

Bay Area Air Quality Management District

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

Proposed

MAJOR FACILITY REVIEW PERMIT

Issued To:
Sonoma County Central Landfill
Facility #A2254

Facility Address:
500 Mecham Road
Petaluma, CA 94952

Mailing Address:
575 Administration Drive, Room 117A
Santa Rosa, CA 95403

Responsible Official
Edward J. Walker, Director,
Dept. of Transportation and Public Works
(707) 527-2231

Facility Contact
Alex Sebastian,
Plant Site Manager
(707) 792-4961

Type of Facility: Municipal Solid Waste Landfill
and Electrical Generation

BAAQMD Permit Division Contact:
Carol S. Allen

Primary SIC: 4953

Product: Disposal Services and Electricity

ISSUED BY THE BAY AREA AIR QUALITY MANAGEMENT DISTRICT

Ellen Garvey, Executive Officer/Air Pollution Control Officer

Date

Draft

h:\pub_data\titlev\permit\f-draft\A2254.doc
09/11/2000 9:17 AM

TABLE OF CONTENTS

I.	STANDARD CONDITIONS.....	3
II.	EQUIPMENT LIST.....	7
III.	GENERALLY APPLICABLE REQUIREMENTS.....	9
IV.	SOURCE-SPECIFIC APPLICABLE REQUIREMENTS.....	12
V.	SCHEDULE OF COMPLIANCE.....	53
VI.	PERMIT CONDITIONS.....	53
VII.	APPLICABLE LIMITS AND COMPLIANCE MONITORING REQUIREMENTS.....	69
VIII.	TEST METHODS.....	98
IX.	GLOSSARY	103
X.	APPLICABLE STATE IMPLEMENTATION PLAN.....	107

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 5/17/00);
- SIP Regulation 1 - General Provisions and Definitions
(as approved by EPA through 8/27/99);
- BAAQMD Regulation 2, Rule 1 - Permits, General Requirements
(as amended by the District Board on 5/17/00);
- SIP Regulation 2, Rule 1 - Permits, General Requirements
(as approved by EPA through 2/25/99);
- 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 2/25/99);
- BAAQMD Regulation 2, Rule 4 - Permits, Emissions Banking
(as amended by the District Board on 5/17/00); and
- SIP Regulation 2, Rule 4 - Permits, Emissions Banking
(as approved by EPA through 2/25/99).
- BAAQMD Regulation 2, Rule 6 – Permits, Major Facility Review
(as amended by the District Board on 10/20/99); and

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

1. This Major Facility Review Permit was issued on [] and expires on [when issued, enter 5th anniversary of issue date]. The permit holder shall submit a complete application for renewal of this Major Facility Review Permit no later than [when issued, enter date 6 months prior to permit expiration date] and no earlier than [when issued, enter date 12 months prior to expiration date]. **If a complete application for renewal has not been submitted in accordance with these deadlines, the facility may not operate after** [when issued, enter 5th anniversary of issue date]. (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)
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

I. Standard Conditions

- cause. (Regulation 2-6-307, 409.8, 415; MOP Volume II, Part 3, §4.11)
5. The filing of a request by the facility for a permit modification, revocation and re-issuance, or termination, or 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, nor 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 which 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 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 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)

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

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 entry. (Regulation 2-6-501, Regulation 3; MOP Volume II, Part 3, §4.7)

I. Standard Conditions

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 [date of issuance] to [six months later]. The report shall be submitted by [one month after end of reporting period]. Subsequent reports shall be for the following periods: [____ 1st through ____ 30th or 31st] and [____ 1st through ____ 30th or 31st], and are due on the last day of the month after the end of the reporting period. All instances of non-compliance shall be clearly identified in these reports. The reports shall be certified by the responsible official as true, accurate, and complete. In addition, all instances of non-compliance with the permit shall be reported in writing to the District's Compliance and Enforcement Division within 10 calendar days of the discovery of the incident. Within 30 calendar days of the discovery of any incident of non-compliance, the facility shall submit a written report including the probable cause of non-compliance and any corrective or preventative actions. The reports shall be sent to the following address:

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

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

G. Compliance Certification

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

I. Standard Conditions

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 caused by conditions beyond the permit holder's reasonable control 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. Any variance granted by the Hearing Board from any term or condition of this permit which lasts longer than 90 days will be subject to EPA approval. (MOP Volume II, Part 3, §4.8)
3. Notwithstanding the foregoing, the granting by the District of breakdown relief or the issuance by the Hearing Board of a variance will not provide relief from federal enforcement. (MOP Volume II, Part 3, §4.8)

I. Severability

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

II. EQUIPMENT LIST

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.

S-#	Description	Make or Type	Model	Capacity
S-1	Sonoma County Central Landfill: (Active Solid Waste Disposal Site with Active Gas Collection System)	Accepting municipal, commercial, industrial, construction, designated, and special wastes.		Max. Design Capacity = 19.8 E6 yd3 (15.1 E6 m ³) and 12.0 E6 tons (10.9 E6 Mg) Max. Waste Acceptance Rate = 2500 tons/day
	2 Blowers	Lampson	Model 859	100 hp, 868 scfm (each)
	2 Blowers	Lampson	Model 605	40 hp, 1736 scfm (each)
	Landfill Gas Collection System	Horizontal Collectors Vertical Wells		43 collectors 94 wells
S-4	Lean Burn Internal Combustion Engine and Generator Set	Caterpillar	3516 S.I.T.A.	1138 hp, 4210 in ³ displacement, 8.61 MM BTU/hr, 800 kWatts
S-5	Lean Burn Internal Combustion Engine and Generator Set	Caterpillar	3516 S.I.T.A.	1138 hp, 4210 in ³ displacement, 8.61 MM BTU/hr, 800 kWatts
S-6	Lean Burn Internal Combustion Engine and Generator Set	Caterpillar	3516 S.I.T.A.	1138 hp, 4210 in ³ displacement, 8.61 MM BTU/hr, 800 kWatts
S-7	Lean Burn Internal Combustion Engine and Generator Set	Caterpillar	3516 S.I.T.A.	1138 hp, 4210 in ³ displacement, 8.61 MM BTU/hr, 800 kWatts
S-9	Lean Burn Internal Combustion Engine and Generator Set	Caterpillar	3516 S.I.T.A.	1138 hp, 4210 in ³ displacement, 8.61 MM BTU/hr, 800 kWatts

II. Equipment Lists

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.

S-#	Description	Make or Type	Model	Capacity
S-10	Lean Burn Internal Combustion Engine and Generator Set	Caterpillar	3516 S.I.T.A.	1138 hp, 4210 in ³ displacement, 8.61 MM BTU/hr, 800 kWatts
S-11	Lean Burn Internal Combustion Engine and Generator Set	Caterpillar	3516 S.I.T.A.	1138 hp, 4210 in ³ displacement, 8.61 MM BTU/hr, 800 kWatts
S-12	Lean Burn Internal Combustion Engine and Generator Set	Caterpillar	3516 S.I.T.A.	1138 hp, 4210 in ³ displacement, 8.61 MM BTU/hr, 800 kWatts

**Table II-B
 Abatement Device List**

A-#	Description	Source(s) Controlled	Applicable Requirement	Operating Parameters	Required Efficiency
A-2	Landfill Gas Flare, John Zinc ZTOF, 52.1 MM BTU/hr	S-1	See Table IV-D	See Table VII-D	See Table VII-D
A-8	Water Sprays, custom design	S-1	Condition # 4044, part 2	Ringelmann 0.5	

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 would 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 parenthesis 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
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 included in Appendix A of this permit if the SIP requirement is different from the current BAAQMD requirement.

NOTE:

There are differences between the current BAAQMD rule and the version of the rule in the SIP. For specific information, contact the District’s Rule Development Section of the Enforcement Division. All sources must comply with both versions of the rule until US EPA has reviewed and approved the District’s revision of the regulation.

**Table III
 Generally Applicable Requirements**

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)
BAAQMD Regulation 1	General Provisions and Definitions (5/17/00)	N
SIP Regulation 1	General Provisions and Definitions (8/27/99)	Y
BAAQMD Regulation 4	Air Pollution Episode Plan (3/20/91)	Y
SIP Regulation 4	Air Pollution Episode Plan (8/6/90)	Y
BAAQMD Regulation 5	Open Burning (11/2/94)	Y
BAAQMD Regulation 6	Particulate Matter and Visible Emissions (12/19/90)	Y

III. Generally Applicable Requirements

**Table III
 Generally Applicable Requirements**

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (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 3	Organic Compounds - Architectural Coatings (11/4/98)	N
SIP Regulation 8, Rule 3	Organic Compounds - Architectural Coatings (2/18/98)	Y ¹
BAAQMD Regulation 8, Rule 16	Organic Compounds - Solvent Cleaning Operations (9/16/98)	N
SIP Regulation 8, Rule 16	Organic Compounds - Solvent Cleaning Operations (12/9/94)	Y ¹
BAAQMD Regulation 8, Rule 49	Organic Compounds - Aerosol Paint Products (12/20/95)	N
SIP Regulation 8, Rule 49	Organic Compounds - Aerosol Paint Products (3/22/95)	Y ¹
BAAQMD Regulation 8, Rule 51	Organic Compounds - Adhesive and Sealant Products (1/7/98)	N
BAAQMD Regulation 11, Rule 1	Hazardous Pollutants - Lead (3/17/82)	N
SIP Regulation 11, Rule 1	Hazardous Pollutants - Lead (9/2/81)	Y ¹
BAAQMD Regulation 11, Rule 2	Hazardous Pollutants – Asbestos Demolition, Renovation and Manufacturing (10/7/98)	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 ¹
40 CFR Part 61, Subpart A	National Emission Standards for Hazardous Air Pollutants – General Provisions	Y
40 CFR Part 61, Subpart M	National Emission Standards for Hazardous Air Pollutants – National Emission Standard for Asbestos (6/19/95)	Y
EPA Regulation 40 CFR 82	Protection of Stratospheric Ozone (2/21/95)	
Subpart F, 40 CFR 82.154	Prohibitions	Y
Subpart F, 40 CFR 82.156	Required Practices	Y
Subpart F, 40 CFR 82.158	Standards for Recycling and Recovery Equipment	Y
Subpart F, 40 CFR 82.161	Technician Certification	Y
Subpart F, 40 CFR 82.162	Certification by Owners of Recovery and Recycling Equipment	Y
Subpart F, 40 CFR 82.166	Reporting and Recordkeeping Requirements	Y

III. Generally Applicable Requirements

- 1 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 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 parenthesis 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.
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 included in Appendix A of this permit if the SIP requirements are different from the current BAAQMD requirements. All other text may be found in the regulations themselves.

Table IV – A
Source-specific Applicable Requirements
S1 – SONOMA COUNTY CENTRAL LANDFILL

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
BAAQMD Regulation 1	General Provisions and Definitions (5/17/00)		
1-523	Parametric Monitoring and Recordkeeping Procedures	Y	7/1/02
1-523.1	Reporting requirement for periods of inoperation > 24 hours	Y	7/1/02
1-523.2	Limit on duration of inoperation	Y	7/1/02
1-523.3	Reporting requirement for violations of any applicable limits	Y	7/1/02
1-523.4	Records of inoperation, tests, calibrations, adjustments, & Maintenance	Y	7/1/02
BAAQMD 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	

IV. Source-specific Applicable Requirements

Table IV – A
Source-specific Applicable Requirements
S1 – SONOMA COUNTY CENTRAL LANDFILL

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
BAAQMD Regulation 8, Rule 2	Organic Compounds – Miscellaneous Operations (6/15/94)		
8-2-301	Miscellaneous Operations	Y	
BAAQMD Regulation 8, Rule 34	Organic Compounds – Solid Waste Disposal Sites (10/6/99)		
8-34-113	Limited Exemption, Inspection and Maintenance	N	
8-34-113.1	Emission Minimization Requirement	Y	
8-34-113.2	Shutdown Time Limitation	N	
8-34-113.3	Recordkeeping Requirement	Y	
8-34-116	Limited Exemption, Well Raising	N	
8-34-116.1	New Fill	N	
8-34-116.2	Limits on Number of Wells Shutdown	N	
8-34-116.3	Shutdown Duration Limit	N	
8-34-116.4	Capping Well Extensions	N	
8-34-116.5	Well Disconnection Records	N	
8-34-117	Limited Exemption, Gas Collection System Components	N	
8-34-117.1	Necessity of Existing Component Repairs/Adjustments	N	
8-34-117.2	New Components are Described in Collection and Control System Design Plan	N	
8-34-117.3	Meets Section 8-34-118 Requirements	N	
8-34-117.4	Limits on Number of Wells Shutdown	N	
8-34-117.5	Shutdown Duration Limit	N	
8-34-117.6	Well Disconnection Records	N	
8-34-118	Limited Exemption, Construction Activities	N	
8-34-118.1	Construction Plan	N	
8-34-118.2	Activity is Required to Maintain Compliance with this Rule	N	
8-34-118.3	Required or Approved by Other Enforcement Agencies	N	
8-34-118.4	Emission Minimization Requirement	N	
8-34-118.5	Excavated Refuse Requirements	N	
8-34-118.6	Covering Requirements for Exposed Refuse	N	
8-34-118.7	Installation Time Limit	N	

IV. Source-specific Applicable Requirements

Table IV – A
Source-specific Applicable Requirements
S1 – SONOMA COUNTY CENTRAL LANDFILL

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
8-34-118.8	Capping Required for New Components	N	
8-34-118.9	Construction Activity Records	N	
8-34-301	Landfill Gas Collection and Emission Control System Requirements	N	
8-34-301.1	Continuous Operation	N	
8-34-301.2	Collection and Control Systems Leak Limitations	N	
8-34-303a	Landfill Surface Requirements	Y	Expires 7/1/02
8-34-303b	Landfill Surface Requirements	N	7/1/02
8-34-304	Gas Collection System Installation Requirements	N	
8-34-304.1	Based on Waste Age For Inactive or Closed Areas	N	
8-34-304.2	Based on Waste Age For Active Areas	N	
8-34-304.3	Based on Amount of Decomposable Waste Accepted	N	
8-34-304.4	Based on NMOC Emission Rate	N	7/1/02
8-34-305	Wellhead Requirements	N	7/1/02
8-34-305.1	Operate Under Vacuum	N	7/1/02
8-34-305.2	Temperature < 55 °C	N	7/1/02
8-34-305.3	Nitrogen < 20% or	N	7/1/02
8-34-305.4	Oxygen < 5%	N	7/1/02
8-34-405	Design Capacity Reports	N	
8-34-406	Initial NMOC Emission Rate Reports	N	
8-34-407	Periodic NMOC Emission Rate Reports	N	10/6/00
8-34-408	Collection and Control System Design Plans	N	10/6/00
8-34-408.1	Sites With NMOC Emission Rate > 50 Mg/year	N	10/6/00
8-34-408.2	Sites With Existing Collection and Control Systems	N	10/6/00
8-34-411	Annual Report	N	10/6/00
8-34-412	Compliance Demonstration Tests	N	7/1/02
8-34-413	Performance Test Report	N	7/1/02
8-34-414	Repair Schedule for Wellhead Excesses	N	7/1/02
8-34-414.1	Records of Excesses	N	7/1/02
8-34-414.2	Corrective Action	N	7/1/02
8-34-414.3	Collection System Expansion	N	7/1/02
8-34-414.4	Operational Due Date for Expansion	N	7/1/02

IV. Source-specific Applicable Requirements

Table IV – A
Source-specific Applicable Requirements
S1 – SONOMA COUNTY CENTRAL LANDFILL

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
8-34-415	Repair Schedule for Surface Leak Excesses	N	7/1/02
8-34-415.1	Records of Excesses	N	7/1/02
8-34-415.2	Corrective Action	N	7/1/02
8-34-415.3	Re-monitor Excess Location Within 10 Days	N	7/1/02
8-34-415.4	Re-monitor Excess Location Within 1 Month	N	7/1/02
8-34-415.5	If No More Excesses, No Further Re-Monitoring	N	7/1/02
8-34-415.6	Additional Corrective Action	N	7/1/02
8-34-415.7	Re-monitor Second Excess Within 10 days	N	7/1/02
8-34-415.8	Re-monitor Second Excess Within 1 Month	N	7/1/02
8-34-415.9	If No More Excesses, No Further Re-monitoring	N	7/1/02
8-34-415.10	Collection System Expansion for Third Excess in a Quarter	N	7/1/02
8-34-415.11	Operational Due Date for Expansion	N	7/1/02
8-34-416	Cover Repairs	N	
8-34-501	Operating Records	N	
8-34-501.1	Collection System Downtime	N	
8-34-501.4	Testing	N	
8-34-501.6	Leak Discovery and Repair Records	N	
8-34-501.7	Waste Acceptance Records	N	
8-34-501.8	Non-decomposable Waste Records	N	
8-34-501.9	Wellhead Excesses and Repair Records	N	7/1/02
8-34-501.10	Gas Flow Rate Records for All Emission Control Systems	N	7/1/02
8-34-501.12	Records Retention for 5 Years	N	
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	N	8/1/02
8-34-506	Landfill Surface Monitoring	N	10/1/02
8-34-508	Gas Flow Meter	N	7/1/02
8-34-510	Cover Integrity Monitoring	N	8/1/02
SIP Regulation 8, Rule 34	Organic Compounds – Solid Waste Disposal Sites (3/22/95)		
8-34-113	Exemption, Inspection and Maintenance	Y	

IV. Source-specific Applicable Requirements

Table IV – A
Source-specific Applicable Requirements
S1 – SONOMA COUNTY CENTRAL LANDFILL

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
8-34-113.1	Emission Minimization Requirement	Y	
8-34-113.2	Shutdown Time Limitation	Y ¹	
8-34-113.3	Recordkeeping Requirement	Y	
8-34-301	Landfill Gas Collection and Emission Control System Requirements	Y	
8-34-301.1	Collection and Control Systems Leak Limitations	Y	
8-34-301.4	Continuous Operation	Y	
8-34-303	Landfill Surface Requirement	Y ¹	
8-34-501	Operating Records	Y	
8-34-501.1	Collection System Downtime	Y	
8-34-501.4	Records of Testing for Compliance with 8-34-111.3 or 301	Y	
8-34-501.6	Records Retention	Y	
8-34-503	Landfill Gas Collection System Testing	Y	
8-34-504	Portable Hydrocarbon Detector	Y	
BAAQMD Regulation 8, Rule 40	Organic Compounds – Aeration of Contaminated Soil and Removal of Underground Storage Tanks (12/15/99)		
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	N	
8-40-116.1	Volume does not exceed 1 cubic yard	N	
8-40-116.2	Volume does not exceed 8 cubic yards, organic content does not exceed 500 ppmw, may be used only once per quarter	N	
8-40-118	Exemption, Aeration Projects of Limited Impact	N	
8-40-301	Uncontrolled Contaminated Soil Aeration	N	6/1/00
8-40-304	Active Storage Piles	N	6/1/00
8-40-305	Inactive Storage Piles	N	6/1/00
8-40-403	Reporting, Aeration of Contaminated Soil	Y	
8-40-403.1	Total Quantity of Soil to be Aerated	Y	
8-40-403.2	Quantity of Soil to be Aerated per Day	Y	
8-40-403.3	Average Organic Content in Soil	Y	
8-40-403.4	Chemical Composition of Organic Compounds	Y	
8-40-403.5	Basis for Above Estimations	Y	

IV. Source-specific Applicable Requirements

Table IV – A
Source-specific Applicable Requirements
S1 – SONOMA COUNTY CENTRAL LANDFILL

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
8-40-403.6	Name and Address of Responsible Persons	N	
8-40-403.7	Location of Site	N	
SIP Regulation 8, Rule 40	Organic Compounds – Aeration of Contaminated Soil and Removal of Underground Storage Tanks (6/15/94)		
8-40-110	Exemption, Storage Pile	Y	
8-40-112	Exemption, Sampling	Y	
8-40-113	Exemption, Non-Volatile Hydrocarbons	Y	
8-40-301	Uncontrolled Aeration	Y ¹	
8-40-302	Controlled Aeration	Y ¹	
8-40-303	Storage Piles	Y ¹	
8-40-403	Reporting, Aeration of Contaminated Soil	Y	
8-40-403.1	Total Quantity of Soil to be Aerated	Y	
8-40-403.2	Quantity of Soil to be Aerated per Day	Y	
8-40-403.3	Average Degree of Contamination or Total Organic Content in Soil	Y	
8-40-403.4	Chemical Composition of Contaminating Organics	Y	
8-40-403.5	Basis for Above Estimations	Y	
BAAQMD Regulation 9, Rule 2	Inorganic Gaseous Pollutants – Hydrogen Sulfide (10/6/99)		
9-2-301	Limitations on Hydrogen Sulfide	N	
BAAQMD Regulation 11, Rule 1	Hazardous Pollutants – Lead (3/17/82)		
11-1-302	Ground Level Concentration Limit Without Background	Y	
BAAQMD Regulation 11, Rule 3	Hazardous Pollutants – Beryllium (3/17/82)		
11-3-301	Emission Limitation	N	
11-3-303	Ambient Concentration Limits	N	

IV. Source-specific Applicable Requirements

Table IV – A
Source-specific Applicable Requirements
S1 – SONOMA COUNTY CENTRAL LANDFILL

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
BAAQMD Regulation 11, Rule 14	Hazardous Pollutants – Asbestos-Containing Serpentine (7/17/91)		
11-14-301	Prohibition of Use for Surfacing Operations	N	
11-14-501	Maintenance of Records	N	
40 CFR Part 60, Subpart A	Standards of Performance for New Stationary Sources – General Provisions (5/4/98)		
60.4(b)	Requires Submission of Requests, Reports, Applications, and Other Correspondence to the Administrator	Y	
60.7	Notification and Record Keeping	Y	
60.8	Performance Tests	Y	
60.11	Compliance with Standards and Maintenance Requirements	Y	
60.11(a)	Compliance determined by performance tests	Y	
60.11(d)	Control devices operated using good air pollution control practice	Y	
60.12	Circumvention	Y	
60.13	Monitoring Requirements	Y	
60.13(a)	Applies to all continuous monitoring systems	Y	
60.13(b)	Monitors shall be installed and operational before performing Performance Tests	Y	
60.13(e)	Continuous monitors shall operate continuously	Y	
60.13(f)	Monitors shall be installed in proper locations	Y	
60.13(g)	Requires multiple monitors for multiple stacks	Y	
60.14	Modification	Y	
60.15	Reconstruction	Y	
60.19	General Notification and Reporting Requirements	Y	
40 CFR Part 60, Subpart Cc	Standards of Performance for New Stationary Sources – Emission Guidelines and Compliance Times for Municipal Solid Waste Landfills (2/24/99)		
60.32c	Designated Facilities	Y	
60.32c(a)	Construction or Modification Commenced before 5/30/91	Y	
60.32c(b)	Physical or Operational Changes Made in Order to Comply are	Y	

IV. Source-specific Applicable Requirements

Table IV – A
Source-specific Applicable Requirements
S1 – SONOMA COUNTY CENTRAL LANDFILL

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
	not Considered Modifications		
60.32c(c)	Title V Applicability and Subject Date	Y	
60.36c	Compliance Times	Y	
60.36c(a)	Collection and Control Systems in Compliance by 30 months After Initial NMOC Emission Rate Report Shows NMOC Emissions \geq 50 MG/year	Y	
60.36c(b)	Collection and Control Systems in Compliance by 30 months After Annual NMOC Emission Rate Report Shows NMOC Emissions \geq 50 MG/year	Y	
40 CFR Part 60, Subpart WWW	Standards of Performance for New Stationary Sources – Standards of Performance for Municipal Solid Waste Landfills (2/24/99)		
60.752	Standards for Air Emissions from Municipal Solid Waste Landfills	Y	
60.752(a)	Initial Design Capacity Report Requirement for MSW Landfills with Design Capacity less than 2.5 million Mg or less than 2.5 million m ³ (Small Designated Facilities)	Y	4/6/00
60.752(a)(1)	Amended Design Capacity Report Requirement	Y	
60.752(a)(2)	Requirements Resulting from an Amended Design Capacity	Y	
60.752(b)	Requirements for MSW Landfills with Design Capacity equal to or greater than 2.5 million Mg and 2.5 million m ³ (Large Designated Facilities)	Y	
60.752(b)(1)	Requirements for Large Designated Facilities with Calculated NMOC Emissions of less than 50 Mg/Year	Y	
60.752 (b)(1)(i)	Submit Annual Emission Report	Y	4/6/01
60.752 (b)(1)(ii)	Recalculate NMOC Emissions Annually until NMOC Emissions > 50 Mg/year or Landfill is Closed	Y	4/6/01
60.752 (b)(1)(ii)(A)	If NMOC > 50 Mg/year, comply with 60.752(b)(2)	Y	
60.752 (b)(1)(ii)(B)	If landfill is permanently closed, submit closure notice to comply with 60.757(d)	Y	
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	4/6/01

IV. Source-specific Applicable Requirements

Table IV – A
Source-specific Applicable Requirements
S1 – SONOMA COUNTY CENTRAL LANDFILL

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
(b)(2)(i)			
60.752 (b)(2)(i)(A)	The collection and control system in the Design Plan shall comply with 60.752(b)(2)(ii)	Y	
60.752 (b)(2)(i)(B)	Design Plan shall include all proposed alternatives to 60.753 through 60.758	Y	
60.752 (b)(2)(i)(C)	Design Plan shall conform to 60.759 (active collection system) or demonstrate sufficiency of proposed alternatives	Y	
60.752 (b)(2)(ii)	Install a collection and control system	Y	10/6/02
60.752 (b)(2)(iii)	Route collected gases to a control system.	Y	10/6/02
60.752 (b)(2)(iv)	Operate in accordance with 60.753, 60.755, and 60.756	Y	10/6/02
60.753	Operational Standards for Collection and Control Systems	Y	10/6/02
60.753(a)	Operate a Collection System in each area or cell in which:	Y	10/6/02
60.753(a)(1)	Active Cell – solid waste in place for 5 years or more	Y	10/6/02
60.753(a)(2)	Closed/Final Grade – solid waste in place for 2 years or more	Y	10/6/02
60.753(b)	Operate each wellhead under negative pressure unless:	Y	10/6/02
60.753(b)(1)	Fire or increased well temperature or to prevent fire	Y	10/6/02
60.753(b)(2)	Use of geomembrane or synthetic cover (subject to alternative Pressure limits)	Y	10/6/02
60.753(b)(3)	Decommissioned well after approval received for shut-down	Y	10/6/02
60.753(c)	Operate each wellhead at < 55 °C, and either < 20% N ₂ or < than 5% O ₂ (or other approved alternative levels)	Y	10/6/02
60.753(c)(1)	N ₂ determined by Method 3C	Y	10/6/02
60.753(c)(2)	O ₂ determined by 3A and as described in (2)(i-v)	Y	10/6/02
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	10/6/02
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	10/6/02

IV. Source-specific Applicable Requirements

Table IV – A
Source-specific Applicable Requirements
S1 – SONOMA COUNTY CENTRAL LANDFILL

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
60.753(g)	If monitoring demonstrates that 60.753(b), (c), or (d) are not Being met, corrective action must be taken	Y	10/6/02
60.754	Test Methods and Procedures	Y	
60.754(a)	NMOC Calculation Procedures for NMOC Emission Rate Reports and Comparison to 50 Mg/Year Standard	Y	
60.654(a)(1)	Calculate NMOC Emission Rate using either or both of the equations in 60.754(a)(1)(i-ii) with the listed default values	Y	4/6/00
60.754 (a)(1)(i)	Equation for known year-to-year waste acceptance rate	Y	
60.754 (a)(1)(ii)	Equation for unknown year-to-year waste acceptance rate	Y	
60.754(a)(2)	Tier 1 - compare calculated NMOC emission rate to 50 Mg/year	Y	4/6/00
60.754 (a)(2)(i)	If NMOC Emission Rate < 50 Mg/Year, submit NMOC emission rate report and recalculate NMOC emissions annually	Y	4/6/00
60.754 (a)(2)(ii)	If NMOC Emission Rate ≥ 50 Mg/year, comply with 60.752(b)(2) or determine a site specific NMOC concentration and follow 60.754(a)(3).	Y	4/6/00
60.754(a)(3)	Tier 2 – determine site specific NMOC Concentration using Methods 18 or 25C	Y	
60.754 (a)(3)(i)	Recalculate NMOC Emission Rate using site specific NMOC concentration data	Y	
60.754 (a)(3)(ii)	If NMOC Emission Rate ≥ 50 Mg/year, comply with 60.752(b)(2) or determine a site specific methane generation rate constant and follow 60.754(a)(4).	Y	
60.754 (a)(3)(iii)	If NMOC Emission Rate < 50 Mg/Year, submit NMOC Emission rate report, recalculate NMOC emissions annually, retest for NMOC Concentration every 5 years.	Y	
60.754(a)(4)	Tier 3 – determine site specific methane generation rate Constant using Method 2E and recalculate NMOC Emission Rate using site specific NMOC Concentration and site specific Methane Generation Rate Constant	Y	

IV. Source-specific Applicable Requirements

Table IV – A
Source-specific Applicable Requirements
S1 – SONOMA COUNTY CENTRAL LANDFILL

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
60.754 (a)(4)(i)	If NMOC Emission Rate \geq 50 Mg/year, comply with 60.752(b)(2).	Y	
60.754 (a)(4)(ii)	If NMOC Emission Rate < 50 Mg/Year, submit NMOC emission rate report, recalculate NMOC emissions annually, retest for NMOC Concentration every 5 years.	Y	
60.754(a)(5)	Allows use of alternative calculation methods if approved by EPA	Y	
60.754(c)	For PSD, NMOC emissions shall be calculated using AP-42	Y	
60.754(d)	Test Methods for Performance Test (Method 18 or 25C)	Y	
60.755	Compliance Provisions	Y	
60.755(a)	For Gas Collection Systems	Y	
60.755(a)(1)	Calculation Procedures for Maximum Expected Gas Generation Flow Rate	Y	
60.755 (a)(1)(i)	Equation for unknown year-to-year waste acceptance rate	Y	
60.755 (a)(1)(ii)	Equation for known year-to-year waste acceptance rate	Y	
60.755 (a)(1)(iii)	For closed or inactive and full sites with gas collection systems, actual flow rates may be used	Y	
60.755(a)(2)	Vertical wells and horizontal collectors shall be of sufficient density to meet all performance specifications	Y	10/6/02
60.755(a)(3)	Measure wellhead pressure monthly. If pressure is positive, take corrective action (final corrective action = expand system within 120 days of initial positive pressure reading)	Y	10/6/02
60.755(a)(4)	Expansion not required during first 180 days after startup.	Y	
60.755(a)(5)	Monitor wellheads monthly for temperature and either nitrogen or oxygen. If readings exceed limits, take corrective action up to expanding system within 120 days of first excess.	Y	10/6/02
60.755(b)	Wells shall be placed in cells as described in design plan And no later than 60 days after:	Y	10/6/02
60.755(b)(1)	Five years after initial waste placement in cell, for active cells	Y	10/6/02
60.755(b)(2)	Two years after initial waste placement in cell, for closed/final grade cells.	Y	10/6/02

IV. Source-specific Applicable Requirements

Table IV – A
Source-specific Applicable Requirements
S1 – SONOMA COUNTY CENTRAL LANDFILL

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
60.755(c)	Procedures for complying with surface methane standard	Y	10/6/02
60.755(c)(1)	Quarterly monitoring of surface and perimeter	Y	10/6/02
60.755(c)(2)	Procedure for determining background concentration	Y	10/6/02
60.755(c)(3)	Method 21 except probe inlet placed 5-10 cm above ground	Y	10/6/02
60.755(c)(4)	Excess is any reading of 500 ppmv or more. Take corrective action indicated below (i-v).	Y	10/6/02
60.755(c)(4)(i)	Mark and record location of excess	Y	10/6/02
60.755(c)(4)(ii)	Repair cover or adjust vacuum. Re-monitor within 10 calendar days.	Y	10/6/02
60.755(c)(4)(iii)	If still exceeding 500 ppmv, take additional corrective action. Re-monitor within 10 calendar days of 2 nd excess.	Y	10/6/02
60.755(c)(4)(iv)	Re-monitor within 1 month of initial excess.	Y	10/6/02
60.755(c)(4)(v)	For any location with 3 monitored excesses in a quarter, additional collectors (or other approved collection system repairs) shall be operational within 120 days of 1 st excess.	Y	10/6/02
60.755(c)(5)	Monitor cover integrity monthly and repair as needed.	Y	10/6/02
60.755(d)	Instrumentation and procedures for complying with 60.755(c).	Y	
60.755(d)(1)	Portable analyzer meeting Method 21	Y	
60.755(d)(2)	Calibrated with methane diluted to 500 ppmv in air	Y	
60.755(d)(3)	Use Method 21, Section 4.4 instrument evaluation procedures	Y	
60.755(d)(4)	Calibrate per Method 21, Section 4.2 immediately before monitoring.	Y	
60.755(e)	Provisions apply at all times except during startup, shutdown, or Malfunction, provided the duration of these shall not exceed 5 Days for collection systems or 1 hour for control systems.	Y	10/6/02
60.756	Monitoring of Operations	Y	10/6/02
60.756(a)	For active collection systems, install wellhead sampling port	Y	10/6/02
60.756(a)(1)	Measure gauge pressure in wellhead on a monthly basis	Y	10/6/02
60.756(a)(2)	Measure nitrogen or oxygen concentration in wellhead gas on a monthly basis.	Y	10/6/02
60.756(a)(3)	Measure temperature of wellhead gas on a monthly basis.	Y	10/6/02

IV. Source-specific Applicable Requirements

Table IV – A
Source-specific Applicable Requirements
S1 – SONOMA COUNTY CENTRAL LANDFILL

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
60.756(b)(2)	Device that records flow to or bypass of the control device (i or ii below)	Y	10/6/02
60.756 (b)(2)(i)	Install, calibrate, and maintain a device that records flow to the control device at least every 15 minutes.	Y	10/6/02
60.756 (b)(2)(ii)	Secure a bypass valve in closed position with a lock-and-key configuration and inspect seal and lock monthly.	Y	10/6/02
60.756(e)	Procedures for requesting alternative monitoring parameters	Y	
60.756(f)	Monitor surface on a quarterly basis. Closed landfills with no monitored exceedences in 3 consecutive quarters may reduce monitoring frequency to an annual basis	Y	10/6/02
60.757	Reporting Requirements	Y	
60.757(a)	Submit an Initial Design Capacity Report	Y	4/6/00
60.757(a)(1)	Initial Design Capacity Report fulfills 60.7(a)(1) construction date notification requirement.	Y	
60.757(a)(2)	Initial Design Capacity Report Shall Contain:	Y	
60.757 (a)(2)(i)	Map indicating size and location of site and all areas where waste may be placed.	Y	
60.757 (a)(2)(ii)	Permit or other documentation that indicates the maximum Design capacity.	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	4/6/00
60.757(b)(3)	Sites with Collection and Control Systems operating in Compliance with this subpart are exempt from periodic NMOC emission rate reporting requirements.	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	4/6/01
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	Y	

IV. Source-specific Applicable Requirements

Table IV – A
Source-specific Applicable Requirements
S1 – SONOMA COUNTY CENTRAL LANDFILL

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
	Monitored per 60.756(a), (b) or (d)		
60.757(f)(2)	Description and duration of all periods when gas is diverted From the control device by a by-pass line	Y	
60.757(f)(3)	Description and duration of all periods when control device was not operating for more than 1 hour	Y	
60.757(f)(4)	All periods when collection system was not operating for more than 5 days.	Y	
60.757(f)(5)	Location of each surface emission excess and all re-monitoring dates and concentrations.	Y	
60.757(f)(6)	Location and installation dates for any wells or collectors added as a result of corrective action for a monitored excess.	Y	
60.757(g)	Initial Performance Test Report Requirements (g)(1-6)	Y	4/4/03
60.757(g)(1)	Diagram of collection system showing positions of all existing collectors, proposed positions for future collectors, and areas to be excluded from control.	Y	
60.757(g)(2)	Basis for collector positioning to meet sufficient density requirement	Y	
60.757(g)(3)	Documentation supporting percentage of asbestos or non-degradable material claims for areas without a collection system.	Y	
60.757(g)(4)	For areas excluded from collection due to non-productivity, calculations and gas generation rates for each non-productive area and the sum for all nonproductive areas.	Y	
60.757(g)(5)	Provisions for increasing gas mover equipment if current system inadequate to handle maximum projected gas flow rate.	Y	
60.757(g)(6)	Provisions for control of off-site migration	Y	
60.758	Recordkeeping Requirements	Y	
60.758(a)	Design Capacity and Waste Acceptance Records (retain 5 years)	Y	10/6/02
60.758(b)	Collection and Control Equipment Records (retain for life of Control equipment except 5 years for monitoring data)	Y	10/6/02
60.758(b)(1)	Collection System Records	Y	10/6/02
60.758 (b)(1)(i)	Maximum expected gas generation flow rate.	Y	10/6/02

IV. Source-specific Applicable Requirements

Table IV – A
Source-specific Applicable Requirements
S1 – SONOMA COUNTY CENTRAL LANDFILL

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
60.758 (b)(1)(ii)	Density of wells and collectors	Y	10/6/02
60.758(c)	Records of parameters monitored pursuant to 60.756 and periods of operation when boundaries are exceeded (retain for 5 years).	Y	10/6/02
60.758(c)(2)	Records of continuous flow to control device or monthly Inspection records if seal and lock for bypass valves	Y	10/6/02
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	10/6/02
60.758(d)(1)	Installation date and location of all newly installed collectors	Y	10/6/02
60.758(d)(2)	Records of nature, deposition date, amount, and location of asbestos or non-degradable waste excluded from control	Y	10/6/02
60.758(e)	Records of any exceedance of 60.753, location of exceedance and re-monitoring dates and data (for wellheads and surface). Retain for 5 years.	Y	10/6/02
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	For calculating NMOC emissions, values for k and	Y	

IV. Source-specific Applicable Requirements

Table IV – A
Source-specific Applicable Requirements
S1 – SONOMA COUNTY CENTRAL LANDFILL

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
(a)(3)(iii)	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.		
60.759(b)	Gas Collection System Components	Y	
60.759(b)(1)	Must be constructed of PVC, HDPE, fiberglass, stainless steel, or other approved material and of suitable dimensions to convey projected gas amounts and withstand settling, traffic, etc.	Y	
60.759(b)(2)	Collectors shall not endanger liner, shall manage condensate and leachate, and shall prevent air intrusion and surface leaks.	Y	
60.759(b)(3)	Header connection assemblies shall include positive closing throttle valve, seals and couplings to prevent leaks, at least one sampling port, and shall be constructed of PVC, HDPE, fiberglass, stainless steel, or other approved materials.	Y	
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, shall be calculated per 60.755(a)(1)	Y	
40 CFR Part 62, Subpart GGG	Approval and Promulgation of State Plans for Designated Facilities and Pollutants – Federal Plan Requirements for Municipal Solid Waste Landfills that Commenced Construction Prior to May 30, 1991 and Have Not Been Modified or Reconstructed Since May 30, 1991 (11/8/99)		
62.14352	Designated Facilities	Y	
62.14352(a)	MSW Landfills Meeting 62.14352(a)(1) and (a)(2)	Y	
62.14352(a)(1)	Commenced construction, reconstruction, or modification before May 30, 1991	Y	
62.14352(a)(2)	Accepted waste since November 8, 1987 or has additional design capacity available	Y	
62.14352(d)	Changes made to comply with EG are not a “modification” and	Y	

IV. Source-specific Applicable Requirements

Table IV – A
Source-specific Applicable Requirements
S1 – SONOMA COUNTY CENTRAL LANDFILL

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
	do not subject a landfill to 40 CFR Part 60, Subpart WWW		
62.14352(e)	Title V Operating Permit Requirements	Y	4/6/00
62.14353	Standards for Municipal Solid Waste Landfill Emissions	Y	
62.14353(b)	Landfills with Design Capacity equal to or greater than 2.5 million Mg and 2.5 million m ³ (Large Designated Facilities) must comply with 40 CFR 60.752(b)	Y	
62.14354	Procedures, Test Methods, and Monitoring	Y	
62.14354(a)	Large Designated Facilities must calculate the NMOC emission rate using procedures in 40 CFR 60.754	Y	
62.14354(b)	A gas collection and control system used to comply with 62.14353(b) must comply with 40 CFR 60.753, 60.754(b) and (d), 60.755, and 60.756.	Y	
62.14355	Reporting and Recordkeeping Requirements	Y	
62.14355(a)	Designated Facilities must comply with 40 CFR 60.757 and 60.758 accept as provided in 62.14355(a)(1) and (a)(2)	Y	
62.14355(a)(1)	Initial Design Capacity is Due 4/6/00	Y	4/6/00
62.14355(a)(2)	Initial NMOC Emission Rate Report is Due 4/6/00	Y	4/6/00
62.14355(b)	Notification Requirement for Increments of Progress	Y	
62.14355(b)(1)	For first increment of progress, include final control plan with the notification	Y	4/6/01
62.14355(b)(2)	For second increment of progress, include signed copy of Construction contracts with notification	Y	12/6/01
62.14355(c)	Notification Requirement for Failure to Meet an Increment of Progress	Y	
62.14356	Compliance Schedules and Increments of Progress	Y	
62.14356(a)	Increments of Progress for Large Designated Facilities with NMOC Emissions Greater Than 50 Mg/year	Y	
62.14356(a)(1)	Increment 1 - Submit final control plan	Y	4/6/01
62.14356(a)(2)	Increment 2 - Award contracts for construction of any new Equipment or for modifications necessary to meet control plan	Y	12/6/01

IV. Source-specific Applicable Requirements

Table IV – A
Source-specific Applicable Requirements
S1 – SONOMA COUNTY CENTRAL LANDFILL

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
62.14356 (a)(3)	Increment 3 - Initiate on-site construction	Y	4/6/02
62.14356 (a)(4)	Increment 4 – Complete on-site construction	Y	10/6/02
62.14356 (a)(5)	Increment 5 – Achieve final compliance	Y	10/6/02
62.14356(b)	Final compliance must be achieved within 30 months of the first Report showing NMOC emissions > 50 Mg/year	Y	10/6/02
62.14356(c)	Compliance schedules	Y	
62.14356 (c)(1)	Achieve increments of progress according to Table 3 of this Section	Y	
BAAQMD Condition # 4044			
Part 1	Refuse acceptance limit (Cumulative Increase)	Y	
Part 2	Dust emission limits (BACT and 1-301)	Y	
Part 3	Public nuisance consequences (1-301)	N	
Part 4	Authority to Construct requirement for collection system modifications (2-1-301)	Y	
Part 4.a.	Minimum Collection System Description (8-34-301.1)	Y	
Part 4.b.	New Collection System Requirements (8-34-304)	N	
Part 5	Continuous operation requirement (8-34-301.1)	Y	
Part 6	Limits on concentrations of toxic air contaminants in landfill gas (TRMP)	N	
Part 8	Prohibition on venting raw landfill gas to the atmosphere (8-34-301)	Y	
Part 15	Test Requirements for toxic air contaminants in landfill gas (TRMP)	N	
Part 17, subparts a.-h., and m.-p.	Record keeping requirements (Cumulative Increase, 6-301, 6-305, 8-34-304, 8-34-501.3, and 8-34-501.8)	Y	
Part 18	Contaminated Soil Acceptance Limits and Records (8-40-301)	N	
Part 19, subparts a.-c.	Contaminated Soil Throughput Limit and Records (8-2-301)	Y	

IV. Source-specific Applicable Requirements

Table IV – A
Source-specific Applicable Requirements
S1 – SONOMA COUNTY CENTRAL LANDFILL

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
Part 20	Permit Application and Gas Collection System Expansion Requirements (Docket No. 2656)	N	

- 1 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.

Table IV-B
Source-specific Applicable Requirements
S-4, S-5, S-6, S-7, Lean Burn Internal Combustion Engines and Generator Sets

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
BAAQMD Regulation 1	General Provisions and Definitions (5/17/00)		
1-523	Parametric Monitoring and Recordkeeping Procedures	Y	7/1/02
1-523.1	Reporting requirement for periods of inoperation > 24 hours	Y	7/1/02
1-523.2	Limit on duration of inoperation	Y	7/1/02
1-523.3	Reporting requirement for violations of any applicable limits	Y	7/1/02
1-523.4	Records of inoperation, tests, calibrations, adjustments, & Maintenance	Y	7/1/02
BAAQMD Regulation 6	Particulate Matter and Visible Emissions (12/19/90)		
6-301	Ringelmann No. 1 Limitation	Y	
6-305	Visible Particles	Y	
6-310	Particle Weight Limitation	Y	
6-401	Appearance of Emissions	Y	
BAAQMD Regulation 8, Rule 34	Organic Compounds - Solid Waste Disposal Sites (10/6/99)		

IV. Source-specific Applicable Requirements

Table IV-B
Source-specific Applicable Requirements
S-4, S-5, S-6, S-7, Lean Burn Internal Combustion Engines and Generator Sets

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
8-34-113	Limited Exemption, Inspection and Maintenance	N	
8-34-113.1	Emission Minimization Requirement	Y	
8-34-113.2	Shutdown Time Limitation	N	
8-34-113.3	Recordkeeping Requirement	Y	
8-34-114	Limited Exemption, Energy Recovery Device and Emission Control System	Y	Expires 7/1/02 (exp. date not FE)
8-34-301	Landfill Gas Collection and Emission Control System Requirements	N	
8-34-301.1	Continuous Operation	N	
8-34-301.2	Collection and Control Systems Leak Limitations	N	
8-34-301.4b	Limits for Other Emission Control Systems	N	7/1/02
8-34-408	Collection and Control System Design Plans	N	
8-34-408.2	Sites With Existing Collection and Control Systems	N	
8-34-410	Equipment Removal Report	N	
8-34-411	Annual Report	N	
8-34-412	Compliance Demonstration Tests	N	
8-34-413	Performance Test Report	N	
8-34-501	Operating Records	N	
8-34-501.2	Emission Control System Downtime	N	
8-34-501.3	Continuous Temperature Records for Enclosed Combustors	N	7/1/02
8-34-501.4	Testing	N	
8-34-501.6	Leak Discovery and Repair Records	N	
8-34-501.10	Gas Flow Rate Records for All Emission Control Systems	N	7/1/02
8-34-501.12	Records Retention for 5 Years	N	
8-34-503	Landfill Gas Collection and Emission Control System Leak Testing	Y	
8-34-504	Portable Hydrocarbon Detector	Y	
8-34-507	Continuous Temperature Monitor and Recorded	N	7/1/02
8-34-508	Gas Flow Meter	N	7/1/02
SIP Regulation 8, Rule 34	Organic Compounds - Solid Waste Disposal Sites (6/15/94)		

IV. Source-specific Applicable Requirements

Table IV-B
Source-specific Applicable Requirements
S-4, S-5, S-6, S-7, Lean Burn Internal Combustion Engines and Generator Sets

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
8-34-113	Exemption, Inspection and Maintenance	Y	
8-34-113.1	Emission Minimization Requirement	Y	
8-34-113.2	Shutdown Time Limitation	Y ¹	
8-34-113.3	Recordkeeping Requirement	Y	
8-34-114	Limited Exemption, Energy Recovery Device and Emission Control System	Y ¹	
8-34-301	Landfill Gas Collection and Emission Control System Requirements	Y	
8-34-301.1	Collection and Control Systems Leak Limitations	Y	
8-34-301.4	Continuous Operation	Y	
8-34-501	Operating Records	Y	
8-34-501.2	Emission Control System Downtime	Y	
8-34-501.4	Records of Testing for Compliance with 8-34-111.3 or 301	Y	
8-34-501.6	Records Retention	Y	
8-34-503	Landfill Gas Collection System Testing	Y	
8-34-504	Portable Hydrocarbon Detector	Y	
BAAQMD Regulation 9, Rule 1	Inorganic Gaseous Pollutants – Sulfur Dioxide (3/15/95)		
9-1-301	Limitations on Ground Level Concentrations	Y	
9-1-302	General Emission Limitations	Y	
BAAQMD Regulation 9, Rule 2	Inorganic Gaseous Pollutants – Hydrogen Sulfide (10/6/99)		
9-2-301	Limitations on Hydrogen Sulfide	N	
BAAQMD Regulation 9 Rule 8	Inorganic Gaseous Pollutants – Nitrogen Oxides and Carbon Monoxide from Stationary Internal Combustion Engines (1/20/93)		
9-8-301	Emission Limits - Fossil Derived Fuel Gas	Y	
9-8-301.2	Lean-Burn Engines: NOx Emission Limit	Y	
9-8-301.3	CO Emission Limit	Y	
9-8-302	Emission Limits – Waste Derived Fuel Gas	Y	
9-8-302.1	Lean-Burn Engines: NOx Emission Limit	Y	
9-8-302.3	CO Emission Limit	Y	

IV. Source-specific Applicable Requirements

**Table IV-B
 Source-specific Applicable Requirements
 S-4, S-5, S-6, S-7, Lean Burn Internal Combustion Engines and Generator Sets**

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
40 CFR Part 60, Subpart A	Standards of Performance for New Stationary Sources – General Provisions (5/4/98)		
60.4(b)	Requires Submission of Requests, Reports, Applications, and Other Correspondence to the Administrator	Y	
60.7	Notification and Record Keeping	Y	
60.8	Performance Tests	Y	
60.11	Compliance with Standards and Maintenance Requirements	Y	
60.11(a)	Compliance determined by performance tests	Y	
60.11(d)	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 operation before performing Performance Tests	Y	
60.13(e)	Continuous monitors shall operate continuously	Y	
60.13(f)	Monitors shall be installed in proper locations	Y	
60.13(g)	Requires multiple monitors for multiple stacks	Y	
60.14	Modification	Y	
60.15	Reconstruction	Y	
60.19	General Notification and Reporting Requirements	Y	
40 CFR Part 60, Subpart Cc	Standards of Performance for New Stationary Sources – Emission Guidelines and Compliance Times for Municipal Solid Waste Landfills (2/24/99)		
60.32c	Designated Facilities	Y	
60.32c(a)	Construction or Modification Commenced before 5/30/91	Y	
60.32c(b)	Physical or Operational Changes Made in Order to Comply are not Considered Modifications	Y	
60.32c(c)	Title V Applicability and Subject Date	Y	
60.32c(d)	Criteria for Ceasing Title V Applicability for Closed Landfills	Y	
60.36c	Compliance Times	Y	
60.36c(a)	Collection and Control Systems in Compliance by 30 months After Initial NMOC Emission Rate Report Shows NMOC	Y	

IV. Source-specific Applicable Requirements

Table IV-B
Source-specific Applicable Requirements
S-4, S-5, S-6, S-7, Lean Burn Internal Combustion Engines and Generator Sets

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
	Emissions \geq 50 MG/year		
60.36c(b)	Collection and Control Systems in Compliance by 30 months After Annual NMOC Emission Rate Report Shows NMOC Emissions \geq 50 MG/year	Y	
40 CFR Part 60, Subpart WWW	Standards of Performance for New Stationary Sources – Standards of Performance for Municipal Solid Waste Landfills (2/24/99)		
60.752	Standards for Air Emissions from Municipal Solid Waste Landfills	Y	4/6/00
60.752(b)	Comply with paragraph (b)(2) or calculate NMOC emission rate	Y	4/6/00
60.752(b)(2)	Comply with all requirements in sections (b)(2)(i through iv)	Y	4/6/00
60.752 (b)(2)(i)	Submit a collection and control system design plan	Y	4/6/01
60.752 (b)(2)(ii)	Install a collection and control system	Y	10/6/02
60.752 (b)(2)(iii)	Route collected gases to a control system	Y	10/6/02
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% O ₂ , dry basis	Y	10/6/02
60.752 (b)(2)(iv)	Operate in accordance with 60.753, 60.755, and 60.756	Y	10/6/02
60.753	Operational Standards for Collection and Control Systems	Y	10/6/02
60.753(e)	Vent all collected gases to a control system complying with 60.752(b)(2)(iii)	Y	10/6/02
60.753(f)	Operate the control system at all times when collected gas is Routed to the control system	Y	10/6/02
60.754	Test Methods and Procedures	Y	
60.754(d)	Test Methods for Performance Test (Method 18 or 25C)	Y	
60.755	Compliance Provisions	Y	
60.755(e)	Provisions apply at all times except during startup, shutdown, or malfunction, provided the duration of these shall not exceed 5 days for collection systems or 1 hour for control systems	Y	10/6/02
60.756	Monitoring of Operations	Y	

IV. Source-specific Applicable Requirements

**Table IV-B
 Source-specific Applicable Requirements
 S-4, S-5, S-6, S-7, Lean Burn Internal Combustion Engines and Generator Sets**

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	10/6/02
60.756(b)(1)	Temperature monitor and continuous recorder	Y	10/6/02
60.756(b)(2)	Device that records flow to or bypass of the control device	Y	10/6/02
60.756(e)	Procedures for requesting alternative monitoring parameters	Y	
60.757	Reporting Requirements	Y	
60.757(c)	Submit a Collection and Control System Design Plan	Y	4/6/01
60.757(e)	Submit Equipment Removal Report 30 days prior to removal or cessation of operation of the control equipment	Y	
60.757(f)	Submit Annual Reports containing information required by (f)(1), (f)(2), and (f)(3)	Y	4/4/03
60.757(f)(1)	Value and length of time for exceedance of parameters monitored per 60.756(b) or (e)	Y	4/4/03
60.757(f)(2)	Description and duration of all periods when gas is diverted from the control device by a by-pass line	Y	4/4/03
60.757(f)(3)	Description and duration of all periods when control device was not operating for more than 1 hour	Y	4/4/03
60.758	Recordkeeping Requirements	Y	
60.758(b)	Control Equipment Records	Y	
60.758(b)(2)	Performance test data for enclosed combustors other than boilers or process heaters (greater than 44 MW heat input)		
60.758(c)	Records of parameters monitored pursuant to 60.756(b) or (e)	Y	
60.758(e)	Records of any exceedance of 60.753(e) or (f)	Y	
40 CFR Part 62, Subpart GGG	Approval and Promulgation of State Plans for Designated Facilities and Pollutants – Federal Plan Requirements for Municipal Solid Waste Landfills that Commenced Construction Prior to May 30, 1991 and Have Not Been Modified or Reconstructed Since May 30, 1991 (11/8/99)		
62.14352	Designated Facilities	Y	
62.14352(a)	Landfills meeting (a)(1) and (a)(2) and not exempted by (b) or (c)	Y	
62.14352(a)(1)	Commenced construction, reconstruction, or modification before May 30, 1991	Y	
62.14352(a)(2)	Accepted waste since November 8, 1987 or has additional design capacity available	Y	

IV. Source-specific Applicable Requirements

**Table IV-B
 Source-specific Applicable Requirements
 S-4, S-5, S-6, S-7, Lean Burn Internal Combustion Engines and Generator Sets**

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
62.14353	Standards for Municipal Solid Waste Landfill Emissions	Y	
62.14353(b)	Landfills with Design Capacity equal to or greater than 2.5 million Mg and 2.5 million m3 must comply with 40 CFR 60.752(b)	Y	
62.14354	Procedures, Test Methods, and Monitoring	Y	
62.14354(b)	A control system used to comply with 62.14353(b) must comply with 40 CFR 60.753, 60.754(d), 60.755, and 60.756.	Y	
62.14355	Reporting and Recordkeeping Requirements	Y	
62.14355(a)	Designated facilities must comply with 40 CFR 60.757 & 60.758	Y	
62.14355(b)	Notification requirement for increments of progress	Y	
62.14355(c)	Notification requirement for failure to meet an increment of Progress	Y	
62.14356	Compliance Schedules and Increments of Progress	Y	
62.14356(a)	Increments of Progress	Y	
62.14356(a)(1)	Submit final control plan	Y	4/6/01
62.14356(a)(2)	Award contracts for construction of any new equipment or for modifications necessary to meet control plan	Y	12/6/01
62.14356(a)(3)	Initiate on-site construction	Y	4/6/02
62.14356(a)(4)	Complete on-site construction	Y	10/6/02
62.14356(a)(5)	Achieve final compliance	Y	10/6/02
62.14356(b)	Final compliance must be achieved within 30 months of the first report showing NMOC emissions > 50 Mg/year	Y	10/6/02
62.14356(c)	Compliance schedules	Y	
62.14356(c)(1)	Achieve increments of progress according to Table 3 of this Section	Y	
BAAQMD Condition # 6117			
Part 1	Abatement requirement for collected landfill gas (8-34-301)	Y	

IV. Source-specific Applicable Requirements

Table IV-B
Source-specific Applicable Requirements
S-4, S-5, S-6, S-7, Lean Burn Internal Combustion Engines and Generator Sets

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
Part 2	Requirements when an engine is down (8-34-301)	Y	
Part 3	Limitations on Natural Gas Usage (Cumulative Increase and Offsets)	Y	
Part 4	Landfill Gas Flow Meter Requirement (8-34-301)	Y	
Part 5	NOx emission limit (BACT and Offsets)	Y	
Part 6	CO emission limit (BACT)	Y	
Part 7	POC emission limit (BACT and Offsets)	Y	
Part 8	Annual Source Test Requirement (BACT, Offsets, 8-34-114, 8-34-412, 9-8-302.1, 9-8-302.3, and 40 CFR 60.752(b)(2)(iii)(B))	Y	
Part 9, subparts a.-d.	Record Keeping Requirements (Cumulative Increase and Offsets)	Y	

- 1 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.

Table IV-C
Source-specific Applicable Requirements
S-9, S-10, S-11, S-12, Lean Burn Internal Combustion Engines and Generator Sets

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
BAAQMD Regulation 1	General Provisions and Definitions (5/17/00)		
1-523	Parametric Monitoring and Recordkeeping Procedures	Y	7/1/02
1-523.1	Reporting requirement for periods of inoperation > 24 hours	Y	7/1/02
1-523.2	Limit on duration of inoperation	Y	7/1/02
1-523.3	Reporting requirement for violations of any applicable limits	Y	7/1/02
1-523.4	Records of inoperation, tests, calibrations, adjustments, & Maintenance	Y	7/1/02
BAAQMD Regulation 6	Particulate Matter and Visible Emissions (12/19/90)		

IV. Source-specific Applicable Requirements

Table IV-C
Source-specific Applicable Requirements
S-9, S-10, S-11, S-12, Lean Burn Internal Combustion Engines and Generator Sets

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
6-301	Ringelmann No. 1 Limitation	Y	
6-305	Visible Particles	Y	
6-310	Particle Weight Limitation	Y	
6-401	Appearance of Emissions	Y	
BAAQMD Regulation 8, Rule 34	Organic Compounds - Solid Waste Disposal Sites (10/6/99)		
8-34-113	Limited Exemption, Inspection and Maintenance	N	
8-34-113.1	Emission Minimization Requirement	Y	
8-34-113.2	Shutdown Time Limitation	N	
8-34-113.3	Recordkeeping Requirement	Y	
8-34-301	Landfill Gas Collection and Emission Control System Requirements	N	
8-34-301.1	Continuous Operation	N	
8-34-301.2	Collection and Control Systems Leak Limitations	N	
8-34-301.4a	Energy Recovery Device or Emission Control System Limit	N	Expires 7/1/02
8-34-301.4b	Limits for Other Emission Control Systems	N	7/1/02
8-34-408	Collection and Control System Design Plans	N	
8-34-408.2	Sites With Existing Collection and Control Systems	N	
8-34-410	Equipment Removal Report	N	
8-34-411	Annual Report	N	
8-34-412	Compliance Demonstration Tests	N	
8-34-413	Performance Test Report	N	
8-34-501	Operating Records	N	
8-34-501.2	Emission Control System Downtime	N	
8-34-501.3	Continuous Temperature Records for Enclosed Combustors	N	7/1/02
8-34-501.4	Testing	N	
8-34-501.6	Leak Discovery and Repair Records	N	
8-34-501.10	Gas Flow Rate Records for All Emission Control Systems	N	7/1/02
8-34-501.12	Records Retention for 5 Years	N	
8-34-503	Landfill Gas Collection and Emission Control System Leak Testing	Y	
8-34-504	Portable Hydrocarbon Detector	Y	

IV. Source-specific Applicable Requirements

**Table IV-C
 Source-specific Applicable Requirements
 S-9, S-10, S-11, S-12, Lean Burn Internal Combustion Engines and Generator Sets**

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
8-34-507	Continuous Temperature Monitor and Recorded	N	7/1/02
8-34-508	Gas Flow Meter	N	7/1/02
SIP Regulation 8, Rule 34	Organic Compounds - Solid Waste Disposal Sites (6/15/94)		
8-34-113	Exemption, Inspection and Maintenance	Y	
8-34-113.1	Emission Minimization Requirement	Y	
8-34-113.2	Shutdown Time Limitation	Y ¹	
8-34-113.3	Recordkeeping Requirement	Y	
8-34-301	Landfill Gas Collection and Emission Control System Requirements	Y	
8-34-301.1	Collection and Control Systems Leak Limitations	Y	
8-34-301.3	Energy Recovery Device or Emission Control System Limit	Y ¹	
8-34-301.4	Continuous Operation	Y	
8-34-501	Operating Records	Y	
8-34-501.2	Emission Control System Downtime	Y	
8-34-501.4	Records of Testing for Compliance with 8-34-111.3 or 301	Y	
8-34-501.6	Records Retention	Y	
8-34-503	Landfill Gas Collection System Testing	Y	
8-34-504	Portable Hydrocarbon Detector	Y	
BAAQMD Regulation 9, Rule 1	Inorganic Gaseous Pollutants – Sulfur Dioxide (3/15/95)		
9-1-301	Limitations on Ground Level Concentrations	Y	
9-1-302	General Emission Limitations	Y	
BAAQMD Regulation 9, Rule 2	Inorganic Gaseous Pollutants – Hydrogen Sulfide (10/6/99)		
9-2-301	Limitations on Hydrogen Sulfide	N	
BAAQMD Regulation 9 Rule 8	Inorganic Gaseous Pollutants – Nitrogen Oxides and Carbon Monoxide from Stationary Internal Combustion Engines (1/20/93)		
9-8-301	Emission Limits - Fossil Derived Fuel Gas	Y	
9-8-301.2	Lean-Burn Engines: NOx Emission Limit	Y	

IV. Source-specific Applicable Requirements

Table IV-C
Source-specific Applicable Requirements
S-9, S-10, S-11, S-12, Lean Burn Internal Combustion Engines and Generator Sets

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
9-8-301.3	CO Emission Limit	Y	
9-8-302	Emission Limits – Waste Derived Fuel Gas	Y	
9-8-302.1	Lean-Burn Engines: NOx Emission Limit	Y	
9-8-302.3	CO Emission Limit	Y	
40 CFR Part 60, Subpart A	Standards of Performance for New Stationary Sources – General Provisions (5/4/98)		
60.4(b)	Requires Submission of Requests, Reports, Applications, and Other Correspondence to the Administrator	Y	
60.7	Notification and Record Keeping	Y	
60.8	Performance Tests	Y	
60.11	Compliance with Standards and Maintenance Requirements	Y	
60.11(a)	Compliance determined by performance tests	Y	
60.11(d)	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 operation before performing Performance Tests	Y	
60.13(e)	Continuous monitors shall operate continuously	Y	
60.13(f)	Monitors shall be installed in proper locations	Y	
60.13(g)	Requires multiple monitors for multiple stacks	Y	
60.14	Modification	Y	
60.15	Reconstruction	Y	
60.19	General Notification and Reporting Requirements	Y	
40 CFR Part 60, Subpart Cc	Standards of Performance for New Stationary Sources – Emission Guidelines and Compliance Times for Municipal Solid Waste Landfills (2/24/99)		
60.32c	Designated Facilities	Y	
60.32c(a)	Construction or Modification Commenced before 5/30/91	Y	
60.32c(b)	Physical or Operational Changes Made in Order to Comply are not Considered Modifications	Y	
60.32c(c)	Title V Applicability and Subject Date	Y	

IV. Source-specific Applicable Requirements

**Table IV-C
 Source-specific Applicable Requirements
 S-9, S-10, S-11, S-12, Lean Burn Internal Combustion Engines and Generator Sets**

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
60.32c(d)	Criteria for Ceasing Title V Applicability for Closed Landfills	Y	
60.36c	Compliance Times	Y	
60.36c(a)	Collection and Control Systems in Compliance by 30 months After Initial NMOC Emission Rate Report Shows NMOC Emissions \geq 50 MG/year	Y	
60.36c(b)	Collection and Control Systems in Compliance by 30 months After Annual NMOC Emission Rate Report Shows NMOC Emissions \geq 50 MG/year	Y	
40 CFR Part 60, Subpart WWW	Standards of Performance for New Stationary Sources – Standards of Performance for Municipal Solid Waste Landfills (2/24/99)		
60.752	Standards for Air Emissions from Municipal Solid Waste Landfills	Y	4/6/00
60.752(b)	Comply with paragraph (b)(2) or calculate NMOC emission rate	Y	4/6/00
60.752(b)(2)	Comply with all requirements in sections (b)(2)(i through iv)	Y	4/6/00
60.752(b)(2)(i)	Submit a collection and control system design plan	Y	4/6/01
60.752(b)(2)(ii)	Install a collection and control system	Y	10/6/02
60.752(b)(2)(iii)	Route collected gases to a control system	Y	10/6/02
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% O ₂ , dry basis	Y	10/6/02
60.752(b)(2)(iv)	Operate in accordance with 60.753, 60.755, and 60.756	Y	10/6/02
60.753	Operational Standards for Collection and Control Systems	Y	10/6/02
60.753(e)	Vent all collected gases to a control system complying with 60.752(b)(2)(iii)	Y	10/6/02
60.753(f)	Operate the control system at all times when collected gas is Routed to the control system	Y	10/6/02
60.754	Test Methods and Procedures	Y	
60.754(d)	Test Methods for Performance Test (Method 18 or 25C)	Y	
60.755	Compliance Provisions	Y	

IV. Source-specific Applicable Requirements

**Table IV-C
 Source-specific Applicable Requirements
 S-9, S-10, S-11, S-12, Lean Burn Internal Combustion Engines and Generator Sets**

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
60.755(e)	Provisions apply at all times except during startup, shutdown, or malfunction, provided the duration of these shall not exceed 5 days for collection systems or 1 hour for control systems	Y	10/6/02
60.756	Monitoring of Operations	Y	
60.756(b)	Enclosed combustors shall comply with (b)(1) and (b)(2)	Y	10/6/02
60.756(b)(1)	Temperature monitor and continuous recorder	Y	10/6/02
60.756(b)(2)	Device that records flow to or bypass of the control device	Y	10/6/02
60.756(e)	Procedures for requesting alternative monitoring parameters	Y	
60.757	Reporting Requirements	Y	
60.757(c)	Submit a Collection and Control System Design Plan	Y	4/6/01
60.757(e)	Submit Equipment Removal Report 30 days prior to removal or cessation of operation of the control equipment	Y	
60.757(f)	Submit Annual Reports containing information required by (f)(1), (f)(2), and (f)(3)	Y	4/4/03
60.757(f)(1)	Value and length of time for exceedance of parameters monitored per 60.756(b) or (e)	Y	4/4/03
60.757(f)(2)	Description and duration of all periods when gas is diverted from the control device by a by-pass line	Y	4/4/03
60.757(f)(3)	Description and duration of all periods when control device was not operating for more than 1 hour	Y	4/4/03
60.758	Recordkeeping Requirements	Y	
60.758(b)	Control Equipment Records	Y	
60.758(b)(2)	Performance test data for enclosed combustors other than boilers or process heaters (greater than 44 MW heat input)		
60.758(c)	Records of parameters monitored pursuant to 60.756(b) or (e)	Y	
60.758(e)	Records of any exceedance of 60.753(e) or (f)	Y	
40 CFR Part 62, Subpart GGG	Approval and Promulgation of State Plans for Designated Facilities and Pollutants – Federal Plan Requirements for Municipal Solid Waste Landfills that Commenced Construction Prior to May 30, 1991 and Have Not Been Modified or Reconstructed Since May 30, 1991 (11/8/99)		
62.14352	Designated Facilities	Y	
62.14352(a)	Landfills meeting (a)(1) and (a)(2) and not exempted by (b) or (c)	Y	

IV. Source-specific Applicable Requirements

Table IV-C
Source-specific Applicable Requirements
S-9, S-10, S-11, S-12, Lean Burn Internal Combustion Engines and Generator Sets

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
62.14352 (a)(1)	Commenced construction, reconstruction, or modification before May 30, 1991	Y	
62.14352 (a)(2)	Accepted waste since November 8, 1987 or has additional design capacity available	Y	
62.14353	Standards for Municipal Solid Waste Landfill Emissions	Y	
62.14353(b)	Landfills with Design Capacity equal to or greater than 2.5 million Mg and 2.5 million m ³ must comply with 40 CFR 60.752(b)	Y	
62.14354	Procedures, Test Methods, and Monitoring	Y	
62.14354(b)	A control system used to comply with 62.14353(b) must comply with 40 CFR 60.753, 60.754(d), 60.755, and 60.756.	Y	
62.14355	Reporting and Recordkeeping Requirements	Y	
62.14355(a)	Designated facilities must comply with 40 CFR 60.757 & 60.758	Y	
62.14355(b)	Notification requirement for increments of progress	Y	
62.14355(c)	Notification requirement for failure to meet an increment of Progress	Y	
62.14356	Compliance Schedules and Increments of Progress	Y	
62.14356(a)	Increments of Progress	Y	
62.14356 (a)(1)	Submit final control plan	Y	4/6/01
62.14356 (a)(2)	Award contracts for construction of any new equipment or for modifications necessary to meet control plan	Y	12/6/01
62.14356 (a)(3)	Initiate on-site construction	Y	4/6/02
62.14356 (a)(4)	Complete on-site construction	Y	10/6/02
62.14356 (a)(5)	Achieve final compliance	Y	10/6/02
62.14356(b)	Final compliance must be achieved within 30 months of the first report showing NMOC emissions > 50 Mg/year	Y	10/6/02
62.14356(c)	Compliance schedules	Y	
62.14356 (c)(1)	Achieve increments of progress according to Table 3 of this section	Y	

IV. Source-specific Applicable Requirements

**Table IV-C
 Source-specific Applicable Requirements
 S-9, S-10, S-11, S-12, Lean Burn Internal Combustion Engines and Generator Sets**

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
BAAQMD Condition # 6117			
Part 1	Abatement requirement for collected landfill gas (8-34-301)	Y	
Part 2	Requirements when an engine is down (8-34-301)	Y	
Part 3	Limitations on Natural Gas Usage (Cumulative Increase and Offsets)	Y	
Part 4	Landfill Gas Flow Meter Requirement (8-34-301)	Y	
Part 5	NOx emission limit (BACT and Offsets)	Y	
Part 6	CO emission limit (BACT)	Y	
Part 7	POC emission limit (BACT and Offsets)	Y	
Part 8	Annual Source Test Requirement (BACT, Offsets, 8-34-301.4, 8-34-412, 9-8-302.1, 9-8-302.3, and 40 CFR 60.752(b)(2)(iii)(B))	Y	
Part 9, subparts a.-d.	Record Keeping Requirements (Cumulative Increase and Offsets)	Y	

- 1 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 – D
Source-specific Applicable Requirements
A2 – 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 (5/17/00)		
1-523	Parametric Monitoring and Recordkeeping Procedures	Y	7/1/02
1-523.1	Reporting requirement for periods of inoperation > 24 hours	Y	7/1/02
1-523.2	Limit on duration of inoperation	Y	7/1/02
1-523.3	Reporting requirement for violations of any applicable limits	Y	7/1/02
1-523.4	Records of inoperation, tests, calibrations, adjustments, & Maintenance	Y	7/1/02
BAAQMD Regulation 6	Particulate Matter and Visible Emissions (12/19/90)		
6-301	Ringelmann No. 1 Limitation	Y	
6-305	Visible Particles	Y	
6-310	Particle Weight Limitation	Y	
6-401	Appearance of Emissions	Y	
BAAQMD Regulation 8, Rule 34	Organic Compounds - Solid Waste Disposal Sites (10/6/99)		
8-34-113	Limited Exemption, Inspection and Maintenance	N	
8-34-113.1	Emission Minimization Requirement	Y	
8-34-113.2	Shutdown Time Limitation	N	
8-34-113.3	Recordkeeping Requirement	Y	
8-34-301	Landfill Gas Collection and Emission Control System Requirements	N	
8-34-301.1	Continuous Operation	N	
8-34-301.2	Collection and Control Systems Leak Limitations	N	
8-34-301.3a	Enclosed Flare Destruction Efficiency	N	Expires 7/1/02
8-34-301.3b	Limits for Enclosed Flares	N	7/1/02
8-34-411	Annual Report	N	10/6/00
8-34-412	Compliance Demonstration Tests	N	7/1/02
8-34-413	Performance Test Report	N	7/1/02
8-34-501	Operating Records	N	
8-34-501.2	Emission Control System Downtime	N	

IV. Source-specific Applicable Requirements

Table IV – D
Source-specific Applicable Requirements
A2 – LANDFILL GAS FLARE

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
8-34-501.3	Continuous Temperature Records for Enclosed Combustors	N	
8-34-501.4	Testing	N	
8-34-501.6	Leak Discovery and Repair Records	N	
8-34-501.10	Gas Flow Rate Records for All Emission Control Systems	N	7/1/02
8-34-501.12	Records Retention for 5 Years	N	
8-34-503	Landfill Gas Collection and Emission Control System Leak Testing	Y	
8-34-504	Portable Hydrocarbon Detector	Y	
8-34-507	Continuous Temperature Monitor and Recorded	N	
8-34-508	Gas Flow Meter	N	7/1/02
SIP Regulation 8, Rule 34	Organic Compounds - Solid Waste Disposal Sites (3/22/95)		
8-34-113	Exemption, Inspection and Maintenance	Y	
8-34-113.1	Emission Minimization Requirement	Y	
8-34-113.2	Shutdown Time Limitation	Y ¹	
8-34-113.3	Recordkeeping Requirement	Y	
8-34-301	Landfill Gas Collection and Emission Control System Requirements	Y	
8-34-301.1	Collection and Control Systems Leak Limitations	Y	
8-34-301.2	Enclosed Flare Destruction Efficiency	Y ¹	
8-34-301.4	Continuous Operation	Y	
8-34-501	Operating Records	Y	
8-34-501.2	Emission Control System Downtime	Y	
8-34-501.3	Temperature Monitoring	Y	
8-34-501.4	Records of Testing for Compliance with 8-34-111.3 or 301	Y	
8-34-501.6	Records Retention	Y	
8-34-503	Landfill Gas Collection System Testing	Y	
8-34-504	Portable Hydrocarbon Detector	Y	
BAAQMD Regulation 9, Rule 1	Inorganic Gaseous Pollutants – Sulfur Dioxide (3/15/95)		
9-1-301	Limitations on Ground Level Concentrations	Y	
9-1-302	General Emission Limitations	Y	

IV. Source-specific Applicable Requirements

**Table IV – D
 Source-specific Applicable Requirements
 A2 – LANDFILL GAS FLARE**

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
BAAQMD Regulation 9, Rule 2	Inorganic Gaseous Pollutants – Hydrogen Sulfide (10/6/99)		
9-2-301	Limitations on Hydrogen Sulfide	N	
40 CFR Part 60, Subpart A	Standards of Performance for New Stationary Sources – General Provisions (5/4/98)		
60.4(b)	Requires Submission of Requests, Reports, Applications, and Other Correspondence to the Administrator	Y	
60.7	Notification and Record Keeping	Y	
60.8	Performance Tests	Y	
60.11	Compliance with Standards and Maintenance Requirements	Y	
60.11(a)	Compliance determined by performance tests	Y	
60.11(d)	Control devices operated using good air pollution control practice	Y	
60.12	Circumvention	Y	
60.13	Monitoring Requirements	Y	
60.13(a)	Applies to all continuous monitoring systems	Y	
60.13(b)	Monitors shall be installed and operational before performing Performance Tests	Y	
60.13(e)	Continuous monitors shall operate continuously	Y	
60.13(f)	Monitors shall be installed in proper locations	Y	
60.13(g)	Requires multiple monitors for multiple stacks	Y	
60.14	Modification	Y	
60.15	Reconstruction	Y	
60.19	General Notification and Reporting Requirements	Y	
40 CFR Part 60, Subpart Cc	Standards of Performance for New Stationary Sources – Emission Guidelines and Compliance Times for Municipal Solid Waste Landfills (2/24/99)		
60.32c	Designated Facilities	Y	
60.32c(a)	Construction or Modification Commenced before 5/30/91	Y	
60.32c(b)	Physical or Operational Changes Made in Order to Comply are not Considered Modifications	Y	

IV. Source-specific Applicable Requirements

Table IV – D
Source-specific Applicable Requirements
A2 – LANDFILL GAS FLARE

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
60.32c(c)	Title V Applicability and Subject Date	Y	
60.36c	Compliance Times	Y	
60.36c(a)	Collection and Control Systems in Compliance by 30 months After Initial NMOC Emission Rate Report Shows NMOC Emissions \geq 50 MG/year	Y	
60.36c(b)	Collection and Control Systems in Compliance by 30 months After Annual NMOC Emission Rate Report Shows NMOC Emissions \geq 50 MG/year	Y	
40 CFR Part 60, Subpart WWW	Standards of Performance for New Stationary Sources – Standards of Performance for Municipal Solid Waste Landfills (2/24/99)		
60.752	Standards for Air Emissions from Municipal Solid Waste Landfills	Y	
60.752(b)	Requirements for MSW Landfills with Design Capacity equal to or greater than 2.5 million Mg and 2.5 million m ³ (Large Designated Facilities)	Y	
60.752(b)(2)	Comply with all requirements in sections (b)(2)(i through iv)	Y	
60.752 (b)(2)(i)	Submit a Collection and Control System Design Plan	Y	4/6/01
60.752 (b)(2)(i)(A)	The collection and control system in the Design Plan shall comply with 60.752(b)(2)(ii)	Y	
60.752 (b)(2)(i)(B)	Design Plan shall include all proposed alternatives to 60.753 through 60.758	Y	
60.752 (b)(2)(ii)	Install a collection and control system	Y	10/6/02
60.752 (b)(2)(iii)	Route collected gases to a control system meeting the following requirements	Y	10/6/02
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% O ₂ , dry basis, as demonstrated by initial performance test within 180 days of start-up.	Y	10/6/02
60.752 (b)(2)(iv)	Operate in accordance with 60.753, 60.755, and 60.756	Y	10/6/02

IV. Source-specific Applicable Requirements

Table IV – D
Source-specific Applicable Requirements
A2 – LANDFILL GAS FLARE

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
60.753	Operational Standards for Collection and Control Systems	Y	10/6/02
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	10/6/02
60.753(f)	Operate the control system at all times when collected gas is Routed to the control system	Y	10/6/02
60.754	Test Methods and Procedures	Y	
60.754(d)	Test Methods for Performance Test (Method 18 or 25C)	Y	
60.755	Compliance Provisions	Y	
60.755(e)	Provisions apply at all times except during startup, shutdown, or Malfunction, provided the duration of these shall not exceed 5 Days for collection systems or 1 hour for control systems.	Y	10/6/02
60.756	Monitoring of Operations	Y	10/6/02
60.756(b)	Enclosed combustors shall comply with (b)(1) and (b)(2)	Y	10/6/02
60.756(b)(1)	Temperature monitor and continuous recorder (not required for boilers and process heaters with capacity > 44 MW)	Y	10/6/02
60.756(b)(2)	Device that records flow to or bypass of the control device (i or ii below)	Y	10/6/02
60.756 (b)(2)(i)	Install, calibrate, and maintain a device that records flow to the control device at least every 15 minutes.	Y	10/6/02
60.756 (b)(2)(ii)	Secure a bypass valve in closed position with a lock-and-key configuration and inspect seal and lock monthly.	Y	10/6/02
60.756(e)	Procedures for requesting alternative monitoring parameters	Y	
60.757	Reporting Requirements	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(g)	Initial Performance Test Report Requirements (g)(1-6)	Y	4/4/03

IV. Source-specific Applicable Requirements

Table IV – D
Source-specific Applicable Requirements
A2 – LANDFILL GAS FLARE

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
60.758	Recordkeeping Requirements	Y	
60.758(b)	Collection and Control Equipment Records (retain for life of Control equipment except 5 years for monitoring data)	Y	10/6/02
60.758(b)(2)	Control System Records – enclosed combustors other than boilers or process heaters with heat input > 44 MW	Y	10/6/02
60.758 (b)(2)(i)	Combustion temperature measured every 15 minutes and Averaged over the same time period as the performance test	Y	10/6/02
60.758 (b)(2)(ii)	Percent NMOC reduction achieved by the control device	Y	10/6/02
60.758(c)	Records of parameters monitored pursuant to 60.756 and periods of operation when boundaries are exceeded (retain for 5 years).	Y	10/6/02
60.758(c)(1)	Exceedances subject to record keeping are	Y	10/6/02
60.758 (c)(1)(i)	All 3-hour periods when average combustion temperature was more than 28 C below the average combustion temperature during the most recent complying performance test	Y	10/6/02
60.758(c)(2)	Records of continuous flow to control device or monthly inspection records if seal and lock for bypass valves	Y	10/6/02
40 CFR Part 62, Subpart GGG	Approval and Promulgation of State Plans for Designated Facilities and Pollutants – Federal Plan Requirements for Municipal Solid Waste Landfills that Commenced Construction Prior to May 30, 1991 and Have Not Been Modified or Reconstructed Since May 30, 1991 (11/8/99)		
62.14352	Designated Facilities	Y	
62.14352(a)	MSW Landfills Meeting 62.14352(a)(1) and (a)(2)	Y	
62.14352 (a)(1)	Commenced construction, reconstruction, or modification before May 30, 1991	Y	
62.14352 (a)(2)	Accepted waste since November 8, 1987 or has additional design capacity available	Y	
62.14352(d)	Changes made to comply with EG are not a “modification” and do not subject a landfill to 40 CFR Part 60, Subpart WWW	Y	
62.14352(e)	Title V Operating Permit Requirements	Y	4/6/00

IV. Source-specific Applicable Requirements

Table IV – D
Source-specific Applicable Requirements
A2 – LANDFILL GAS FLARE

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
62.14353	Standards for Municipal Solid Waste Landfill Emissions	Y	
62.14353(b)	Landfills with Design Capacity equal to or greater than 2.5 million Mg and 2.5 million m ³ (Large Designated Facilities) must comply with 40 CFR 60.752(b)	Y	
62.14354	Procedures, Test Methods, and Monitoring	Y	
62.14354(b)	A gas collection and control system used to comply with 62.14353(b) must comply with 40 CFR 60.753, 60.754(b) and (d), 60.755, and 60.756.	Y	
62.14355	Reporting and Recordkeeping Requirements	Y	
62.14355(a)	Designated Facilities must comply with 40 CFR 60.757 and 60.758 accept as provided in 62.14355(a)(1) and (a)(2)	Y	
62.14356	Compliance Schedules and Increments of Progress	Y	
62.14356(a)	Increments of Progress for Large Designated Facilities with NMOC Emissions Greater Than 50 Mg/year	Y	
62.14356(a)(1)	Increment 1 - Submit final control plan	Y	4/6/01
62.14356(a)(2)	Increment 2 - Award contracts for construction of any new equipment or for modifications necessary to meet control plan	Y	12/6/01
62.14356(a)(3)	Increment 3 - Initiate on-site construction	Y	4/6/02
62.14356(a)(4)	Increment 4 - Complete on-site construction	Y	10/6/02
62.14356(a)(5)	Increment 5 - Achieve final compliance	Y	10/6/02
62.14356(b)	Final compliance must be achieved within 30 months of the first Report showing NMOC emissions > 50 Mg/year	Y	10/6/02
62.14356(c)	Compliance schedules	Y	
62.14356(c)(1)	Achieve increments of progress according to Table 3 of this Section	Y	
BAAQMD Condition # 4044			
Part 7	Limit on total reduced sulfur content in landfill gas (9-1-302)	Y	

IV. Source-specific Applicable Requirements

Table IV – D
Source-specific Applicable Requirements
A2 – LANDFILL GAS FLARE

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
Part 9	Requirement to operate flare when an engine is down (8-34-301)	Y	
Part 10	Combustion Temperature Limit (TRMP)	N	
Part 11	Flow meter requirement (8-34-301)	Y	
Part 12	Alarm requirements (8-34-301.1)	Y	
Part 13	Temperature monitor and recorder (8-34-507 and TRMP)	Y	
Part 14	Test requirement for NMOC and THC limits (8-34-301.3)	Y	
Part 16	Test requirement for landfill gas sulfur content limit (9-1-302)	Y	
Part 17, subparts i.-m.	Record keeping requirements (Cumulative Increase, 8-34-304, 8-34-501.3, and 8-34-501.8)	Y	

- 1 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.

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.

VI. PERMIT CONDITIONS

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

District Comments: Proposed changes to permit conditions are identified below by strike-through and underline text. The District's reasons for the proposed changes are listed following each part number (in italic text). The italic text will be deleted when the permit is final. The part numbers referenced in Tables IV and VII are based on the proposed changes below.

Condition # 4044

For S-1 Sonoma County Central Landfill, A-2 Landfill Gas Flare, and A-8 Water Sprays

The permit conditions listed below have been rearranged to follow the District's preferred order for landfill conditions (general landfill limits, waste limits, particulate limits, road requirements, cover soil limitations, collection system description, collection system requirements, abatement requirements, abatement device limits, monitoring requirements, testing requirements, and record keeping requirements) and have been modified extensively to clarify requirements.

91. ~~The landfill shall receive total amount of municipal solid waste in quantities received at the Sonoma County Central Landfill (S-1) shall not to exceed the following limits:~~
2,500 tons per day.
a. ~~2,500 tons per day;~~
b. ~~500,000 tons per consecutive 365 day period~~
Quantities of waste received shall be entered in a District approved log on a daily basis, and totaled to demonstrate compliance with the permit condition. These records shall be kept at the site for at least 24 months from the date the data is

VI. Permit Conditions

~~entered, and shall be made available to the District staff for inspection. (basis: Cumulative Increase)~~

The solid waste facility permit limits the amount of waste received to 2500 tons/day. Particulate emission calculations were also based on receiving 2500 tons/day of waste and the traffic volume associated with delivering 2500 tons/day of waste. However, annual particulate emissions were not limited. Therefore, staff could find no basis for the 500,000 tons per year limit and recommend that it be deleted. Phrases were also added for clarity. The waste record keeping requirement will be combined with other record keeping requirements into a single record keeping condition (see Part 17 below).

102. Particulate emissions from any operation of the Landfill operations (S-1) shall be abated by Water Spray (A-8), if necessary, so that visible dust emissions shall not exceed Ringelmann 0.5 or result in fallout on adjacent property in such quantities as to cause a public nuisance per Regulation 1-301. (basis: BACT and 1-301)

Corrected language for clarity.

- 11*3. If the plant receives two or more Violation Notices from the District for "Public Nuisance" related to dust emissions in any consecutive 12 month period, the ~~owner/operator of this plant~~ Permit Holder 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 ~~order~~ other measures that the District deems necessary and appropriate. (basis: Regulation ~~2-1-403~~ 1-301)
- The paving of all significant roads associated with landfill operations, or
 - The use of chemical suppressant to control fugitive dust emissions from roadways associated with this landfill.

Modified phrasing for consistency and corrected the basis for the condition.

- ~~12. In no event shall any filled area be uncontrolled in excess of twelve months. (basis: Regulation 2-1-403)~~

This requirement is now contained in Regulation 8-34-304 with more detail. There is no need to duplicate this requirement in the permit conditions.

- ~~3. If the collection system exhibits breakdown or if any isolation or adjustment valve is closed in excess of 240 hours in any calendar year for maintenance, a variance from~~

VI. Permit Conditions

~~the District Hearing Board shall be immediately applied for. (basis: Regulation 2-1-403)~~

When the collection system is not operating in compliance with 8-34, operators may at their discretion apply for breakdown relief or a variance. However, the District cannot require operators to apply for these. Therefore this condition will be deleted.

4. ~~Prior to increasing the number of landfill gas wells, written approval shall be obtained from the District. The Permit Holder shall apply for and receive an Authority to Construct before modifying the landfill gas collection system described in Parts 4.a.-b. below. Increasing or decreasing the number of wells or collectors, or significantly changing the length of collectors, or the locations of wells or collectors are all considered to be modifications that are subject to the Authority to Construct requirement.~~

- a. ~~The Permit Holder has been issued a Permit to Operate for the landfill gas collection system components listed below. Well and collector locations, depths, and lengths are as described in detail in Permit Application #25840.~~

	Required Components
Total Number of Vertical Wells:	94
Total Number of Horizontal Collectors:	43

- b. ~~The Permit Holder has been issued an Authority to Construct for the landfill gas collection system components listed below. These collectors shall be installed in the East Canyon Expansion Area in accordance with the requirements of Regulation 8-34-304. Specific collector locations, depths, and lengths of associated piping are as described in detail in Permit Application # 19313.~~

	Minimum	Maximum
Total Number of Horizontal Collectors:	14	

~~Wells installed pursuant to Parts 4.b. shall be added to Part 4.a. via an administrative permit amendment.~~

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

Regulation 8-34 requires that the gas collection system be operated continuously. Continuous operation is defined as having all wells and collectors operating under vacuum and with landfill gas flow. Therefore, it is critical that the landfill gas collection system be clearly defined, so that both the operator and the District are aware of which wells and collectors are required to be under vacuum (and to meet the other requirements of 8-34-305). The permit applications should contain a list of the unique ID numbers for all wells and collectors that are required to be operating.

VI. Permit Conditions

In addition, industry and District staff need to know which wells are covered by A/Cs and when these wells need to be installed in order to maintain compliance with 8-34-304 or other requirements. This level of detail is often not provided in the A/C letter. Permit conditions are the most appropriate place to put such detailed requirements. Since A/Cs are often obtained long ahead of installation, many operators have requested that A/Cs be issued for a range of wells, with well numbers and locations optimized nearer to the installation date. The condition above was structured to allow this amount of discretion. Three days before start-up operators must notify the District of the start-up date and final collection system design. After start-up the installed wells and collectors will become part of the required collection system in Part 4.a.

25. The landfill gas collection system described in Part 4.a. shall be operated continuously. Wells shall not be shut off, disconnected or removed from operation without written authorization from the District, unless the Permit Holder complies with all applicable requirements of Regulation 8, Rule 34, Sections 113, 116, 117, and 118. (basis: Regulation ~~2-1-403~~ 8-34-301.1)

This condition elaborates on the requirement to operate the gas collection system continuously (8-34-301.1) and is based on the definition of continuous operation (8-34-219). The exemption Sections (113,116,117,118) describe situations in which a few wells may be shut down for short periods of time in order to perform necessary installations, repairs, maintenance, etc. on the system.

- *6. If the concentrations (dry basis) of toxic air contaminants in the collected landfill gas exceed any of the limits listed below, the Permit Holder shall submit a permit application for a Change of Permit Conditions within 30 days of receiving the test results.

Benzene = 2.5 ppmv

Trichloroethylene = 3.0 ppmv

Perchloroethylene = 3.0 ppmv

Methylene Chloride = 20.0 ppmv

Vinyl Chloride = 2.5 ppmv

(basis: Toxic Risk Management Policy)

These limits were moved here from Condition #6117, because they really apply to collected landfill gas rather than to just engines. The limits above were modified based on the maximum concentration limits that would ensure that the facility's toxic

VI. Permit Conditions

risk would remain below 10 in a million (as allowed by the Toxic Risk Management Policy for an operation equipped with TBACT). If these concentrations are ever exceeded, staff must conduct a new risk screening analysis to ensure that the facility will still comply with the District's Toxic Risk Management Policy. This analysis will be done during the evaluation of the Permit Application required above.

7. Total reduced sulfur 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 1300 ppmv (dry). (basis: Regulation 9-1-302)
18. All collected landfill gas shall be vented to properly operating abatement equipment including the Internal Combustion Engines (S-4, S-5, S-6, S-7, S-9, S-10, S-11, and S-12) and/or the Landfill Gas Flare (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 that is 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: Regulation 8-34-301)

Language was added to clarify what was meant by the prohibition on venting raw landfill gas to the atmosphere.

9. The A-2 Landfill Gas Flare shall be operated when one or more Internal Combustion Engines are down and whenever the flow of landfill gas exceeds the capacity of the Internal Combustion Engines (S-4, S-5, S-6, S-7, S-9, S-10, S-11, and S-12). (basis: Regulation 8-34-301)

This requirement appears in Condition #6117, but was repeated here because it is an operating requirement for the flare.

- ~~*510.~~ The combustion temperature of the A-2 Landfill Gas Flare shall be maintained at a minimum of 1400 degrees Fahrenheit and a residence time of 0.3 second, averaged over any 3-hour period. These operating conditions are subject to adjustment if source test data demonstrates significant NO_x or CO reduction at a different temperature and/or residence time, while still maintaining compliance with Regulation 8, Rule 34. (basis: Regulation 2-1-403 Toxic Risk Management Policy)

VI. Permit Conditions

The residence time requirement was deleted because it is not enforceable in the field. Residence time is a function of the flare design and maximum flow rate and was verified during evaluation for the Authority to Construct. The 3-hour averaging time was added to be consistent with the future federal reporting requirements for temperature excursions, see 40 CFR 60.758(c)(1)(i).

The main reason for setting the temperature at 1400 F is to ensure adequate destruction of toxic compounds. Therefore the TRMP was sited as the basis. After the initial compliance demonstration test, we will need to add a federally enforceable temperature limit that is 28 C below the average temperature during the test for compliance with 40 CFR 60.758(c)(1)(i).

Operators may request to modify permit conditions at any time. There is no need to state that here. However, in this case, the temperature limit will not be changed unless the operator can demonstrate compliance with the Toxic Risk Management Policy, 8-34, 40 CFR Part 60 Subpart WWW, and RACT for NOx, CO, SO2, and PM10 at a lower temperature.

611. A flow meter to measure gas flow into the A-2 Landfill Gas Flare shall be installed and maintained in good working condition. (basis: Regulation ~~2-1-403~~ 8-34-301)

This requirement was added to ensure compliance with Part 9. The basis for the condition was corrected accordingly.

712. The A-2 Landfill Gas Flare shall be equipped with both local and remote alarm systems, which shall be enabled whenever the flare is required to be operated under the requirements of Part 9 above. (basis: Regulation 8-34-301.41)

This condition is to verify compliance with the requirement to operate the abatement system at all times that gas is vented to it (now in 8-34-301.1) The applicant requested the addition of the last phrase to prevent unnecessary sounding of alarms.

813. The A-2 Landfill Gas Flare shall be equipped with a combustion temperature readout monitor and continuous recorder. ~~The temperature charts shall be retained for at least two years from the date of recording and shall be made available to the District staff for inspection.~~ (basis: Regulation ~~2-1-403~~ 8-34-507 and Toxic Risk Management Policy)

VI. Permit Conditions

This is the monitoring requirement necessary to verify compliance with Part 10. This requirement is now also repeated in 8-34-507. Continuous temperature records were previously required for flares per 8-34-501.3 and will now be combined in the record keeping condition (see Part 17).

14. In order to demonstrate compliance with Regulation 8, Rule 34, Section 301.3 and 40 CFR 60.752(b)(2)(iii)(B), the Permit Holder shall ensure that a District approved source test is conducted annually on the Landfill Gas Flare (A-2). As a minimum, the annual source test shall determine the following:
- a. landfill gas flow rate to the flare (dry basis);
 - b. concentrations (dry basis) of carbon dioxide (CO₂), nitrogen (N₂), oxygen (O₂), methane(CH₄), total non-methane organic compounds (NMOC), and total hydrocarbons (THC) in the landfill gas;
 - c. stack gas flow rate from the flare (dry basis);
 - d. concentrations (dry basis) of CH₄, NMOC, THC, and O₂ in the flare stack gas;
 - e. the CH₄, NMOC, and THC destruction efficiencies achieved by the flare;
and
 - f. the average combustion temperature in the flare during the test period.
- The first annual source test shall be conducted by no later than October 1, 2002 or no later than 12 months after the issue date of the MFR Permit, whichever date occurs first. Subsequent source tests shall be conducted no sooner than 9 months and no later than 12 months after the previous source test. The Source Test Section of the District shall be contacted to obtain their approval of the source test procedures at least 14 days in advance of each source test. They shall be notified of the scheduled test date at least 7 days in advance of each source test. The source test report shall be submitted to the Compliance and Enforcement Division within 45 days of the test date.
- [Basis: Regulations 8-34-301.3 and 8-34-412 and 40 CFR 60.752(b)(2)(iii)(B)]

This annual source test is necessary to demonstrate compliance with the current and new Regulation 8, Rule 34 NMOC limits for flares.

- *15. In order to demonstrate compliance with Part 6 above, the Permit Holder shall conduct a characterization of the landfill gas at least once per year. The landfill gas sample shall be drawn from the main landfill gas header. The landfill gas shall be analyzed for methane (CH₄), carbon dioxide (CO₂), nitrogen (N₂), oxygen (O₂), and the compounds listed in the most recent version of EPA's AP-42 Table 2.4-1. All concentrations shall be reported on a dry basis. The test report shall be

VI. Permit Conditions

submitted to the Compliance and Enforcement Division within 45 days of the test date. After conducting three annual landfill gas characterization tests, the Permit Holder may request to remove specific compounds from the list of compounds to be tested for if the compounds have not been detected, have no significant impact on the cancer risk determination for the site, and have no significant impact on the hazard index determination for the site. If the Permit Holder has excluded any NPOCs from the POC emission calculations for the site, then the Permit Holder shall continue to test for these NPOCs on an annual basis. (basis: Toxic Risk Management Policy)

This requirement was moved here from Condition #6117, because it really applies to collected landfill gas rather than to just engines. Current landfill emission calculations and risk screens are now based on AP-42 data (which was not available when the first risk screen was done for this site). AP-42 data indicates that there are several compounds (in addition to the Calderon compounds) in landfill gas that are present in sufficient quantity to have at least as great an impact on health as the Calderon compounds and the concentration limits specified in Part 6. The District is requesting testing of the landfill gas for all AP-42 listed compounds, in order to ensure that any future risk screens are based on adequate data.

16. In order to demonstrate compliance with Part 7 above, the Permit Holder shall measure the total sulfur content in collected landfill gas on a weekly basis using a draeger tube. The landfill gas sample shall be taken from the main landfill gas header. The Permit Holder shall follow the manufacturer's recommended procedures for using the draeger tube and interpreting the results. The Permit Holder shall conduct the first draeger tube test no later than 3 months after the issue date of the MFR Permit and weekly thereafter. After collecting three months of landfill gas sulfur content data, the Permit Holder may reduce the sulfur content testing frequency to a monthly basis, if all tests indicate compliance with the limit specified in Part 7 above. After collecting one year of sulfur content data, the Permit Holder may reduce the sulfur content testing frequency to a quarterly basis, if all tests indicate compliance with the limit specified in Part 7 above. (basis: 9-1-302)

~~1317. Records of the amount of waste received and the fill area in use shall be kept at the landfill and retained for two years. Records shall be available to the District staff upon request. In order to demonstrate compliance with the above conditions, the Permit Holder shall maintain the following records in a District approved logbook.~~

a. Record the total amount of municipal solid waste received at S-1 on a daily basis.

VI. Permit Conditions

- 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.
- 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 4.a. 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. Record the operating times for the A-2 Landfill Gas Flare on a daily basis.
- j. Record the total amount of landfill gas vented to A-2 on a daily basis.
- k. Summarize the amount of landfill gas vented to A-2 on a monthly basis.
- l. Maintain continuous records of the combustion temperature achieved at A-2 during all hours of operation.
- m. Maintain records of all test dates and test results performed to maintain compliance these permit conditions.
- n. For each dust suppressant application, maintain records of the date the dust suppressant was applied, the areas that it was applied to, the type of dust suppressant used, and the amount of dust suppressant that was applied.
- o. Maintain daily records of the water application frequency for construction areas, unpaved roads, and dirt and rock stockpiles.
- p. Monitor the wind speed on a daily basis and record the date for any days when the wind speed exceeds 15 mph.

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. These record keeping requirements do not replace the record keeping requirements contained in any applicable rules or regulations.

VI. Permit Conditions

(basis: Cumulative Increase and Regulations 6-301, 6-305, 8-34-304, 8-34-501.3, and 8-34-501.8)

The record keeping requirements from old parts 8, 9, and 13 were combined into this new condition. More detailed waste records and maps are now required to verify compliance with 8-34-304. Updating the map semi-annually was specified to coincide with the semi-annual compliance report that is required for all Title V facilities.

- *18. The Permit Holder shall not accept any contaminated soil at this facility unless the Permit Holder can demonstrate that the soil meets one of the following requirements.
- a. The soil has an organic content of no more than 50 ppm by weight (ppmw), as defined in Regulation 8, Rule 40; or
 - b. The soil is solely contaminated by petroleum hydrocarbons and contains no more than 50 ppmw of Total Petroleum Hydrocarbons (TPH) measured as gasoline, no more than 50 ppmw of TPH as diesel, and no more than 50 ppmw of TPH as motor oil; or
 - c. The soil is solely contaminated with compounds that have an initial boiling point of 302 °F or higher.

In order to demonstrate compliance with this condition, the Permit Holder shall maintain records of test data for each soil lot accepted at the facility. 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 8-40-301)

This condition was added to ensure compliance with Regulation 8-40-301.

19. The Permit Holder shall limit the quantity of contaminated soil disposed of per day so that no more than 15 pounds of total carbon could be emitted to the atmosphere per day. 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 contaminated soil disposed of in the landfill and used as cover material in the landfill. This total amount (in units of pounds per day) is Q in the equation in Part c. below.
 - b. Record on a daily basis the VOC content of all soils disposed of or used as cover material. This VOC Content (C in the equation below) should be expressed as parts per million by weight as total carbon (or C₁).
 - c. Calculate and record on a daily basis the VOC Emission Rate (E) using the following equation:

VI. Permit Conditions

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

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)

This condition was added to ensure compliance with the 8-2-301 limit on organic compound emissions.

*20. In accordance with Docket No. 2656, the Permit Holder shall submit permit applications to expand the landfill gas collection system at least every six months. In no event shall any fill area be uncontrolled in excess of twelve months. The Permit Holder shall keep records to demonstrate compliance with this condition. The records shall be retained for two years and shall be available to the District staff upon request.

(basis: Docket No. 2656, Conditional Order for Abatement)

Although Regulation 8-34-304 now specifies the dates by which collection systems must be expended into unfilled areas, the requirements specified in the Conditional Order for Abatement issued under Docket No. 2656 are more stringent than Regulation 8-34-304. These abatement order requirements must therefore be reflected in the MFR permit. Should Sonoma County ever receive approval from the District's Hearing Board to end this Conditional Order for Abatement, these permit conditions could be removed.

VI. Permit Conditions

Condition # 6117

For S-4, S-5, S-6, S-7, S-9, S-10, S-11, S-12 Lean Burn Internal Combustion Engines and Generator Sets

1. All collected landfill gas shall be vented to properly operating abatement equipment including the Internal Combustion Engines (S-4, S-5, S-6, S-7, S-9, S-10, S-11, and S-12) and/or the Landfill Gas Flare (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 control system installation, maintenance, or repair that is 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: Regulation 8-34-301)

Language was added to clarify what was meant by the prohibition on venting raw landfill gas to the atmosphere.

2. The ~~flare, A-1, A-2~~ Landfill Gas Flare shall be operated when one or more engines of the Internal Combustion Engines (S-4, S-5, S-6, S-7, S-9, S-10, S-11, and S-12) are down and whenever the flow of landfill gas exceeds the capacity of these engines-generators S-1 through S-4 and S-9 through S-12. Gas flow records shall be maintained to show compliance with this condition. An automatically controlled landfill gas valve shall be installed, and maintained to insure that landfill gas is immediately made available for flaring to the flare when one or more engines are down. (basis: Regulation 8-34-301)

Equipment names and numbers were corrected. Condition basis was added. The monitoring and record keeping requirements will be listed in separate parts below.

3. The ~~engines S-4 through S-7, and S-9 through S-12~~ Internal Combustion Engines (S-4, S-5, S-6, S-7, S-9, S-10, S-11, and S-12) shall be fired exclusively on landfill gas. If required, natural gas can be used as a supplemental fuel, but it shall not reduce or replace landfill gas available for use in these engine-generators. Natural gas shall not be used as supplemental fuel when ~~flare~~ the A-2 Flare is operating concurrently with these engine-generators. (basis: Offsets and Cumulative Increase)

Equipment names and numbers were corrected. Condition basis was added.

VI. Permit Conditions

4. ~~The total combined output of the engines, S-4 through S-7, and S-9 through S-12 is limited to 79.751E+6 hp-hr per consecutive 365-day period 12-month period. Daily records shall be maintained to show compliance with this condition.~~

The above limit (79.751E6 hp-hr per year) is the maximum physical operating rate for the eight engines combined:

$$(8 \text{ engines}) * (1138 \text{ hp}) * (24 \text{ hours/day}) * (365 \text{ days/year}) = 79.51 \text{ E6 hp-hrs/year}$$

This limit cannot be exceeded and serves no purpose.

54. District approved flowmeters, to measure landfill gas flow into the engines, shall be installed prior to any operation and maintained in good working condition. An automatically controlled landfill gas valve shall be installed, and maintained to insure that landfill gas is immediately made available for flaring to the A-2 Landfill Gas Flare when one or more of the engines are down. (basis: 8-34-301)

The requirement for an automatic valve to divert landfill gas from an engine to the flare was moved from Part 2 to Part 5.

65. Nitrogen Oxide (NO_x) emissions, calculated as NO₂, from each Internal Combustion Engine S-4 through S-7, and S-9 through S-12 (S-4, S-5, S-6, S-7, S-9, S-10, S-11, and S-12) shall not exceed 1.0 gram/hp-hr 78 ppmv, corrected to 15% O₂, dry basis. (basis: BACT and Offsets)

The grams/hp-hr limit is difficult to verify by source testing. The District recommends converting all such limits into concentration limits. The concentration limit suggested above was calculated by assuming 55% methane, hhv=557 BTU/scf, engine eff=35%. The Permit Holder can supply site specific LFG data and engine efficiency to justify an alternative limit.

76. Carbon Monoxide (CO) emissions from each Internal Combustion Engine S-4 through S-7, and S-9 through S-12 (S-4, S-5, S-6, S-7, S-9, S-10, S-11, and S-12) shall not exceed 2.2 grams/hp-hr 283 ppmv, corrected to 15% O₂, dry basis. (basis: BACT)

The grams/hp-hr limit is difficult to verify by source testing. The District recommends converting all such limits into concentration limits. The concentration limit suggested above was calculated by assuming 55% methane, hhv=557 BTU/scf, engine eff=35%.

VI. Permit Conditions

87. Precursor Organic Compound (POC) emissions from each Internal Combustion Engine S-4 through S-7, and S-9 through S-12 (S-4, S-5, S-6, S-7, S-9, S-10, S-11, and S-12) shall not exceed 0.563 gram/hp-hr 126 ppmv, expressed as methane, corrected to 15% O₂, dry basis. When demonstrating compliance with this condition, the concentration of total non-methane organic compounds (NMOC) measured in the engine exhaust shall be assumed to be 100% POC, unless the Permit Holder concurrently tests the engine exhaust for one or more non-precursor organic compounds (NPOC). If the engine exhaust is concurrently tested for one or more NPOCs, then the following equation shall be used to determine the concentration of POC (C_{POC}) that is subject to this requirement:

$$C_{\text{POC}} (\text{as CH}_4) = C_{\text{NMOC}} (\text{as CH}_4) - C_{\text{NPOC}} (\text{as CH}_4)$$

(basis: BACT and Offsets)

The grams/hp-hr limit is difficult to verify by source testing. The District recommends converting all such limits into concentration limits. The concentration limit suggested above was calculated by assuming 55% methane, hhv=557 BTU/scf, engine eff=35%. Note that the new 8-34 limit (effective 7/1/02) is more stringent than this BACT limit. The new 8-34 limit is 120 ppmv as methane at 3% O₂, which is equivalent to 40 ppmv as methane at 15% O₂ (or 32% of the current BACT limit).

98. A source test shall be performed on any one of the engines S-4 through S-7, and S-9 through S-12 within 60 days of start up to demonstrate compliance with conditions 6, 7, and 8. Such source test shall be performed annually thereafter. In order to demonstrate compliance with Parts #5, #6, and #7 above, Regulation 8, Rule 34, Sections 114 and 301.4, Regulation 9, Rule 8, Sections 302.1 and 302.3, and 40 CFR 60 .752(b)(2)(iii)(B), the Permit Holder shall ensure that a District approved source test is conducted annually on each Internal Combustion Engine (S-4, S-5, S-6, S-7, S-9, S-10, S-11, and S-12). As a minimum, the annual source tests shall determine the following:
- landfill gas flow rate to each engine (dry basis);
 - concentrations (dry basis) of carbon dioxide (CO₂), nitrogen (N₂), oxygen (O₂), CH₄, NMOC, and total hydrocarbons (THC) in the landfill gas;
 - exhaust gas flow rate from each engine (dry basis);
 - concentrations (dry basis) of NO_x, CO, CH₄, NMOC, THC, and O₂ in the exhaust gas from each engine;
 - the CH₄, NMOC, and THC destruction efficiencies achieved by each engine; and
 - the combustion temperature of each engine during the test period.

VI. Permit Conditions

The first annual source test for each engine shall be conducted by no later than October 1, 2002 or no later than 12 months after the issue date of the MFR Permit, whichever date occurs first. Subsequent source tests for each engine shall be conducted no sooner than 9 months and no later than 12 months after the previous source test. The Source Test Section of the District shall be contacted to obtain their approval of the source test procedures at least 14 days in advance of each source test. They shall be notified of the scheduled test date at least 7 days in advance of each source test. The source test report shall be submitted to the ~~Source Test Section for their approval, with a copy being sent to the Permit Services Division~~ Compliance and Enforcement Division within 45 days of the test date.

[basis: BACT, Offsets, Regulations 8-34-114, 8-34-301.4, 8-34-412, 9-8-302.1, 9-8-302.3, and 40 CFR 60.752(b)(2)(iii)(B)]

Language was added to include an annual source test on each engine to verify compliance with the existing 8-34 limits, the new 8-34 limits, and the new EG limits. The additional source testing is required pursuant to Title V enhanced monitoring requirements. The statement “the Permit Holder shall ensure that an annual source test is conducted ...” means that District source tests may be used for compliance with this condition (if all required parameters are measured). If no District test was conducted, then it is the Permit Holder’s responsibility to hire someone to test each engine.

10. ~~A characterization of the landfill gas shall be performed concurrently with each source test. The landfill gas sample shall be drawn from the main landfill gas header. The landfill gas characterization shall be performed in accordance with current California Air Resources Board testing guidelines for Calderon specified air contaminants, total chlorinated compounds, methane, POC, CO₂, O₂, and N₂. The results of this characterization shall be submitted to the District within 60 days of start up. Thereafter, a landfill characterization for the Calderon specified air contaminants shall be performed annually, and the data shall be submitted to the District within 30 days of the testing.~~

This part was moved to Condition # 4044, Part 15, because it really applies to the landfill as a whole rather than just to the engines.

11. ~~Any landfill gas characterization from the engine header which indicates the presence of toxic compounds in excess of the following unabated concentrations and presence of any other toxic compounds not listed below shall require the permit~~

VI. Permit Conditions

~~holder to submit to the District for review a risk analysis. The risk analysis shall be submitted to the District within 30 days of the results of the characterization and be referenced to this application number.~~

~~Unabated concentrations:~~

~~Benzene _____ = _____ 0.8 ppmv~~

~~Trichloroethylene _____ = _____ 1.2 ppmv~~

~~Perchloroethylene _____ = _____ 2.1 ppmv~~

~~Methylene Chloride _____ = _____ 2.0 ppmv~~

~~Toluene _____ = _____ 17 ppmv~~

~~Vinyl Chloride _____ = _____ 0.76 ppmv~~

~~Methyl Chloroform _____ = _____ 0.2 ppmv~~

This part was moved to Condition # 4044, Part 6, because it really applies to the landfill as a whole rather than just to the engines.

~~129. Daily records shall be maintained, in a District approved logbook, of the amount of landfill and natural gas burned in the engines. The logbook shall be kept on site for at least two years from the date the data is recorded, and shall be made available to the District staff for inspection. The Permit Holder shall maintain the following records in a District approved logbook:~~

~~a. _____ On a daily basis, record the operating times for each engine.~~

~~b. _____ On a daily basis, calculate the amount of landfill gas burned in each engine.~~

~~c. _____ On any day that natural gas is burned in an engine, record the amount of natural gas burned in each engine.~~

~~d. _____ On a monthly basis, summarize all daily records for each engine.~~

~~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. These record keeping requirements do not replace the record keeping requirements contained in any applicable rules or regulations.~~

~~(basis: Cumulative Increase and Offsets)~~

More detail was added to the record keeping requirements to ensure that sufficient data would be collected to assure compliance with applicable requirements.

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 indicates whether periodic (P) or continuous (C) monitoring is required. For periodic monitoring, the frequency of the monitoring has also been shown, either annual (A), quarterly (Q), monthly (M), weekly (W), daily (D), or on an event basis (E). No monitoring (N) has been required if the current applicable rule or regulation does not require monitoring, and the operation is unlikely to deviate from the applicable emission limit based upon the nature of the operation.

Table VII-A
Applicable Limits and Compliance Monitoring Requirements
S-1, Landfill with Gas Collection System

Type of limit	Emission Limit Citation	FE Y/N	Future Effective Date	Emission Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
Collection System Installation Dates	BAAQMD 8-34-304.1	N		For Inactive/Closed Areas: collection system components must be installed and operating by 2 years + 60 days after initial waste placement	BAAQMD 8-34-501.7 and 501.8 and BAAQMD Condition #4044, Parts 17.d., f., g., h.	P/E	Records
Collection System Installation Dates	BAAQMD 8-34-304.2 and BAAQMD Condition #4044, Part 4.b.	N		For Active Areas: Collection system components must be installed and operating by 5 years + 60 days after initial waste placement	BAAQMD 8-34-501.7 and 501.8 and BAAQMD Condition #4044, Parts 17.d., f., g., h.	P/E	Records

VII. Applicable Limits and Compliance Monitoring Requirements

Table VII-A
Applicable Limits and Compliance Monitoring Requirements
S-1, Landfill with Gas Collection System

Type of limit	Emission Limit Citation	FE Y/N	Future Effective Date	Emission Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
Collection System Installation Dates	BAAQMD 8-34-304.3 and BAAQMD Condition #4044, Part 4.b.	N		For Any Uncontrolled Areas or Cells: collection system components must be installed and operating within 60 days after the uncontrolled area or cell accumulates 1,000,000 tons of decomposable waste	BAAQMD 8-34-501.7 and 501.8 and BAAQMD Condition #4044, Parts 17.e., f., g., h.	P/E	Records
Collection System Installation Dates	40 CFR 60.753 (a)(2) and 60.755 (b)(2)	Y	10/6/02	For Inactive/Closed Areas: collection system components must be installed and operating by 2 years + 60 days after initial waste placement	40 CFR 60.758(a), (d)(1) and (d)(2), and 60.759(a)(3) and BAAQMD Condition #4044, Parts 17.d.,f.,g.	P/E	Records
Collection System Installation Dates	40 CFR 60.753 (a)(1) and 60.755 (b)(1)	Y	10/6/02	For Active Areas: Collection system components must be installed and operating by 5 years + 60 days after initial waste placement	40 CFR 60.758(a), (d)(1) and (d)(2) and BAAQMD Condition #4044, Parts 17.d.,f.,g.	P/E	Records
Collection System Installation Dates	BAAQMD Permit Condition #4044, Part 20	N		No filled area may be uncontrolled in excess of 12 months	BAAQMD Permit Condition #4044, Part 20	P/E	Records

VII. Applicable Limits and Compliance Monitoring Requirements

Table VII-A
Applicable Limits and Compliance Monitoring Requirements
S-1, Landfill with Gas Collection System

Type of limit	Emission Limit Citation	FE Y/N	Future Effective Date	Emission Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
Gas Flow	BAAQMD 8-34-301 and 301.1; BAAQMD Condition #4044, Parts 4.a., 5, 8, and 9; BAAQMD Condition #6117, Parts 1 & 2	Y		Landfill gas collection system shall operate continuously and all collected gases shall be vented to a properly operating control system	BAAQMD Condition #4044, Part 11 and Condition #6117, Part 5	C	Gas Flow Meter
Gas Flow	BAAQMD 8-34-301 and 301.1; BAAQMD Condition #4044, Parts 4.a., 5, 8, and 9; BAAQMD Condition #6117, Parts 1 & 2	Y		Landfill gas collection system shall operate continuously and all collected gases shall be vented to a properly operating control system	BAAQMD 8-34-501.10 and 508 (effective 7/1/02)	C	Gas Flow Meter and Recorder (every 15 minutes); effective 7/1/02
Gas Flow	SIP 8-34-301 and 301.4	Y		Landfill gas collection system shall operate continuously and all collected gases shall be vented to a properly operating control system	SIP 8-34-501.1	P/D	Operating Records

VII. Applicable Limits and Compliance Monitoring Requirements

Table VII-A
Applicable Limits and Compliance Monitoring Requirements
S-1, Landfill with Gas Collection System

Type of limit	Emission Limit Citation	FE Y/N	Future Effective Date	Emission Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
Gas Flow	40 CFR 60.753(a) and (e)	Y	10/6/02	Operate a Collection System in each area or cell and vent all collected gases to a properly operating control system	40 CFR 60.756(b)(2) (i or ii) and 60.758(c)(2)	C or P/M	Gas Flow Meter and Recorder (every 15 minutes) or Monthly Inspection of Bypass Valve and Lock and Records
Collection and Control Systems Shutdown Time	BAAQMD 8-34-113.2	N		240 hours/year nor 5 consecutive days	BAAQMD 8-34-501.1 and BAAQMD Condition #4044, Part 17.i.	P/D	Operating Records
Collection and Control Systems Shutdown Time	SIP 8-34-113.2	Y ¹		12 hours/calendar month	SIP 8-34-501.1	P/D	Operating Records
Collection System Startup Shutdown or Malfunction	40 CFR 60.755(e)	Y	10/6/02	5 days per event	40 CFR 60.7(b), 60.757(f)(2) and (f)(4)	P/D	Operating Records (all occurrences and duration of each)

VII. Applicable Limits and Compliance Monitoring Requirements

Table VII-A
Applicable Limits and Compliance Monitoring Requirements
S-1, Landfill with Gas Collection System

Type of limit	Emission Limit Citation	FE Y/N	Future Effective Date	Emission Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
Periods of Inoperation for Parametric Monitors	BAAQMD 1-523.2	Y	7/1/02	15 consecutive days/incident and 30 calendar days/12 month period	BAAQMD 1-523.4	P/D	Operating Records for All Parametric Monitors
Continuous Monitors	40 CFR 60.13(e)	Y		Requires Continuous Operation except for breakdowns, repairs, calibration, and required span adjustments	40 CFR 60.7(b)	P/D	Operating Records for All Continuous Monitors
Wellhead Pressure	BAAQMD 8-34-305.1	N	7/1/02	< 0 psig	BAAQMD 8-34-414, 501.9 and 505.1	P/M	Monthly Inspection and Records
Wellhead Pressure	40 CFR 60.753(b)	Y	10/6/02	< 0 psig	40 CFR 60.755(a)(3), 60.756(a)(1), and 60.758(c) and (e)	P/M	Monthly Inspection and Records
Temperature of Gas at Wellhead	BAAQMD 8-34-305.2	N	7/1/02	< 55 °C	BAAQMD 8-34-414, 501.9 and 505.2	P/M	Monthly Inspection and Records
Temperature of Gas at Wellhead	40 CFR 60.753(c)	Y	10/6/02	< 55 °C	40 CFR 60.755(a)(5), 60.756(a)(3), and 60.758(c) and (e)	P/M	Monthly Inspection and Records

VII. Applicable Limits and Compliance Monitoring Requirements

Table VII-A
Applicable Limits and Compliance Monitoring Requirements
S-1, Landfill with Gas Collection System

Type of limit	Emission Limit Citation	FE Y/N	Future Effective Date	Emission Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
Gas Concentrations at Wellhead	BAAQMD 8-34-305.3 or 305.4	N	7/1/02	N ₂ < 20% OR O ₂ < 5%	BAAQMD 8-34-414, 501.9 and 505.3 or 505.4	P/M	Monthly Inspection and Records
Gas Concentrations at Wellhead	40 CFR 60.753(c)	Y	10/6/02	N ₂ < 20% OR O ₂ < 5%	40 CFR 60.755(a)(5), 60.756(a)(2), and 60.758(c) and (e)	P/M	Monthly Inspection and Records
Well Shutdown Limits	BAAQMD 8-34-116.2	N		No more than 5 wells at a time or 10% of total collection system, whichever is less	BAAQMD 8-34-116.5 and 501.1	P/D	Records
Well Shutdown Limits	BAAQMD 8-34-116.3	N		24 hours per well	BAAQMD 8-34-116.5 and 501.1	P/D	Records
Well Shutdown Limits	BAAQMD 8-34-117.4	N		No more than 5 wells at a time or 10% of total collection system, whichever is less	BAAQMD 8-34-117.6 and 501.1	P/D	Records
Well Shutdown Limits	BAAQMD 8-34-117.5	N		24 hours per well	BAAQMD 8-34-117.6 and 501.1	P/D	Records

VII. Applicable Limits and Compliance Monitoring Requirements

Table VII-A
Applicable Limits and Compliance Monitoring Requirements
S-1, Landfill with Gas Collection System

Type of limit	Emission Limit Citation	FE Y/N	Future Effective Date	Emission Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
TOC (Total Organic Compounds Plus Methane)	BAAQMD 8-34-301.2	N		1000 ppmv as methane (component leak limit)	BAAQMD 8-34-501.6 and 503	P/Q	Quarterly Inspection of collection and control system components with OVA and Records
TOC	SIP 8-34-301.1	Y		1000 ppmv as methane (component leak limit)	SIP 8-34-503	P/Q	Quarterly Inspection with OVA
TOC	BAAQMD 8-34-303a	Y	Expires 7/1/02	1000 ppmv as methane at 3 inches above surface		N	
TOC	BAAQMD 8-34-303b	N	7/1/02	500 ppmv as methane at 2 inches above surface	BAAQMD 8-34-415, 416, 501.6, 506 and 510	P/M, Q, and E	Monthly Visual Inspection of Cover, Quarterly Inspection with OVA of Surface, Various Reinspection Times for Leaking Areas, and Records
TOC	SIP 8-34-303	Y ¹		1000 ppmv as methane at 3 inches above surface		N	

VII. Applicable Limits and Compliance Monitoring Requirements

Table VII-A
Applicable Limits and Compliance Monitoring Requirements
S-1, Landfill with Gas Collection System

Type of limit	Emission Limit Citation	FE Y/N	Future Effective Date	Emission Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
TOC	40 CFR 60.753(d)	Y	10/6/02	<500 ppmv as methane at 5-10 cm from surface	40 CFR 60.755(c)(1), (4) and (5), 60.756(f), and 60.758(c) and (e)	P/M, Q and E	Monthly Visual Inspection of Cover, Quarterly Inspection with OVA of Surface, Various Reinspection Times for Leaking Areas, and Records
Total Carbon	BAAQMD 8-2-301	Y		15 pounds/day or 300 ppm, dry basis only for aeration of or use as cover soil of soil containing ≤ 50 ppmw of volatile organic compounds	BAAQMD Condition # 4044, Part 19, subparts a.-c.	P/E	Records
Amount of Contaminated Soil Aerated or Used as Cover	BAAQMD 8-40-116.1	N		1 cubic yard per project	BAAQMD Condition # 4044, Part 18	P/E	Records

VII. Applicable Limits and Compliance Monitoring Requirements

Table VII-A
Applicable Limits and Compliance Monitoring Requirements
S-1, Landfill with Gas Collection System

Type of limit	Emission Limit Citation	FE Y/N	Future Effective Date	Emission Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
Amount of Contaminated Soil Aerated or Used as Cover	BAAQMD 8-40-116.2	N		8 cubic yards per project, provided organic content \leq 500 ppmw and limited to 1 exempt project per 3 month period	BAAQMD 8-40-116.2 and BAAQMD Condition # 4044, Part 18	P/E	Records
Total Aeration Project Emissions	BAAQMD 8-40-118	N		150 pounds per project and toxic air contaminant emissions per year <BAAQMD Table 2-1-316 limits	BAAQMD Condition # 4044, Part 18	P/E	Records
Amount of Contaminated Soil Aerated or Used as Cover	BAAQMD 8-40-301	N	6/1/00	Prohibited for Soil with Organic Content >50 ppmw unless exempt per BAAQMD 8-40-116 or 118	BAAQMD Condition # 4044, Part 18	P/E	Records
Amount of Contaminated Soil Aerated or Used as Cover	SIP 8-40-301	Y ¹		Organic Content Amount ppmw yd ³ /day 50-99 600 100-499 120 500-999 60 1000-1999 30 2000-2999 15 3000-3999 10 4000-4999 8 5000+ 0.1	BAAQMD Condition # 4044, Part 18	P/E	Records

VII. Applicable Limits and Compliance Monitoring Requirements

Table VII-A
Applicable Limits and Compliance Monitoring Requirements
S-1, Landfill with Gas Collection System

Type of limit	Emission Limit Citation	FE Y/N	Future Effective Date	Emission Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
TSP	BAAQMD 6-301	Y		Ringelmann No. 1	BAAQMD Permit Condition # 4044, Part 17.n.-p.	P/E	Records of Dust Suppressant and Water Application
TSP	BAAQMD Condition #4044, Part 2	Y		Ringelmann No. 0.5	BAAQMD Permit Condition # 4044, Part 17.n.-p.	P/E	Records of Dust Suppressant and Water Application
Amount of Waste Accepted	BAAQMD Permit Condition #4044, Part 1	Y		≤ 2500 tons/day	BAAQMD Permit Condition #4044, Part #17.a., b., c.	P/D	Records
H ₂ S	BAAQMD 9-2-301	N		Property Line ground level limits ≤ 0.06 ppm Averaged over 3 minutes and ≤ 0.03 ppm Averaged over 60 minutes		N	
Lead	BAAQMD 11-1-302	Y		Ground level concentration ≤ 1.0 µg/m ³ averaged over 24 hours		N	
Beryllium	BAAQMD 11-3-301 or 303	N		10 grams / 24 hours or 0.01 µg/m ³ averaged over 30 days		N	

VII. Applicable Limits and Compliance Monitoring Requirements

Table VII-A
Applicable Limits and Compliance Monitoring Requirements
S-1, Landfill with Gas Collection System

Type of limit	Emission Limit Citation	FE Y/N	Future Effective Date	Emission Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
Serpentine Material	BAAQMD 11-14-301	N		Surfacing Material \leq 5% asbestos	BAAQMD 11-14-501	P/D	Records of Testing and Receipts
Toxic Air Contaminants in Collected Landfill Gas	BAAQMD Condition #4044, Part 6	N		Benzene \leq 2.5 ppmv Trichloroethylene \leq 3.0 ppmv Perchloroethylene \leq 3.0 ppmv MethyleneChloride \leq 20.0ppmv Vinyl Chloride \leq 2.5 ppmv	BAAQMD Condition #4044, Part 15	P/A	Annual Source Test

- 1 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.

Table VII-B
Applicable Limits and Compliance Monitoring Requirements
S-4, S-5, S-6, S-7, Lean Burn Internal Combustion Engines and Generator Sets

Type of limit	Emission Limit Citation	FE Y/N	Future Effective Date	Emission Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
TSP	BAAQMD 6-301	Y		Ringelmann No. 1		N	
TSP	BAAQMD 6-310	Y		0.15 grains/dscf		N	

VII. Applicable Limits and Compliance Monitoring Requirements

Table VII-B
Applicable Limits and Compliance Monitoring Requirements
S-4, S-5, S-6, S-7, Lean Burn Internal Combustion Engines and Generator Sets

Type of limit	Emission Limit Citation	FE Y/N	Future Effective Date	Emission Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
TOC (Total Organic Compounds Plus Methane)	BAAQMD 8-34-301.2	N		1000 ppmv as methane (component leak limit)	BAAQMD 8-34-501.6 and 8-34-503	P/Q	Quarterly Inspection and Records
TOC	SIP 8-34-301.1	Y		1000 ppmv as methane (component leak limit)	SIP 8-34-503	P/Q	Quarterly Inspection
TOC	BAAQMD 8-34-114	Y	Expires 7/1/02	90% removal by weight	BAAQMD Condition #6117, Part 8	P/A	Annual Source Test
TOC	SIP 8-34-114	Y ¹		90% removal by weight	BAAQMD Condition #6117, Part 8	P/A	Annual Source Test
Non-Methane Organic Compounds (NMOC)	BAAQMD 8-34-301.4b	N	7/1/02	98% removal by weight OR < 120 ppmv dry @ 3% O ₂ , expressed as methane	BAAQMD 8-34-412 and 8-34-501.4 and BAAQMD Condition #6117, Part 8	P/A	Initial and Annual Source Tests and Records
NMOC	40 CFR 60.752(b) (2)(iii)(B)	Y	10/6/02	98% removal by weight OR < 20 ppmv dry @ 3% O ₂ , expressed as hexane	40 CFR 60.8 and 60.752(b) (2)(iii)(B) and 60.758(b)(2)	P/I	Initial Source Test and Records
POC	BAAQMD Condition #6117, Part 7	Y		≤ 126 ppmv (dry) expressed as CH ₄ and corrected to 15% O ₂	BAAQMD Condition #6117, Part 8	P/A	Annual Source Test

VII. Applicable Limits and Compliance Monitoring Requirements

Table VII-B
Applicable Limits and Compliance Monitoring Requirements
S-4, S-5, S-6, S-7, Lean Burn Internal Combustion Engines and Generator Sets

Type of limit	Emission Limit Citation	FE Y/N	Future Effective Date	Emission Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
SO ₂	BAAQMD 9-1-301	Y		Property Line Ground Level Limits: ≤ 0.5 ppm for 3 minutes, ≤ 0.25 ppm for 60 minutes & ≤ 0.05 ppm for 24 hours		N	
SO ₂	BAAQMD 9-1-302	Y		300 ppm (dry)	BAAQMD Condition #4044, Part 16, 17.m.	P/W, M, or Q (Monthly if 3 months data < 1300 ppm, Quarterly if 1 year of data < 1300 ppm)	Sulfur Analysis of landfill gas only
H ₂ S	BAAQMD 9-2-301	N		Property Line ground level limits ≤ 0.06 ppm Averaged over 3 minutes and ≤ 0.03 ppm Averaged over 60 minutes		N	
Total Sulfur Content in Landfill Gas	BAAQMD Condition #4044, Part 7	Y		≤ 1300 ppmv	BAAQMD Permit Condition #4044, Part 16, 17.m.	P/W, M, or Q (Monthly if 3 months data < 1300 ppm, Quarterly if 1 year of data < 1300 ppm)	Sulfur Analysis of landfill gas only
NO _x	BAAQMD 9-8-301.2	Y		Fossil Fuel Gas, Lean-Burn 140 ppmv dry @ 15% O ₂		N	

VII. Applicable Limits and Compliance Monitoring Requirements

Table VII-B
Applicable Limits and Compliance Monitoring Requirements
S-4, S-5, S-6, S-7, Lean Burn Internal Combustion Engines and Generator Sets

Type of limit	Emission Limit Citation	FE Y/N	Future Effective Date	Emission Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
NO _x	BAAQMD 9-8-302.1	Y		Waste Fuel Gas, Lean-Burn 140 ppmv dry @ 15% O ₂	BAAQMD Condition #6117, Part 8	P/A	Annual Source Test
NO _x	BAAQMD Condition #6117, Part 5	Y		≤ 78 ppmv (dry) expressed as NO ₂ corrected to 15% O ₂	BAAQMD Condition #6117, Part 8	P/A	Annual Source Test
CO	BAAQMD 9-8-301.3	Y		Fossil Fuel Gas: 2000 ppmv dry @ 15% O ₂		N	
CO	BAAQMD 9-8-302.3	Y		Waste Fuel Gas: 2000 ppmv dry @ 15% O ₂	BAAQMD Condition #6117, Part 8	P/A	Annual Source Test
CO	BAAQMD Condition #6117, Part 6	Y		≤ 283 ppmv (dry) corrected to 15% O ₂	BAAQMD Condition #6117, Part 8	P/A	Annual Source Test
Emission Control System Shutdown Time	BAAQMD 8-34-113.2	N		240 hours/year	BAAQMD 8-34-501.2 and BAAQMD Condition #6117, Part 9.a.	P/D	Records
Emission Control System Shutdown Time	SIP 8-34-113.2	Y ¹		12 hours/calendar month	SIP 8-34-501.2	P/D	Records

VII. Applicable Limits and Compliance Monitoring Requirements

Table VII-B
Applicable Limits and Compliance Monitoring Requirements
S-4, S-5, S-6, S-7, Lean Burn Internal Combustion Engines and Generator Sets

Type of limit	Emission Limit Citation	FE Y/N	Future Effective Date	Emission Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
Emission Control System Startup Shutdown or Malfunction	40 CFR 60.755(e)	Y	10/6/02	≤ 1 hour per event	40 CFR 60.7(b), 60.757(f)(2) and (f)(3), and 60.758(e)	P/D	Records of occurrence and duration
Temperature of Combustion Zone					BAAQMD 8-34-501.3 and 8-34-507 (effective 7/1/02)	C	Temperature sensor and continuous recorder (effective 7/1/02)
Combustion Temperature	40 CFR 60.758(c)(1)(i)	Y	4/4/03	3-Hour Average Temperature No Less Than 28 °C below Average Temperature Recorded During Most Recent Complying Performance Test	60 CFR 60.756(b)(1) and 60.758(c)	C	Temperature sensor and continuous recorder
Natural Gas Usage	BAAQMD Condition #6117, Part 3	Y		Prohibited when flare is operating and unless it is needed as supplemental fuel	BAAQMD Condition #6117, Part 9.a.-c.	P/D	Records
Gas Flow	BAAQMD 8-34-301 and 301.1; BAAQMD Condition #6117, Parts 1 & 2	Y		Vent all collected gases to a properly operating control system and operate control system continuously.	BAAQMD Condition #6117, Part 4	C	Gas Flow Meter (per engine)

VII. Applicable Limits and Compliance Monitoring Requirements

**Table VII-B
 Applicable Limits and Compliance Monitoring Requirements
 S-4, S-5, S-6, S-7, Lean Burn Internal Combustion Engines and Generator Sets**

Type of limit	Emission Limit Citation	FE Y/N	Future Effective Date	Emission Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
Gas Flow	BAAQMD 8-34-301 and 301.1; BAAQMD Condition #6117, Parts 1 & 2	Y		Vent all collected gases to a properly operating control system and operate control system continuously.	BAAQMD 8-34-501.10 and 508 (effective 7/1/02)	C	Gas Flow Meter and Recorder (every 15 minutes); effective 7/1/02
Gas Flow	SIP 8-34-301 and 301.4	Y		Vent all collected gases to a properly operating control system and operate control system continuously.	SIP 8-34-501.1	P/D	Operating Records
Gas Flow	40 CFR 60.753(a) and (e)	Y	10/6/02	Vent all collected gases to a properly operating control system and operate control system at all times when gas is vented to it	40 CFR 60.756(b)(2) (i or ii) and 60.758(c)(2)	C or P/M	Gas Flow Meter and Recorder (every 15 minutes) or Monthly Inspection of Bypass Valve and Lock and Records
Periods of Inoperation for Parametric Monitors	BAAQMD 1-523.2	Y	7/1/02	15 consecutive days/incident and 30 calendar days/12 month period	BAAQMD 1-523.4	P/D	Records of occurrence and duration

VII. Applicable Limits and Compliance Monitoring Requirements

Table VII-B
Applicable Limits and Compliance Monitoring Requirements
S-4, S-5, S-6, S-7, Lean Burn Internal Combustion Engines and Generator Sets

Type of limit	Emission Limit Citation	FE Y/N	Future Effective Date	Emission Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
Continuous Monitors	40 CFR 60.13(e)	Y		Requires Continuous Operation except for breakdowns, repairs, calibration, and required span adjustments	40 CFR 60.7(b)	P/D	Records of occurrence and duration

- 1 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-9, S-10, S-11, S-12, Lean Burn Internal Combustion Engines and Generator Sets

Type of limit	Emission Limit Citation	FE Y/N	Future Effective Date	Emission Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
TSP	BAAQMD 6-301	Y		Ringelmann No. 1		N	
TSP	BAAQMD 6-310	Y		0.15 grains/dscf		N	
TOC (Total Organic Compounds Plus Methane)	BAAQMD 8-34-301.2	N		1000 ppmv as methane (component leak limit)	BAAQMD 8-34-501.6 and 8-34-503	P/Q	Quarterly Inspection and Records
TOC	SIP 8-34-301.1	Y		1000 ppmv as methane (component leak limit)	SIP 8-34-503	P/Q	Quarterly Inspection
Organic Compounds	BAAQMD 8-34-301.4a	N	Expires 7/1/02	97% removal by weight	BAAQMD Condition #6117, Part 8	P/A	Annual Source Test
Organic Compounds	SIP 8-34-301.3	Y ¹		97% removal by weight	BAAQMD Condition #6117, Part 8	P/A	Annual Source Test
Methane	BAAQMD 8-34-301.4a	N	Expires 7/1/02	97% removal by weight	BAAQMD Condition #6117, Part 8	P/A	Annual Source Test
Methane	SIP 8-34-301.3	Y ¹		97% removal by weight	BAAQMD Condition #6117, Part 8	P/A	Annual Source Test

VII. Applicable Limits and Compliance Monitoring Requirements

Table VII-C
Applicable Limits and Compliance Monitoring Requirements
S-9, S-10, S-11, S-12, Lean Burn Internal Combustion Engines and Generator Sets

Type of limit	Emission Limit Citation	FE Y/N	Future Effective Date	Emission Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
Non-Methane Organic Compounds (NMOC)	BAAQMD 8-34-301.4b	N	7/1/02	98% removal by weight OR < 120 ppmv dry @ 3% O ₂ , expressed as methane	BAAQMD 8-34-412 and 8-34-501.4 and BAAQMD Condition #6117, Part 8	P/A	Initial and Annual Source Tests and Records
NMOC	40 CFR 60.752(b)(2)(iii)(B)	Y	10/6/02	98% removal by weight OR < 20 ppmv dry @ 3% O ₂ , expressed as hexane	40 CFR 60.8 and 60.752(b)(2)(iii)(B) and 60.758(b)(2)	P/I	Initial Source Test and Records
POC	BAAQMD Condition #6117, Part 7	Y		≤ 126 ppmv (dry) expressed as CH ₄ and corrected to 15% O ₂	BAAQMD Condition #6117, Part 8	P/A	Annual Source Test
SO ₂	BAAQMD 9-1-301	Y		Property Line Ground Level Limits: ≤ 0.5 ppm for 3 minutes, ≤ 0.25 ppm for 60 minutes & ≤ 0.05 ppm for 24 hours		N	
SO ₂	BAAQMD 9-1-302	Y		300 ppm (dry)	BAAQMD Condition #4044, Part 16, 17.m.	P/W, M, or Q (Monthly if 3 months data < 1300 ppm, Quarterly if 1 year of data < 1300 ppm)	Sulfur Analysis of landfill gas only

VII. Applicable Limits and Compliance Monitoring Requirements

Table VII-C
Applicable Limits and Compliance Monitoring Requirements
S-9, S-10, S-11, S-12, Lean Burn Internal Combustion Engines and Generator Sets

Type of limit	Emission Limit Citation	FE Y/N	Future Effective Date	Emission Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
H ₂ S	BAAQMD 9-2-301	N		Property Line ground level limits ≤ 0.06 ppm Averaged over 3 minutes and ≤ 0.03 ppm Averaged over 60 minutes		N	
Total Sulfur Content in Landfill Gas	BAAQMD Condition #4044, Part 7	Y		≤ 1300 ppmv	BAAQMD Permit Condition #4044, Part 16, 17.m.	P/W, M, or Q (Monthly if 3 months data < 1300 ppm, Quarterly if 1 year of data < 1300 ppm)	Sulfur Analysis of landfill gas only
NO _x	BAAQMD 9-8-301.2	Y		Fossil Fuel Gas, Lean-Burn 140 ppmv dry @ 15% O ₂		N	
NO _x	BAAQMD 9-8-302.1	Y		Waste Fuel Gas, Lean-Burn 140 ppmv dry @ 15% O ₂	BAAQMD Condition #6117, Part 8	P/A	Annual Source Test
NO _x	BAAQMD Condition #6117, Part 5	Y		≤ 78 ppmv (dry) expressed as NO ₂ corrected to 15% O ₂	BAAQMD Condition #6117, Part 8	P/A	Annual Source Test
CO	BAAQMD 9-8-301.3	Y		Fossil Fuel Gas: 2000 ppmv dry @ 15% O ₂		N	
CO	BAAQMD 9-8-302.3	Y		Waste Fuel Gas: 2000 ppmv dry @ 15% O ₂	BAAQMD Condition #6117, Part 8	P/A	Annual Source Test

VII. Applicable Limits and Compliance Monitoring Requirements

Table VII-C
Applicable Limits and Compliance Monitoring Requirements
S-9, S-10, S-11, S-12, Lean Burn Internal Combustion Engines and Generator Sets

Type of limit	Emission Limit Citation	FE Y/N	Future Effective Date	Emission Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
CO	BAAQMD Condition #6117, Part 6	Y		≤ 283 ppmv (dry) corrected to 15% O ₂	BAAQMD Condition #6117, Part 8	P/A	Annual Source Test
Emission Control System Shutdown Time	BAAQMD 8-34-113.2	N		240 hours/year	BAAQMD 8-34-501.2 and BAAQMD Condition #6117, Part 9.a.	P/D	Records
Emission Control System Shutdown Time	SIP 8-34-113.2	Y ¹		12 hours/calendar month	SIP 8-34-501.2	P/D	Records
Emission Control System Startup Shutdown or Malfunction	40 CFR 60.755(e)	Y	10/6/02	≤ 1 hour per event	40 CFR 60.7(b), 60.757(f)(2) and (f)(3), and 60.758(e)	P/D	Records of occurrence and duration
Temperature of Combustion Zone					BAAQMD 8-34-501.3 and 8-34-507 (effective 7/1/02)	C	Temperature sensor and continuous recorder (effective 7/1/02)

VII. Applicable Limits and Compliance Monitoring Requirements

**Table VII-C
 Applicable Limits and Compliance Monitoring Requirements
 S-9, S-10, S-11, S-12, Lean Burn Internal Combustion Engines and Generator Sets**

Type of limit	Emission Limit Citation	FE Y/N	Future Effective Date	Emission Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
Combustion Temperature	40 CFR 60.758(c)(1)(i)	Y	4/4/03	3-Hour Average Temperature No Less Than 28 °C below Average Temperature Recorded During Most Recent Complying Performance Test	60 CFR 60.756(b)(1) and 60.758(c)	C	Temperature sensor and continuous recorder
Natural Gas Usage	BAAQMD Condition #6117, Part 3	Y		Prohibited when flare is operating and unless it is needed as supplemental fuel	BAAQMD Condition #6117, Part 9.a.-c.	P/D	Records
Gas Flow	BAAQMD 8-34-301 and 301.1; BAAQMD Condition #6117, Parts 1 & 2	Y		Vent all collected gases to a properly operating control system and operate control system continuously.	BAAQMD Condition #6117, Part 4	C	Gas Flow Meter (per engine)
Gas Flow	BAAQMD 8-34-301 and 301.1; BAAQMD Condition #6117, Parts 1 & 2	Y		Vent all collected gases to a properly operating control system and operate control system continuously.	BAAQMD 8-34-501.10 and 508 (effective 7/1/02)	C	Gas Flow Meter and Recorder (every 15 minutes); effective 7/1/02
Gas Flow	SIP 8-34-301 and 301.4	Y		Vent all collected gases to a properly operating control system and operate control system continuously.	SIP 8-34-501.1	P/D	Operating Records

VII. Applicable Limits and Compliance Monitoring Requirements

**Table VII-C
 Applicable Limits and Compliance Monitoring Requirements
 S-9, S-10, S-11, S-12, Lean Burn Internal Combustion Engines and Generator Sets**

Type of limit	Emission Limit Citation	FE Y/N	Future Effective Date	Emission Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
Gas Flow	40 CFR 60.753(a) and (e)	Y	10/6/02	Vent all collected gases to a properly operating control system and operate control system at all times when gas is vented to it	40 CFR 60.756(b)(2) (i or ii) and 60.758(c)(2)	C or P/M	Gas Flow Meter and Recorder (every 15 minutes) or Monthly Inspection of Bypass Valve and Lock and Records
Periods of Inoperation for Parametric Monitors	BAAQMD 1-523.2	Y	7/1/02	15 consecutive days/incident and 30 calendar days/12 month period	BAAQMD 1-523.4	P/D	Records of occurrence and duration
Continuous Monitors	40 CFR 60.13(e)	Y		Requires Continuous Operation except for breakdowns, repairs, calibration, and required span adjustments	40 CFR 60.7(b)	P/D	Records of occurrence and duration

1 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 – D
Applicable Limits and Compliance Monitoring Requirements
A2 – LANDFILL GAS FLARE

Type of Limit	Emission Limit Citation	FE Y/N	Future Effective Date	Emission Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
Gas Flow	BAAQMD 8-34-301, 301.1, and 301.3 and BAAQMD Condition #4044, Part 8, 9	Y		Vent all collected gases to a properly operating control system and operate control system continuously.	BAAQMD Condition #4044, Part 11, 12, and 17.j., k.	C	Gas Flow Meter, Alarms, and Total Flow Rate Records
Gas Flow	BAAQMD 8-34-301, 301.1, and 301.3 and BAAQMD Condition #4044, Part 8, 9	Y		Vent all collected gases to a properly operating control system and operate control system continuously.	BAAQMD 8-34-501.10 and 508 (effective 7/1/02)	C	Gas Flow Meter and Recorder (every 15 minutes); effective 7/1/02
Gas Flow	SIP 8-34-301, 301.2, and 301.4	Y		Vent all collected gases to a properly operating control system and operate control system continuously.	SIP 8-34-501.2 and BAAQMD Condition #4044, Parts 11 and 12	P/D	Operating Records, Flow Meter, and Alarms

VII. Applicable Limits and Compliance Monitoring Requirements

Table VII – D
Applicable Limits and Compliance Monitoring Requirements
A2 – LANDFILL GAS FLARE

Type of Limit	Emission Limit Citation	FE Y/N	Future Effective Date	Emission Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
Gas Flow	40 CFR 60.752 (b)(2)(iii) and 60.753(e) and (f)	Y	10/6/02	Vent all collected gases to a properly operating control system and operate control system at all times when gas is vented to it	40 CFR 60.756(b)(2) (i or ii) and 60.758(c)(2)	C or P/M	Gas Flow Meter and Recorder (every 15 minutes) or Monthly Inspection of Bypass Valve and Lock and Records
Collection and Control Systems Shutdown Time	BAAQMD 8-34-113.2	N		240 hours/year	BAAQMD 8-34-501.2 and BAAQMD Condition #4044, Part 17.i.	P/D	Operating Records
Collection and Control Systems Shutdown Time	SIP 8-34-113.2	Y ¹		12 hours/calendar month	SIP 8-34-501.2	P/D	Operating Records
Control System Startup Shutdown or Malfunction	40 CFR 60.755(e)	Y	10/6/02	1 hour per event	40 CFR 60.7(b), 60.757(f)(2) and (f)(3)	P/D	Operating Records (all occurrences and duration of each)

VII. Applicable Limits and Compliance Monitoring Requirements

Table VII – D
Applicable Limits and Compliance Monitoring Requirements
A2 – LANDFILL GAS FLARE

Type of Limit	Emission Limit Citation	FE Y/N	Future Effective Date	Emission Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
TOC	BAAQMD 8-34-301.3a	N	Expires 7/1/02	98% removal by weight	BAAQMD Permit Condition #4044, Part 14, 17.m.	P/A	Annual Source Test
TOC	SIP 8-34-301.2	Y		98% removal by weight	BAAQMD Permit Condition #4044, Part 14, 17.m.	P/A	Annual Source Test
Non-Methane Organic Compounds (NMOC)	BAAQMD 8-34-301.3b	N	7/1/02	98% removal by weight OR < 30 ppmv dry @ 3% O ₂ , expressed as methane	BAAQMD 8-34-412 and BAAQMD Permit Condition #4044, Part 14, 17.m.	P/A	Initial and Annual Source Tests
NMOC	40 CFR 60.752(b) (2)(iii)(B)	Y	10/6/02	98% removal by weight OR < 20 ppmv dry @ 3% O ₂ , expressed as hexane	40 CFR 60.8 and 60.752(b) (2)(iii)(B) and 60.758 (b)(2)(ii)	P	Initial Source Test and Records
Temperature of Combustion Zone (CT)	BAAQMD Permit Condition #4044, Part 10	N		CT ≥ 1400 °F	BAAQMD 8-34-501.3 and 507, SIP 8-34-501.3 and BAAQMD Permit Condition #4044, Part 13, 17.l.	C	Temperature Sensor and Recorder (continuous)

VII. Applicable Limits and Compliance Monitoring Requirements

Table VII – D
Applicable Limits and Compliance Monitoring Requirements
A2 – LANDFILL GAS FLARE

Type of Limit	Emission Limit Citation	FE Y/N	Future Effective Date	Emission Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
Temperature of Combustion Zone (CT)	40 CFR 60.758 (c)(1)(i)	Y	10/6/02	CT (3-hour average) \geq (CT _{PF} – 28 °C), where CT _{PF} is the average combustion temperature during the most recent complying performance test	40 CFR 60.756(b)(1) and 60.758 (b)(2)(i)	C	Temperature Sensor and Recorder (measured every 15 minutes and averaged over performance test time period and 3-hours)
TOC (Total Organic Compounds Plus Methane)	BAAQMD 8-34-301.2	N		1000 ppmv as methane (component leak limit)	BAAQMD 8-34-501.6 and 503	P/Q	Quarterly Inspection of collection and control system components with OVA and Records
TOC	SIP 8-34-301.1	Y		1000 ppmv as methane (component leak limit)	SIP 8-34-503	P/Q	Quarterly Inspection with OVA

VII. Applicable Limits and Compliance Monitoring Requirements

Table VII – D
Applicable Limits and Compliance Monitoring Requirements
A2 – LANDFILL GAS FLARE

Type of Limit	Emission Limit Citation	FE Y/N	Future Effective Date	Emission Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
TSP	BAAQMD 6-301	Y		Ringelmann No. 1	BAAQMD 8-34-501.3 and 507, SIP 8-34-501.3 and BAAQMD Permit Condition #4044, Part 13, 17.l.	C	Temperature Sensor and Recorder (continuous)
TSP	BAAQMD 6-310	Y		0.15 grains/dscf		N	
SO ₂	BAAQMD 9-1-301	Y		Property Line Ground Level Limits ≤ 0.5 ppm for 3 minutes and ≤ 0.25 ppm for 60 minutes and ≤ 0.05 ppm for 24 hours		N	
SO ₂	BAAQMD 9-1-302	Y		≤ 300 ppm (dry)	BAAQMD Permit Condition #4044, Part 16, 17.m.	P/W, M, or Q (Monthly if 3 months data < 1300 ppm, Quarterly if 1 year of data < 1300 ppm)	Sulfur Analysis of landfill gas only
H ₂ S	BAAQMD 9-2-301	N		Property Line ground level limits ≤ 0.06 ppm Averaged over 3 minutes and ≤ 0.03 ppm Averaged over 60 minutes		N	

VII. Applicable Limits and Compliance Monitoring Requirements

Table VII – D
Applicable Limits and Compliance Monitoring Requirements
A2 – LANDFILL GAS FLARE

Type of Limit	Emission Limit Citation	FE Y/N	Future Effective Date	Emission Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
Total Sulfur Content in Landfill Gas	BAAQMD Condition #4044, Part 7	Y		≤ 1300 ppmv	BAAQMD Permit Condition #4044, Part 16, 17.m.	P/W, M, or Q (Monthly if 3 months data < 1300 ppm, Quarterly if 1 year of data < 1300 ppm)	Sulfur Analysis of landfill gas only
Periods of Inoperation for Parametric Monitors	BAAQMD 1-523.2	Y	7/1/02	15 consecutive days/incident and 30 calendar days/12 month period	BAAQMD 1-523.4	P/D	Operating Records for All Parametric Monitors
Continuous Monitors	40 CFR 60.13(e)	Y		Requires Continuous Operation except for breakdowns, repairs, calibration, and required span adjustments	40 CFR 60.7(b)	P/D	Operating Records for All Continuous Monitors

- 1 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.

VIII. TEST METHODS

The test methods associated with the emission limit of a District regulation are generally referenced in Section 600 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

Applicable Requirement	Description of Requirement	Acceptable Test Methods
BAAQMD 6-301	Ringelmann No. 1 Limitation	Manual of Procedures, Volume I, Evaluation of Visible Emissions
BAAQMD 6-310	Particulate Weight Limitation	Manual of Procedures, Volume IV, ST-15, Particulate
BAAQMD 8-2-301		Manual of Procedures, Volume IV, ST-7, Organic Compounds; or EPA Reference Method 25 or 25A
BAAQMD 8-34-114	Energy Recovery Device and Emission Control System	Manual of Procedures, Volume IV, ST-7, Organic Compounds and ST-14, Oxygen, Continuous Sampling; or EPA Reference Method 18, 25, 25A, or 25C
BAAQMD 8-34-301.2	Collection and Control System Leak Limitations	EPA Reference Method 21, Determination of Volatile Organic Compound Leaks
BAAQMD 8-34-301.3	Limits for Flares	Manual of Procedures, Volume IV, ST-7, Organic Compounds and ST-14, Oxygen, Continuous Sampling; or EPA Reference Method 18, 25, 25A, or 25C
BAAQMD 8-34-301.4	Limits for Other Emission Control Systems	Manual of Procedures, Volume IV, ST-7, Organic Compounds and ST-14, Oxygen, Continuous Sampling; or EPA Reference Method 18, 25, 25A, or 25C
BAAQMD 8-34-303	Landfill Surface Requirements	EPA Reference Method 21, Determination of Volatile Organic Compound Leaks
BAAQMD 8-34-305.1	Wellhead Gauge Pressure	APCO Approved Device
BAAQMD 8-34-305.2	Wellhead Temperature	APCO Approved Device
BAAQMD 8-34-305.3	Wellhead Nitrogen	EPA Reference Method 3C, Determination of Carbon Dioxide, Methane, Nitrogen, and Oxygen from Stationary Sources
BAAQMD 8-34-305.4	Wellhead Oxygen	EPA Reference Method 3C, Determination of Carbon Dioxide, Methane, Nitrogen, and Oxygen from Stationary Sources

VIII. Test Methods

Table VIII

Applicable Requirement	Description of Requirement	Acceptable Test Methods
BAAQMD 8-34-412	Compliance Demonstration Test	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
SIP 8-34-114 ¹	Energy Recovery Device and Emission Control System	Manual of Procedures, Volume IV, ST-7, Organic Compounds; or EPA Reference Method 25 or 25A
SIP 8-34-301.1	Collection and Control Systems Leak Limitations	EPA Reference Method 21, Determination of Volatile Organic Compound Leaks
SIP 8-34-301.2 ¹	Flare Limit	Manual of Procedures, Volume IV, ST-7, Organic Compounds; or EPA Reference Method 25 or 25A
SIP 8-34-301.3 ¹	Energy Recovery Device or Emission Control System Limit	Manual of Procedures, Volume IV, ST-7, Organic Compounds; or EPA Reference Method 25 or 25A
SIP 8-34-303		EPA Reference Method 21, Determination of Volatile Organic Compound Leaks
BAAQMD 8-40-116.2	Organic Content Limit for Small Volume Exemption	BAAQMD 8-40-601 and EPA Reference Methods 8015B and 8021B
BAAQMD 8-40-301	Limits on Uncontrolled Aeration of Contaminated Soil	BAAQMD 8-40-601 and EPA Reference Methods 8015B and 8021B; or EPA Reference Method 21
SIP 8-40-301 ¹	Limits on Uncontrolled Aeration of Contaminated Soil	BAAQMD 8-40-601 and EPA Reference Methods 8010 or 8015
BAAQMD 9-1-301	Limitations on Ground Level Concentrations (SO ₂)	Manual of Procedures, Volume VI, Part 1, Ground Level Monitoring for Hydrogen Sulfide and Sulfur Dioxide
BAAQMD 9-1-302	General Emission Limitation (SO ₂)	Manual of Procedures, Volume IV, ST-19A, Sulfur Dioxide, Continuous Sampling, or ST-19B, Total Sulfur Oxides, Integrated Sample
BAAQMD 9-2-301	Limitations on Hydrogen Sulfide	Manual of Procedures, Volume VI, Part 1, Ground Level Monitoring for Hydrogen Sulfide and Sulfur Dioxide
BAAQMD 9-8-301.2	Fossil Derived Fuel Gas, NOx Limits for Lean Burn Engines	Manual of Procedures, Volume IV, ST-13A, Oxides of Nitrogen, Continuous Sampling and ST-14, Oxygen, Continuous Sampling

VIII. Test Methods

Table VIII

Applicable Requirement	Description of Requirement	Acceptable Test Methods
BAAQMD 9-8-301.3	Fossil Derived Fuel Gas, CO Limits	Manual of Procedures, Volume IV, ST-6, Carbon Monoxide, Continuous Sampling and ST-14, Oxygen, Continuous Sampling
BAAQMD 9-8-302.1	Waste Derived Fuel Gas NOx Limits for Lean Burn Engines	Manual of Procedures, Volume IV, ST-13A, Oxides of Nitrogen, Continuous Sampling and ST-14, Oxygen, Continuous Sampling
BAAQMD 9-8-302.3	Waste Derived Fuel Gas CO Limits	Manual of Procedures, Volume IV, ST-6, Carbon Monoxide, Continuous Sampling and ST-14, Oxygen, Continuous Sampling
BAAQMD 11-1-302	Ground Level Concentration Limit Without Background (lead)	Manual of Procedures, Volume VI, Part 2, Atmospheric Sampling of Ground Level Lead Concentrations, Sections 2.1 General and 2.2 Mass Emission Limitations
BAAQMD 11-3-301	Emission Limitation (beryllium)	Test waste in accordance with EPA SW-846 and calculate emissions in accordance with EPA AP-42
BAAQMD 11-14-301	Prohibition of Use for Surfacing Operations (asbestos serpentine)	ARB Test Method 435, Determination of Asbestos Content of 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 60.752 (b)(2)(iii)(B)	NMOC Outlet Concentration and Destruction Efficiency Limits	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 60.753(b)	Wellhead Pressure	APCO Approved Device
40 CFR 60.753(c)	Temperature, N ₂ , and O ₂ concentration in wellhead gas	EPA Reference Method 3C, Determination of Carbon Dioxide, Methane, Nitrogen, and Oxygen from Stationary Sources

VIII. Test Methods

Table VIII

Applicable Requirement	Description of Requirement	Acceptable Test Methods
40 CFR 60.753(d)	Methane Limit at Landfill Surface	EPA Reference Method 21, Determination of Volatile Organic Compound Leaks
BAAQMD Condition # 4044		
Part 2	Ringelmann No. 0.5 Limitation	Manual of Procedures, Volume I, Evaluation of Visible Emissions
Part 6	Toxic Air Contaminants in Landfill Gas	GC Analysis for all compounds listed in AP-42 Chapter 2.4
Part 7	Total Sulfur Content in Landfill Gas	APCO Approved Draeger Tube Method
Part 10	Combustion Temperature	APCO Approved Continuous Temperature Monitor
Part 18	Acceptance Criteria for VOC Contaminated Soil	EPA Reference Methods 8015B, 8021B, or any method determined to be equivalent by the US EPA and approved by the APCO
Part 19	Total Carbon Emission Limit for Use or Disposal of Soil Containing VOCs	VOC Content as determined by EPA Reference Methods 8015B, 8021B (or any method determined to be equivalent by the US EPA 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 #4044, Part 19.c.
BAAQMD Condition # 6117		
Part 5	NO _x Limit	Manual of Procedures, Volume IV, Oxides of Nitrogen, Continuous Sampling, and ST-14, Oxygen, Continuous Sampling; or EPA Reference Method 20
Part 6	CO Limit	Manual of Procedures, Volume IV, ST-6, Carbon Monoxide, Continuous Sampling, and ST-14, Oxygen, Continuous Sampling; or EPA Reference Method 10
Part 7	POC Limit	Manual of Procedures, Volume IV, ST-14, Oxygen, Continuous Sampling, and either Manual of Procedures, Volume IV, ST-7, Organic Compounds OR EPA Reference Method 18, 25, 25A, or 25C

VIII. Test Methods

- 1 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.

IX. GLOSSARY

BAAQMD

Bay Area Air Quality Management District

BACT

Best Available Control Technology

CAA

The federal Clean Air Act

CAAQS

California Ambient Air Quality Standards

CEQA

California Environmental Quality Act

CFR

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

CO

Carbon Monoxide

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

EPA

The federal Environmental Protection Agency.

Excluded

Not subject to any District Regulations.

Federally Enforceable, FE

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

IX. Glossary

Rain), and also including limitations and conditions contained in operating permits issued under an EPA-approved program that has been incorporated into the SIP.

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 both 40 CFR Part 63, and District Regulation 2, Rule 5.

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.

MFR

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

MOP

The District's Manual of Procedures.

NAAQS

National Ambient Air Quality Standards

NESHAPS

National Emission Standards for Hazardous Air Pollutants. Contained in 40 CFR Part 61.

NMHC

Non-methane Hydrocarbons

NO_x

Oxides of nitrogen.

NSPS

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

NSR

New Source Review. A federal program for preconstruction 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

IX. Glossary

as District Regulation 2, Rule 2. (Note: There are additional NSR requirements mandated by the California Clean Air Act.)

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, NO_x, 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

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.

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 Federal Clean Air Act.

SO₂

Sulfur dioxide

Title V

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

TRMP

Toxic Risk Management Policy.

IX. Glossary

TSP

Total Suspended Particulate

VOC

Volatile Organic Compounds

Units of Measure:

bhp	=	brake-horsepower
Btu	=	British Thermal Unit
g	=	grams
gal	=	gallon
hp	=	horsepower
hr	=	hour
lb	=	pound
in	=	inches
max	=	maximum
m ²	=	square meter
min	=	minute
MM	=	million
ppmv	=	parts per million, by volume
ppmw	=	parts per million, by weight
psia	=	pounds per square inch, absolute
psig	=	pounds per square inch, gauge
scfm	=	standard cubic feet per minute
yr	=	year

X. APPLICABLE STATE IMPLEMENTATION PLAN

See Attachments