Y/N	Date	Limit	t Citation	(P/C/N)	Type
Decom-	BAAQMD	Y		≤ 23.185 million tons	BAAQMD	P/D	Records
posable	Condition			(cumulative) and	Condition #		
Material	# 19867,			$\leq$ 541,140 tons/year	19867,		
Disposal	Part 2			of decomposable wastes and	Part 5		
_				decomposable cover			
				materials, unless fugitive			
				$POC \le 26.380 \text{ tons/year}$			
Material	BAAQMD	Y		All Materials, except non-	BAAQMD	P/D	Records
Acceptance	Condition			decomposable cover and	Condition #		
Rates	# 19867,			construction materials:	19867,		
	Part 3			$\leq$ 2310 tons per day	Part 5		
				(except during emergencies)			
				and			
				$\leq$ 718,410 tons per calendar			
				year			
				Sewage Sludge:			
				$\leq$ 310 wet tons per day			
				(except during emergencies)			
				and			
				$\leq$ 96,410 wet tons per			
				calendar year			
Cover	BAAQMD	Y		All Cover Materials:	BAAQMD	P/D	Records
Material	Condition			$\leq$ 1160 tons per day and	Condition #		
Usage Rate	# 19867,			$\leq$ 360,760 tons per	19867,		
	Part 4			calendar year	Part 5		
				<u>Decomposable Cover</u>			
				Materials:			
				$\leq$ 350 tons per day and			
				$\leq$ 108,850 tons per			
				calendar year			
Contami-	BAAQMD	Y		≤ 6240 tons	BAAQMD	P/E	Records
nated Soil	Condition			per calendar year	Condition #		
Disposal	# 19867,				19867,		
Rate	Part 15f				Part 15m		

## VII. Applicable Limits and Compliance Monitoring Requirements

## Table VII – B

## **Applicable Limits and Compliance Monitoring Requirements**

S-5 REDWOOD LANDFILL – WASTE DECOMPOSITION PROCESS; EQUIPPED WITH GAS COLLECTION SYSTEM; ABATED BY A-51 LANDFILL GAS FLARE; AND A-60 LANDFILL GAS FLARE;

S-76 REDWOOD LANDFILL – WASTE AND COVER MATERIAL DUMPING; ABATED BY A-18 WATER SPRAYS; AND

S-77 REDWOOD LANDFILL – EXCAVATING, BULLDOZING, AND COMPACTING ACTIVITIES; ABATED BY A-18 WATER SPRAYS

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

## VII. Applicable Limits and Compliance Monitoring Requirements

## Table VII - B

## **Applicable Limits and Compliance Monitoring Requirements**

S-5 REDWOOD LANDFILL – WASTE DECOMPOSITION PROCESS; EQUIPPED WITH GAS COLLECTION SYSTEM; ABATED BY A-51 LANDFILL GAS FLARE; AND A-60 LANDFILL GAS FLARE;

S-76 REDWOOD LANDFILL – WASTE AND COVER MATERIAL DUMPING; ABATED BY A-18 WATER SPRAYS; AND

S-77 REDWOOD LANDFILL – EXCAVATING, BULLDOZING, AND COMPACTING ACTIVITIES; ABATED BY A-18 WATER SPRAYS

			Future		Monitoring	Monitoring	
Type of	Citation	FE	Effective		Requiremen	Frequency	Monitoring
Limit	of Limit	Y/N	Date	Limit	t Citation	(P/C/N)	Type
Contami-	BAAQMD	Y		Limited to 2 on-site	BAAQMD	P/E	Records
nated Soil	Condition			transfers per lot of	Condition #		
Handling	# 19867,			contaminated soil	19867,		
	Part 15e				Part 15m		
Contami-	BAAQMD	Y		Storage Time $\leq$ 90 days	BAAQMD	P/E	Records
nated Soil	Condition			from receipt	Condition #		
On-Site	# 19867,				19867,		
Storage	Part 15f				Part 15m		
Time							
Vehicle	BAAQMD	Y		$\leq$ 15.31 tons	BAAQMD	P/E	Records
Fleet	Condition			for off-site vehicle fleet	Condition #		
Weight	# 19867,			traveling on paved roads	19867,		
	Part 6				Part 10		
Vehicle	BAAQMD	Y		$\leq$ 16.63 tons	BAAQMD	P/E	Records
Fleet	Condition			for off-site vehicle fleet	Condition #		
Weight	# 19867,			traveling on gravel or dirt	19867,		
	Part 6			roads	Part 10		
Vehicle	BAAQMD	Y		$\leq$ 28.37 tons	BAAQMD	P/E	Records
Fleet	Condition			for on-site vehicle fleet	Condition #		
Weight	# 19867,				19867,		
	Part 7				Part 10		
Vehicle	BAAQMD	Y		VMT Road	BAAQMD	P/D	Records
Miles	Condition			<u>Limit Type</u>	Condition #		
Traveled	# 19867,			$\leq$ 280 per day gravel	19867,		
(VMT)	Part 8			$\leq$ 639 per day dirt	Part 10		
				$\leq$ 662 per day paved			
				≤ 87,080 per year gravel			
				$\leq$ 198.650 per year dirt			
				$\leq$ 205,880 per year paved			
Vehicle	BAAQMD	Y		VMT Road	BAAQMD	P/D	Records
Miles	Condition			<u>Limit</u> <u>Type</u>	Condition #		
Traveled	# 19867,			≤ 61 per day dirt	19867,		
(VMT)	Part 9			≤ 19,080 per year dirt	Part 10		

## VII. Applicable Limits and Compliance Monitoring Requirements

## Table VII - B

## **Applicable Limits and Compliance Monitoring Requirements**

S-5 Redwood Landfill – Waste Decomposition Process; Equipped with Gas Collection System; Abated by A-51 Landfill Gas Flare; and A-60 Landfill Gas Flare;

S-76 REDWOOD LANDFILL – WASTE AND COVER MATERIAL DUMPING; ABATED BY A-18 WATER SPRAYS; AND

S-77 REDWOOD LANDFILL – EXCAVATING, BULLDOZING, AND COMPACTING ACTIVITIES; ABATED BY A-18 WATER SPRAYS

	~		Future	_	Monitoring	Monitoring	
Type of	Citation	FE	Effective	- · · ·	Requiremen	Frequency	Monitoring
Limit	of Limit	Y/N	Date	Limit	t Citation	(P/C/N)	Type
Water	BAAQMD	Y		≤ 0.5 gallons	BAAQMD	P/D	Records
Applica-	Condition			per square yard	Condition #		
tion Rates	# 19867,			on unpaved roads and	19867,		
	Part 11a			parking areas	Part 11f-g		
Water	BAAQMD	Y		unpaved roads:	BAAQMD	P/D	Records
Applica-	Condition			once every 3 hours;	Condition #		
tion Fre-	# 19867,			unpaved parking areas and	19867,		
quency	Part 11b-d			infrequently traveled	Part 11f-g		
				unpaved roads:			
				twice per day or once every			
				150 vehicle trips;			
				active face, stockpiles,			
				composting, etc.:			
				twice per day			
Toxic Air	BAAQMD	N		Concentration Limits for	BAAQMD	P/A	Annual
Contam-	Condition			TACs in Landfill Gas:	Condition #		Landfill Gas
inants	# 19867,			Compound PPBV	19867,		Analysis
(TACs)	Part 18b			acrylonitrile 300	Part 31		
				benzene 1,500			
				benzyl chloride 500			
				carbon tetrachloride 200			
				chlorobenzene 200			
				chloroethane 500			
				chloroform 200			
				1,4 dichlorobenzene 1,000			
				ethylene dibromide 200			
				ethylene dichloride 200			
				ethylidene dichloride 500			
				hexane 2,000			
				isopropyl alcohol 10,000			
				methyl alcohol 300,000			

## VII. Applicable Limits and Compliance Monitoring Requirements

## Table VII – B

## **Applicable Limits and Compliance Monitoring Requirements**

S-5 REDWOOD LANDFILL – WASTE DECOMPOSITION PROCESS; EQUIPPED WITH GAS COLLECTION SYSTEM; ABATED BY A-51 LANDFILL GAS FLARE; AND A-60 LANDFILL GAS FLARE; S-76 REDWOOD LANDFILL – WASTE AND COVER MATERIAL DUMPING; ABATED BY A-18 WATER SPRAYS; AND

S-77 REDWOOD LANDFILL – EXCAVATING, BULLDOZING, AND COMPACTING ACTIVITIES; ABATED BY A-18 WATER SPRAYS

			Future		Monitoring	Monitoring	
Type of	Citation	FE	Effective		Requiremen	Frequency	Monitoring
Limit	of Limit	Y/N	Date	Limit	t Citation	(P/C/N)	Type
				methyl ethyl ketone 15,000			
				methylene chloride 1,000			
				methyl t-butyl ether 500			
				perchloroethylene 1,000			
				Styrene 500			
				1,1,2,2			
				tetrachloroethane 200			
				toluene 20,000			
				1,1,1 trichloroethane 200			
				trichloroethylene 500			
				vinyl chloride 2,000			
				vinylidene chloride 500			
				xylenes 20,000			

## VII. Applicable Limits and Compliance Monitoring Requirements

## $\label{eq:continuous} \textbf{Table VII-C} \\ \textbf{Applicable Limits and Compliance Monitoring Requirements} \\$

S-34 Compost Facility Operations; S-39 Trommel Screening Processes; and A-18 Water Sprays

			Future		Monitoring	Monitoring	
Type of	Citation of	FE	Effective		Requirement	Frequency	Monitoring
Limit	Limit	Y/N	Date	Limit	Citation	(P/C/N)	Туре
Opacity	BAAQMD	Y		≤ Ringelmann 1.0	BAAQMD	P/E	Observation
	6-1-301,			for 3 minutes	Condition #		of Source in
	SIP 6-301,			in any hour	13123,		Operation
	and				Part 5		
	BAAQMD						
	Condition						
	# 13123,						
	Part 5			0.67			
FP	BAAQMD	Y		$E = 0.026(P)^{0.67}$	None	N	NA
	6-1-311			where:			
	and			E = Allowable			
	SIP 6-311			Emission Rate			
				(lb/hr); and			
				P = Process Weight			
				Rate (lb/hr) Maximum Allowable			
				Emission Rate			
				= 40  lb/hr			
				For P >57,320 lb/hr			
Total	BAAQMD	Y		$\leq 15$ pounds/day or	None	N	NA
Carbon	8-2-301	-		≤ 300 ppm, dry basis	110110	-,	1,11
Emissions							
H <sub>2</sub> S	BAAQMD	N		Property Line Ground	None	N	NA
_	9-2-301			Level Limits:			
				≤ 0.06 ppm,			
				averaged over 3 minutes			
				and $\leq$ 0.03 ppm,			
				averaged over 60 minutes			
Through-	BAAQMD	Y		Material Produced at S-34:	BAAQMD	P/D	Records
put	Condition			$\leq$ 50,000 tons	Condition #		
	# 13123,			per 12-month period;	13123,		
	Part 1			and	Part 2		
				Material Processed at S-39:			
				$\leq$ 50,000 tons			
				per 12-month period			

## VII. Applicable Limits and Compliance Monitoring Requirements

# Table VII – C Applicable Limits and Compliance Monitoring Requirements

S-34 COMPOST FACILITY OPERATIONS; S-39 TROMMEL SCREENING PROCESSES; AND A-18 WATER SPRAYS

			Future		Monitoring	Monitoring	
Type of	Citation of	FE	Effective		Requirement	Frequency	Monitoring
Limit	Limit	Y/N	Date	Limit	Citation	(P/C/N)	Type
Stockpile	BAAQMD	N		$\leq$ 72 hours from receipt or	BAAQMD	P/D	Records
Storage	Condition			$\leq$ 7 days from receipt, if	Condition #		
Time	# 13123,			processing equipment is not	13123,		
	Part 7			functional or during	Part 2		
				exceptional circumstances			

## $\label{eq:continuous} \textbf{Table VII-D} \\ \textbf{Applicable Limits and Compliance Monitoring Requirements} \\$

S-41 TEMPORARY STOCKPILES FOR YARD AND GREEN WASTE SHREDDING OPERATIONS; AND A-18 WATER SPRAYS

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

# VII. Applicable Limits and Compliance Monitoring Requirements

# Table VII – D Applicable Limits and Compliance Monitoring Requirements

S-41 TEMPORARY STOCKPILES FOR YARD AND GREEN WASTE SHREDDING OPERATIONS; AND A-18 WATER SPRAYS

			Future		Monitoring	Monitoring	
Type of	Citation of	FE	Effective		Requirement	Frequency	Monitoring
Limit	Limit	Y/N	Date	Limit	Citation	(P/C/N)	Type
Through-	BAAQMD	Y		$\leq$ 820 tons per day	BAAQMD	P/D	Records
put	Condition			and	Condition #		
	# 19865,			$\leq$ 200,000 tons per	19865,		
	Part 1			year	Part 2		

Table VII – E
Applicable Limits and Compliance Monitoring Requirements
S-42 Soil and Cover Material Stockpiles; and A-18 Water Sprays

Type of	Citation of	FE	Future Effective		Monitoring Requirement	Monitoring Frequency	Monitoring
Limit	Limit	Y/N	Date	Limit	Citation	(P/C/N)	Туре
Opacity	BAAQMD	Y		< Ringelmann 1.0	BAAQMD	P/E	Observation of
	6-1-301,			for 3 minutes	Condition #		Sources in
	SIP 6-301,			in any hour	19866,		Operation
	and				Part 4		
	BAAQMD						
	Condition						
	# 19866,						
	Part 3						
Total	BAAQMD	Y		≤ 15 pounds/day or	BAAQMD	P/D	Records and
Carbon	8-2-301			$\leq$ 300 ppm, dry basis	Condition #		Emission
Emissions				(applies to unintended	19867,		Calculations
				aeration of soil	Part 14	OR	OR
				containing		P/E	Soil Surface
				≤ 50 ppmw of VOC			Screening and
				during transfers to and			Records
				from stockpiles or			
				during storage)			
Through-	BAAQMD	Y		$\leq$ 1160 tons per day	BAAQMD	P/D	Records
put	Condition			and	Condition #		
	# 19866,			$\leq$ 105,500 tons per	19866,		
	Part 1			year	Part 2		

# VII. Applicable Limits and Compliance Monitoring Requirements

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

			Future		Monitoring	Monitoring	
Type of	Citation of	FE	Effective		Requirement	Frequency	Monitoring
Limit	Limit	Y/N	Date	Limit	Citation	(P/C/N)	Туре
Opacity	BAAQMD	Y		≤ Ringelmann 2.0	None	N	NA
	6-1-303			for 3 minutes			
	and			in any hour			
	SIP 6-303						
FP	BAAQMD	Y		≤ 0.15 grains/dscf	None	N	NA
	6-1-310						
	and						
	SIP 6-310						
$SO_2$	BAAQMD	Y		Property Line Ground	None	N	NA
	9-1-301			Level Limits:			
				$\leq 0.5$ ppm for 3 min. and			
				$\leq$ 0.25 ppm for 60 min. and			
				$\leq$ 0.05 ppm for 24 hours			
Liquid	BAAQMD	Y		$\leq$ 0.5% sulfur by weight	CCR,	P/E	CARB
Fuel Sulfur	9-1-304				Title 13,		Diesel Fuel
Content					Section		Sulfur
					2281(a)		Content
					(2 and 5),		Limits, Sales
					CCR,		Restrictions,
					Title 17,		Usage Re-
					Sections		quirements,
					93115.5 and		and Records
T 1	CCD	NT.		G. 11 E .	93115.10	D/E	CARR
Liquid Fuel Sulfur	CCR Title 17,	N		Standby Engines must use CARB Diesel Fuel or other	CCR, Title 17,	P/E	CARB Diesel Fuel
Content	Section			CARB Diesel Fuel of other CARB Approved	Sections		Sulfur
Content	93115.5			Alternative Fuel,	93115.5 and		Content
	93113.3 (b)			which has	93115.3 and 93115.10		Limits, Sales
	and			Fuel Sulfur Limits of:	73113.10		Restrictions,
	CCR,			≤ 15 ppmw of S			Usage Re-
	Title 13,			(for fuel sold after 6/1/06)			quirements,
	Section Section			(======================================			and Records
	2281(a)						
	(2 and 5)						

# VII. Applicable Limits and Compliance Monitoring Requirements

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

			Future		Monitoring	Monitoring	
Type of	Citation of	FE	Effective		Requirement	Frequency	Monitoring
Limit	Limit	Y/N	Date	Limit	Citation	(P/C/N)	Type
Operating	BAAQMD	N	Expires	Operating Hours for	BAAQMD	C & P/M	Hour Meter
Hours	9-8-330.2		1/1/12	Reliability-Related	9-8-530		and Records
				Activities:			
				<u>≤</u> 100 hours	and		
				in a calendar year	BAAQMD		
					Condition		
					# 22820,		
					Parts 3-4		
Operating	BAAQMD	N	1/1/12	Operating Hours for	BAAQMD	C & P/M	Hour Meter
Hours	9-8-330.3			Reliability-Related	9-8-530		and Records
				Activities:	and		
				≤ 20 hours	BAAQMD		
				in a calendar year	Condition		
					# 22820, Parts 3-4		
Operating	40 CFR	Y	5/3/13	Operating Hours for	40 CFR	C & P/M	Hour Meter
Hours	63.6640	1	3/3/13	Maintenance Checks,	63.6625(f)	C & F/IVI	and Records
Hours	(f)(1)(ii)			Readiness Testing, and	and		and Records
	(1)(1)(11)			Other Non-Emergency	63.6655(f)(2)		
				Operation:	03.0033(1)(2)		
				≤ 100 hours			
				in a calendar year			
Operating	40 CFR	Y	5/3/13	Operating Hours for	40 CFR	C & P/M	Hour Meter
Hours	63.6640			Non-Emergency Operation:	63.6625(f)		and Records
	(f)(1)(iii)			$\leq$ 50 hours	and		
				in a calendar year	63.6655(f)(2)		
Operating	CCR,	N		Operating Hours for	CCR,	C & P/M	Hour Meter
Hours	Title 17,			Reliability-Related	Title 17,		and Records
	Section			Activities:	Section		
	93115.6			≤ 20 hours	93115.10		
	(b)(3)(A)			in a calendar year	(d)(1) and		
	(1)(a)			(for engines emitting	(f)(1)		
				$\geq$ 0.40 g/bhp-hr			
				of diesel PM)			
Operating	BAAQMD	N		Operating Hours for	BAAQMD	C & P/M	Hour Meter
Hours	Condition			Reliability-Related	Condition		and Records
	# 22820,			Activities:	# 22820,		
	Part 1			≤ 20 hours	Parts 3-4		
				in a calendar year			

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# VII. Applicable Limits and Compliance Monitoring Requirements

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

			Future		Monitoring	Monitoring	
Type of	Citation of	FE	Effective		Requirement	Frequency	Monitoring
Limit	Limit	Y/N	Date	Limit	Citation	(P/C/N)	Type
Idle Time	40 CFR	Y	5/3/13	≤30 minutes	None	N	N/A
	63.6625(h)			for start-up			
Main-	40 CFR,	Y	5/3/13	Change Oil and Filter:	40 CFR	P/E	Records
tenance	Part 63,			Every 500 hours of	63.6655(e)		
Events	Subpart			operation			
	ZZZZ,			or annually,			
	Table 2d			whichever comes first			
	4.a.						
Main-	40 CFR,	Y	5/3/13	Inspect Air Cleaner:	40 CFR	P/E	Records
tenance	Part 63,			Every 1,000 hours of	63.6655(e)		
Events	Subpart			operation			
	ZZZZ,			or annually,			
	Table 2d			whichever comes first			
	4.b.						
Main-	40 CFR,	Y	5/3/13	Inspect Hoses and Belts	40 CFR	P/E	Records
tenance	Part 63,			and (if necessary)	63.6655(e)		
Events	Subpart			Replace Hoses and Belts:			
	ZZZZ,			Every 500 hours of			
	Table 2d			operation			
	4.c.			or annually,			
				whichever comes first			

Table VII – G
Applicable Limits and Compliance Monitoring Requirements
S-55 Non-Retail Gasoline Dispensing Facility # 8573

			Future		Monitoring	Monitoring	
Type of	Citation of	FE	Effective		Requirement	Frequency	Monitoring
Limit	Limit	Y/N	Date	Limit	Citation	(P/C/N)	Type
Gasoline	BAAQMD	N		≤ 940,000 gallons	BAAQMD	P/A	Records
Through-	Condition			per 12-month period	8-5-501.1 and		
put	# 14098				8-7-503.1		
Through-	BAAQMD	Y		≤ 1000 gallons per facility	BAAQMD	P/E	Records
put	8-7-114			for tank integrity leak	8-7-501.1 and		
(exempt				checking	8-7-503.2		
from							
Phase I)							

# VII. Applicable Limits and Compliance Monitoring Requirements

Table VII – G

Applicable Limits and Compliance Monitoring Requirements
S-55 Non-Retail Gasoline Dispensing Facility # 8573

			Future		Monitoring	Monitoring	
Type of	Citation of	FE	Effective		Requirement	Frequency	Monitoring
Limit	Limit	Y/N	Date	Limit	Citation	(P/C/N)	Type
Organic	BAAQMD	Y		All Phase I Systems Shall	CARB EO	P/E	CARB
Com-	8-7-301.2			Meet the Emission	G-70-160		Certification
pounds				Limitations of the			Procedures
				Applicable CARB			
				Certification			
Organic	BAAQMD	Y		All Phase I Equipment	CARB EO	P/A	Annual
Com-	8-7-301.6			(except components with	G-70-160,		Check for
pounds				allowable leak rates) shall	paragraph 19		Vapor
				be leak free	and		Tightness
				(≤3 drops/minute)	BAAQMD		and Proper
				and vapor tight	8-7-301.13		Operation of
					and 8-7-407		Vapor
					and		Recovery
					BAAQMD		System
					Condition #		
					16516		
Organic	BAAQMD	Y		All Phase II Equipment	CARB EO	P/A	Annual
Com-	8-7-302.5			(except components with	G-70-160,		Check for
pounds				allowable leak rates or at	paragraph 19		Vapor
				the nozzle/fill-pipe	and		Tightness
				interface) Shall Be: leak	BAAQMD		and Proper
				free	8-7-301.13		Operation of
				(≤3 drops/minute)	and 8-7-407		Vapor
				and vapor tight	and		Recovery
					BAAQMD		System
					Condition #		
	CID	37		T I D W	16516	D/E	g .
Organic	SIP	Y		Tank Pressure Vacuum	SIP	P/E	Semi-
Com-	8-5-303.2			Valve Shall Be:	8-5-403 and 8-5-503		Annual
pounds				Gas Tight	8-3-303		Inspection with
				or ≤ 500 ppmv			With Portable
							Hydro-
				above background			carbon
				for PRVs			Detector
				(as defined in SIP 8-5-206)			Detector
	I			(as defined in SIP 8-3-200)	I		

# VII. Applicable Limits and Compliance Monitoring Requirements

Table VII – G

Applicable Limits and Compliance Monitoring Requirements
S-55 Non-Retail Gasoline Dispensing Facility # 8573

TD 6	Gu u	EE	Future		Monitoring	Monitoring	36 1/
Type of	Citation of	FE	Effective	T **4	Requirement	Frequency	Monitoring
Limit	Limit	Y/N	Date	Limit	CARRES	(P/C/N)	Type
Organic	CARB EO	N		Any Emergency Vent	CARB EO	P/A	Annual
Com-	G-70-160,			Shall Be:	G-70-160,		Check for
pounds	paragraph			Leak Free	paragraph 19		Vapor
	10				and		Tightness
					BAAQMD 8-7-301.13		and Proper Operation of
					and 8-7-407		Vapor
					and 6-7-407		Recovery
					BAAQMD		System
					Condition #		System
					16516		
Defective	BAAQMD	Y		≤7 days	BAAQMD	P/E	Records
Com-	8-7-302.4	1		≥ / days	8-7-503.2	1/L	Records
ponent	0 7 302.4				0 7 303.2		
Repair/							
Replace-							
ment							
Time							
Limit							
Liquid	BAAQMD	Y		≥ 5 ml	CARB EO	P/E	CARB
Removal	8-7-302.8			per gallon dispensed,	G-70-17-AD		Certification
Rate				when dispensing rate			Procedures
				> 5 gallons/minute			
Liquid	BAAQMD	Y		≤ 100 ml per	CARB EO	P/E	CARB
Retain	8-7-302.12			1000 gallons dispensed	G-70-17-AD		Certification
from							Procedures
Nozzles							
Nozzle	BAAQMD	Y		$\leq$ 1.0 ml per nozzle	CARB EO	P/E	CARB
Spitting	8-7-302.13			per test	G-70-17-AD		Certification
							Procedures
Pressure-	BAAQMD	Y		Pressure Setting:	CARB EO	P/E	CARB
Vacuum	8-7-316			$\geq$ 2.5 inches of water,	G-70-160		Certification
Valve	and			gauge			Procedures
Settings	CARB EO						
	G-70-160,						
	paragraph						
	14						

# VII. Applicable Limits and Compliance Monitoring Requirements

Table VII – G

Applicable Limits and Compliance Monitoring Requirements
S-55 Non-Retail Gasoline Dispensing Facility #8573

			Future		Monitoring	Monitoring	
Type of	Citation of	FE	Effective		Requirement	Frequency	Monitoring
Limit	Limit	Y/N	Date	Limit	Citation	(P/C/N)	Type
Pressure-		Y		Pressure Setting:	SIP	P/E	Semi-
Vacuum	SIP			$\geq$ 10% of maximum	8-5-403		Annual
Valve	8-5-303.1			working pressure or	and		Inspection
Settings				$\geq$ 0.5 psig	CARB EO		and
					G-70-160		CARB
							Certification
							Procedures
Dispens-	CARB EO	N		≤ 10 gallons per minute	CARB EO	P/E	CARB
ing Rate	G-70-17-				G-70-17-AD		Certification
Limit	AD,						Procedures
	paragraph						
	11						
Discon-	CARB EO	N		$\leq$ 10 ml per disconnect,	CARB EO	P/A	Annual
nection	G-70-160,			averaged over 3	G-70-160,		Check for
Liquid	paragraph			disconnect operations	paragraph 19		Vapor
Leaks	12				and		Tightness
					BAAQMD		and Proper
					8-7-301.13		Operation of
					and 8-7-407		Vapor
					and		Recovery
					BAAQMD		System
					Condition #		
					16516		

# VII. Applicable Limits and Compliance Monitoring Requirements

Table VII – H
Applicable Limits and Compliance Monitoring Requirements
S-56 PORTABLE HORIZONTAL GRINDER

			Future		Monitoring	Monitoring	
Type of	Citation of	FE	Effective		Requirement	Frequency	Monitoring
Limit	Limit	Y/N	Date	Limit	Citation	(P/C/N)	Туре
Opacity	BAAQMD	Y		≤ Ringelmann 1.0	CARB PERP#	P/E	Observation of
	6-1-301			for 3 minutes	117378,		Sources in
	and			in any hour	Parts 20 and		Operation and
	SIP 6-301				21		Use of Water
							Sprays to
							Prevent Visible
							Emissions
Opacity	CARB	N		≤ Ringelmann 1.0	CARB PERP#	P/E	Observation of
	PERP#			for 3 minutes	117378,		Sources in
	117378,			in any hour	Parts 20 and		Operation and
	Parts 13			and	21		Use of Water
	and 15			≤ 20% Opacity			Sprays to
							Prevent Visible
				0.67			Emissions
FP	BAAQMD	Y		$E = 0.026(P)^{0.67}$	None	N	NA
	6-1-311			where:			
	and			E = Allowable			
	SIP 6-311			Emission Rate			
				(lb/hr); and			
				P = Process Weight			
				Rate (lb/hr)			
				Maximum Allowable Emission Rate			
				= 40 lb/hr			
				= 40  fb/fir For P >57,320 lb/hr			
PM10	CARB	N		$\leq 82$ pounds per day	CARB PERP#	P/D	Throughput
1 1/110	PERP #	11		≥ 62 pounds per day	117378,	17D	Records and
	117378,				Parts 17 and		Emission
	Part 14				22		Calculations
PM10	CARB	N		≤ 10 tons per year	CARB PERP #	P/D	Throughput
11,110	PERP #	-,		<u></u>	117378,	1,5	Records and
	117378,				Parts 17 and		Emission
	Part 16				22		Calculations
Wood	CARB	N		≤ 820 tons per day	CARB PERP #	P/D	Throughput
Waste	PERP #	-,		p	117378,	_,_	Records
Through-	117378,				Parts 17 and		
put	Part 17				22		

# VII. Applicable Limits and Compliance Monitoring Requirements

# Table VII – H Applicable Limits and Compliance Monitoring Requirements S-56 PORTABLE HORIZONTAL GRINDER

			Future		Monitoring	Monitoring	
Type of	Citation of	FE	Effective		Requirement	Frequency	Monitoring
Limit	Limit	Y/N	Date	Limit	Citation	(P/C/N)	Type
Wood	CARB	N		≤ 200,000	CARB PERP#	P/D	Throughput
Waste	PERP#			tons per year	117378,		Records
Through-	117378,				Parts 17 and		
put	Part 18				22		

Table VII – I
Applicable Limits and Compliance Monitoring Requirements
S-58 Aerated Leachate Pond

			Future		Monitoring	Monitoring	
Type of	Citation of	FE	Effective		Requirement	Frequency	Monitoring
Limit	Limit	Y/N	Date	Limit	Citation	(P/C/N)	Type
Leachate	BAAQMD	Y		≤ 39.42	BAAQMD	P/M	Calculations
Through-	Condition			million gallons per	Condition #		and Records
put	# 23052,			12-month period	23052,		
	Part 1				Part 5		
Organic	BAAQMD	Y		Average	BAAQMD	P/A	Analysis of
Com-	Condition			Concentration:	Condition #		Leachate
pounds in	# 23052,			$\leq$ 500 ppbw of POC	23052,		Influent,
Leachate	Part 2				Part 4		Calculations,
							and Records
Organic	BAAQMD	N		Average	BAAQMD	P/A	Analysis of
Com-	Condition			Concentration:	Condition #		Leachate
pounds in	# 23052,			≤ 19 ppbw of	23052,		Influent,
Leachate	Part 3			benzene, and	Part 4		Calculations,
				$\leq$ 48 ppbw of			and Records
				1,4-dichlorobenzene,			
				and			
				$\leq$ 7 ppbw of			
				vinyl chloride			

# 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	Ringelmann No. 1 Limitation	Manual of Procedures, Volume I, Evaluation of Visible
6-1-301 and		Emissions; or
SIP 6-301		US EPA Reference Method 9, Visual Determination of the
		Opacity of Emissions from Stationary Sources
BAAQMD	Ringelmann No. 2 Limitation	Manual of Procedures, Volume I, Evaluation of Visible
6-1-303.1 and		Emissions; or
SIP 6-303.1		US EPA Reference Method 9, Visual Determination of the
		Opacity of Emissions from Stationary Sources
BAAQMD	Particulate Weight Limitation	Manual of Procedures, Volume IV, ST-15, Particulates Sampling,
6-1-310 and		or
SIP 6-310		For combustion equipment: US EPA Reference Method 5,
		Determination of Particulate Matter Emissions from Stationary
		Sources
BAAQMD	Process Weight Rate Based	Manual of Procedures, Volume IV, ST-15, Particulates Sampling,
6-1-311 and	Emissions Limits	or
SIP 6-311		US EPA Reference Method 5, Determination of Particulate Matter
		Emissions from Stationary Sources
BAAQMD	Total Organic Compound (TOC)	For Operations Other Than Aeration of VOC Laden Soil at
8-2-301 and	Mass and Concentration	Redwood Landfill:
SIP 8-2-301	Limitations for Miscellaneous	Manual of Procedures, Volume IV, ST-7, Organic Compounds; or
	Operations	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
		For Aeration of VOC Laden Soil at Redwood Landfill:
		BAAQMD Regulation 8-40-604 measurement procedures, and
		US EPA Reference Method 21, Determination of Volatile Organic
		Compound Leaks (or any method determined to be equivalent by
		the US EPA and approved by the APCO)

# VIII. Test Methods

# Table VIII Test Methods

Applicable		
Requirement	Description of Requirement	Acceptable Test Methods
SIP 8-5-303.2	Gas Tight Requirement for PRV	US EPA Reference Method 21, Determination of Volatile Organic
		Compound Leaks
BAAQMD	Vapor Tightness Requirement	Manual of Procedures, Volume IV, ST-38, Gasoline Dispensing
8-7-301.6		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	Vapor Tightness Requirement	Manual of Procedures, Volume IV, ST-38, Gasoline Dispensing
8-7-302.5		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	Liquid Removal Rate	Manual of Procedures, Volume IV, ST-37, Gasoline Dispensing
8-7-302.8		Facility Liquid Removal Devices or ARB Test Method TP-201.6
		Determination of Liquid Removal of Vapor Recovery Systems of
		Dispensing Facilities
BAAQMD	Liquid Retain from Nozzles Manual of Procedures, Volume IV, ST-41, Gasoline Liquid	
8-7-302.12		Retention in Nozzles and Hoses (this method has not been
		approved yet)
BAAQMD	Nozzle Spitting	Manual of Procedures, Volume IV, ST-41, Gasoline Liquid
8-7-302.13		Retention in Nozzles and Hoses (this method has not been
		approved yet)
BAAQMD	Collection and Control System	US EPA Reference Method 21, Determination of Volatile Organic
8-34-301.2	Component Leak Limitations	Compound Leaks
BAAQMD	NMOC Emission Limits for	Manual of Procedures, Volume IV, ST-14, Oxygen, Continuous
8-34-301.3	Flares	Sampling; and
		Manual of Procedures, Volume IV, ST-7, Organic Compounds; or
		US EPA Reference Methods 18, 25, 25A, or 25C
BAAQMD	NMOC Emission Limits for	Manual of Procedures, Volume IV, ST-14, Oxygen, Continuous
8-34-301.4	Other Emission Control Systems	Sampling; and
		Manual of Procedures, Volume IV, ST-7, Organic Compounds; or
D.1.103.05	T 1011 0 0 T 1 T 1	US EPA Reference Methods 18, 25, 25A, or 25C
BAAQMD	Landfill Surface Leak Limit	US EPA Reference Method 21, Determination of Volatile Organic
8-34-303	W.III. I.C. D	Compound Leaks
BAAQMD	Wellhead Gauge Pressure	APCO Approved Device
8-34-305.1		

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# VIII. Test Methods

# Table VIII Test Methods

Applicable			
Requirement	Description of Requirement	Acceptable Test Methods	
BAAQMD	Temperature Limit for Gas at	APCO Approved Device	
8-34-305.2	Wellheads		
BAAQMD	Nitrogen Concentration in Gas at	US EPA Reference Method 3C, Determination of Carbon	
8-34-305.3	Wellheads	Dioxide, Methane, Nitrogen, and Oxygen from Stationary Sources	
BAAQMD	Oxygen Concentration in Gas at	US EPA Reference Method 3C, Determination of Carbon	
8-34-305.4	Wellheads	Dioxide, Methane, Nitrogen, and Oxygen from Stationary Sources	
BAAQMD	Compliance Demonstration Test	US EPA Reference Method 18, Measurement of Gaseous Organic	
8-34-412		Compound Emissions by Gas Chromatography, Method 25,	
		Determination of Total Gaseous Nonmethane Organic Emissions	
		as Carbon, Method 25A, Determination of Total Gaseous Organic	
		Concentration Using a Flame Ionization Analyzer, or Method	
		25C, Determination of Nonmethane Organic Compounds	
		(NMOC) in MSW Landfill Gases	
BAAQMD	Organic Content Limit for Small	BAAQMD 8-40-601 and	
8-40-116.2	Volume Exemption	US EPA Reference Methods 8015B and 8021B	
BAAQMD	Limits on Uncontrolled Aeration	BAAQMD 8-40-601 and	
8-40-301	of Contaminated Soil	US EPA Reference Methods 8015B and 8021B; or	
		US EPA Reference Method 21	
BAAQMD	Limitations on Ground Level	Manual of Procedures, Volume VI, Part 1, Ground Level	
9-1-301	Concentrations (SO <sub>2</sub> )	Monitoring for Hydrogen Sulfide and Sulfur Dioxide	
BAAQMD	General Emission Limitation	Manual of Procedures, Volume IV, ST-19A, Sulfur Dioxide,	
9-1-302	(SO <sub>2</sub> )	Continuous Sampling	
BAAQMD	Liquid Fuel Sulfur Content	Manual of Procedures, Volume III, Method 10, Determination of	
9-1-304	Limit	Sulfur in Fuel Oil	
BAAQMD	Limitations on Hydrogen Sulfide	Manual of Procedures, Volume VI, Part 1, Ground Level	
9-2-301		Monitoring for Hydrogen Sulfide and Sulfur Dioxide	
40 CFR 60.8	Performance Tests	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	

# VIII. Test Methods

# Table VIII Test Methods

Applicable		
Requirement	<b>Description of Requirement</b>	Acceptable Test Methods
40 CFR	NMOC Outlet Concentration	US EPA Reference Method 18, Measurement of Gaseous Organic
60.752	and Destruction Efficiency	Compound Emissions by Gas Chromatography, Method 25,
(b)(2)(iii)(B)	Limits	Determination of Total Gaseous Nonmethane Organic Emissions
		as Carbon, Method 25A, Determination of Total Gaseous Organic
		Concentration Using a Flame Ionization Analyzer, or Method
		25C, Determination of Nonmethane Organic Compounds
		(NMOC) in MSW Landfill Gases
40 CFR	Wellhead Pressure	APCO Approved Device
60.753(b)		
40 CFR	Temperature, N <sub>2</sub> , and O <sub>2</sub>	US EPA Reference Method 3C, Determination of Carbon
60.753(c)	concentration in wellhead gas	Dioxide, Methane, Nitrogen, and Oxygen from Stationary Sources
40 CFR	Methane Limit at Landfill	US EPA Reference Method 21, Determination of Volatile Organic
60.753(d)	Surface	Compound Leaks
40 CFR	Flare Combustion Zone	Temperature Monitor and continuous recorder meeting the
60.758	Temperature Limit	requirements of 40 CFR Part 60.756(b)(1)
(c)(1)(i)		
CCR,	Liquid Fuel Sulfur Content Limit	ASTM D2622-94 or CARB Approved Equivalent
Title 13,		
Section 2281		
(a)(2 and 5)		
BAAQMD	Ringelmann No. 1 Limitation	Manual of Procedures, Volume I, Evaluation of Visible
Condition		Emissions; or
# 13123,		US EPA Reference Method 9, Visual Determination of the
Part 5		Opacity of Emissions from Stationary Sources
BAAQMD	Static Pressure Test requirement	Manual of Procedures, Volume IV, ST-38, Gasoline Dispensing
Condition #	for Aboveground Gasoline	Facility Static Pressure Integrity Test Aboveground Vaulted Tanks
16515	Storage Tanks	
BAAQMD	Ringelmann No. 1 Limitation	Manual of Procedures, Volume I, Evaluation of Visible
Condition		Emissions; or
# 19865,		US EPA Reference Method 9, Visual Determination of the
Part 3		Opacity of Emissions from Stationary Sources
BAAQMD	Ringelmann No. 1 Limitation	Manual of Procedures, Volume I, Evaluation of Visible
Condition		Emissions; or
# 19866,		US EPA Reference Method 9, Visual Determination of the
Part 3		Opacity of Emissions from Stationary Sources

# VIII. Test Methods

# Table VIII Test Methods

Applicable		
Requirement	<b>Description of Requirement</b>	Acceptable Test Methods
BAAQMD	POC Emissions Limits	POC Emissions shall be calculated using data collected pursuant
Condition		to BAAQMD Condition # 19867, Parts 5, 20, and 30, the US EPA
# 19867,		LandGEM Program, and APCO approved input parameters, gas
Part 2		capture rates, and emission rates.
BAAQMD	PM10 Emission Limits	PM10 Emissions shall be calculated using data collected pursuant
Condition		to BAAQMD Condition # 19867, Parts 3-11, and the calculation
# 19867,		procedures identified in AP-42 Chapters 13.2.1 (January 2011)
Part 3		and 13.2.2 (November 2006).
BAAQMD	Mean Vehicle Fleet Weight	Calculation procedures identified in AP-42 Chapters 13.2.1
Condition	Limits	(January 2011) and 13.2.2 (November 2006).
# 19867,		
Parts 6 and 7		
BAAQMD	Vehicle Miles Traveled (VMT)	VMT for each applicable road segment shall be calculated based
Condition	Limits	on data collected pursuant to BAAQMD Condition # 19867, Part
# 19867,		10, site maps, and travel routes.
Parts 8 and 9		
BAAQMD	Ringelmann No. 1 Limitation	Manual of Procedures, Volume I, Evaluation of Visible
Condition		Emissions; or
# 19867,		US EPA Reference Method 9, Visual Determination of the
Part 11		Opacity of Emissions from Stationary Sources
BAAQMD	Volatile Organic Compound	BAAQMD 8-40-601 and US EPA Reference Methods 8015B,
Condition	(VOC) Concentration in Soils	8021B, or any method determined to be equivalent by the US
# 19867,		EPA and approved by the APCO; or
Part 13		US EPA Reference Method 21
BAAQMD	Daily Total Carbon Emission	VOC Content as determined by US EPA Reference Methods
Condition	Limit for VOC Laden Soil	8015B or 8021B (or any method determined to be equivalent by
# 19867,		the US EPA and approved by the APCO), and converted to Total
Part 14a		Carbon as defined in BAAQMD Regulation 8-2-202. Total
		Carbon Emissions determined by APCO approved equation
		described in BAAQMD Condition #19867, Part 14a.
BAAQMD	Surface VOC Concentration for	BAAQMD Regulation 8-40-604 measurement procedures and
Condition	VOC Laden Soil	US EPA Reference Method 21 (or any method determined to be
# 19867,		equivalent by the US EPA and approved by the APCO)
Part 14b		

# VIII. Test Methods

# Table VIII Test Methods

Applicable		
Requirement	<b>Description of Requirement</b>	Acceptable Test Methods
BAAQMD	Annual Emission Limit for VOC	VOC Content as determined by US EPA Reference Methods
Condition	Laden Soil	8015B or 8021B (or any method determined to be equivalent by
# 19867,		the US EPA and approved by the APCO), and emissions
Part 14c		determined by APCO approved equation described in BAAQMD
		Condition #19867, Part 14a.
BAAQMD	VOC Concentration in Soils	BAAQMD 8-40-601 and US EPA Reference Methods 8015B,
Condition		8021B, or any method determined to be equivalent by the US
# 19867,		EPA and approved by the APCO; or
Part 15		US EPA Reference Method 21
BAAQMD	Total Concentration of Non-	US EPA Reference Method 18, Measurement of Gaseous Organic
Condition	Methane Organic Compounds	Compound Emissions by Gas Chromatography; or Method 25C,
# 19867,	(NMOC) in Landfill Gas	Determination of Nonmethane Organic Compounds (NMOC) in
Part 18a		MSW Landfill Gases
BAAQMD	Concentrations of Toxic Air	US EPA Reference Method 18, Measurement of Gaseous Organic
Condition	Contaminants (TACs) in Landfill	Compound Emissions by Gas Chromatography
# 19867,	Gas	
Part 18b		
BAAQMD	Concentration of Total Reduced	Draeger tube used in accordance with manufacturer's
Condition	Sulfur (TRS) Compounds in	recommendations and calculation procedures described in
# 19867,	Landfill Gas (Peak and Annual	Condition # 19867, Part 31b; and
Part 18c	Average Limits)	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
BAAQMD	Landfill Gas Throughput Limit	APCO Approved Gas Flow Meter and Recorder
Condition	for Flares	
# 19867,		
Part 20		
BAAQMD	Flare Combustion Zone	APCO Approved Device
Condition	Temperature Limits	
# 19867,		
Part 22		

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# VIII. Test Methods

# Table VIII Test Methods

Applicable		
Requirement	Description of Requirement	Acceptable Test Methods
BAAQMD	NMOC Emission Limits for Manual of Procedures, Volume IV, ST-14, Oxygen, Continuo	
Condition	Flares	Sampling; and
# 19867,		Manual of Procedures, Volume IV, ST-7, Organic Compounds; or
Part 23		US EPA Reference Method 18, 25, 25A, or 25C
BAAQMD	NOx Emission Limit for Flares	Manual of Procedure, Volume IV, ST-13A, Oxides of Nitrogen,
Condition		Continuous Sampling; and
# 19867,		Manual of Procedure, Volume IV, ST-14, Oxygen, Continuous
Part 25		Sampling
BAAQMD	CO Emission Limit for Flares	Manual of Procedure, Volume IV, ST-6, Carbon Monoxide,
Condition		Continuous Sampling; and
# 19867,		Manual of Procedure, Volume IV, ST-14, Oxygen, Continuous
Part 26		Sampling
BAAQMD	Annual Compliance	Manual of Procedures, Volume IV, ST-17, Stack Gas Velocity
Condition	Demonstration Tests	and Volumetric Flow Rate; ST-23 Water Vapor; ST-14, Oxygen,
# 19867,		Continuous Sampling; ST-13A, Oxides of Nitrogen, Continuous
Part 30		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
BAAQMD	Landfill Gas Analyses	Manual of Procedures, Volume III, Method 5 Determination of
Condition		Total Mercaptans in Effluents and Method 25 Determination of
# 19867,		Hydrogen Sulfide in Effluents, or Method 44 Determination of
Part 31		Reduced Sulfur Gases and Sulfur Dioxide in Effluent Samples by
		Gas Chromatographic Methods
BAAQMD	Fence Line Hydrogen Sulfide	BAAQMD approved portable H <sub>2</sub> S analyzer calibrated and used in
Condition	Limits	accordance with manufacturer's recommendations at BAAQMD
# 19867,		approved monitoring locations.
Part 33		
BAAQMD	POC Concentration Limit for	Regional Water Quality Control Board Methods SW846 8260B;
Condition	Leachate Influent	or Manual of Procedures, Volume III, Lab Method 33; AND
# 23052,		Calculation Procedures in BAAQMD Condition # 23052, Part 4
Part 2		
BAAQMD	Individual Organic Compound	Regional Water Quality Control Board Methods SW846 8260B;
Condition	Limits for Leachate Influent	AND Calculation Procedures in BAAQMD Condition # 23052,
# 23052,		Part 4
Part 3		

# VIII. Test Methods

# Table VIII Test Methods

Applicable		
Requirement	Description of Requirement	Acceptable Test Methods
CARB EO	Leak Free Emergency Vent	Manual of Procedures, Volume IV, ST-38, Gasoline Dispensing
G-70-160,		Facility Static Pressure Integrity Test Aboveground Vaulted Tanks
paragraph 10		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	Disconnection Liquid Leaks for	BAAQMD Enforcement Division, Policies and Procedures,
G-70-160,	Phase I Systems	Regulation 8, Rule 33, Bulk Gasoline Distribution Facilities and
paragraph 12		Gasoline Delivery Vehicles Guidelines, Section 5.B.1.
CARB PERP	Ringelmann No. 1 and Opacity	Manual of Procedures, Volume I, Evaluation of Visible
# 117378,	Limits	Emissions; or EPA Reference Method 9
Parts 12, 13,		
and 15		
CARB PERP	PM10 Emission Limits	Throughput Records and Calculation Procedures in CARB PERP
# 117378,		# 117378, Parts 17 and 22.
Parts 14, 16,		
and 17		

# IX. PERMIT SHIELD

# A. SUBSUMED REQUIREMENTS

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

Table IX-A
S-42 SOIL AND COVER MATERIAL STOCKPILES AND
S-76 REDWOOD LANDFILL – WASTE AND COVER MATERIAL DUMPING

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

The Regulation 8, Rule 2 total carbon test procedure is subsumed by the Regulation 8, Rule 40 VOC test procedure for the Redwood Landfill – Waste and Cover Material Dumping (S-76) and for the Soil and Cover Material Stockpiles (S-42), because testing performed pursuant to Regulation 8-40-604 will rule out the need to test in accordance with Regulation 8-2-601.

Regulation 8, Rule 2 "Miscellaneous Operations" is only applicable to sources of precursor organic compounds that are not otherwise limited by Regulation 8 or Regulation 10 rules. In the case of an active landfill, the storage, handling, reuse (such as for cover material), and disposal of soil that contains volatile organic compounds (VOC) results in the transfer of some of the VOCs from the soil into the atmosphere. This process is called aeration. Soil which has an organic content exceeding 50 ppmw or that registers an organic concentration greater than 50 ppmv (expressed as methane, C1) at the soil surface is defined as "contaminated" soil in Regulation 8-40-205. VOC-laden soil is soil that contains some VOCs but that has less VOCs than the contaminated soil thresholds above. The aeration of contaminated

# IX. Permit Shield

soil is subject to Regulation 8, Rule 40. However, the aeration of the low concentration VOC-laden soils is subject to Regulation 8, Rule 2.

Regulation 8-2-301 limits organic compound emissions (expressed as total carbon) from an operation to 15 pounds per day, if the emission from the operation has an organic compound concentration greater than 300 ppmv (expressed as total carbon, dry basis). Thus, an operator may verify compliance with Regulation 8-2-301 by either demonstrating compliance with the 15 pound/day total carbon limit or by demonstrating compliance with the 300 ppmv total carbon concentration limit. Condition # 19867, Part 14 identifies these two compliance options. Part 14a specifies emission limits, acceptance limits, emission calculation procedures, and record keeping requirements that assure compliance with the 15 pound/day total carbon emission limit. Part 14b discusses the alternative measures that may be used to verify compliance with the 300 ppmv total carbon concentration limit.

If the operator chooses to demonstrate compliance with Regulation 8-2-301 using Condition #19867 Part 14b, the operator will be required to use the Regulation 8-40-604 test procedures to verify that the soil is not contaminated (i.e., does not contain more than 50 ppmw of VOC or will not emit more than 50 ppmv of VOC from the surface of the soil). Since soil found not to be contaminated using the procedures of Regulation 8-40-604 will have a surface VOC concentration of less than 50 ppmv (expressed as methane, C1) it can reasonably be assumed that the concentration that occurs in the atmosphere during the aeration of VOC-laden soil will also be less than 300 ppmv (total carbon, dry basis) as determined by the procedures of Regulation 8-2-601. Since this VOC-laden soil aeration operation will comply with the total carbon concentration limit (< 300 ppmv), it will also comply with Regulation 8-2-301.

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

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# X. REVISION HISTORY

# Title V Permit Issuance (Application 17363):

**November 10, 2003** 

# **Significant Revision (Application 8501):**

**November 10, 2004** 

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

# Minor Revision (Applications 6943 and 9565):

November 10, 2004

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

# **Significant Revision (Applications 10873 and 10874):**

July 27, 2005

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

# X. Revision History

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

July 27, 2005

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

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

**December 29, 2005** 

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

# Minor Revision (Applications 12966 and 13026):

**April 18, 2006** 

- Correct the Facility Contact on the title page.
- Delete the S-40 Diesel Engine from Table II-A, and delete the associated requirements, limits, and conditions that were listed in Table IV-E, Table VII-E, and Condition # 19864. Renumber all subsequent tables in Sections IV and VII.
- Remove the Diamond Z Tub Grinder from S-41 in Table II-A, and delete the associated A-41 Water Sprays from Table II-B. Delete the requirements associated with the tub grinder and water sprays from Tables IV-E and VII-E and Condition # 19865 Parts 3-5.
- Increase the throughput limits for the S-41 Temporary Stockpiles in Tables II-A and VII-E and Condition # 19865 Part 1. Clarify the water spray requirements for S-41 in Tables II-B, IV-E, and VII-E and in Condition # 19865 Part 3.
- Add the A-18 Water Sprays to the titles for Tables IV-C, IV-E, IV-F, VII-B, VII-C, VII-E, and VII-F and to the equipment list for Conditions # 16066, # 19865, and # 19866.

# X. Revision History

- Clarify the monitoring and record keeping procedures for VOC laden soil aeration operations in Condition # 19867 Part 14, Table VII-B, and Table VIII.
- Update the landfill gas collection system description in Condition # 19867 Part 17a and Table II-A and authorize additional collection system modifications in Part 17b.
- Correct the minimum combustion zone temperature limit for A-51 in Condition # 19867 Part 22b, Table II-B, and Table VII-B.

# Administrative Revision (Applications 14140 and 14420):

July 13, 2006

- Remove the S-50 Leachate Vaporator from Table II-A.
- Delete Tables IV-L and VII-L and renumber subsequent tables.
- Delete BAAOMD Condition # 19609.
- Delete references to the S-50 Leachate Vaporator from BAAQMD Condition # 19867, Parts 16 and 19 and from Table VIII.

# Minor Revision (Applications 14140 and 14420):

**September 20, 2006** 

- Add S-56 Portable Horizontal Grinder and S-58 Aerated Leachate Pond to Table II.
- Add Tables IV-M and VII-M for S-56 and Tables IV-N and VII-N for S-58.
- Add BAAQMD Condition # 22940 and the conditions from CARB PERP # 117378 for S-56.
- Add BAAQMD Condition # 23052 for S-58.
- Add test method reference for S-56 and S-58 in Table VIII.
- Add the term PERP to the Section XI Glossary.

# **Administrative Revision (Application 11370):**

August 28, 2007

- Correct the Responsible Official and Facility Contact information for this site on the title page.
- Remove the S-25 Yard and Green Waste Stockpiles and the S-45 Pumpmaster Engine from this permit by revising Tables II-A and II-B; by deleting Conditions # 16066 and # 17842; and by deleting Tables IV-C, IV-G, VII-C, and VII-G.
- Update the lettering sequence for subsequent tables in Sections IV and VII.

# X. Revision History

# **Minor Revision (Application 11370):**

October 24, 2007

- Correct the landfill gas collection system component lists for S-5 Redwood Landfill in Table II-A and in Condition # 19867, Part 17.
- Revise the landfill gas throughput limits for the A-50 and A-51 Landfill Gas Flares in Condition # 19867, Part 20 and in Table VII-B.
- Update the bases for Condition # 19867, Parts 22 and 24 due to the adoption of Regulation 2, Rule 5, and modify Table IV-B accordingly.
- Correct the minimum combustion zone temperature limit for A-51 in Condition # 19867, Part 22 and in Table VII-B.
- Eliminate obsolete text from Condition # 19867, Part 24
- Alter the CO emission limit for A-51 in Condition # 19867, Part 26 and in Table VII-B.

# **Renewal (Application 17987):**

**April 5, 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-5, was split into three sources (S-5, S-76, and S-77) 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, IX-A and Condition # 19867. The composting operations (S-28, S-34, S-35, S-37, and S-38) were all combined under a single source number: S-34 Compost Facility Operations. These changes are reflected in Tables II-A, IV-C, VII-C, and Condition # 13123.
- Remove sources that have been shut down from Table II-A (S-46, S-47, and S-48), delete the associated tables (Tables IV-F, VII-F, IV-G, VII-G, IV-H, and VII-H), and delete the associated conditions (Condition #17843, #17844, and #17845).
- Renumber Table IV- I-L and Tables VII- I-L as Tables IV- F-I and Tables VII- F-I.
- Add an existing portable diesel engine and two new portable diesel engines and the associated diesel PM filters to Table II-C.
- In Table II-B and Condition #19867, replace of the A-50 Landfill Gas Flare with the new A-60 Landfill Gas Flare.
- Correct and update regulatory references and amendment dates throughout the permit.

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# X. Revision History

- Add several missing BAAQMD and federal regulations to Table III, and add several new California regulations to Table III.
- Incorporate changes to SIP Regulation 6 and BAAQMD Regulation 6, Rule 1 in Tables IV- B-F, VII- B-F, IV-H, VII-H, and VIII and in Conditions #13123, #19865, #19866, and #19867.
- 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 Redwood Landfill sources (S-5, S-76, and S-77) and associated flares (A-51 and A-60), update tables (Tables IV-B, VII-B, and VIII) and permit conditions (Condition #19867) to incorporate changes made pursuant to new source review (NSR) applications: for flare replacements (NSR Applications #16608 and #19098), for gas collection system changes (NSR Application #21623), and for an expansion of the landfill (NSR Application #20607).
- For the S-42 Soil and Cover Material Stockpiles, add the missing Regulation 8, Rule 2 requirements to Tables IV-E and VII-E. Regulation 8, Rule 2 applies to the aeration of VOC-laden soil that may occur at S-42.
- For the S-49 Diesel Engine for Emergency Back-Up Generator, add the exemption in BAAQMD Regulation 8-1-110.2 to Table IV-F to clarify that this diesel engine is exempt from other Regulation 8 requirements. In Tables IV-F and VII-F, add the new and future requirements for emergency engines identified in the 2007 amendments to BAAQMD Regulation 9, Rule 8. Also in Tables IV-F, VII-F, and VIII, add the applicable NESHAP requirements for this stationary RICE engine (40 CFR, Part 63, Subpart ZZZZ) and the applicable ATCM requirements for this stationary emergency engine (CCC, Title 17, Section 931115). Replace Condition #19613 with Condition #22820.
- For the S-55 Non-Retail Gasoline Dispensing Facility # 8573, incorporate the 2006 amendments to Regulation 8, Rule 5 into Tables IV-G, VII-G, and VIII. These amendments exempt the above-ground gasoline storage tank associated with S-55 from BAAQMD Regulation 8, Rule 5; however, this tank is still subject to SIP Regulation 8, Rule 5. Under Condition #16516 for S-55, text was added to clarify source testing and reporting requirements.
- Add symbols to Tables VII-B through VII-G to clarify limits.

# X. Revision History

- For Table VIII, add missing test methods for existing requirements, add test methods for all new limits, and remove obsolete or unnecessary test methods.
- Clarify the applicability of the permit shield in Section IX. It applies to the aeration of VOC-laden soil, which may occur at S-76 or S-42 during the transfer, storage, or re-use of VOC-laden.
- Add this permit renewal to the Section X Revision History.
- Add terms to the Section XI Glossary.

# **XI. GLOSSARY**

#### **ACT**

Federal Clean Air Act

#### **AP-42**

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

### **APCO**

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

### **ARB**

Air Resources Board (same as CARB)

### **ASTM**

American Society for Testing and Materials

### **ATC**

Authority to Construct

### **ATCM**

Airborne Toxic Control Measure

# **BAAQMD**

Bay Area Air Quality Management District

#### **BACT**

Best Available Control Technology

#### **BARCT**

Best Available Retrofit Control Technology

#### **Basis**

The underlying authority that allows the District to impose requirements.

### **C1**

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

# **C3**

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

# XI. Glossary

### **C5**

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

#### **C6**

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

### $C_6H_6$

Benzene

#### CAA

The federal Clean Air Act

# **CAAQS**

California Ambient Air Quality Standards

#### **CAPCOA**

California Air Pollution Control Officers Association

#### **CARB**

California Air Resources Board (same as ARB)

#### **CCR**

California Code of Regulations

### CEC

California Energy Commission

### CEM

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

# **CEQA**

California Environmental Quality Act

### **CFR**

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

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

Methane

# XI. Glossary

# CI

**Compression Ignition** 

#### **CIWMB**

California Integrated Waste Management Board

### CO

Carbon Monoxide

# CO2 or CO<sub>2</sub>

Carbon Dioxide

#### CO<sub>2</sub>e

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  $(4.53) \times (106) = (4.53) \times (10x10x10x10x10x10) = 4,530,000$ . Scientific notation is used to express large or small numbers without writing out long strings of zeros.

#### EG

**Emission Guidelines** 

Renewal Date: April 5, 2012

# XI. Glossary

#### EO

**Executive Order** 

#### **EPA**

The federal Environmental Protection Agency.

#### **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

#### **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

# XI. Glossary

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

Sulfuric Acid

### H&SC

Health and Safety Code

### **HAP**

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

#### Hg

Mercury

#### **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

# XI. Glossary

# **MFR**

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

### MIN or Min.

Minimum

### **MOP**

The District's Manual of Procedures.

### **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)

# XI. Glossary

# NOx or NOx

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.

#### **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, NOx, 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

# XI. Glossary

# **PM10 or PM<sub>10</sub>**

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

### **PSD**

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

### PV or P/V Valve or PRV

Pressure/Vacuum Relief Valve

#### RICE

Reciprocating Internal Combustion Engine

#### **RMP**

Risk Management Plan

# **RWQCB**

Regional Water Quality Control Board

# S

Sulfur

### SCR

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

### **Short ton**

2000 pounds

# **SIP**

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

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

Sulfur dioxide

# XI. Glossary

### $SO3 \text{ or } SO_3$

Sulfur trioxide

### **SSM**

Startup, Shutdown, or Malfunction

# **SSM Plan**

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

### **TAC**

Toxic Air Contaminant (as identified by CARB)

### **TBACT**

Best Available Control Technology for Toxics

#### 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)

142

#### **TPH**

**Total Petroleum Hydrocarbons** 

#### **TRMP**

Toxic Risk Management Policy

# XI. Glossary

# **TRS**

Total Reduced Sulfur, which is a measure of the amount of sulfur-containing compounds in a gas stream, typically a fuel gas stream, including, but not limited to, hydrogen sulfide. The TRS content of a fuel gas determines the concentration of  $SO_2$  that will be present in the combusted fuel gas, since sulfur compounds are converted to  $SO_2$  by the combustion process.

# **TSP**

**Total Suspended Particulate** 

# **TVP**

True Vapor Pressure

# **VOC**

Volatile Organic Compounds

### **VMT**

Vehicle Miles Traveled

# **Symbols:**

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

### **Units of Measure:**

atm	=	atmospheres
bbl	=	barrel of liquid (42 gallons)
bhp	=	brake-horsepower
btu	=	British Thermal Unit
BTU	=	<b>British Thermal Unit</b>
°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

# XI. Glossary

hour hr 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 = parts per billion ppb = parts per billion, by volume ppbv = parts per million ppm = parts per million, by volume ppmv = parts per million, by weight ppmw = psia pounds per square inch, absolute = psig pounds per square inch, gauge = standard cubic feet scf = scfm standard cubic feet per minute = sdcf standard dry cubic feet = sdcfm standard dry cubic feet per minute = yd = yard  $yd^3$ cubic yards = year yr =