## **Bay Area Air Quality Management District**

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

### **Final**

## **MAJOR FACILITY REVIEW PERMIT**

**Issued To:** Allied Waste Industries, Inc. Facility #A4618

**Facility Address:** 

901 Bailey Road Pittsburg, CA 94565

**Mailing Address:** 

901 Bailey Road Pittsburg, CA 94565

**Responsible Official** 

Norm Christensen, General Manager 925-458-9800

**Facility Contact** 

Norm Christensen, General Manager 925-458-9800

**Type of Facility:** Municipal Solid Waste Landfill **BAAQMD Permit Division Contact:** 

**Primary SIC:** Carol S. Allen

**Product:** Class II Solid Waste Disposal

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

Signed by Jack P. Broadbent March 16, 2006 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 5/2/01);

SIP Regulation 1 - General Provisions and Definitions

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

BAAQMD Regulation 2, Rule 1 - Permits, General Requirements

(as amended by the District Board on 8/1/01);

SIP Regulation 2, Rule 1 - Permits, General Requirements

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

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

(as amended by the District Board on 5/17/00);

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

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

BAAQMD Regulation 2, Rule 4 - Permits, Emissions Banking

(as amended by the District Board on 5/17/00);

SIP Regulation 2, Rule 4 - Permits, Emissions Banking

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

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

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

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

- 1. This Major Facility Review Permit was issued on September 20, 2001 and expires on August 31, 2006. The permit holder shall submit a complete application for renewal of this Major Facility Review Permit no later than February 28, 2006 and no earlier than August 31, 2005. **If a complete application for renewal has not been submitted in accordance with this deadline, the facility may not operate after** August 31, 2006. (Regulation 2-6-307, 404.2, & 409.6; MOP Volume II, Part 3, §4.2)
- 2. The permit holder shall comply with all conditions of this permit. The permit consists of this document and all appendices. Any non-compliance with the terms and conditions of this permit will constitute a violation of the law and will be grounds for enforcement action; permit termination, revocation and re-issuance, or modification; or denial of a permit renewal application. (Regulation 2-6-307; MOP Volume II, Part 3, §4.11)

### I. Standard Conditions

3. In the event any enforcement action is brought as a result of a violation of any term or condition of this permit, the fact that it would have been necessary for the permittee to halt or reduce the permitted activity in order to maintain compliance with such term or condition shall not be a defense to such enforcement action. (MOP Volume II, Part 3, §4.11)

- 4. This permit may be modified, revoked, reopened and reissued, or terminated for cause. (Regulation 2-6-307, 409.8, 415; MOP Volume II, Part 3, §4.11)
- 5. The filing of a request by the facility for a permit modification, revocation and 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)
- 11. The responsible official shall certify all documents submitted by the facility pursuant to the major facility review permit. The certification shall state that based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete. The certifications shall be signed by a responsible official for the facility. (MOP Volume II, Part 3, §4.11)

### I. Standard Conditions

### C. Requirement to Pay Fees

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

### D. Inspection and Entry

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

#### E. Records

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

#### F. Monitoring Reports

Reports of all required monitoring must be submitted to the District at least once every six months, except where an applicable requirement specifies more frequent reporting. The first reporting period for this permit shall be September 20, 2001 to February 28, 2002. The report shall be submitted by March 31, 2002. Subsequent reports shall be for the following periods: March 1<sup>st</sup> through August 31<sup>st</sup> and September 1<sup>st</sup> through February 28<sup>th</sup> or 29<sup>th</sup>, and are due on the last day of the month after the end of the reporting period. All instances of non-compliance shall be clearly identified in these reports. The reports shall be certified by the responsible official as true, accurate, and complete. In addition, all instances of non-compliance with the permit shall be reported in writing to the District's Compliance and Enforcement Division within 10 calendar days of the discovery of the incident. Within 30 calendar days of the discovery of any incident of non-compliance, the facility shall submit a written report including the probable cause of non-compliance and any corrective or preventative actions. The reports shall be sent to the following address:

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

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

### I. Standard Conditions

### **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 September 1st to August 31st. The certification shall be submitted by September 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 should be sent to the Environmental Protection Agency at the following address:

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

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

### **H.** Emergency Provisions

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

### I. Severability

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

### J. Miscellaneous Conditions

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

## II. EQUIPMENT

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

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

S-#	Description	Make or Type	Model	Capacity	
S-1	Keller Canyon Landfill with	Class II Disposal		Max. Design Capacity (waste and	
	Active Gas Collection System:	Operations (MSW,		cover, excluding final cover) =	
		commercial, industrial,		75 million yd <sup>3</sup> (57.3 million m <sup>3</sup> )	
		construction, designated,		Max. Waste Acceptance Rate =	
		and special wastes)		3500 tons/day	
				Max. Cumulative Waste In-Place =	
				38.4 million tons (34.8 million Mg)	
	Gas Collection Wells			50 vertical wells	
S-2	Wipe Cleaning Operation	Mineral Spirits		100 gallons/year	
S-3	Yard and Green Waste	Yard and Green Waste		225 tons/day	
	Stockpiles				

Table II B – Abatement Devices

		Source(s)	Applicable	Operating	Limit or Efficiency
<b>A-</b> #	Description	Controlled	Requirement	Parameters	
A-1	Enclosed Ground Flare,	S-1	BAAQMD	Minimum	Either 98% destruction
	burning propane (during		8-34-301.3,	combustion zone	of NMOC or
	start-up only) and landfill		See also	temperature of:	< 30 ppmv of NMOC,
	gas, 72.7 MM BTU/hour		Table IV-A	1504 °F	as CH <sub>4</sub> , at 3% O <sub>2</sub> , dry,
				(3-hour average),	See also Table VII-A
				See also Table VII-A	
A-2	Enclosed Ground Flare,	S-1	BAAQMD	Minimum	Either 98% destruction
	burning propane (during		8-34-301.3,	combustion zone	of NMOC or
	start-up only) and landfill		See also	temperature of:	< 30 ppmv of NMOC,
	gas, 76 MM BTU/hour		Table IV-A	1400 °F	as CH <sub>4</sub> , at 3% O <sub>2</sub> , dry,
	(not constructed yet)			(3-hour average),	See also Table VII-A
				See also Table VII-A	

### III. GENERALLY APPLICABLE REQUIREMENTS

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

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

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

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

#### NOTE:

There are differences between the current BAAQMD rules and the version 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 (5/2/01)	N
SIP Regulation 1	General Provisions and Definitions (6/28/99)	$\mathbf{Y}^{1}$
BAAQMD Regulation 2, Rule 1	General Requirements (8/1/01)	N
BAAQMD 2-1-429	Federal Emissions Statement (6/7/95)	Y
SIP Regulation 2, Rule 1	General Requirements (1/26/99)	$\mathbf{Y}^1$
BAAQMD Regulation 5	Open Burning (3/6/02)	N
SIP Regulation 5	Open Burning (9/4/98)	$\mathbf{Y}^{1}$
BAAQMD Regulation 6	Particulate Matter and Visible Emissions (12/19/90)	Y

## III. Generally Applicable Requirements

## Table III Generally Applicable Requirements

		Federally
Applicable	Regulation Title or	Enforceable
Requirement	Description of Requirement	(Y/N)
BAAQMD Regulation 7	Odorous Substances (3/17/82)	N
BAAQMD Regulation 8, Rule 1	Organic Compounds - General Provisions (6/15/94)	Y
BAAQMD Regulation 8, Rule 2	Organic Compounds – Miscellaneous Operations (6/15/94)	Y
BAAQMD Regulation 8, Rule 3	Organic Compounds - Architectural Coatings (11/21/01)	N
SIP Regulation 8, Rule 3	Organic Compounds - Architectural Coatings (2/18/98)	$\mathbf{Y}^{1}$
BAAQMD Regulation 8, Rule 4	Organic Compounds - General Solvent and Surface Coating Operations (10/16/02)	N
SIP Regulation 8, Rule 4	Organic Compounds - General Solvent and Surface Coating Operations (12/23/97)	Y <sup>1</sup>
BAAQMD Regulation 8, Rule 16	Organic Compounds – Solvent Cleaning Operations (10/16/02)	N
SIP Regulation 8, Rule 16	Organic Compounds – Solvent Cleaning Operations (12/9/94)	$\mathbf{Y}^{1}$
BAAQMD Regulation 8, Rule 40	Organic Compounds - Aeration of Contaminated Soil and	Y
	Removal of Underground Storage Tanks (12/15/99)	
BAAQMD 8-40-116	Exemption, Small Volume	Y
BAAQMD 8-40-117	Exemption, Accidental Spills	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)	$\mathbf{Y}^{1}$
BAAQMD Regulation 8, Rule 51	Organic Compounds - Adhesive and Sealant Products (7/17/02)	N
SIP Regulation 8, Rule 51	Organic Compounds - Adhesive and Sealant Products (2/26/02)	$\mathbf{Y}^{1}$
BAAQMD Regulation 11, Rule 1	Hazardous Pollutants – Lead (3/17/82)	N
SIP Regulation 11, Rule 1	Hazardous Pollutants – Lead (9/2/81)	$Y^1$
BAAQMD Regulation 11, Rule 2	Hazardous Pollutants - Asbestos Demolition, Renovation and Manufacturing (10/7/98)	N
BAAQMD Regulation 11, Rule 14	Hazardous Pollutants - Asbestos Containing Serpentine (7/17/91)	N
BAAQMD Regulation 12, Rule 4	Miscellaneous Standards of Performance – Sandblasting (7/11/90)	N
SIP Regulation 12, Rule 4	Miscellaneous Standards of Performance – Sandblasting (9/2/81)	Y <sup>1</sup>
California Health and Safety Code Section 44300 et seq.	Air Toxics "Hot Spots" Information and Assessment Act of 1987	N

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

### IV. SOURCE-SPECIFIC APPLICABLE REQUIREMENTS

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

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

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

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

## Table IV – A Source-Specific Applicable Requirements S-1 KELLER CANYON LANDFILL, A-1 LANDFILL GAS FLARE, AND A-2 LANDFILL GAS FLARE

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
BAAQMD Regulation 1	General Provisions and Definitions (5/2/01)	(2/24)	Dutt
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	$Y^1$	
1-523.3	Reports of Violations	$Y^1$	

## IV. Source-Specific Applicable Requirements

# Table IV – A Source-Specific Applicable Requirements S-1 Keller Canyon Landfill, A-1 Landfill Gas Flare, and A-2 Landfill Gas Flare

Applicable	Regulation Title or	Federally Enforceable	Future Effective
Requirement	Description of Requirement	(Y/N)	Date
BAAQMD	Particulate Matter and Visible Emissions (12/19/90)	(1/11)	Dute
Regulation 6	Tartedate Matter and Visible Emissions (12/17/70)		
6-301	Ringelmann No. 1 Limitation	Y	
6-305	Visible Particles	Y	
6-310	Particulate Weight Limitation (applies to flares only)	Y	
6-401	Appearance of Emissions	Y	
BAAQMD	Organic Compounds – Miscellaneous Operations (6/15/94)		
Regulation 8,	, and the second		
Rule 2			
8-2-301	Miscellaneous Operations	Y	
BAAQMD	Organic Compounds – Solid Waste Disposal Sites (6/15/05)		
Regulation 8,			
Rule 34			
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	

## IV. Source-Specific Applicable Requirements

# Table IV – A Source-Specific Applicable Requirements S-1 Keller Canyon Landfill, A-1 Landfill Gas Flare, and A-2 Landfill Gas Flare

Applicable Requirement	Regulation Title or  Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
8-34-118.3	Required or Approved by Other Enforcement Agencies	Y	
8-34-118.4	Emission Minimization Requirement	Y	
8-34-118.5	Excavated Refuse Requirements	Y	
8-34-118.6	Covering Requirements for Exposed Refuse	Y	
8-34-118.7	Installation Time Limit	Y	
8-34-118.8	Capping Required for New Components	Y	
8-34-118.9	Construction Activity Records	Y	
8-34-301	Landfill Gas Collection and Emission Control System Requirements	Y	
8-34-301.1	Continuous Operation	Y	
8-34-301.2	Collection and Control Systems Leak Limitations	Y	
8-34-301.3	Limits for Enclosed Flares (applies to flares only)	Y	
8-34-303	Landfill Surface Requirements	Y	
8-34-304	Gas Collection System Installation Requirements	Y	
8-34-304.1	Based on Waste Age For Inactive or Closed Areas	Y	
8-34-304.2	Based on Waste Age For Active Areas	Y	
8-34-304.3	Based on Amount of Decomposable Waste Accepted	Y	
8-34-304.4	Based on NMOC Emission Rate	Y	
8-34-305	Wellhead Requirements	Y	
8-34-305.1	Operate Under Vacuum	Y	
8-34-305.2	Temperature < 55 °C	Y	
8-34-305.3	Nitrogen < 20% or	Y	
8-34-305.4	Oxygen < 5%	Y	
8-34-405	Design Capacity Reports	Y	
8-34-408	Collection and Control System Design Plan	Y	
8-34-408.2	Sites With Existing Collection and Control Systems	Y	
8-34-411	Annual Report	Y	
8-34-412	Compliance Demonstration Tests	Y	
8-34-413	Performance Test Report	Y	
8-34-414	Repair Schedule for Wellhead Excesses	Y	
8-34-414.1	Records of Excesses	Y	
8-34-414.2	Corrective Action	Y	
8-34-414.3	Collection System Expansion	Y	
8-34-414.4	Operational Due Date for Expansion	Y	
8-34-415	Repair Schedule for Surface Leak Excesses	Y	

## IV. Source-Specific Applicable Requirements

# Table IV – A Source-Specific Applicable Requirements S-1 Keller Canyon Landfill, A-1 Landfill Gas Flare, and A-2 Landfill Gas Flare

		Federally	Future
Applicable	Regulation Title or	Enforceable	Effective
Requirement	Description of Requirement	(Y/N)	Date
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 (applies to flares only)	Y	
8-34-501.3	Continuous Temperature Records for Enclosed Combustors (applies to	Y	
	flares only)		
8-34-501.4	Testing	Y	
8-34-501.6	Leak Discovery and Repair Records	Y	
8-34-501.7	Waste Acceptance Records	Y	
8-34-501.8	Non-decomposable Waste Records	Y	
8-34-501.9	Wellhead Excesses and Repair Records	Y	
8-34-501.10	Gas Flow Rate Records for All Emission Control Systems	Y	
8-34-501.12	Records Retention for 5 Years	Y	
8-34-503	Landfill Gas Collection and Emission Control System Leak Testing	Y	
8-34-504	Portable Hydrocarbon Detector	Y	
8-34-505	Well Head Monitoring	Y	
8-34-506	Landfill Surface Monitoring	Y	
8-34-507	Continuous Temperature Monitor and Recorded (applies to flares only)	Y	
8-34-508	Gas Flow Meter	Y	
8-34-510	Cover Integrity Monitoring	Y	

## IV. Source-Specific Applicable Requirements

# Table IV – A Source-Specific Applicable Requirements S-1 Keller Canyon Landfill, A-1 Landfill Gas Flare, and A-2 Landfill Gas Flare

		Federally	Future
Applicable	Regulation Title or	Enforceable	Effective
Requirement	Description of Requirement	(Y/N)	Date
BAAQMD	Organic Compounds - Aeration of Contaminated Soil and Removal of		
Regulation 8,	Underground Storage Tanks (12/15/99)		
Rule 40			
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	Y	
8-40-117	500 ppmw, may be used only once per quarter  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	Inorganic Gaseous Pollutants – Sulfur Dioxide (3/15/95)		
Regulation 9, Rule 1			
9-1-301	Limitations on Ground Level Concentrations (applies to flares only)	Y	
9-1-301	General Emission Limitations (applies to flares only)	Y	
		1	
BAAQMD Regulation 9,	Inorganic Gaseous Pollutants – Hydrogen Sulfide (10/6/99)		
Rule 2			
9-2-301	Limitations on Hydrogen Sulfide	N	
BAAQMD	Hazardous Pollutants – Asbestos-Containing Serpentine (7/17/91)	11	
Regulation	Tazar dous Fondames Assessos Containing Scripenine (1717)		
11, Rule 14			
11-14-301	Prohibition of Use for Surfacing Operations	N	
11-14-501	Maintenance of Records	N	
40 CFR	Standards of Performance for New Stationary Sources – General		
Part 60,	Provisions (8/27/01)		
Subpart A	, , ,		
60.4(b)	Requires Submission of Requests, Reports, Applications, and Other	Y	
	Correspondence to the Administrator		

## IV. Source-Specific Applicable Requirements

# Table IV – A Source-Specific Applicable Requirements S-1 Keller Canyon Landfill, A-1 Landfill Gas Flare, and A-2 Landfill Gas Flare

Applicable Requirement	Regulation Title or  Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
60.7	Notification and Record Keeping	Y	
60.8	Performance Tests	Y	
60.11	Compliance with Standards and Maintenance Requirements	Y	
60.11(a)	Compliance determined by performance tests	Y	
60.11(d)	Control devices operated using good air pollution control practice	Y	
60.12	Circumvention	Y	
60.13	Monitoring Requirements	Y	
60.13(a)	Applies to all continuous monitoring systems	Y	
60.13(b)	Monitors shall be installed and operational before performing performance tests	Y	
60.13(e)	Continuous monitors shall operate continuously	Y	
60.13(f)	Monitors shall be installed in proper locations	Y	
60.13(g)	Multiple monitors are required for multiple stacks	Y	
60.14	Modification	Y	
60.15	Reconstruction	Y	
60.19	General Notification and Reporting Requirements	Y	
40 CFR Part	Standards of Performance for New Stationary Sources – Standards of		
60, Subpart	Performance for Municipal Solid Waste Landfills (10/17/00)		
WWW			
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	Y	
	greater than 2.5 million Mg and 2.5 million m³ (Large Designated Facilities)		
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) or	Y	
(b)(2)(i)(C)	demonstrate sufficiency of proposed alternatives		
60.752 (b)(2)(ii)	Install a collection and control system	Y	

## IV. Source-Specific Applicable Requirements

# Table IV – A Source-Specific Applicable Requirements S-1 Keller Canyon Landfill, A-1 Landfill Gas Flare, and A-2 Landfill Gas Flare

Applicable Requirement	Regulation Title or  Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
60.752 (b)(2)(iii)	Route collected gases to a control system.	Y	
60.752 (b)(2)(iii)(B)	Reduce NMOC emissions by 98% by weight or reduce NMOC outlet concentration to less than 20 ppmv as hexane at 3% O2, dry basis, as demonstrated by initial performance test within 180 days of start-up. (applies to flares only)	Y	
60.752 (b)(2)(iv)	Operate in accordance with 60.753, 60.755, and 60.756	Y	
60.752(c)	Title V Operating Permit Requirements	Y	
60.752(c)(1)	Subject date is June 10, 1996 for Landfills new or modified between May 30, 1991 and March 12, 1996	Y	
60.753	Operational Standards for Collection and Control Systems	Y	
60.753(a)	Operate a Collection System in each area or cell in which:	Y	
60.753(a)(1)	Active Cell – solid waste in place for 5 years or more	Y	
60.753(a)(2)	Closed/Final Grade – solid waste in place for 2 years or more	Y	
60.753(b)	Operate each wellhead under negative pressure unless:	Y	
60.753(b)(1)	Fire or increased well temperature or to prevent fire	Y	
60.753(b)(2)	Use of geomembrane or synthetic cover (subject to alternative pressure limits)	Y	
60.753(b)(3)	Decommissioned well after approval received for shut-down	Y	
60.753(c)	Operate each wellhead at $< 55$ °C, and either $< 20\%$ N <sub>2</sub> or $<$ than 5% O <sub>2</sub> (or other approved alternative levels)	Y	
60.753(c)(1)	N <sub>2</sub> determined by Method 3C	Y	
60.753(c)(2)	O <sub>2</sub> determined by 3A and as described in (2)(i-v)	Y	
60.753(d)	Surface Leak Limit is less than 500 ppm methane above background at landfill surface. This section also describes some surface monitoring procedures.	Y	
60.753(e)	Vent all collected gases to a control system complying with 60.752(b)(2)(iii). If collection or control system inoperable, shut down gas mover and close all vents within 1 hour	Y	
60.753(f)	Operate the control system at all times when collected gas is routed to the control system (applies to flares only)	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	

## IV. Source-Specific Applicable Requirements

# Table IV – A Source-Specific Applicable Requirements S-1 Keller Canyon Landfill, A-1 Landfill Gas Flare, and A-2 Landfill Gas Flare

		Federally	Future
Applicable	Regulation Title or	Enforceable	Effective
Requirement	Description of Requirement	(Y/N)	Date
60.754(a)	NMOC Calculation Procedures for NMOC Emission Rate Reports and	Y	
	Comparison to 50 Mg/Year Standard		
60.754(a)(1)	Calculate NMOC Emission Rate using either or both of the equations	Y	
	in 60.754(a)(1)(i-ii) with the listed default values		
60.754	Equation for known year-to-year waste acceptance rate	Y	
(a)(1)(i)			
60.754	Equation for unknown year-to-year waste acceptance rate	Y	
(a)(1)(ii)			
60.754(a)(2)	Tier 1 - compare calculated NMOC emission rate to 50 Mg/year	Y	
60.754	If NMOC Emission Rate $\geq$ 50 Mg/year, comply with 60.752(b)(2)	Y	
(a)(2)(ii)	or determine a site-specific NMOC concentration and follow		
	60.754(a)(3).		
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	Y	
	rate		
60.755	Equation for unknown year-to-year waste acceptance rate	Y	
(a)(1)(i)			
60.755	Equation for known year-to-year waste acceptance rate	Y	
(a)(1)(ii)			
60.755(a)(2)	Vertical wells and horizontal collectors shall be of sufficient density to	Y	
	meet all performance specifications.		
60.755(a)(3)	Measure wellhead pressure monthly. If pressure is positive, take	Y	
	corrective action (final corrective action = expand system within 120		
	days of initial positive pressure reading)		
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	Y	
	oxygen. If readings exceed limits, take corrective action up to		
	expanding system within 120 days of first excess.		
60.755(b)	Wells shall be placed in cells as described in Design Plan and no later	Y	
	than 60 days after:		
60.755(b)(1)	Five years after initial waste placement in cell, for active cells	Y	

## IV. Source-Specific Applicable Requirements

# Table IV – A Source-Specific Applicable Requirements S-1 Keller Canyon Landfill, A-1 Landfill Gas Flare, and A-2 Landfill Gas Flare

Applicable	Regulation Title or	Federally Enforceable	Future Effective
Requirement	Description of Requirement	(Y/N)	Date
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	Mark and record location of excess	Y	
(c)(4)(i)			
60.755	Repair cover or adjust vacuum. Re-monitor within 10 calendar	Y	
(c)(4)(ii)	days.		
60.755	If still exceeding 500 ppmv, take additional corrective action. Re-	Y	
(c)(4)(iii)	monitor within 10 calendar days of 2 <sup>nd</sup> excess.		
60.755	Re-monitor within 1 month of initial excess.	Y	
(c)(4)(iv)			
60.755	For any location with 3 monitored excesses in a quarter, additional	Y	
(c)(4)(v)	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	Y	
	malfunction, provided the duration of these shall not exceed 5 days for		
	collection systems or 1 hour for control systems.		
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	

## IV. Source-Specific Applicable Requirements

# Table IV – A Source-Specific Applicable Requirements S-1 Keller Canyon Landfill, A-1 Landfill Gas Flare, and A-2 Landfill Gas Flare

Applicable Requirement	Regulation Title or  Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
60.756(b)	Enclosed combustors shall comply with (b)(1) and (b)(2)	Y	
60.756(b)(1)	Temperature monitor and continuous recorder (not required for boilers and process heaters with capacity > 44 MW)	Y	
60.756(b)(2)	Device that records flow to or bypass of the control device (i or ii below)	Y	
60.756 (b)(2)(i)	Install, calibrate, and maintain a device that records flow to the control device at least every 15 minutes.	Y	
60.756(e)	Procedures for requesting alternative monitoring parameters	Y	
60.756(f)	Monitor surface on a quarterly basis.	Y	
60.757	Reporting Requirements	Y	
60.757(a)	Submit an Initial Design Capacity Report	Y	
60.757(a)(3)	Amended Design Capacity Report required within 90 days of receiving a permitted increase in design capacity or within 90 days of an annual density calculation that results in a design capacity over the thresholds.	Y	
60.757(b)	Submit Initial and Annual NMOC Emission Rate Report	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	

## IV. Source-Specific Applicable Requirements

# Table IV – A Source-Specific Applicable Requirements S-1 Keller Canyon Landfill, A-1 Landfill Gas Flare, and A-2 Landfill Gas Flare

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

## IV. Source-Specific Applicable Requirements

# Table IV – A Source-Specific Applicable Requirements S-1 Keller Canyon Landfill, A-1 Landfill Gas Flare, and A-2 Landfill Gas Flare

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 (a)(3)(i)	Any segregated area of asbestos or non-degradable material only may be excluded, if documented adequately per 60.758(d).	Y	
60.759 (a)(3)(ii)	Any non-productive areas may be excluded from control, provided total NMOC emissions from all excluded areas is < 1% of total NMOC emissions from landfill. Document amount, location, and age of waste and all calculations for each excluded area.	Y	
60.759 (a)(3)(iii)	For calculating NMOC emissions, values for k and concentration of NMOC that have been previously approved shall be used or defaults if no values were approved. All non-degradable wastes that are being subtracted from total wastes for NMOC calculations must be documented adequately.	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	

## IV. Source-Specific Applicable Requirements

# Table IV – A Source-Specific Applicable Requirements S-1 Keller Canyon Landfill, A-1 Landfill Gas Flare, and A-2 Landfill Gas Flare

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
60.759(b)(3)	Header connection assemblies shall include positive closing throttle valve, seals and couplings to prevent leaks, at least one sampling port, and shall be constructed of PVC, HDPE, fiberglass, stainless steel, or other approved materials.	Y	
60.759(c)	Gas Mover Equipment shall be sized to handle maximum expected gas generation rate over the intended period of use.	Y	
60.759(c)(1)	For existing systems, flow data shall be used to project maximum flow rate.	Y	
60.759(c)(2)	For new systems, gas generation rate shall be calculated per 60.755(a)(1)	Y	
40 CFR Part 63, Subpart A	National Emission Standards for Hazardous Air Pollutants: General Provisions (10/12/05)		
63.4	Prohibited activities and circumvention	Y	
63.5(b)	Requirements for existing, newly constructed, and reconstructed sources	Y	
63.6(e)	Operation and maintenance requirements and SSM Plan	Y	
63.6(f)	Compliance with non-opacity emission standards	Y	
63.10(b)(2) (i-v)	Records for startup, shutdown, malfunction, and maintenance	Y	
63.10(d)(5)	Startup, Shutdown, and Malfunction (SSM) Reports	Y	
40 CFR Part 63, Subpart AAAA	National Emission Standards for Hazardous Air Pollutants: Municipal Solid Waste Landfills (1/16/03)		
63.1955	What requirements must I meet?	Y	
63.1955(a)(1)	Comply with 40 CFR Part 60, Subpart WWW	Y	
63.1955(a)(2)	Comply with State Plan that implements 40 CFR Part 60, Subpart Cc	Y	
63.1955(b)	Comply with 63.1960-63.1985, if a collection and control system is required by 40 CFR Part 60, Subpart WWW or a State Plan implementing 40 CFR Part 60, Subpart Cc	Y	
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	

## IV. Source-Specific Applicable Requirements

# Table IV – A Source-Specific Applicable Requirements S-1 Keller Canyon Landfill, A-1 Landfill Gas Flare, and A-2 Landfill Gas Flare

		Federally	Future
Applicable	Regulation Title or	Enforceable	Effective
Requirement	Description of Requirement	(Y/N)	Date
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			
#17309			
Part 1	Operating Time Restrictions (Cumulative Increase)	Y	
Part 2	Waste Acceptance Rate Limits (Cumulative Increase and Regulation 2-1-301)	Y	
Part 3	Daily Cover Requirements and Limitations	Y	
	(Regulation 1-301 and Cumulative Increase)		
Part 4	Road Surfacing Requirements for Parking and Maintenance Areas (Cumulative Increase)	Y	
Part 5	Road Surfacing Requirements for On-Site Road Ways (Cumulative Increase)	Y	
Part 6	Speed Limits for Unpaved Roads (Cumulative Increase)	Y	
Part 7	Road Surfacing Requirements for Unpaved Roads (Cumulative Increase)	Y	
Part 8	Minimum Water and Dust Suppressant Application Rates for Unpaved Roads (Cumulative Increase)	Y	
Part 9	Water Truck Requirements (Cumulative Increase)	Y	
Part 10	Watering Requirements for Paved and Aggregate Based Road Ways (Cumulative Increase)	Y	
Part 11	Traffic Volume Limitations (Cumulative Increase)	Y	
Part 12	Trip Length Limitations for Heavy Duty Vehicles (Cumulative Increase)	Y	
Part 13	Watering Requirements for Active Face, Cover Soil Areas, and Off-Road Soil Areas (Cumulative Increase)	Y	
Part 14	Vegetation Requirements for Inactive Cover Soil Stockpiles (CEQA, Dust Mitigation Measures)	N	
Part 15	Vegetation Requirements for Completed Landfill Phases (CEQA, Dust Mitigation Measures)	N	

## IV. Source-Specific Applicable Requirements

# Table IV – A Source-Specific Applicable Requirements S-1 Keller Canyon Landfill, A-1 Landfill Gas Flare, and A-2 Landfill Gas Flare

		Federally	Future
Applicable	Regulation Title or	Enforceable	Effective
Requirement	Description of Requirement	(Y/N)	Date
Part 16	Record Keeping Requirements	Y	
	(Cumulative Increase and Regulation 2-6-501)		
Part 17	Control Requirements for Collected Landfill Gas (Regulations 8-34-301	Y	
	and 8-34-303 and 40 CFR 60.752(b)(2)(iii), 60.753(e) and 60.755(e))		
Part 18	Continuous Operating Requirement for Landfill Gas Collection System	Y	
	(Regulation 8-34-301 and 40 CFR 60.753(b and c) and 60.755(e))		
Part 19	Reporting Periods and Report Submittal Due Dates for the Regulation 8,	Y	
	Rule 34 and NESHAP Reports		
	(Regulation 8-34-411 and 40 CFR 63.1980(a))		
Part 20	Well Installation and Design Parameters (Regulations 8-34-303, 8-34-304,	Y	
	and 8-34-305 and 40 CFR 60.755(a) and 60.759)		
Part 21	Continuous Operation Requirement (Regulation 8-34-301 and 40 CFR	Y	
	60.752(b)(2)(iii), 60.753(e), and 60.755(e))		
Part 22	Temperature Monitoring and Recording Requirements for Flares	Y	
	(Regulations 2-6-501 and 8-34-501 and 40 CFR 60.756(b))		
Part 23	Minimum Temperature Requirement for Flares (RACT, Toxic Risk	Y	
	Management Policy, Regulation 8-34-301, and 40 CFR 60.758(c)(1)(i))		
Part 24	Nitrogen Oxide Emission Limit for Flares (RACT)	Y	
Part 25	Carbon Monoxide Emission Limit for Flares (RACT)	Y	
Part 26	[deleted]		
Part 27	Gas Flow Meter Requirement	Y	
	(Regulation 8-34-508 and 40 CFR 60.756(b))		
Part 28	Alarm and Automated Control Requirements for Flares	Y	
	(Regulation 8-34-301)		
Part 29	[deleted]		
Part 30	Annual Source Testing Requirement	Y	
	(RACT, Regulation 8-34-301.3, and 40 CFR 60.752(b)(2)(iii))		
Part 31	Annual Landfill Gas Characterization Test (Toxic Risk Management	Y	
	Policy, Regulations 8-34-301 and 9-1-302, and NSPS)		
Part 32	Limits on Toxic Air Contaminants in Landfill Gas	N	
	(Toxic Risk Management Policy)		
Part 33	Precursor Organic Compound Emission Limit and Calculation Procedures	Y	
	(Offsets)		
Part 34	Landfill Gas Sulfur Content Limit and Testing Procedures	Y	
	(Cumulative Increase and Regulations 9-1-302 and 2-6-503)		

## IV. Source-Specific Applicable Requirements

## Table IV – A Source-Specific Applicable Requirements S-1 Keller Canyon Landfill, A-1 Landfill Gas Flare, and A-2 Landfill Gas Flare

		Federally	Future
Applicable	Regulation Title or	Enforceable	Effective
Requirement	Description of Requirement	(Y/N)	Date
Part 35	Heat Input Limits for Flares	Y	
	(Offsets, Cumulative Increases, and Regulation 2-1-301)		
Part 36	Contaminated Soil Throughput Limit and Records (Regulation 8-2-301)	Y	
Part 37	Handling Procedures for Soil Containing Volatile Organic Compounds	Y	
	(Regulations 2-1-403, 8-40-301, 8-40-304, and 8-40-305)		

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

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## IV. Source-Specific Applicable Requirements

## Table IV – B Source-Specific Applicable Requirements S-2 WIPE CLEANING OPERATION

Applicable	Regulation Title or	Federally Enforceable	Future Effective
Requirement	Description of Requirement	(Y/N)	Date
BAAQMD	Organic Compounds – Solvent Cleaning Operations (10/16/02)		
Regulation 8,			
Rule 16			
8-16-501	Solvent Records		
8-16-501.2	Facility-wide, annual records of makeup solvent use	N	
8-16-501.5	Record retention	N	
SIP	Organic Compounds – Solvent Cleaning Operations (6/15/94)		
Regulation 8,			
Rule 16			
8-16-501	Solvent Records		
8-16-501.2	Facility-wide, quarterly records of makeup solvent use	$\mathbf{Y}^{1}$	
BAAQMD			
Condition			
#9527			
Part 1	Solvent Usage Limits (Cumulative Increase and Regulation 2-1-301)	Y	
Part 2,	Record Keeping Requirements	Y	
subparts a-b	(Cumulative Increase and Regulations 8-16-501 and 2-6-501)		

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

## IV. Source-Specific Applicable Requirements

### Table IV – C Source-Specific Applicable Requirements S-3 YARD AND GREEN WASTE STOCKPILES

Applicable Requirement	Regulation Title or  Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
BAAQMD	Description of Requirement	(2/11)	Dutt
Regulation 6	Particulate Matter and Visible Emissions (12/19/90)		
6-301	Ringelmann No. 1 Limitation	Y	
6-305	Visible Particles	Y	
6-401	Appearance of Emissions	Y	
BAAQMD			
Condition			
#16462			
Part 1	Limit on Yard and Green Waste Received (Cumulative Increase)	Y	
Part 2	Watering Requirements (Regulation 6-301, 6-305, and Regulation 2-6-503)	Y	
Part 3	Maximum Storage Time for Incoming Waste Prior to Processing (Regulation 1-301)	N	
Part 4	Maximum Storage Time for "Odorous" Stockpile (Regulation 1-301)	N	
Part 5	Public Nuisance Control Measures (Regulation 1-301)	N	
Part 6, subparts a-d	Record Keeping Requirements (Cumulative Increase and Regulations 1-301, 2-6-501, 6-301 and 6-305)	Y	

### V. SCHEDULE OF COMPLIANCE

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

### VI. PERMIT CONDITIONS

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

#### **Condition # 9527**

For S-2 Wipe Cleaning Operation:

- 1. The net solvent usage at this source shall not exceed 100 gallons during any consecutive 12-month period nor 0.75 gallons during any day. (Basis: Cumulative Increase and Regulation 2-1-301)
- 2. In order to ensure compliance with this condition, the following records shall be maintained on site and made available for District inspection for 5 years from the date a record is made:
  - a. The type, VOC content and amount of solvent used monthly.
  - b. The monthly quantities shall be totaled on an annual basis.

(Basis: Cumulative Increase and Regulations 8-16-501 and 2-6-501)

### **Condition # 16462**

For S-3 YARD AND GREEN WASTE STOCKPILES:

- 1. The total amount of yard and green waste received at S-3 shall not exceed 1000 tons during any day nor 70,200 tons during any consecutive 12-month period. (Basis: Cumulative Increase)
- 2. The yard and green waste stockpiles shall be watered down as necessary to prevent visible dust emissions during loading or unloading. Dry, dusty material shall be watered down before unloading from truck beds as necessary to prevent visible emissions. To ensure compliance with this part, the Permit Holder shall visually observe all unloading, stockpiling, and loading operations and shall immediately initiate corrective actions if any visible dust emissions are detected. (Basis: Regulation 6-301 and Regulation 2-6-503)
- \*3. Yard and green waste shall be removed from the stockpiles within 4 days of the time it is received to prevent decomposition and odors. If any stockpiles are deemed to be odorous by a District inspector, the allowable stockpile storage time shall be reduced from 4 days to 72 hours. (Basis: Regulation 1-301)
- \*4. Any stockpile that is deemed to be odorous by a District inspector shall be removed within 24 hours. (Basis: Regulation 1-301)

### VI. Permit Conditions

#### **Condition # 16462**

For S-3 YARD AND GREEN WASTE STOCKPILES:

- \*5. If the plant receives two or more Violation Notices from the District for "Public Nuisance" in any consecutive 12 month period, the owner/operator of this facility shall submit to the District, within 30 days, an application to modify the Permit to Operate to include the following control measures, as applicable, or any other measures that the District deems necessary and appropriate.
  - a. Require the application of odor inhibitor solutions,
  - b. Reduce the allowable stockpile time, or
  - c. Discontinue use of green waste stockpiles during the ozone season or other appropriate time period.

(Basis: Regulation 1-301)

- 6. In order to demonstrate compliance with Parts 1, 2 and 3, the owner/operator shall maintain the following records:
  - a. Record the date, time, and amount of yard and green waste received at a stockpile.
  - b. Summarize the amount of yard and green waste received on a monthly basis.
  - c. Record the date, time, and amount of yard and green waste removed from the stockpile.
  - d. Record the date and time that water was applied to the stockpiles or associated loading or unloading operations.

All records shall be kept on site for a minimum of 5 years from the date of entry and shall be made available to District staff upon request. (Basis: Cumulative Increase and Regulations 2-6-501 and 6-301)

#### VI. Permit Conditions

#### **Condition # 17309**

For S-1 Keller Canyon Landfill, A-1 Landfill Gas Flare, and A-2 Landfill Gas Flare:

- 1. All landfill operations, including the acceptance and placement of waste and earthmoving and construction activities, shall be restricted to six days per week, Monday through Saturday. No operation shall take place on Sunday. (Basis: Cumulative Increase)
- 2. The Permit Holder shall apply for and receive written authorization from the District (in the form of an MFR Permit Revision and either a District Authority to Construct or Change of Permit Conditions) prior to exceeding any of the waste acceptance or waste disposal limits listed in subparts a-c below, unless the subpart below specifically states otherwise. Any changes in waste acceptance rates, types of waste accepted, or other practices that will result in emissions increases above the maximum permitted emission rates at the Keller Canyon Landfill (S-1) or the Landfill Gas Flares (A-1 and A-2) shall be considered a modification of S-1, A-1, or A-2 as defined in Regulation 2-1-234. (Basis: Cumulative Increase and Regulation 2-1-301)
  - a. Total waste accepted and placed at the landfill shall not exceed 3,500 tons in any single day (except during temporary emergency situations approved by the Local Enforcement Agency).
  - b. The total cumulative amount of all wastes placed in the landfill shall not exceed 38.4 million tons. However, an exceedance of this amount is not a violation of the permit and does not trigger the requirement to obtain an NSR permit, if the Permit Holder provides documentation to the District, within 30 days of the date of discovery of the exceedance, that demonstrates to the satisfaction of the APCO that the higher cumulative tonnage in place will not result in an increase of the Part 33 emission limit.
  - c. The maximum design capacity of the landfill (total volume of all wastes and cover materials placed in the landfill, excluding final cover) shall not exceed 75 million cubic yards.
- 3. All waste shall be covered on a daily basis with suitable cover material meeting the requirements of the California Integrated Waste Management Board (CIWMB). This cover frequency shall be increased as necessary for the control of odors and litter. Approved daily cover materials for this site include:
  - a. Clean soil compacted to a depth of least 6 inches,
  - b. Green waste compacted to a depth of at least 6 inches, but not exceeding an average depth of 12 inches, and
  - c. Geosynthetic blankets, provided that the working face is covered with clean soil at least once a week.

#### VI. Permit Conditions

#### **Condition # 17309**

For S-1 Keller Canyon Landfill, A-1 Landfill Gas Flare, and A-2 Landfill Gas Flare:

d. Upon receiving written approval from the District (in the form of a letter or email concurring that no permit revisions are required), the owner/operator of S-1 may use other Alternative Daily Cover (ADC) materials that have been approved by CIWMB, provided that the use of these ADC materials do not result in odors, emission increases of any pollutant, the emission of any new pollutants, or contribute to a public nuisance. The owner/operator of S-1 shall apply for and receive an Authority to Construct before using any ADC materials that may result in odors, emission increases, the emission of any new pollutants, or that could contribute to a public nuisance.

(Basis: Regulation 1-301 and Cumulative Increase)

- 4. All on-site parking and maintenance areas for vehicles and mobile equipment shall either be paved, or provided with a gravel surface, except parking areas for landfill operation employees located directly adjacent to the working face. (Basis: Cumulative Increase)
- 5. All on-site roadways shall be paved, with the following exceptions:
  - a. A segment not exceeding 3,000' in length leading from the cover stockpiles to the midpoint of the working face.
  - b. A segment not exceeding 400' in length leading from the end of the main access haul road to the midpoint of the working face.
  - c. A segment not exceeding 750' in length leading from the end of the paved entrance roadway to the beginning of the unpaved 400' segment (exception b. above). This segment shall consist of a minimum of 12 inches of compacted gravel or crushed asphalt.
  - d. A segment not exceeding 1400' in length consisting of a secondary fireaccess road southerly from the sedimentation basin perimeter roadway, starting from the graveled roadway surface to its southernmost point. Use of the roadway for maintenance and site patrol purposes shall not exceed an average of two vehicle trips per day.

(Basis: Cumulative Increase)

6. Speed of vehicles on unpaved roads shall not exceed 10 miles per hour. This speed limit shall be posted and enforced on unpaved roads at all times. Speed of vehicles on the fire access road shall not exceed 25 miles per hour. (Basis: Cumulative Increase)

#### VI. Permit Conditions

#### **Condition # 17309**

For S-1 Keller Canyon Landfill, A-1 Landfill Gas Flare, and A-2 Landfill Gas Flare:

- 7. All unpaved roads shall be provided with a gravel surface, excluding the fire access road, the 400 foot section of roadway from the end of the main access haul road to the working face, and the 3,000 foot scraper haul road segment from the working face to the soil stockpile area. (Basis: Cumulative Increase)
- 8. Operator shall control dust emissions from all unpaved roads, excluding the fire access road, by applying water as necessary and chemical dust suppressants at the following frequency and intensity:
  - a. Except as provided below, all applications of dust suppressant shall consist of 0.5 gallons per square yard of 10% MgCl2 applied along the entire length of all unpaved roads.
  - b. Beginning May 1st and ending November 1st, dust suppressants shall be applied every 30 days.
  - c. From November 1 through May 1, dust suppressants shall be applied following any 30 consecutive dry days. For the purposes of this permit, a dry operating day shall be defined as any 24-hour period, midnight to midnight, with less than 0.09 inches of rain.
  - d. Upon written request of the operator, the above dust suppression program may be modified to allow for the use of dust suppressants other than MgCl2 provided an 85% control efficiency for TSP can be demonstrated to the satisfaction of the APCO. All such changes must be approved by the APCO in writing (in the form of a letter or email concurring that no permit revisions are required) prior to implementation.

(Basis: Cumulative Increase)

- 9. Operator shall maintain a fleet of at least two water trucks at all times to wash down paved roadway surfaces and wet unpaved roads (excluding the fire access road) and work areas. (Basis: Cumulative Increase)
- 10. On all dry operating days, all paved and AB roads shall be completely washed down at regular intervals throughout operating hours. Rinsing frequency shall average once every fifth heavy-duty vehicle (gross weight > 5 tons) pass, excluding water trucks. Averaging shall be done on a daily basis. (Basis: Cumulative Increase)
- 11. On-site traffic volume of the following heavy duty vehicles shall not exceed the following number of round trips in any single day, calculated on an annual basis, except as otherwise provided in this permit:
  - a. 175 transfer truck trips

### VI. Permit Conditions

#### **Condition # 17309**

For S-1 Keller Canyon Landfill, A-1 Landfill Gas Flare, and A-2 Landfill Gas Flare:

- b. 4 leachate transfer truck trips
- c. 45 scraper trips
- d. For all heavy-duty vehicles, such other on-site travel as may be approved in writing by the APCO.

'Annual Basis' shall be calculated by dividing the number of total truck trips by the number of operating days in any 365-day period. (Basis: Cumulative Increase)

- 12. For the following heavy-duty vehicles, one-way on-site trip length shall not exceed the following distances at any time during the life of the landfill except as otherwise provided by this permit:
  - a. Transfer trucks: 7,800 feet (7,400 feet paved and AB)
  - b. Leachate trucks: 3,600 feet (all paved)
  - c. Scrapers: 3,000 feet (all unpaved)

A map shall be kept on site at all times identifying the paved and AB roads, clearly stating their length and the type of vehicles that use them. (Basis: Cumulative Increase)

- 13. On all dry operating days, all off-road soil areas, including the active face area and the active portion of the cover stockpiles, trafficked or otherwise disturbed by vehicles, equipment or operations shall be wetted down with 0.5 gallons of water per square yard or 2,420 gallons of water per acre, at least twice per day. (Basis: Cumulative Increase)
- \*14. All inactive portions of the cover stockpiles shall either be covered by a latex sealer or revegetated. (Basis: CEQA, Dust Mitigation Measures)
- \*15. All completed landfill phases shall be revegetated as soon as possible. (Basis: CEQA, Dust Mitigation Measures)
- 16. In order to demonstrate compliance with the above parts, the owner/operator of S-1 shall maintain the following records:
  - a. Daily records of the quantity of waste accepted and placed in the landfill.
  - b. Summarize the daily waste acceptance records for each calendar month.
  - c. Summarize monthly waste acceptance records for each preceding 12-month period.
  - d. For each area or cell that is not controlled by a landfill gas collection system, maintain a record of the date that waste was initially placed in the area or cell.

#### VI. Permit Conditions

#### **Condition # 17309**

For S-1 Keller Canyon Landfill, A-1 Landfill Gas Flare, and A-2 Landfill Gas Flare:

- e. Record the cumulative amount of waste placed in each uncontrolled area or cell on a monthly basis.
- f. If the Permit Holder plans to exclude an uncontrolled area or cell from the collection system requirement, the Permit Holder shall also record the types and amounts of all non-decomposable waste placed in the area and the percentage (if any) of decomposable waste placed in the area.
- g. Record the initial operation date for each new landfill gas well and collector.
- h. Maintain an accurate map of the landfill, which indicates the locations of all refuse boundaries and the locations of all wells and collectors (using unique identifiers) that are required to be operating continuously pursuant to Part 20a. Any areas containing only non-decomposable waste shall be clearly identified. This map shall be updated at least every six months to indicate changes in refuse boundaries and to include any newly installed wells and collectors.
- i. Daily records of the number of site trips made by heavy-duty vehicles by type of vehicle (transfer trucks, leachate trucks, scrapers, etc.)
- j. Daily records of the number of water truck rinses on paved and unpaved roads. Alternatively, the Permit Holder may maintain daily checklists instead of the records required by this subpart, provided the Permit Holder has received written approval from the District for the site's dust control plan, checklists, and implementation procedures.
- k. Records of all chemical dust suppressant applications including the date of treatment, length of roads treated, and amount of dust suppressant applied. Alternatively, the Permit Holder may maintain daily checklists instead of the records required by this subpart, provided the Permit Holder has received written approval from the District for the site's dust control plan, checklists, and implementation procedures.
- 1. Daily records of all water applications to the working face, cover soil stockpiles, or other areas including the number of times that water was applied and the amount of water applied. Alternatively, the Permit Holder may maintain daily checklists instead of the records required by this subpart, provided the Permit Holder has received written approval from the District for the site's dust control plan, checklists, and implementation procedures.

All records required to be kept under the provisions of this permit must be maintained on site for a period of five years from the date of entry, and be available for inspection by District staff upon request. (Basis: Cumulative Increase and Regulation 2-6-501)

## **VI. Permit Conditions**

## **Condition # 17309**

For S-1 Keller Canyon Landfill, A-1 Landfill Gas Flare, and A-2 Landfill Gas Flare:

- 17. All landfill gas collected by the gas collection well system for S-1 shall be abated at all times by the enclosed flares, A-1 or A-2. Under no circumstances shall raw landfill gas be vented to the atmosphere. This limitation does not apply to unavoidable landfill gas emissions that occur during collection system installation, maintenance, or repair performed in compliance with Regulation 8, Rule 34 Sections 113, 116, 117, or 118 or to inadvertent component or surface leaks that do not exceed the limits specified in 8-34-301.2 or 8-34-303. (Basis: Regulations 8-34-301, 8-34-303, 40 CFR 60.752(b)(2)(iii), 60.753(e), and 60.755(e))
- 18. The landfill gas collection system described below in Part 20a shall be operated continuously. Wells shall not be shut off, disconnected, or removed from operation without prior 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. (Basis: Regulation 8-34-301, 40 CFR 60.753(b and c) and 60.755(e))
- 19. The annual report required by BAAQMD Regulation 8-34-411 shall be submitted in two semi-annual increments. The reporting periods and report submittal due dates for the semi-annual increments of the Regulation 8-34-411 report and the MSW Landfill NESHAP 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))
- 20. Well Installation and Design Parameters:

The Permit Holder shall apply for and receive an Authority to Construct before modifying the landfill gas collection system described in subsection a below. Increasing or decreasing the number of wells or collectors or significantly changing the locations, depths or lengths of wells or collectors are all considered to be modifications that are subject to the Authority to Construct requirement.

## **VI. Permit Conditions**

## **Condition # 17309**

For S-1 Keller Canyon Landfill, A-1 Landfill Gas Flare, and A-2 Landfill Gas Flare:

a. The Permit Holder has been issued a Permit to Operate for the landfill gas collection system components listed below. Well and collector locations, depths, and lengths of associated piping are as described in detail in Permit Application # 12155. The authorized number of landfill gas collection system components is the baseline count listed below plus any components added pursuant to Part 1b as evidenced by start-up notification letters submitted to the District.

Well Station	Number of Wells
A	12
E	12
K	12
L	6
M	9
N	16
P	8

- b. The Permit Holder has been issued an Authority to Construct to allow for the landfill gas collection system modifications described below as of June 9, 2005. Well and collector locations, depths, and lengths are as described in detail in Permit Application # 12155.
  - Install a minimum of 15 up to a maximum of 20 vertical gas collection wells.
  - Install 2 wellhead stations that will provide flow rate control and monitoring points for the above wells.

(Basis: Regulations 8-34-303, 8-34-304, 8-34-305, 40 CFR 60.755(a) and 60.759)

- 21. Each flare shall be operated continuously during any time that landfill gas is being vented to the flare. (Basis: Regulation 8-34-301, 40 CFR 60.752(b)(2)(iii), 60.753(e), and 60.755(e))
- 22. A temperature monitor with readout display and continuous recorder shall be installed and maintained on each flare. One or more thermocouples shall be placed in the primary combustion zone of the flare and shall accurately indicate flue gas temperature at all times. Temperature charts shall be retained for five years and made readily available to District Staff upon request. (Basis: Regulations 8-34-501 and 2-6-501 and 40 CFR 60.756(b))

## **VI. Permit Conditions**

## **Condition # 17309**

- 23. The combustion zone temperature of the A-1 Flare shall be maintained at a minimum temperature of 1504 degrees F, averaged over any 3-hour period. The combustion zone temperature of the A-2 Flare shall be maintained at a minimum temperature of 1400 degrees F, averaged over any 3-hour period. If a source test demonstrates compliance with all applicable requirements at a different temperature, the APCO may revise these minimum temperature requirements in accordance with the procedures identified in Regulation 2-6-414 or 2-6-415 and 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: Regulation 8-34-301, Toxic Risk Management Policy, RACT, 40 CFR 60.758(c)(1)(i))
- 24. NOx emissions from either the A-1 Flare or the A-2 Flare shall not exceed 15 ppmv of NO<sub>x</sub>, expressed as NO<sub>2</sub> at 15% oxygen on a dry basis. (Basis: RACT)
- 25. CO emissions from the A-1 Flare shall not exceed 114 ppmv of CO at 15% oxygen on a dry basis. CO emissions from the A-2 Flare shall not exceed 81 ppmv of CO at 15% oxygen on a dry basis. (Basis: RACT)
- 26. [deleted]
- 27. A flow meter to measure gas flow into each flare shall be installed prior to operation and maintained in good working condition. (Basis: Regulation 8-34-508 and 40 CFR 60.756(b))
- 28. Each flare shall be equipped with both local and remote alarms, automatic combustion air control, and automatic start/restart system. (Basis: Regulation 8-34-301)
- 29. [deleted]

## VI. Permit Conditions

## **Condition # 17309**

- 30. In order to demonstrate compliance with Parts 24 and 25 above, Regulations 8-34-301.3 and 8-34-412, 40 CFR 60.8, and 40 CFR 60.752(b)(2)(iii)(B), the owner/operator shall conduct a source test at each flare once every year. The source tests shall be conducted no sooner than 9 months and no later than 12 months after the previous source test. The first source test for A-2 shall be conducted within 60 days of initial start-up of A-2. 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. Each annual source test shall determine the following:
  - a. landfill gas flow rate to the flare (dry basis);
  - b. concentrations (dry basis) of carbon dioxide (CO<sub>2</sub>), nitrogen (N<sub>2</sub>), oxygen (O<sub>2</sub>), methane (CH<sub>4</sub>), and total non-methane organic compounds (NMOC) in the landfill gas;
  - c. stack gas flow rate from the flare (dry basis);
  - d. concentrations (dry basis) of  $NO_x$ , CO, 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 MM BTU,
  - g. average combustion zone temperature in the flare during the test period. (Basis: Regulation 8-34-301.3, RACT, 40 CFR 60.752(b)(2)(iii))
- 31. The Permit Holder shall conduct a characterization of the landfill gas concurrent with the annual source test required by Part 30 above. The landfill gas sample shall be drawn from the main landfill gas header. In addition to the compounds listed in Part 30b, the landfill gas shall be analyzed for the organic and sulfur compounds listed below. All concentrations shall be reported on a dry basis. The sulfur compound data collected pursuant to this part may be used to determine the total reduced sulfur compound concentration expressed as H2S (TRS) and the ratio (R) of total reduced sulfur content versus hydrogen sulfide content, where R=TRS/H2S. This ratio (R) may be used in Part 34 below (in place of the default value of R=1.2) to calculate TRS based on H2S measured by the Draeger tube method. The test report shall be submitted to the Compliance and Enforcement Division and the Source Test Section within 60 days of the test date. (Basis: Toxic Risk Management Policy, Regulations 8-34-301 and 9-1-302, and NSPS)

## VI. Permit Conditions

## **Condition # 17309**

For S-1 Keller Canyon Landfill, A-1 Landfill Gas Flare, and A-2 Landfill Gas Flare:

Organic Compounds	Sulfur Compounds
Acrylonitrile	Carbon Disulfide
Benzene	Carbonyl Sulfide
Carbon Tetrachloride	Dimethyl Sulfide
Chloroform	Ethyl Mercaptan
Ethylene Dibromide	Hydrogen Sulfide
Ethylene Dichloride	Methyl Mercaptan
Methylene Chloride	
Perchloroethylene	
Trichloroethylene	
Vinyl Chloride	

\*32. If concentrations of toxic air contaminants (TACs) are above the levels listed below, an additional risk screen run at actual concentrations will be required. Depending on the results of such screen, additional permit conditions may be required if health risks are deemed unacceptable.

Compound	Concentration (ppbv)
Acrylonitrile	500
Benzene	10,000
Carbon Tetrachloride	100
Chloroform	100
Ethylene Dibromide	100
Ethylene Dichloride	400
Methylene Chloride	27,600
Perchloroethylene	3,600
Trichloroethylene	2,300
Vinyl Chloride	1,600

(Basis: Toxic Risk Management Policy)

- 33. The fugitive emissions of Precursor Organic Compounds (POC) from the S-1 Landfill shall not exceed 40.059 tons per year (expressed asmethane). Fugitive POC emissions from the landfill shall be determined using the procedures and assumptions described in Parts 33a-f below. POC emissions from the landfill shall be calculated at least once every five years or whenever the capacity of the landfill gas emissions control system, A-1 and A-2 Flares, is expanded, whichever is sooner.
  - a. The current methane generation rate and uncontrolled POC emissions from the S-1 Landfill shall be calculated using the equations described in the most recent revision of AP-42 Chapter 2.4.

## **VI. Permit Conditions**

## **Condition # 17309**

For S-1 Keller Canyon Landfill, A-1 Landfill Gas Flare, and A-2 Landfill Gas Flare:

- b. The methane generation rate shall be based on the total amount of waste accepted at the landfill to date. The Permit Holder may use either average annual or year-to-year waste acceptance rates.
- c. The Permit Holder shall use the AP-42 recommended default values for the methane generation potential and methane generation rate constant. As of April 1, 2005, these default values were:

  Lo = 100 m3 CH4/Mg and k = 0.02 year^-1.
- d. When calculating uncontrolled POC emissions (UEPOC, pounds/year of POC), the Permit Holder shall use site specific NMOC, NPOC, and methane concentrations (after correcting for air infiltration) and the site specific landfill gas temperature. The site specific values shall be the average of at least three previous years of data collected pursuant to Part 31 above.
- e. Total non-methane organic compounds (NMOC) measured in the landfill gas pursuant to Part 31 may be assumed to be 100% POC, or a site specific POC concentration (CPOC) can be calculated using data from Part 33d above, where CPOC = NMOC NPOC (all concentrations expressed as methane).
- f. The fugitive POC emissions from the landfill (FEPOC, pounds/year of POC) shall be calculated using the equation below:

  FEPOC = 0.25 \* UEPOC

(Basis: Offsets)

34. Total reduced sulfur (TRS) compounds in the collected landfill gas shall be monitored as a surrogate for monitoring sulfur dioxide in control systems exhaust. The concentration of total reduced sulfur compounds in the collected landfill gas shall not exceed 300 ppmv (dry). In order to demonstrate compliance with this part, the Permit Holder shall measure the hydrogen sulfide (H2S) content in collected landfill gas on a quarterly basis using the Draeger tube method. The TRS content of the landfill gas shall be calculated according to the following equation: TRS = R \* H2S measured by Draeger tube method, where R is either (a) the ratio of TRS/H2S that is determined from the sulfur compound data collected pursuant to Part 31 or (b) a default value of 1.2. The annual laboratory analysis for reduced sulfur compounds, which is required by Part 31 above, may be substituted for one quarterly Draeger tube analysis per year. The landfill gas sample shall be taken from the main landfill gas header. The Permit Holder shall follow the manufacturer's recommended procedures for using the Draeger tube and interpreting the results. (Basis: Cumulative Increase and Regulations 9-1-302 and 2-6-503)

## **VI. Permit Conditions**

## **Condition # 17309**

For S-1 Keller Canyon Landfill, A-1 Landfill Gas Flare, and A-2 Landfill Gas Flare:

- 35. The heat input to the flares shall not exceed the following limits: (a) 1744.8 million BTU per day and 636,852 million BTU per year for A-1 and (b) 1824 million BTU per day and 665,760 million BTU per year for A-2. In order to demonstrate compliance with this part, the Permit Holder shall calculate and record on a monthly basis the maximum daily and total monthly heat input to each flare based on the landfill gas flow rate recorded pursuant to Part 27, the average methane concentration in the landfill gas based on the most recent source test, and a high heating value for methane of 1013 BTU/scf. The records shall be retained for five years and shall be made available to the District staff upon request. (Basis: Offsets, Cumulative Increase, and Regulation 2-1-301)
- 36. The Permit Holder shall limit the quantity of VOC soil handled per day so that no more than 15 pounds of total carbon could be emitted to the atmosphere per day. VOC soil is any soil that contains volatile organic compounds, as defined in Regulation 8-40-213, at a concentration of 50 ppmw or less. Soil containing more than 50 ppmw of VOC is considered to be "contaminated soil" and is subject to Part 37 instead of Part 36. Soil containing only non-volatile hydrocarbons and meeting the requirements of Regulation 8-40-113 is not subject to Part 36. In order to demonstrate compliance with this condition, the Permit Holder shall maintain the following records in a District approved log.
  - a. Record on a daily basis the amount of VOC soil handled at the landfill. This total amount (in units of pounds per day) is Q in the equation in subpart c below.
  - b. Record on a daily basis the VOC content of all soils handled at the landfill. This VOC Content (C in the equation below) should be expressed as parts per million by weight as total carbon (or  $C_1$ ).
  - c. Calculate and record on a daily basis the VOC Emission Rate (E) using the following equation:

$$E = O * C / 10^6$$

All records shall be maintained on site or shall be made readily available to District staff upon request for at least 5 years from the date of entry. (Basis: Regulation 8-2-301)

- \*37. 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.

## VI. Permit Conditions

## **Condition # 17309**

- 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 36 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.
- 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 36 above.

## **VI. Permit Conditions**

### **Condition # 17309**

- 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.
- 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 considered one transfer. Moving soil from a temporary storage pile to a final disposal site is considered one transfer. Moving soil from a staging area to a final disposal site is considered 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 would be 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 would be 3 on-site transfers and is not allowed.
- f. If the contaminated soil has an organic content of less than 500 ppmw, the contaminated soil shall be either treated or deposited in a final disposal site or transported off-site for treatment, within 90 days of receipt at the facility.
- g. If the contaminated soil has an organic content 500 ppmw or more, the contaminated soil shall be either treated or deposited in a final disposal site or transported off-site for treatment, within 45 days of receipt at the facility.
- h. All active storage piles shall meet the requirements of Regulation 8-40-304 by using water sprays, vapor suppressants or approved coverings to minimize emissions. The exposed surface area of any active storage pile (including the active face at a landfill) shall be limited to 6000 ft<sup>2</sup>. The types of storage piles that may become subject to these provisions include (but are not limited to) truck unloading areas, staging areas, temporary stockpiles, soil on conveyors, bulldozers or trucks, the active face of a landfill, or other permanent storage pile at the final disposal location.

## VI. Permit Conditions

## **Condition # 17309**

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

## VI. Permit Conditions

## **Condition # 17309**

- 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 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.
  - i. For all soil received by the facility (including soil with no known contamination), record the arrival date at the facility, the soil lot number, the amount of soil in the lot, the organic content or organic concentration of the lot (if known), the type of contamination (if any), and keep copies of any test data or other information that documents whether the soil is contaminated (as defined in 8-40-205) or not contaminated, with what, and by how much.
  - ii. If the soil is tested for organic content after receipt by the facility, a report with the sampling date, test results, and the date results were received.
  - iii. For all on-site handling of contaminated soil, use a checklist or other approved method to demonstrate that appropriate procedures were followed during all on-site handling activities. One checklist shall be completed for each day and for each soil lot (if multiple lots are handled per day).
  - iv. For soil aerated in accordance with 8-40-116 or 117 record the soil lot number, the amount of soil in the lot, the organic content, the final placement date, the final placement location, and describe how the soil was handled or used on-site.
  - 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. Permit Conditions**

## **Condition # 17309**

For S-1 Keller Canyon Landfill, A-1 Landfill Gas Flare, and A-2 Landfill Gas Flare:

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: Regulations 2-1-403, 8-40-301, 8-40-304 and 8-40-305)

# VII. APPLICABLE LIMITS AND COMPLIANCE MONITORING REQUIREMENTS

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

Table VII – A
Applicable Limits and Compliance Monitoring Requirements
S-1 KELLER CANYON LANDFILL;
A-1 LANDFILL GAS FLARE; AND A-2 LANDFILL GAS FLARE

Type of	Citation of	FE	Future Effective		Monitoring Requirement	Monitoring Frequency	Monitoring
Limit	Limit	Y/N	Date	Limit	Citation	(P/C/N)	Type
Collection	BAAQMD	Y		For Inactive/Closed	BAAQMD	P/E	Records
System	8-34-304.1			Areas: collection	8-34-501.7 and		
Installa-				system components	501.8 and		
tion Dates				must be installed and	BAAQMD		
				operating by	Condition #		
				2 years + 60 days	17309, Part		
				after initial waste	16d-h		
				placement			
Collection	BAAQMD	Y		For Active Areas:	BAAQMD	P/E	Records
System	8-34-304.2			Collection system	8-34-501.7 and		
Installa-	and			components must be	501.8 and		
tion Dates	BAAQMD			installed and operating	BAAQMD		
	Condition			by	Condition #		
	# 17309,			5 years + 60 days	17309, Part		
	Part 20b			after initial waste	16d-h		
				placement			

# VII. Applicable Limits and Compliance Monitoring Requirements

			Future		Monitoring	Monitoring	
Type of	Citation of	FE	Effective		Requirement	Frequency	Monitoring
Limit	Limit	Y/N	Date	Limit	Citation	(P/C/N)	Type
Collection	BAAQMD	Y		For Any Uncontrolled	BAAQMD	P/E	Records
System	8-34-304.3			Areas or Cells:	8-34-501.7 and		
Installa-	and			collection system	501.8 and		
tion Dates	BAAQMD			components must be	BAAQMD		
	Condition			installed and operating	Condition #		
	# 17309,			within 60 days after	17309, Part		
	Part 20b			the uncontrolled area	16d-h		
				or cell accumulates			
				1,000,000 tons of			
				decomposable waste			
Collection	40 CFR	Y		For Inactive/Closed	40 CFR	P/E	Records
System	60.753			Areas: collection	60.758(a),		
Installa-	(a)(2) and			system components	(d)(1) and		
tion Dates	60.755			must be installed and	(d)(2), and		
	(b)(2)			operating by	60.759(a)(3)		
				2 years + 60 days			
				after initial waste			
				placement			
Collection	40 CFR	Y		For Active Areas:	40 CFR	P/E	Records
System	60.753			Collection system	60.758(a),		
Installa-	(a)(1) and			components must be	(d)(1) and		
tion Dates	60.755			installed and operating	(d)(2)		
	(b)(1)			by			
				5 years + 60 days			
				after initial waste			
				placement			
Gas Flow	BAAQMD	Y		Landfill gas collection	BAAQMD	C	Gas Flow Meter
	8-34-301			system shall operate	8-34-501.10		and Recorder
	and 301.1			continuously, all	and 508		(every 15
	and			collected gases shall	and		minutes),
	BAAQMD			be vented to a	BAAQMD		Records and
	Condition			properly operating	Condition #		Alarms
	# 17309,			control system, and	17309, Parts		
	Parts 17,			control system shall	27 and 28		
	18, 20, 21			operate continuously			

# VII. Applicable Limits and Compliance Monitoring Requirements

			Future		Monitoring	Monitoring	
Type of	Citation of	FE	Effective		Requirement	Frequency	Monitoring
Limit	Limit	Y/N	Date	Limit	Citation	(P/C/N)	Type
Gas Flow	40 CFR	Y		Operate a collection	40 CFR	C or P/M	Gas Flow Meter
	60.752			system in each area or	60.756(b)(2)		and Recorder
	(b)(2)(iii)			cell, vent all collected	(i or ii) and		(every 15
	and			gases to a properly	60.758(c)(2)		minutes) or
	40 CFR			operating control			Monthly
	60.753(a)			system, and operate			Inspection of
	and (e)			control system at all			Bypass Valve
				times when gas is			and Lock and
				vented to it			Records
Collection	BAAQMD	Y		For Collection and	BAAQMD	P/D	Operating
and	8-34-113.2			Control Systems:	8-34-501.1 and		Records (all
Control				≤ 240 hours/year	501.2		occurrences and
Systems				and			duration of
Shutdown				≤ 5 consecutive days			each)
Time							
Collection	40 CFR	Y		For Collection	40 CFR	P/D	Operating
and	60.755(e)			System:	60.7(b),		Records (all
Control				≤ 5 days per event	60.757(f)(2-4)		occurrences and
Systems				and			duration of
Startup				For Control System:			each)
Shutdown				$\leq 1$ hour per event			
or							
Malfunc-							
tion							
Startup	40 CFR	Y		Minimize Emissions	40 CFR	P/E	Records (all
Shutdown	63.6(e)			by Implementing	63.1980(a-b)		occurrences,
or Mal-				SSM Plan			duration of
function							each, corrective
Pro-							actions)
cedures							

# VII. Applicable Limits and Compliance Monitoring Requirements

Type of	Citation of	FE	Future Effective		Monitoring Requirement	Monitoring Frequency	Monitoring
Limit	Limit	Y/N	Date	Limit	Citation	(P/C/N)	Type
Periods of	BAAQMD	Y		≤ 15 consecutive days	BAAQMD	P/D	Operating
Inopera-	1-523.2			per incident and	1-523.4		Records for All
tion for				≤ 30 calendar days			Parametric
Para-				per 12 month period			Monitors
metric							
Monitors							
Contin-	40 CFR	Y		Requires Continuous	40 CFR	P/D	Operating
uous	60.13(e)			Operation except for	60.7(b)		Records for All
Monitors				breakdowns, repairs,			Continuous
				calibrations, and			Monitors
				required span			
				adjustments			
Wellhead	BAAQMD	Y		< 0 psig	BAAQMD	P/M	Monthly
Pressure	8-34-305.1				8-34-414,		Inspection and
					501.9 and		Records
					505.1		
Wellhead	40 CFR	Y		< 0 psig	40 CFR	P/M	Monthly
Pressure	60.753(b)				60.755(a)(3),		Inspection and
					60.756(a)(1),		Records
					and 60.758(c)		
					and (e)		
Temper-	BAAQMD	Y		< 55 °C	BAAQMD	P/M	Monthly
ature of	8-34-305.2				8-34-414,		Inspection and
Gas at					501.9 and		Records
Wellhead					505.2		
Temper-	40 CFR	Y		< 55 °C	40 CFR	P/M	Monthly
ature of	60.753(c)				60.755(a)(5),		Inspection and
Gas at					60.756(a)(3),		Records
Wellhead					and 60.758(c)		
					and (e)		
Gas	BAAQMD	Y		$N_2 < 20\%$	BAAQMD	P/M	Monthly
Concen-	8-34-305.3			OR	8-34-414,		Inspection and
trations at	or 305.4			O <sub>2</sub> < 5%	501.9 and		Records
Wellhead					505.3 or 505.4		

# VII. Applicable Limits and Compliance Monitoring Requirements

			Future		Monitoring	Monitoring	
Type of	Citation of	FE	Effective	<b>.</b>	Requirement	Frequency	Monitoring
Limit	Limit	Y/N	Date	Limit	Citation	(P/C/N)	Type
Gas	40 CFR	Y		$N_2 < 20\%$	40 CFR	P/M	Monthly
Concen-	60.753(c)			OR	60.755(a)(5),		Inspection and
trations at				$O_2 < 5\%$	60.756(a)(2),		Records
Wellhead					and 60.758(c)		
					and (e)		
Well	BAAQMD	Y		No more than 5 wells	BAAQMD	P/D	Records
Shutdown	8-34-116.2			at a time or 10% of	8-34-116.5 and		
Limits				total collection	501.1		
				system, whichever is			
				less			
Well	BAAQMD	Y		$\leq$ 24 hours per well	BAAQMD	P/D	Records
Shutdown	8-34-116.3				8-34-116.5 and		
Limits					501.1		
Well	BAAQMD	Y		No more than 5 wells	BAAQMD	P/D	Records
Shutdown	8-34-117.4			at a time or 10% of	8-34-117.6 and		
Limits				total collection	501.1		
				system, whichever is			
				less			
Well	BAAQMD	Y		≤ 24 hours per well	BAAQMD	P/D	Records
Shutdown	8-34-117.5				8-34-117.6 and		
Limits					501.1		
TOC	BAAQMD	Y		Component Leak	BAAQMD	P/Q	Quarterly
(Total	8-34-301.2			Limit:	8-34-501.6 and		Inspection of
Organic				≤ 1000 ppmv	503		collection and
Com-				as methane			control system
pounds							components
Plus							with OVA and
Methane)							Records

# VII. Applicable Limits and Compliance Monitoring Requirements

Type of	Citation of	FE	Future Effective		Monitoring Requirement	Monitoring Frequency	Monitoring
Limit	Limit	Y/N	Date	Limit	Citation	(P/C/N)	Type
TOC	BAAQMD	Y		Surface Leak Limit:	BAAQMD	P/M, Q, and	Monthly Visual
	8-34-303			≤ 500 ppmv	8-34-415, 416,	E	Inspection of
				as methane	501.6, 506 and		Cover,
				at 2 inches	510		Quarterly
				above surface			Inspection with
							OVA of
							Surface,
							Various
							Reinspection
							Times for
							Leaking Areas,
							and Records
TOC	40 CFR	Y		Surface Leak Limit:	40 CFR	P/M, Q and	Monthly Visual
	60.753(d)			≤ 500 ppmv	60.755(c)(1),	Е	Inspection of
				as methane	(4) and (5),		Cover,
				at 5-10 cm	60.756(f), and		Quarterly
				from surface	60.758(c) and		Inspection with
					(e)		OVA of
							Surface,
							Various
							Reinspection
							Times for
							Leaking Areas,
							and Records
Non-	BAAQMD	Y		≥ 98%	BAAQMD	P/A	Initial and
Methane	8-34-301.3			removal by weight	8-34-412 and		Annual Source
Organic				OR	8-34-501.4		Tests
Com-				≤ 30 ppmvd	and		
pounds				@ 3% O <sub>2</sub> ,	BAAQMD		
(NMOC)				expressed as methane	Condition #		
					17309, Parts		
					30 and 31		

# VII. Applicable Limits and Compliance Monitoring Requirements

			Future		Monitoring	Monitoring	
Type of	Citation of	FE	Effective		Requirement	Frequency	Monitoring
Limit	Limit	Y/N	Date	Limit	Citation	(P/C/N)	Type
NMOC	40 CFR	Y		≥ 98%	40 CFR 60.8	P/E	Initial Source
	60.752(b)			removal by weight	and 60.752(b)		Test and
	(2)(iii)(B)			OR	(2)(iii)(B) and		Records
				≤ 20 ppmvd	60.758		
				@ 3% O <sub>2</sub> ,	(b)(2)(ii)		
				expressed as hexane			
Temper-	BAAQMD	Y		For A-1 Flare:	BAAQMD	C	Temperature
ature of	Condition			CT ≥ 1504 °F	8-34-501.3 and		Sensor and
Combus-	# 17309,			(3-hour average)	507, and		Recorder
tion Zone	Part 23			For A-2 Flare:	BAAQMD		(continuous)
(CT)				CT ≥ 1400 °F	Condition #		
				(3-hour average)	17309, Part 22		
Temper-	40 CFR	Y		For A-1 Flare:	40 CFR	C	Temperature
ature of	60.758			CT ≥ 1504 °F	60.756(b)(1)		Sensor and
Combus-	(c)(1)(i)			(3-hour average)	and 60.758		Recorder
tion Zone				from	(b)(2)(i)		(measured every
(CT)				$(CT \ge CT_{PF} - 28  ^{\circ}C),$			15 minutes and
				where CT <sub>PF</sub> is the			averaged over
				average combustion			performance
				temperature during the			test time period
				most recent complying			and 3-hours)
				performance test,			
				CT <sub>PF</sub> was 1554 °F			
				during 10/13/04 test			
				For A-2 Flare:			
				CT will be determined			
				during initial			
				performance test			
POC	BAAQMD	Y		≤ 40.059 tons per	BAAQMD	P/E	Calculation
	Condition			year	Condition #		Procedure (once
	# 17309,			(fugitive POC from all	17309, Part 33		every 5 years)
	Part 33			landfill operations)			

# VII. Applicable Limits and Compliance Monitoring Requirements

			Future		Monitoring	Monitoring	
Type of	Citation of	FE	Effective		Requirement	Frequency	Monitoring
Limit	Limit	Y/N	Date	Limit	Citation	(P/C/N)	Туре
Total	BAAQMD	Y		≤ 15 pounds/day or	BAAQMD	P/E	Records
Carbon	8-2-301	1		≤ 300 ppm, dry basis	Condition #	172	Records
Curcon	0 2 301			only for aeration of or	17309, Part		
				use as cover soil of	36a-c		
				soil containing $\leq 50$	304 6		
				ppmw of volatile			
				organic compounds			
Amount	BAAQMD	Y		< 1 cubic yard	BAAQMD	P/E	Records
of	8-40-116.1	1		per project	Condition #	1/L	Records
Contami-	0 40 110.1			per project	17309, Parts		
nated Soil					36a-c and 37m		
Aerated					30a e ana 37m		
or Used							
as Cover							
Amount	BAAQMD	Y		≤ 8 cubic yards	BAAQMD	P/E	Records
of	8-40-116.2	1		per project,	8-40-116.2 and	172	records
Contami-	0 10 110.2			provided	BAAQMD		
nated Soil				organic content	Condition #		
Aerated				≤ 500 ppmw	17309, Parts		
or Used				and limited to	36a-c and 37m		
as Cover				1 exempt project			
				per 3 month period			
Amount	BAAQMD	Y		Soil Contaminated by	None	N	NA
of Acci-	8-40-117	•		Accidental Spillage of	1,0116	-11	1,111
dental				≤ 5 gallons of Liquid			
Spillage				Organic Compounds			
Total	BAAQMD	Y		≤ 150 pounds	BAAQMD	P/E	Records
Aeration	8-40-118	-		per project and	Condition #		
Project				toxic air contaminant	17309, Part		
Emissions				emissions per year	37m		
				< BAAQMD			
				Table 2-5-1 limits			

# VII. Applicable Limits and Compliance Monitoring Requirements

			Future		Monitoring	Monitoring	
Type of	Citation of	FE	Effective		Requirement	Frequency	Monitoring
Limit	Limit	Y/N	Date	Limit	Citation	(P/C/N)	Type
Amount	BAAQMD	Y		Prohibited for Soil	BAAQMD	P/E	Records
of	8-40-301			with Organic Content	Condition #		
Contami-	and			> 50 ppmw unless	17309, Parts		
nated Soil	BAAQMD			exempt per BAAQMD	36a-c and 37m		
Aerated	Condition			8-40-116, 117, or 118			
or Used	# 17309,						
as Cover	Part 37k						
Contami-	BAAQMD	Y		Limited to 2 on-site	BAAQMD	P/E	Records
nated Soil	Condition			transfers per lot of	Condition #		
Handling	# 17309,			contaminated soil	17309, Part		
	Part 37e				37m		
Contami-	BAAQMD	Y		If organic content is:	BAAQMD	P/E	Records
nated Soil	Condition			< 500 ppmw, storage	Condition #		
On-Site	# 17309,			time $\leq$ 90 days;	17309, Part		
Storage	Part 37f-g			If organic content is:	37m		
Time				≥ 500 ppmw, storage			
				time ≤ 45 days			
$SO_2$	BAAQMD	Y		Property Line	None	N	NA
	9-1-301			Ground Level Limits:			
				≤ 0.5 ppm			
				for 3 minutes,			
				≤ 0.25 ppm			
				for 60 minutes, and			
				<u>&lt;</u> 0.05 ppm			
				for 24 hours			
$SO_2$	BAAQMD	Y		For Flares:	BAAQMD	P/Q	Sulfur Analysis
	9-1-302			≤ 300 ppm (dry)	Condition #		of Landfill Gas
					17309, Parts		
					31 and 34		

# VII. Applicable Limits and Compliance Monitoring Requirements

Type of	Citation of	FE	Future Effective	•••	Monitoring Requirement	Monitoring Frequency	Monitoring
Limit	Limit	Y/N	Date	Limit	Citation	(P/C/N)	Type
H <sub>2</sub> S	9-2-301	N		Property Line Ground Level Limits: ≤ 0.06 ppm averaged over 3 minutes and ≤ 0.03 ppm averaged over 60	None	N	NA
Total Reduced Sulfur (TRS) Compounds	BAAQMD Condition # 17309, Part 34	Y		minutes  Concentration in  Landfill Gas:  ≤ 300 ppmv (dry)	BAAQMD Condition # 17309, Parts 31 and 34	P/Q	Sulfur Analysis of Landfill Gas
Opacity	BAAQMD 6-301	Y		For Landfill Operations: ≤ Ringelmann No. 1 for 3 minutes in any hour	BAAQMD Condition # 17309, Part 16j-l	P/D	Records of Water and Dust Suppressant Application
Opacity	BAAQMD 6-301	Y		For Flares:  ≤ Ringelmann No. 1  for 3 minutes  in any hour	BAAQMD 8-34-501.3 and 507, and BAAQMD Condition # 17309, Part 22	С	Temperature Sensor and Recorder (continuous)
FP	BAAQMD 6-310	Y		For Flares: ≤ 0.15 grains/dscf	None	N	NA
Serpen- tine Material	BAAQMD 11-14-301	N		Surfacing Material: ≤ 5% asbestos	BAAQMD 11-14-501	P/D	Records of Testing and Receipts
Operating Time	BAAQMD Condition # 17309, Part 1	Y		Monday through Friday	BAAQMD Condition # 17309, Parts 16a and 16i	P/D	Records of Waste Received and Truck Traffic

# VII. Applicable Limits and Compliance Monitoring Requirements

			Future		Monitoring	Monitoring	
Type of	Citation of	FE	Effective		Requirement	Frequency	Monitoring
Limit	Limit	Y/N	Date	Limit	Citation	(P/C/N)	Туре
Waste	BAAQMD	Y		≤ 3500 tons per day	BAAQMD	P/D	Records of
Received	Condition				Condition #		Waste Received
	# 17309,				17309,		
	Part 2a				Part 16a		
Cumula-	BAAQMD	Y		$\leq$ 38.4 million tons	BAAQMD	P/D	Records of
tive	Condition			( <u>&lt;</u> 34.8 million Mg)	Condition #		Waste Placed in
Waste In-	# 17309,				17309,		Landfill
Place	Part 2b				Part 16a		
	BAAQMD	Y		$\leq$ 75 million yd <sup>3</sup>	BAAQMD	P/D	Records of
Design	Condition			$(\leq 57.3 \text{ million m}^3)$	Condition #		Materials
Capacity	# 17309,			of all wastes and	17309,		Placed in
	Part 2c			cover materials	Parts 16a, 36a,		Landfill
				(excluding final cover)	and 37m		
Unpaved	BAAQMD	Y		≤ 3000 feet	BAAQMD	P/E	Site Maps
Road	Condition			from cover stockpile	Condition #		
Length	# 17309,			to working face	17309, Part 12		
	Part 5a			midpoint			
Unpaved	BAAQMD	Y		≤ 400 feet	BAAQMD	P/E	Site Maps
Road	Condition			from end of main	Condition #		
Length	# 17309,			access road to	17309, Part 12		
	Part 5b			working face midpoint			
Unpaved	BAAQMD	Y		≤ 750 feet	BAAQMD	P/E	Site Maps
Road	Condition			from end of paved	Condition #		
Length	# 17309,			road to end of main	17309, Part 12		
	Part 5c			access road			
				(this section must			
				have 12 inches of			
				gravel or crushed			
				asphalt)			
Unpaved	BAAQMD	Y		< 1400 feet	BAAQMD	P/E	Site Maps
Road	Condition			of fire access roads	Condition #		
Length	# 17309,				17309, Part 12		
	Part 5d						

# VII. Applicable Limits and Compliance Monitoring Requirements

			Future		Monitoring	Monitoring	
Type of	Citation of	FE	Effective		Requirement	Frequency	Monitoring
Limit	Limit	Y/N	Date	Limit	Citation	(P/C/N)	Туре
Vehicle	BAAQMD	Y		≤ 10 mph	BAAQMD	P/E	Posted Signs
Speed	Condition			on unpaved roads and	Condition #		and
	# 17309,			≤ 25 mph	17309, Part 6		Enforcement if
	Part 6			on fire access roads			Necessary
Dust	BAAQMD	Y		$\geq$ 0.5 gallons	BAAQMD	P/D	Records
Suppress-	Condition			per square yard	Condition #		
ant	# 17309,			of 10%	17309, Part		
Applica-	Part 8a-c			magnesium chloride	16k		
tion Rate				applied once			
for				every 30 days			
Unpaved				between May 1 and			
Roads				November 1 and			
				once every 30			
				consecutive dry days			
				between November 1			
				and May 1			
Water	BAAQMD	Y		Once every fifth	BAAQMD	P/D	Records
Applica-	Condition			heavy duty vehicle	Condition #		
tion Rate	# 17309,			and more often as	17309, Part		
for Roads	Parts 8			necessary	16i-j		
	and 10						
Water	BAAQMD	Y		≥ 0.5 gallons	BAAQMD	P/D	Records
Applicati	Condition			per square yard	Condition #		
on Rate	# 17309,			twice per day	17309,		
for Active	Part 13			on all dry days	Part 161		
face and							
Soil Areas							
Truck	BAAQMD	Y		≤ 175 transfer truck	BAAQMD	P/D	Records
Traffic	Condition			trips per annual	Condition #		
Volume	# 17309,			average day	17309,		
	Part 11a				Part 16i		
Truck	BAAQMD	Y		≤ 4 leachate truck	BAAQMD	P/D	Records
Traffic	Condition			trips	Condition #		
Volume	# 17309,			per annual average	17309,		
	Part 11b			day	Part 16i		

# VII. Applicable Limits and Compliance Monitoring Requirements

			Future		Monitoring	Monitoring	
Type of	Citation of	FE	Effective	<b></b>	Requirement	Frequency	Monitoring
Limit	Limit	Y/N	Date	Limit	Citation	(P/C/N)	Type
Truck	BAAQMD	Y		≤ 45 scraper trips	BAAQMD	P/D	Records
Traffic	Condition			per annual average	Condition #		
Volume	# 17309,			day	17309,		
	Part 11c				Part 16i		
Truck	BAAQMD	Y		≤ 7800 feet	BAAQMD	P/E	Site Maps and
Traffic	Condition			for transfer trucks	Condition #		Records
Trip	# 17309,				17309, Part 12		
Length	Part 12a						
Truck	BAAQMD	Y		≤ 3600 feet	BAAQMD	P/E	Site Maps and
Traffic	Condition			for leachate trucks	Condition #		Records
Trip	# 17309,				17309, Part 12		
Length	Part 12b						
Truck	BAAQMD	Y		≤ 3000 feet	BAAQMD	P/E	Site Maps and
Traffic	Condition			for scrapers	Condition #		Records
Trip	# 17309,				17309, Part 12		
Length	Part 12c						
$NO_x$	BAAQMD	Y		For both A-1 Flare	BAAQMD	P/A	Annual Source
	Condition			and A-2 Flare:	Condition #		Test
	# 17309,			$\leq$ 15 ppmv of NO <sub>x</sub> ,	17309, Part 30		
	Part 24			expressed as NO2			
				at 15% O <sub>2</sub> , dry			
СО	BAAQMD	Y		For A-1 Flare:	BAAQMD	P/A	Annual Source
	Condition			≤ 114 ppmv of CO	Condition #		Test
	# 17309,			at 15% O <sub>2</sub> , dry	17309, Part 30		
	Part 25			For A-2 Flare:			
				≤ 81 ppmv of CO			
				at 15% $O_2$ , dry			
Acrylo-	BAAQMD	N		Concentration in	BAAQMD	P/A	Annual
nitrile	Condition			Landfill Gas:	Condition #		Laboratory
	# 17309,			≤ 500 ppbv	17309, Part 31		Analysis
	Part 32						-
Benzene	BAAQMD	N		Concentration in	BAAQMD	P/A	Annual
	Condition			Landfill Gas:	Condition #		Laboratory
	# 17309,			≤ 10,000 ppbv	17309, Part 31		Analysis
	Part 32						,

# VII. Applicable Limits and Compliance Monitoring Requirements

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
Carbon	BAAQMD	N		Concentration in	BAAQMD	P/A	Annual
Tetra-	Condition	11		Landfill Gas:	Condition #	1/11	Laboratory
chloride	# 17309,			≤ 100 ppbv	17309, Part 31		Analysis
	Part 32			= FF	,		,
Chloro-	BAAQMD	N		Concentration in	BAAQMD	P/A	Annual
form	Condition			Landfill Gas:	Condition #		Laboratory
	# 17309,			≤ 100 ppbv	17309, Part 31		Analysis
	Part 32				ŕ		•
Ethylene	BAAQMD	N		Concentration in	BAAQMD	P/A	Annual
Di-	Condition			Landfill Gas:	Condition #		Laboratory
bromide	# 17309,			≤ 100 ppbv	17309, Part 31		Analysis
	Part 32						
Ethylene	BAAQMD	N		Concentration in	BAAQMD	P/A	Annual
Di-	Condition			Landfill Gas:	Condition #		Laboratory
chloride	# 17309,			$\leq$ 400 ppbv	17309, Part 31		Analysis
	Part 32						
Methyl-	BAAQMD	N		Concentration in	BAAQMD	P/A	Annual
ene	Condition			Landfill Gas:	Condition #		Laboratory
Chloride	# 17309,			$\leq$ 27,600 ppbv	17309, Part 31		Analysis
	Part 32						
Perchloro	BAAQMD	N		Concentration in	BAAQMD	P/A	Annual
-ethylene	Condition			Landfill Gas:	Condition #		Laboratory
	# 17309,			≤ 3,600 ppbv	17309, Part 31		Analysis
	Part 32						
Trichloro-	BAAQMD	N		Concentration in	BAAQMD	P/A	Annual
ethylene	Condition			Landfill Gas:	Condition #		Laboratory
	# 17309,			$\leq$ 2,300 ppbv	17309, Part 31		Analysis
	Part 32						
Vinyl	BAAQMD	N		Concentration in	BAAQMD	P/A	Annual
Chloride	Condition			Landfill Gas:	Condition #		Laboratory
	# 17309,			≤ 1,600 ppbv	17309, Part 31		Analysis
	Part 32						

# VII. Applicable Limits and Compliance Monitoring Requirements

Type of	Citation of	FE	Future Effective		Monitoring Requirement	Monitoring Frequency	Monitoring
Limit	Limit	Y/N	Date	Limit	Citation	(P/C/N)	Type
Heat	BAAQMD	Y		For A-1 Flare:	BAAQMD	P/M	Records
Input	Condition			≤ 1744.8 MM BTU	Condition #		
	# 17309,			per day and	17309, Part 35		
	Part 35			≤ 636,852 MM BTU			
				per year			
				For A-2 Flare:			
				≤ 1824 MM BTU			
				per day and			
				≤ 665,760 MM BTU			
				per year			

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# VII. Applicable Limits and Compliance Monitoring Requirements

# Table VII – B Applicable Limits and Compliance Monitoring Requirements S-2 WIPE CLEANING OPERATION

Type of	Citation of	FE	Future Effective		Monitoring Requirement	Monitoring Frequency	Monitoring
Limit	Limit	Y/N	Date	Limit	Citation	(P/C/N)	Type
Solvent	BAAQMD	Y		0.75 gallons per day	BAAQMD	P/M	Records
Usage	Condition			and	Condition #		
	# 9527,			100 gallons per	9527, Part 2		
	Part 1			12-month period			
					BAAQMD	P/A	Records
					8-16-501.2		
					SIP	P/Q	Records
					8-16-501.2 1		

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

# VII. Applicable Limits and Compliance Monitoring Requirements

# Table VII – C Applicable Limits and Compliance Monitoring Requirements S-3 YARD AND GREEN WASTE STOCKPILES

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
Opacity	BAAQMD	Y		Ringelmann No. 1	BAAQMD	С	Visual
	6-301				Condition #		Observation of
					16462, Part 2		Source in
							Operation
Waste	BAAQMD	Y		225 tons per day	BAAQMD	P/E	Records of
Received	Condition			and	Condition #		Amount of
	# 16462,			70,200 tons per	16462, Part 6a		Waste Received
	Part 1			12-month period	and b		
Waste	BAAQMD	N		4 days from receipt of	BAAQMD	P/E	Records of Date
Storage	Condition			waste	Condition #		and Time for
Time	# 16462,				16462, Part 6a		Waste Receipt
	Part 3				and c		and Processing
Odorous	BAAQMD	N		24 hours from the time	BAAQMD	P/E	Records of Date
Stockpile	Condition			the stockpile is	Condition #		and Time for
Storage	# 16462,			deemed "odorous"	16462, Part 6a		Waste Receipt
Time	Part 4				and c		and Processing

## VIII. TEST METHODS

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

Table VIII Test Methods

Applicable		
Requirement	<b>Description of Requirement</b>	Acceptable Test Methods
BAAQMD	Ringelmann No. 1 Limitation	Manual of Procedures, Volume I, Evaluation of Visible Emissions
6-301		
BAAQMD	Particulate Weight Limitation	Manual of Procedures, Volume IV, ST-15, Particulate; or EPA
6-310		Reference Method 5 Determination of Particulate Matter
		Emissions from Stationary Sources for combustion sources
BAAQMD	Miscellaneous Operations	Manual of Procedures, Volume IV, ST-7, Organic Compounds; or
8-2-301		EPA Reference Method 25 or 25A
BAAQMD	Collection and Control System	EPA Reference Method 21, Determination of Volatile Organic
8-34-301.2	Leak Limitations	Compound Leaks
BAAQMD	Limits for Flares	Manual of Procedures, Volume IV, ST-7, Organic Compounds and
8-34-301.3		ST-14, Oxygen, Continuous Sampling; or EPA Reference Method
		18, 25, 25A, or 25C
BAAQMD	Landfill Surface Requirements	EPA Reference Method 21, Determination of Volatile Organic
8-34-303		Compound Leaks
BAAQMD	Wellhead Gauge Pressure	APCO Approved Device
8-34-305.1		
BAAQMD	Wellhead Temperature	APCO Approved Device
8-34-305.2		
BAAQMD	Wellhead Nitrogen	EPA Reference Method 3C, Determination of Carbon Dioxide,
8-34-305.3		Methane, Nitrogen, and Oxygen from Stationary Sources
BAAQMD	Wellhead Oxygen	EPA Reference Method 3C, Determination of Carbon Dioxide,
8-34-305.4		Methane, Nitrogen, and Oxygen from Stationary Sources
BAAQMD	Compliance Demonstration Test	EPA Reference Method 18, Measurement of Gaseous Organic
8-34-412		Compound Emissions by Gas Chromatography, Method 25,
		Determination of Total Gaseous Nonmethane Organic Emissions
		as Carbon, Method 25A, Determination of Total Gaseous Organic
		Concentration Using a Flame Ionization Analyzer, or Method 25C,
		Determination of Nonmethane Organic Compounds (NMOC) in
		MSW Landfill Gases

# VIII. Test Methods

## Table VIII Test Methods

Applicable		
Requirement	Description of Requirement	Acceptable Test Methods
BAAQMD	Organic Content Limit for Small	BAAQMD 8-40-601 and EPA Reference Methods 8015B and
8-40-116.2	Volume Exemption	8021B
BAAQMD	Limits on Uncontrolled Aeration	BAAQMD 8-40-601 and EPA Reference Methods 8015B and
8-40-301	of Contaminated Soil	8021B; or 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	Limitations on Hydrogen Sulfide	Manual of Procedures, Volume VI, Part 1, Ground Level
9-2-301		Monitoring for Hydrogen Sulfide and Sulfur Dioxide
BAAQMD	Prohibition of Use for Surfacing	ARB Test Method 435, Determination of Asbestos Content of
11-14-301	Operations (asbestos serpentine)	Serpentine Aggregate
40 CFR 60.8	Performance Tests	EPA Reference Method 18, Measurement of Gaseous Organic
		Compound Emissions by Gas Chromatography, Method 25,
		Determination of Total Gaseous Nonmethane Organic Emissions
		as Carbon, Method 25A, Determination of Total Gaseous Organic
		Concentration Using a Flame Ionization Analyzer, or Method 25C,
		Determination of Nonmethane Organic Compounds (NMOC) in
		MSW Landfill Gases
40 CFR	NMOC Outlet Concentration and	EPA Reference Method 18, Measurement of Gaseous Organic
60.752	Destruction Efficiency Limits	Compound Emissions by Gas Chromatography, Method 25,
(b)(2)(iii)(B)		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>	EPA Reference Method 3C, Determination of Carbon Dioxide,
60.753(c)	concentration in wellhead gas	Methane, Nitrogen, and Oxygen from Stationary Sources
40 CFR	Methane Limit at Landfill	EPA Reference Method 21, Determination of Volatile Organic
60.753(d)	Surface	Compound Leaks
BAAQMD	Combustion Temperature Limits	APCO Approved Device
Condition #	for Flares	
17309, Part 23		
BAAQMD	NO <sub>x</sub> Limit for Flares	Manual of Procedures, Volume IV, Oxides of Nitrogen,
Condition #		Continuous Sampling, and ST-14, Oxygen, Continuous Sampling;
17309, Part 24		or EPA Reference Method 20

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# VIII. Test Methods

## Table VIII Test Methods

Applicable		
Requirement	Description of Requirement	Acceptable Test Methods
BAAQMD	CO Limit for Flares	Manual of Procedures, Volume IV, ST-6, Carbon Monoxide,
Condition #		Continuous Sampling, and ST-14, Oxygen, Continuous Sampling;
17309, Part 25		or EPA Reference Method 10
BAAQMD	Limits for Specified Toxic Air	EPA Reference Method 18, Measurement of Gaseous Organic
Condition #	Contaminants (Acylonitrile,	Compound Emissions by Gas Chromatography
17309, Part 32	Benzene, Carbon Tetrachloride,	
	Ethylene Dibromide, Ethylene	
	Dichloride, Methylene Chloride,	
	Perchloroethylene, Trichloro-	
	ethylene, and Vinyl Chloride) in	
	Landfill Gas	
BAAQMD	Fugitive POC Emission Limit for	Calculation Procedure Described in BAAQMD Condition # 17309,
Condition #	Landfill	Part 33
17309, Part 33		
BAAQMD	Limit for Total Reduced Sulfur	Draeger Tube Method for H <sub>2</sub> S, used in accordance with
Condition #	Compounds in Landfill Gas	manufacturer's recommended procedures, and calculation
17309, Part 34		procedures described in BAAQMD, Condition # 17309, Part 34;
		OR
		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	Heat Input Limits for Flares	APCO approved calculation procedure as described in BAAQMD
Condition #		Condition # 17309, Part 35
17309, Part 35		
BAAQMD	Total Carbon Emission Limit for	VOC Content as determined by EPA Reference Methods 8015B,
Condition #	Use or Disposal of Soil	8021B (or any method determined to be equivalent by the US EPA
17309, Part 36	Containing VOCs	and approved by the APCO) and converted to Total Carbon as
		defined in BAAQMD Regulation 8-2-202. Total Carbon
		Emissions determined by APCO approved equation described in
		BAAQMD Condition #17309, Part 36c
BAAQMD	Handling Procedures for Soil	EPA Reference Methods 8015B, 8021B, or any method
Condition #	Containing Volatile Organic	determined to be equivalent by the US EPA and approved by the
17309, Part 37	Compounds	APCO

Revision Date: March 16, 2006

## IX. PERMIT SHIELD

Not Applicable

## X. REVISION HISTORY

## **Title V Permit Issuance (Application # 17348):**

**September 20, 2001** 

## **Minor Revision (Application # 7939):**

**December 17, 2003** 

- Add and revise text in Section I, III, IV and VII to conform to current standard text.
- Correct and update regulatory dates in Sections I. and III.
   Include additional applicable requirement citations in Section III.
- Update Table II A to reflect expansion of the landfill gas collection system.
- Update Table II B to conform to data presented for other landfill flares.
- Update minimum combustion zone temperature, in Tables II-B and VII-D, and Condition #17309 Part 23, to reflect the calculated minimum based on the most recent complying performance test (October 30, 2002).
- Updates Tables IV-A, IV-B, IV-D, VII-A, VII-B, VII-D, and VIII and delete Condition # 17309, Part 38 to reflect EPA's adoption of BAAQMD Regulation 8, Rules 34, and 40 into the SIP and BAAQMD's subsequent adoption of amendments to Regulation 1-523 and Regulation 8, Rule 16.
- Update Tables IV-A to include applicable NSPS subsections of 60.754, 60.756 and 60.759.
- Update Tables IV-D to include applicable NSPS subsections of 60.752.
- Revise Condition # 16462 to reflect minor wording changes made to Part 1 under application #2379.
- Revise Condition # 17309, Part 11 to update the number of transfer truck and scraper trips as modified in under application #2379
- Delete references in Condition # 17309, Parts 17 and 33 to proposed IC engines that will not be installed,
- Revise Condition # 17309, Part 20 to reflect expansion of the landfill gas collection system.
- Correct test methods referenced in Table VIII by adding optional methods and deleting obsolete methods.
- Add new terms to Section XI.
- SIP rules available on EPA's website
- Changed Responsible Official

## X. Revision History

## **Reopening (Application # 10393):**

March 16, 2006

- Add the NESHAP General Provisions (40 CFR, Part 63, Subpart A) and the NESHAP for MSW Landfills (40 CFR, Part 63, Subpart AAAA) to Table IV-A.
- Combine Table IV-A for the S-1 Keller Canyon Landfill and Table IV-D for the A-1 Landfill Gas Flare into a single Table IV-A for S-1 and A-1, and delete Table IV-D.
- Delete an erroneous citation for SIP Regulation 1 from Table IV-A.
- Update the Regulation 8, Rule 34 amendment date in Table IV-A and correct a related citation reference in Table VII-A.
- Delete Regulation 11, Rules 1 and 3 from Tables IV-A, VII-A, and VIII.
- Update amendment dates for federal requirements in Table IV-A.
- In Condition # 17309, Part 2, clarify the NSR applicability requirements for the waste acceptance limits.
- Clarify notification procedures in Condition # 17309, Parts 3 and 8.
- Clarify record keeping procedures in Condition # 17309, Part 16.
- Clarify the basis for Condition # 17309, Part 18.
- Revise the Condition # 17309, Part 19 reporting requirement and revise the basis for Part 19 in Table IV-A.
- Revise the minimum combustion zone temperature limit for A-1 in Table II-B, Condition # 17309, Part 23, and Table VII-A, and correct the temperature revision procedures in Part 23.
- Correct the NO<sub>x</sub> limit for A-1 in Condition # 17309, Part 24 and Table VII-A. Clarify the basis for this limit in Part 24 and in Table IV-A.
- Delete the obsolete POC and NMOC limits listed in Condition # 17309, Parts 26 and 29, and delete the associated references to these limits in Part 30 and Tables IV-A, VII-A, and VIII.

## X. Revision History

- For the annual source test in Condition # 17309, Part 30, correct the citations of applicable limits, replace the existing notification and reporting requirements with the new standard language, clarify the testing requirements, and correct the basis.
- For the annual landfill gas characterization test in Condition # 17309, Part 31, replace the testing and reporting requirements with the new standard language, which includes a list of the specific organic compounds that the gas needs to be analyzed for.
- Combine Table VII-A for S-1 and Table VII-D for A-1 into a single Table VII-A for S-1 and A-1, and delete Table VII-D.
- For Table VII-A, delete unnecessary or duplicative limits, add symbols and text to clarify limits, and delete an obsolete future effective date.
- Update the Revision History in Section X.
- Add several terms to the Glossary in Section XI.
- Correct the web site address for SIP requirements in Section XII.

## **Significant Revision (Application # 11385):**

[insert approval data]

- Add the new A-2 Landfill Gas Flare and associated requirements, limits, and test methods to Tables II-B, IV-A, VII-A, and VIII.
- In Condition # 17309, Part 17, 21, 22, 27, and 28, add a reference to the new A-2 Flare and clarify the bases for these parts.
- In Condition # 17309, Part 20, add subpart b that describes landfill gas collection equipment that is under constructions and clarify other Part 20 provisions.
- Add the minimum combustion zone temperature limit for A-2 to Condition # 17309, Part 23.
- Add the NOx, CO, and heat input limits for A-2 to Condition # 17309, Parts 24, 25, and 35, respectively. Correct the basis for Parts 24 and 35.
- Add an initial compliance demonstration test for A-2 to Condition # 17309, Part 30.

## X. Revision History

- In Condition # 17309, Part 31 and Table VIII, add a laboratory analysis for six sulfur compounds to the annual landfill gas characterization test, and add a calculation procedure for the TRS/H2S ratio that will be used in conjunction with the revised TRS calculation procedure listed in Part 34.
- In Condition # 17309, Part 32 and Table VII-A, increase the concentration limits for acrylonitrile, benzene, and ethylene dichloride.
- In Condition # 17309, Part 33 and Table VII-A, delete the A-1 Flare from the combined POC emission limit for S-1 and A-1 in Condition # 17309, Part 33, and revised the POC limit and calculation procedures for fugitive POC emissions from S-1.
- In Condition # 17309, Part 34 and Table VII-A, revise the limit on total reduced sulfur compounds in landfill gas, and correct the basis accordingly in Part 34 and Table IV-A. Clarify that the Draeger tube analysis method measures hydrogen sulfide (H<sub>2</sub>S), and add a TRS calculation method to Part 34.

## 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

### **Basis**

The underlying authority that allows the District to impose requirements.

## **CAA**

The federal Clean Air Act

## **CAAOS**

California Ambient Air Quality Standards

### **CAPCOA**

California Air Pollution Control Officers Association

## XI. Glossary

### **CARB**

California Air Resources Board (same as ARB)

## **CEOA**

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

### CO

Carbon Monoxide

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

Carbon Dioxide

### CT

Combustion Zone Temperature

## **Cumulative Increase**

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

## **District**

The Bay Area Air Quality Management District

#### EG

**Emission Guidelines** 

### EO

**Executive Order** 

## **EPA**

The federal Environmental Protection Agency.

## XI. Glossary

#### **Excluded**

Not subject to any District Regulations.

## Federally Enforceable, FE

All limitations and conditions which are enforceable by the Administrator of the EPA including those requirements developed pursuant to 40 CFR Part 51, subpart I (NSR), Part 52.21 (PSD), Part 60, (NSPS), Part 61, (NESHAPs), Part 63 (HAP), and Part 72 (Permits Regulation, Acid Rain), and also 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.

## H2S or H<sub>2</sub>S

Hydrogen Sulfide

## **HAP**

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

### HHV

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

## **LFG**

Landfill gas

#### 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.

## **Major Facility**

A facility with potential emissions of regulated air pollutants greater than or equal to 100 tons per year, greater than or equal to 10 tons per year of any single hazardous air pollutant, and/or greater than or equal to 25 tons per year of any combination of hazardous air pollutants, or such lesser quantity as determined by the EPA administrator.

### MAX or Max.

Maximum

## XI. Glossary

## **MFR**

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

## MIN or Min.

Minimum

### **MOP**

The District's Manual of Procedures.

## **MSW**

Municipal solid waste

## MW

Molecular weight

## N2 or N<sub>2</sub>

Nitrogen

## NA

Not Applicable

## **NAAQS**

National Ambient Air Quality Standards

### **NESHAPs**

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

## **NMHC**

Non-methane Hydrocarbons (same as NMOC).

## **NMOC**

Non-methane Organic Compounds (same as NMHC).

## NOx or NOx

Oxides of nitrogen.

## XI. Glossary

### **NSPS**

Standards of Performance for New Stationary Sources. Federal standards for emissions from new stationary sources. Mandated by Title I, Section 111 of the Federal Clean Air Act, and implemented by both 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 air pollutants for which the District is classified "non-attainment". Mandated by Title I of the Clean Air Act and implemented by 40 CFR Parts 51 and 52 as well as District Regulation 2, Rule 2. (Note: There are additional NSR requirements mandated by the California Clean Air Act.)

## $O2 \text{ or } O_2$

Oxygen

## **Offset Requirement**

A New Source Review requirement to provide federally enforceable emission offsets at a specified ratio for the emissions from a new or modified source and any pre-existing cumulative increase minus any onsite contemporaneous emission reduction credits. Applies to emissions of POC, NOx, PM10, and SO2.

## **Phase II Acid Rain Facility**

A facility that generates electricity for sale through fossil-fuel combustion and by virtue of certain other characteristics (defined in Regulation 2, Rule 6) is subject to Titles IV and V of the Clean Air Act.

#### POC

**Precursor Organic Compounds** 

### **PM**

**Total Particulate Matter** 

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

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

#### **PSD**

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

## XI. Glossary

### PV or P/V Valve

Pressure/Vacuum Valve

### **RMP**

Risk Management Plan

## **RWQCB**

Regional Water Quality Control Board

#### S

Sulfur

### SIP

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

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

Sulfur dioxide

### SSM

Startup, Shutdown, or Malfunction

## **SSM Plan**

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

## TAC

Toxic Air Contaminant (as identified by CARB)

## THC

Total Hydrocarbons includes all NMHC plus methane (same as TOC).

### Title V

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

### TOC

Total Organic Compounds includes all NMOC plus methane (same as THC).

# XI. Glossary

## **TPH**

Total Petroleum Hydrocarbons

## **TRMP**

Toxic Risk Management Policy.

## TRS

Total Reduced Sulfur

## **TSP**

**Total Suspended Particulate** 

## **VMT**

Vehicle Miles Traveled

## VOC

Volatile Organic Compounds

## **Symbols:**

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

## **Units of Measure:**

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
hr	=	hour
in	=	inches
lb	=	pound
lbmol	=	pound-mole

## XI. Glossary

 $m^2$ = square meter  $m^3$ cubic meters = min minute millimeter mm million MM MMBTU = million BTU MMcf million cubic feet Mg mega grams parts per billion ppb parts per billion, by volume ppbv = ppm parts per million parts per million, by volume ppmv = parts per million, by weight ppmw = pounds per square inch, absolute psia pounds per square inch, gauge psig = standard cubic feet scf standard cubic feet per minute scfm = standard dry cubic feet sdcf standard dry cubic feet per minute sdcfm yard yd =  $yd^3$ cubic yards = year yr =

## XII. APPLICABLE STATE IMPLEMENTATION PLAN

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

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