

Bay Area Air Quality Management District

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

Proposed

MAJOR FACILITY REVIEW PERMIT

Issued To:
West Contra Costa Sanitary District
Facility #A1840

Facility Address:
Foot of Parr Boulevard
Richmond, CA 94801

Mailing Address:
P.O. Box 4100
Richmond, CA 94804

Responsible Official
Mr. Caeser Nuti, General Manager
510-620-0133

Facility Contact
Mr. Gary Ponder, Plant Manager
510-620-0133

Type of Facility: Landfill/Power Producer
Primary SIC: 4953
Product: Electricity

BAAQMD Permit Division Contact:
Carol Allen

ISSUED BY THE BAY AREA AIR QUALITY MANAGEMENT DISTRICT

Ellen Garvey, Executive Officer/Air Pollution Control Officer

Date

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I. STANDARD CONDITIONS

A. Administrative Requirements

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

- BAAQMD Regulation 1 - General Provisions and Definitions
(as amended by the District Board on 5/2/01);
SIP Regulation 1 - General Provisions and Definitions
(as approved by EPA through 8/27/99);
BAAQMD Regulation 2, Rule 1 - Permits, General Requirements
(as amended by the District Board on 8/1/01);
SIP Regulation 2, Rule 1 - Permits, General Requirements
(as approved by EPA through 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);
SIP Regulation 2, Rule 4 - Permits, Emissions Banking
(as approved by EPA through 2/25/99); and
BAAQMD Regulation 2, Rule 6 - Permits, Major Facility Review
(as amended by the District Board on 5/2/01).

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 this deadline, 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

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- 3, §4.11)
4. This permit may be modified, revoked, reopened and reissued, or terminated for cause. (Regulation 2-6-307, 409.8, 415; MOP Volume II, Part 3, §4.11)
 5. The filing of a request by the facility for a permit modification, revocation and re-issuance, or termination, or the filing of a notification of planned changes or anticipated non-compliance does not stay the applicability of any permit condition. (Regulation 2-6-409.7; MOP Volume II, Part 3, §4.11)
 6. This permit does not convey any property rights of any sort, or any exclusive privilege. (Regulation 2-6-409.7; MOP Volume II, Part 3, §4.11)
 7. The permit holder shall supply within 30 days any information that the District requests in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. (Regulation 1-441, Regulation 2-6-409.4 & 501; MOP Volume II, Part 3, §4.11)
 8. Any records required to be maintained pursuant to this permit 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's Administrative Code. (Regulation 2-6-419; MOP Volume II, Part 3, §4.11)
 9. Proprietary or trade secret information provided to EPA will be subject to the requirements of 40 CFR Part 2, Subpart B - Public Information, Confidentiality of Business Information. (40 CFR Part 2)
 10. The emissions inventory submitted with the application for this Major Facility Review Permit is an estimate of actual emissions or the potential to emit for the time period stated and is included only as one means of determining applicable requirements for emission sources. It does not establish, or constitute a basis for establishing, any new emission limitations. (MOP Volume II, Part 3, §4.11)
 11. The responsible official shall certify all documents submitted by the facility pursuant to the major facility review permit. The certification shall state that based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete. The certifications shall be signed by a responsible official for the facility. (MOP Volume II, Part 3, §4.11)

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)

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D. Inspection and Entry

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

E. Records

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

F. Monitoring Reports

Reports of all required monitoring must be submitted to the District at least once every six months, except where an applicable requirement specifies more frequent reporting. The first reporting period for this permit shall be [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

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requirement through submittal of District-generated Compliance Certification forms. The certification should be directed to the District's Compliance and Enforcement Division at the address above, and a copy of the certification shall be sent to the Environmental Protection Agency at the following address:

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

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

H. Emergency Provisions

1. The permit holder may seek relief from enforcement action in the event of a breakdown, as defined by Regulation 1-208 of the District's Rules and Regulations, by following the procedures contained in Regulations 1-431 and 1-432. The District will thereafter determine whether breakdown relief will be granted in accordance with Regulation 1-433. (MOP Volume II, Part 3, §4.8)
2. The permit holder may seek relief from enforcement action for a violation of any of the terms and conditions of this permit by applying to the District's Hearing Board for a variance pursuant to Health and Safety Code Section 42350. The Hearing Board will determine after notice and hearing whether variance relief should be granted in accordance with the procedures and standards set forth in Health and Safety Code Section 42350 et seq. (MOP Volume II, Part 3, §4.8)
3. The granting by the District of breakdown relief or the issuance by the Hearing Board of a variance will not provide relief from federal enforcement. (MOP Volume II, Part 3, §4.8)

I. Severability

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

J. Miscellaneous Conditions

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

II. EQUIPMENT

Table II A - Permitted Sources

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

S-#	Description	Make or Type	Model	Capacity
S-5	Internal Combustion Lean Burn Engine, fired exclusively on landfill gas	Waukesha Lean Burn	7042 GL	1478 hp, 975 kW, 7040 in ³ , 10.8 E6 BTU/hour, 327 scfm of landfill gas at 550 BTU/scf
S-6	Internal Combustion Lean Burn Engine, fired exclusively on landfill gas	Waukesha Lean Burn	7042 GL	1478 hp, 975 kW, 7040 in ³ , 10.8 E6 BTU/hour, 327 scfm of landfill gas at 550 BTU/scf
S-15	West Contra Costa Sanitary Landfill Active Solid Waste Disposal Site with Active Gas Collection System Landfill gas collection system	Type of waste accepted are MSW, Commercial, Industrial, and Construction Horizontal Collectors Vertical Wells		Max. Design Capacity = 18.2 E6 yd ³ (13.9 E6 m ³) Max. Acceptance Rate = 2500 tons/day Max. Cumulative Waste In Place = 10.92 E6 tons 16 collectors and 53 wells
S-22	Primary Oil/Water Separator, TK-2	Polycal Plastics	SP-084-4	1,850 Gallon Capacity, 1200 Gallons/Hour
S-23	Secondary Oil/Water Separator, TK-4	AFL Industries	VTC-5	450 Gallon Capacity, 300 Gallons/Hour
S-24	Load Equalization Tank, TK-7	Polycal Plastics	SPC-52	500 Gallon Capacity, 1200 Gallons/Hour
S-25	Photo-Oxidizer Tank, TK-5	Ryan Herco	7353-030	300 Gallon Capacity, 1200 Gallons/Hour
S-26	Neutralization Tank, TK-9	Polycal Plastics	SPC-52	500 Gallon Capacity, 1200 Gallons/Hour
S-27	First Stage Clarifier, TK-8	Great Lakes	IPC-2-110	1200 Gallons/Hour
S-28	Air Stripper Sump	Polycal Plastics	SP-724-U	550 Gallon Capacity, 1200 Gallons/Hour
S-29	Flocculation/Mixing Tank, TK-8A	Custom Made	Custom made	20,300 Gallon Capacity, 1200 Gallons/Hour

II. Equipment

Table II A - Permitted Sources

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

S-#	Description	Make or Type	Model	Capacity
S-30	Air Stripper	Terraqua		1200 Gallons/Hour, 200 cfm
S-37	Internal Combustion Lean Burn Engine, fired exclusively on landfill gas	Waukesha Lean Burn	7042 GL	1585 hp, 1050 kW, 7040 in ³ , 9.55 E6 BTU/hour, 290 scfm of landfill gas at 550 BTU/scf
S-38	Secondary Oil/Water Separator, TK-4	Custom Made	Custom Made	780 Gallon Capacity, 1200 Gallons/Hour
S-39	Sludge Storage Tank, TK-3	Custom Made	Custom Made	1100 Gallon Capacity, 1200 Gallons/Hour
S-40	Equalization Tank, TK-1	Custom Made	Custom Made	5000 Gallon Capacity, 1200 Gallons/Hour

Table II B – Abatement Devices

A-#	Description	Source(s) Controlled	Applicable Requirement	Operating Parameters	Limit or Efficiency
A-1	Carbon Adsorber (in series with A-1 first followed by A-2)	S-22, S-24, S-25, S-26, S-27, S-28, S-29, S-38, S-39, and S-40	BAAQMD Condition # 7463, Part 2	NMHC in inlet and in A-1 exhaust	Replace carbon when NMHC removal efficiency is less than 90% by volume
A-2	Carbon Adsorber (in series with A-1 first followed by A-2)	S-22, S-24, S-25, S-26, S-27, S-28, S-29, S-38, S-39, and S-40	BAAQMD Condition # 7463, Part 2	NMHC in A-2 exhaust	Replace carbon upon detection of 6 ppmv of NMHC

II. Equipment

Table II B – Abatement Devices

A-#	Description	Source(s) Controlled	Applicable Requirement	Operating Parameters	Limit or Efficiency
A-3	Carbon Adsorber (in series with A-3 first followed by A-4)	S-30	BAAQMD Condition # 7463, Part 3	NMHC in inlet and in A-3 exhaust	Replace carbon when NMHC removal effi- ciency is less than 90% by volume
A-4	Carbon Adsorber (in series with A-3 first followed by A-4)	S-30	BAAQMD Condition # 7463, Part 3	NMHC in A-4 exhaust	Replace carbon upon detection of 6 ppmv of NMHC
A-5	Carbon Adsorber (in series with A-5 first followed by A-6)	S-30	BAAQMD Condition # 7463, Part 3	NMHC in inlet and in A-5 exhaust	Replace carbon when NMHC removal effi- ciency is less than 90% by volume
A-6	Carbon Adsorber (in series with A-5 first followed by A-6)	S-30	BAAQMD Condition # 7463, Part 3	NMHC in A-6 exhaust	Replace carbon upon detection of 6 ppmv of NMHC
A-8	Landfill Gas Flare	S-15	BAAQMD 8-34-301.3, see also Table IV-B	Minimum combustion zone temperature of 1400 °F, see also Table VII-B	98% destruction of THC and either 98% destruction of NMOC or < 30 ppmv of NMOC, as CH ₄ , at 3% O ₂ , dry

III. GENERALLY APPLICABLE REQUIREMENTS

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

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 on EPA Region 9's website. The address is included in Appendix A of this permit.

NOTE:

There are differences between the current BAAQMD rule and the version of the rule in the SIP. All sources must comply with both versions of the rule until US EPA has reviewed and approved (or disapproved) 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 (8/1/01)	N
SIP Regulation 1	General Provisions and Definitions (8/27/99)	Y
BAAQMD Regulation 2, Rule 1	General Requirements (8/1/01)	N
BAAQMD 2-1-429	Federal Emissions Statement (6/7/95)	Y
SIP Regulation 2, Rule 1	General Requirements (8/27/99)	Y
BAAQMD Regulation 4	Air Pollution Episode Plan (3/20/91)	N
SIP Regulation 4	Air Pollution Episode Plan (8/06/90)	Y
BAAQMD Regulation 5	Open Burning (11/2/94)	N
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 2	Organic Compounds – Miscellaneous Operations (6/15/94)	Y
BAAQMD Regulation 8, Rule 3	Organic Compounds - Architectural Coatings (12/20/95)	Y
BAAQMD Regulation 8, Rule 4	Organic compounds - General Solvent and Surface Coating Operations (5/15/96)	N
SIP Regulation 8, Rule 4	Organic compounds - General Solvent and Surface Coating Operations (12/23/97)	Y
BAAQMD Regulation 8, Rule 49	Organic Compounds - Aerosol Paint Products (12/20/95)	N
SIP Regulation 8, Rule 49	Organic Compounds - Aerosol Paint Products (3/22/95)	Y
BAAQMD Regulation 8, Rule 51	Organic Compounds - Adhesive and Sealant Products (12/20/95)	N
BAAQMD Regulation 11, Rule 1	Hazardous Pollutants-Control of Lead Emissions	Y
BAAQMD Regulation 11, Rule 2	Hazardous Pollutants - Asbestos Demolition, Renovation and Manufacturing (12/4/91)	Y
BAAQMD Regulation 11, Rule 14	Hazardous Pollutants – Asbestos-Containing Serpentine	Y
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

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 on EPA Region 9’s website. The address is included in Appendix A of this permit. All other text may be found in the regulations themselves.

Table IV – A
Source-specific Applicable Requirements
S-5 INTERNAL COMBUSTION LEAN BURN ENGINE
S-6 INTERNAL COMBUSTION LEAN BURN ENGINE

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
BAAQMD Regulation 1	General Provisions and Definitions (10/7/1998)		
1-523	Parametric Monitoring and Record keeping Procedures	Y	
1-523.1	Reporting requirement for periods of in-operation > 24 hours	Y	
1-523.2	Limit on duration of in operation	Y	
1-523.3	Reporting requirement for violations of any applicable limits	Y	
1-523.4	Records of in-operation, tests, calibrations, adjustments, & maintenance	Y	
BAAQMD Regulation 6	Particulate Matter and Visible Emissions (12/19/1990)		
6-301	Ringelmann No. 1 Limitation	Y	
6-305	Visible Particles	Y	
6-310	Particle Weight Limitation	Y	
6-401	Appearance of Emissions	Y	

IV. Source Specific Applicable Requirements

Table IV – A
Source-specific Applicable Requirements
S-5 INTERNAL COMBUSTION LEAN BURN ENGINE
S-6 INTERNAL COMBUSTION LEAN BURN ENGINE

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
BAAQMD Regulation 8, Rule 34	Organic Compounds - Solid Waste Disposal Sites (10/6/1999)		
8-34-113	Limited Exemption, Inspection and Maintenance	Y	
8-34-113.1	Emission Minimization Requirement	Y	
8-34-113.2	Shutdown Time Limitation	Y	
8-34-113.3	Record keeping 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	Y	
8-34-301.1	Continuous Operation	Y	
8-34-301.2	Collection and Control Systems Leak Limitations	Y	
8-34-301.4b	Limits for Other Emission Control Systems	Y	7/1/02
8-34-412	Compliance Demonstration Tests	Y	
8-34-413	Performance Test Report	Y	
8-34-501	Operating Records	Y	
8-34-501.2	Emission Control System Downtime	Y	
8-34-501.3	Continuous Temperature Records for Enclosed Combustors	Y	7/1/02
8-34-501.4	Testing	Y	
8-34-501.6	Leak Discovery and Repair Records	Y	
8-34-501.10	Gas Flow Rate Records for All Emission Control Systems	Y	7/1/02
8-34-501.11	Records of Key Emission Control System Operating Parameters	Y	7/1/02
8-34-501.12	Records Retention for 5 Years	Y	
8-34-503	Landfill Gas Collection and Emission Control System Leak Testing	Y	
8-34-504	Portable Hydrocarbon Detector	Y	
8-34-507	Continuous Temperature Monitor and Recorder	Y	7/1/02
8-34-508	Gas Flow Meter	Y	7/1/02
8-34-509	Key emission control system operating parameters	Y	7/1/02

IV. Source Specific Applicable Requirements

Table IV – A
Source-specific Applicable Requirements
S-5 INTERNAL COMBUSTION LEAN BURN ENGINE
S-6 INTERNAL COMBUSTION LEAN BURN ENGINE

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
SIP Regulation 8, Rule 34	Organic Compounds - Solid Waste Disposal Sites (3/22/1995)		
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	Record keeping 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 (3/15/1995)		
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 (10/6/1999)		
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 (8/1/2001)		
9-8-302	Emission Limits – Waste Derived Fuel Gas	Y	

IV. Source Specific Applicable Requirements

Table IV – A
Source-specific Applicable Requirements
S-5 INTERNAL COMBUSTION LEAN BURN ENGINE
S-6 INTERNAL COMBUSTION LEAN BURN ENGINE

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
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 (5/4/1998)		
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 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 (2/24/1999)		
60.36c(a)	Collection and Control Systems in Compliance by 30 months After Initial NMOC Emission Rate Report Shows NMOC Emissions \geq 50 MG/year	Y	
40 CFR Part 62	Approval and Promulgation of State Plans for Designated Facilities and Pollutants (9/20/2001)		

IV. Source Specific Applicable Requirements

Table IV – A
Source-specific Applicable Requirements
S-5 INTERNAL COMBUSTION LEAN BURN ENGINE
S-6 INTERNAL COMBUSTION LEAN BURN ENGINE

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
62.1115	Identification of Sources	Y	
BAAQMD Condition # 5771			
Part 1	Fuel Restrictions (Cumulative Increase)	Y	
Part 2	Diverter Valve Requirement (Regulation 8-34-301)	Y	
Part 3	Gas Flow Meter Requirement (Cumulative Increase and Regulation 8-34-508)	Y	
Part 4	NOx Emissions Limit (BACT)	Y	
Part 5	CO Emissions Limit (BACT)	Y	
Part 6	NMOC Emissions Limit (BACT and Regulation 8-34-301.4)	Y	
Part 7	Annual Source Test Requirement (BACT and Regulations 8-34-114, 8-34-301.4, 8-34-412, 9-8-302.1, and 9-8-302.3)	Y	
Part 8	Heat Input Limitation (Regulation 2-1-301)	Y	
Part 9	Daily Record Keeping Requirement (Cumulative Increase and Regulations 2-1-301, 2-6-501, and 8-34-301)	Y	
Part 10	Engine Temperature Limit and Temperature Monitoring Requirements (8-34-301, 8-34-501.3, 8-34-501.11, 8-34-507, 8-34-509)	Y	Limit is effective: 1/1/03 Monitoring is effective: 7/1/02

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 – B
Source-specific Applicable Requirements
S-15 WEST CONTRA COSTA SANITARY LANDFILL
A-8 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 (10/7/1998)		
1-523	Parametric Monitoring and Recordkeeping Procedures	Y	
1-523.1	Reporting requirement for periods of inoperation > 24 hours	Y	
1-523.2	Limit on duration of inoperation	Y	
1-523.3	Reporting requirement for violations of any applicable limits	Y	
1-523.4	Records of inoperation, tests, calibrations, adjustments, & maintenance	Y	
BAAQMD Regulation 6	Particulate Matter and Visible Emissions (12/19/1990)		
6-301	Ringelmann No. 1 Limitation	Y	
6-305	Visible Particles	Y	
6-310	Particle Weight Limitation (applies to A-8 Flare only)	Y	
6-401	Appearance of Emissions	Y	
BAAQMD Regulation 8, Rule 2	Organic Compounds – Miscellaneous Operations (3/22/1995)		
8-2-301	Miscellaneous Operations (applies to low VOC soil handling and disposal activities only)	Y	
BAAQMD Regulation 8, Rule 34	Organic Compounds – Solid Waste Disposal Sites (10/6/1999)		
8-34-113	Limited Exemption, Inspection and Maintenance	Y	
8-34-113.1	Emission Minimization Requirement	Y	
8-34-113.2	Shutdown Time Limitation	Y	
8-34-113.3	Recordkeeping Requirement	Y	
8-34-116	Limited Exemption, Well Raising	Y	
8-34-116.1	New Fill	Y	
8-34-116.2	Limits on Number of Wells Shutdown	Y	
8-34-116.3	Shutdown Duration Limit	Y	

IV. Source Specific Applicable Requirements

Table IV – B
Source-specific Applicable Requirements
S-15 WEST CONTRA COSTA SANITARY LANDFILL
A-8 LANDFILL GAS FLARE

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
8-34-116.4	Capping Well Extensions	Y	
8-34-116.5	Well Disconnection Records	Y	
8-34-117	Limited Exemption, Gas Collection System Components	Y	
8-34-117.1	Necessity of Existing Component Repairs/Adjustments	Y	
8-34-117.2	New Components are Described in Collection and Control System Design Plan	Y	
8-34-117.3	Meets Section 8-34-118 Requirements	Y	
8-34-117.4	Limits on Number of Wells Shutdown	Y	
8-34-117.5	Shutdown Duration Limit	Y	
8-34-117.6	Well Disconnection Records	Y	
8-34-118	Limited Exemption, Construction Activities	Y	
8-34-118.1	Construction Plan	Y	
8-34-118.2	Activity is Required to Maintain Compliance with this Rule	Y	
8-34-118.3	Required or Approved by Other Enforcement Agencies	Y	
8-34-118.4	Emission Minimization Requirement	Y	
8-34-118.5	Excavated Refuse Requirements	Y	
8-34-118.6	Covering Requirements for Exposed Refuse	Y	
8-34-118.7	Installation Time Limit	Y	
8-34-118.8	Capping Required for New Components	Y	
8-34-118.9	Construction Activity Records	Y	
8-34-301	Landfill Gas Collection and Emission Control System Requirements	Y	
8-34-301.1	Continuous Operation	Y	
8-34-301.2	Collection and Control Systems Leak Limitations	Y	
8-34-301.3a	Enclosed Flare Destruction Efficiency	Y	Expires 7/1/02
8-34-301.3b	Limits for Enclosed Flares	Y	7/1/02
8-34-303a	Landfill Surface Requirements	Y	Expires 7/1/02
8-34-303b	Landfill Surface Requirements	Y	7/1/02
8-34-304	Gas Collection System Installation Requirements	Y	
8-34-304.1	Based on Waste Age For Inactive or Closed Areas	Y	

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Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
8-34-304.2	Based on Waste Age For Active Areas	Y	
8-34-304.3	Based on Amount of Decomposable Waste Accepted	Y	
8-34-304.4	Based on NMOC Emission Rate	Y	7/1/02
8-34-305	Wellhead Requirements	Y	7/1/02
8-34-305.1	Operate Under Vacuum	Y	7/1/02
8-34-305.2	Temperature < 55 °C	Y	7/1/02
8-34-305.3	Nitrogen < 20% or	Y	7/1/02
8-34-305.4	Oxygen < 5%	Y	7/1/02
8-34-405	Design Capacity Reports	Y	
8-34-408	Collection and Control System Design Plans	Y	
8-34-408.2	Sites With Existing Collection and Control Systems	Y	
8-34-411	Annual Report	Y	1/1/03
8-34-412	Compliance Demonstration Tests	Y	7/1/02
8-34-413	Performance Test Report	Y	7/1/02
8-34-414	Repair Schedule for Wellhead Excesses	Y	7/1/02
8-34-414.1	Records of Excesses	Y	7/1/02
8-34-414.2	Corrective Action	Y	7/1/02
8-34-414.3	Collection System Expansion	Y	7/1/02
8-34-414.4	Operational Due Date for Expansion	Y	7/1/02
8-34-415	Repair Schedule for Surface Leak Excesses	Y	7/1/02
8-34-415.1	Records of Excesses	Y	7/1/02
8-34-415.2	Corrective Action	Y	7/1/02
8-34-415.3	Re-monitor Excess Location Within 10 Days	Y	7/1/02
8-34-415.4	Re-monitor Excess Location Within 1 Month	Y	7/1/02
8-34-415.5	If No More Excesses, No Further Re-Monitoring	Y	7/1/02
8-34-415.6	Additional Corrective Action	Y	7/1/02
8-34-415.7	Re-monitor Second Excess Within 10 days	Y	7/1/02
8-34-415.8	Re-monitor Second Excess Within 1 Month	Y	7/1/02
8-34-415.9	If No More Excesses, No Further Re-monitoring	Y	7/1/02
8-34-415.10	Collection System Expansion for Third Excess in a Quarter	Y	7/1/02
8-34-415.11	Operational Due Date for Expansion	Y	7/1/02

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Table IV – B
Source-specific Applicable Requirements
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Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
8-34-416	Cover Repairs	Y	
8-34-501	Operating Records	Y	
8-34-501.1	Collection System Downtime	Y	
8-34-501.2	Emission Control System Downtime	Y	
8-34-501.3	Continuous Temperature Records for Enclosed Combustors	Y	
8-34-501.4	Testing	Y	
8-34-501.6	Leak Discovery and Repair Records	Y	
8-34-501.7	Waste Acceptance Records	Y	
8-34-501.8	Non-decomposable Waste Records	Y	
8-34-501.9	Wellhead Excesses and Repair Records	Y	7/1/02
8-34-501.10	Gas Flow Rate Records for All Emission Control Systems	Y	7/1/02
8-34-501.12	Records Retention for 5 Years	Y	
8-34-503	Landfill Gas Collection and Emission Control System Leak Testing	Y	
8-34-504	Portable Hydrocarbon Detector	Y	
8-34-505	Well Head Monitoring	Y	8/1/02
8-34-506	Landfill Surface Monitoring	Y	10/1/02
8-34-507	Continuous Temperature Monitor and Recorded	Y	
8-34-508	Gas Flow Meter	Y	7/1/02
8-34-510	Cover Integrity Monitoring	Y	8/1/02
SIP Regulation 8, Rule 34	Organic Compounds - Solid Waste Disposal Sites (3/22/1995)		
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	

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Table IV – B
Source-specific Applicable Requirements
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A-8 LANDFILL GAS FLARE

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
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	
8-34-501.2	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 (3/15/1995)		
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 (10/6/1999)		
9-2-301	Limitations on Hydrogen Sulfide	N	
40 CFR Part 60, Subpart A	Standards of Performance for New Stationary Sources – General Provisions (5/4/1998)		
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	

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 – B
Source-specific Applicable Requirements
S-15 WEST CONTRA COSTA SANITARY LANDFILL
A-8 LANDFILL GAS FLARE

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
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 (2/24/1999)		
60.36c(a)	Collection and Control Systems in Compliance by 30 months after Initial NMOC Emission Rate Report Shows NMOC Emissions \geq 50 MG/year	Y	
40 CFR Part 62	Approval and Promulgation of State Plans for Designated Facilities and Pollutants (9/20/2001)		
62.1115	Identification of Sources	Y	
BAAQMD Condition # 17821			
Part 1	Waste acceptance rate limits (Regulation 2-1-301)	Y	
Part 2	Acceptance criteria for soils containing VOCs (Regulation 8-40-301)	N	
Part 3	Emission limit for low VOC soils (Regulation 8-2-301)	Y	
Part 4	Particulate emission control measures (Regulations 2-1-403, 6-301, and 6-305)	Y	

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Table IV – B
Source-specific Applicable Requirements
S-15 WEST CONTRA COSTA SANITARY LANDFILL
A-8 LANDFILL GAS FLARE

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
Part 5	Control requirements for collected landfill gas (Regulation 8-34-301)	Y	
Part 6	Landfill gas collection system description (Regulations 2-1-301, 8-34-301.1, 8-34-304, and 8-34-305)	Y	
Part 7	Landfill gas collection system operating requirements (Regulation 8-34-301.1)	Y	
Part 8	Flare operating restrictions and heat input limits (Cumulative Increase and Regulation 2-1-301)	Y	
Part 9	Flare temperature limit (Toxic Risk Management Policy and Regulation 8-34-301.3)	Y	
Part 10	Landfill gas sulfur content limit and monitoring requirements (Regulation 9-1-302)	Y	
Part 11	Annual source test (Regulations 8-34-301.3 and 8-34-412)	Y	
Part 12	Annual landfill gas characterization test (Toxic Risk Management Policy and Regulation 8-34-412)	Y	
Part 13	Toxic compound concentration limits (Toxic Risk Management Policy)	N	
Part 14	Record keeping requirements (Cumulative Increase, 2-1-301, 2-6-501, 6-301, 6-305, 8-2-301, 8-34-301, 8-34-304, and 8-34-501)	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 – C
Source-specific Applicable Requirements
S-22 PRIMARY OIL/WATER SEPARATOR, TK-2
S-23 SECONDARY OIL/WATER SEPARATOR, TK-4
S-38 SECONDARY OIL/WATER SEPARATOR, TK-4
A-1 CARBON ADSORBER
A-2 CARBON ADSORBER

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
BAAQMD Regulation 8, Rule 8	Organic Compounds – Wastewater (Oil-Water) Separators (8/29/1994)		
8-8-301	Waste Water Separators Greater than 760 Liters Per Day and Smaller than 18.9 liters per second	Y	
8-8-301.3	OC Vapor Recovery System	Y	
8-8-303	Gauging and Sampling Devices	Y	
8-8-501	API Separator or Air Flotation Bypassed Wastewater Records	Y	
8-8-503	Inspection and Repair Records	Y	
8-8-504	Portable Hydrocarbon Detector	Y	
BAAQMD Condition # 7463			
Part 1	Abatement requirement for POC emissions (Cumulative Increase and Toxic Risk Management Policy)	Y	
Part 3	Operating restrictions for Secondary Oil/Water Separators (Cumulative Increase)	Y	
Part 4	Operating requirements for Oil/Water Separators (Regulations 8-8-301 and 8-8-303)	Y	
Part 5	Wastewater throughput limits (Cumulative Increase)	Y	
Part 6	POC leak limit for valves, flanges, and pumps (Cumulative Increase)	Y	
Part 7	Replacement requirements for second to last Carbon Adsorber (Cumulative Increase and Toxic Risk Management Policy)	Y	
Part 8	Replacement requirements for last Carbon Adsorber (Cumulative Increase and Toxic Risk Management Policy)	Y	
Part 9	Methane and non-methane measurement method (Cumulative Increase and Toxic Risk Management Policy)	Y	

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Table IV – C
Source-specific Applicable Requirements
S-22 PRIMARY OIL/WATER SEPARATOR, TK-2
S-23 SECONDARY OIL/WATER SEPARATOR, TK-4
S-38 SECONDARY OIL/WATER SEPARATOR, TK-4
A-1 CARBON ADSORBER
A-2 CARBON ADSORBER

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
Part 10.a.-c.	Carbon Adsorber monitoring requirements (Cumulative Increase and Toxic Risk Management Policy)	Y	
Part 11.a.-e.	Record keeping requirements (Cumulative Increase and Toxic Risk Management Policy)	Y	
Part 12	Permitting requirements for any future proposed revisions of Parts 5 or 8 (Cumulative Increase and Toxic Risk Management Policy)	Y	

IV. Source Specific Applicable Requirements

Table IV – D
Source-specific Applicable Requirements
S-24 LOAD EQUALIZATION TANK, TK-7
S-25 PHOTO-OXIDIZER TANK, TK-5
S-26 NEUTRALIZATION TANK, TK-9
S-27 FIRST STAGE CLARIFIER, TK-8
S-28 AIR STRIPPER SUMP
S-39 SLUDGE STORAGE TANK, TK-3
S-40 EQUALIZATION TANK, TK-1

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
BAAQMD Regulation 8, Rule 2	Organic Compounds-Miscellaneous Operation (3/22/1995)	Y	
8-2-301	Miscellaneous Operations	Y	
BAAQMD Condition #7463			
Part 1	Abatement requirement for POC emissions (Cumulative Increase and Toxic Risk Management Policy)	Y	
Part 5	Wastewater throughput limits (Cumulative Increase)	Y	
Part 6	POC leak limit for valves, flanges, and pumps (Cumulative Increase)	Y	
Part 11a	Record keeping requirements (Cumulative Increase and Toxic Risk Management Policy)	Y	

IV. Source Specific Applicable Requirements

Table IV – E
Source-specific Applicable Requirements
S-30 AIR STRIPPER
A-3 CARBON ADSORBER
A-4 CARBON ADSORBER
A-5 CARBON ADSORBER
A-6 CARBON ADSORBER

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
BAAQMD Regulation 8, Rule 47	Air Stripping and Soil Vapor Extraction Operations (4/26/1995)		
8-47-301	Emission Control Requirement, Specific Compounds	Y	
8-47-302	Organic Compounds	Y	
8-47-501	Records	Y	
8-47-501.1	Water Analysis Records	Y	
8-47-501.2	Vapor Monitoring Results	Y	
8-47-601	Air Stripper Water Sampling	Y	
BAAQMD Condition # 7463			
Part 2	Abatement requirement for POC emissions (Cumulative Increase and Toxic Risk Management Policy)	Y	
Part 5	Wastewater throughput limits (Cumulative Increase)	Y	
Part 6	POC leak limit for valves, flanges, and pumps (Cumulative Increase)	Y	
Part 7	Replacement requirements for second to last Carbon Adsorber (Cumulative Increase and Toxic Risk Management Policy)	Y	
Part 8	Replacement requirements for last Carbon Adsorber (Cumulative Increase and Toxic Risk Management Policy)	Y	
Part 9	Methane and non-methane measurement method (Cumulative Increase and Toxic Risk Management Policy)	Y	
Part 10.a.-c.	Carbon Adsorber monitoring requirements (Cumulative Increase and Toxic Risk Management Policy)	Y	
Part 11.a.-e.	Record keeping requirements (Cumulative Increase and Toxic Risk Management Policy)	Y	

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Table IV – E
Source-specific Applicable Requirements
S-30 AIR STRIPPER
A-3 CARBON ADSORBER
A-4 CARBON ADSORBER
A-5 CARBON ADSORBER
A-6 CARBON ADSORBER

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
Part 12	Permitting requirements for any future proposed revisions of Parts 5 or 8 (Cumulative Increase and Toxic Risk Management Policy)	Y	

Table IV – F
Source-specific Applicable Requirements
S-37 INTERNAL COMBUSTION LEAN BURN ENGINE

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
BAAQMD Regulation 1	General Provisions and Definitions (10/7/1998)		
1-523	Parametric Monitoring and Record keeping Procedures	Y	
1-523.1	Reporting requirement for periods of in-operation > 24 hours	Y	
1-523.2	Limit on duration of in operation	Y	
1-523.3	Reporting requirement for violations of any applicable limits	Y	
1-523.4	Records of in-operation, tests, calibrations, adjustments, & maintenance	Y	
BAAQMD Regulation 6	Particulate Matter and Visible Emissions (12/19/1990)		
6-301	Ringelmann No. 1 Limitation	Y	
6-305	Visible Particles	Y	
6-310	Particle Weight Limitation	Y	
6-401	Appearance of Emissions	Y	

IV. Source Specific Applicable Requirements

Table IV – F
Source-specific Applicable Requirements
S-37 INTERNAL COMBUSTION LEAN BURN ENGINE

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
BAAQMD Regulation 8, Rule 34	Organic Compounds - Solid Waste Disposal Sites (10/6/1999)		
8-34-113	Limited Exemption, Inspection and Maintenance	Y	
8-34-113.1	Emission Minimization Requirement	Y	
8-34-113.2	Shutdown Time Limitation	Y	
8-34-113.3	Record keeping Requirement	Y	
8-34-301	Landfill Gas Collection and Emission Control System Requirements	Y	
8-34-301.1	Continuous Operation	Y	
8-34-301.2	Collection and Control Systems Leak Limitations	Y	
8-34-301.4a	Energy recovery device or emission control system limit	Y	Expires 7/1/02
8-34-301.4b	Limits for Other Emission Control Systems	Y	7/1/02
8-34-412	Compliance Demonstration Tests	Y	
8-34-413	Performance Test Report	Y	
8-34-501	Operating Records	Y	
8-34-501.2	Emission Control System Downtime	Y	
8-34-501.3	Continuous Temperature Records for Enclosed Combustors	Y	7/1/02
8-34-501.4	Testing	Y	
8-34-501.6	Leak Discovery and Repair Records	Y	
8-34-501.10	Gas Flow Rate Records for All Emission Control Systems	Y	7/1/02
8-34-501.11	Records of Key Emission Control System Operating Parameters	Y	7/1/02
8-34-501.12	Records Retention for 5 Years	Y	
8-34-503	Landfill Gas Collection and Emission Control System Leak Testing	Y	
8-34-504	Portable Hydrocarbon Detector	Y	
8-34-508	Gas Flow Meter	Y	7/1/02
8-34-509	Key emission control system operating parameters	Y	7/1/02
SIP Regulation 8, Rule 34	Organic Compounds - Solid Waste Disposal Sites (3/22/1995)		
8-34-113	Exemption, Inspection and Maintenance	Y	
8-34-113.1	Emission Minimization Requirement	Y	

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Source-specific Applicable Requirements
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Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
8-34-113.2	Shutdown Time Limitation	Y ¹	
8-34-113.3	Record keeping 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 (3/15/1995)		
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 (10/6/1999)		
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 (8/1/2001)		
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 (5/4/1998)		
60.4(b)	Requires Submission of Requests, Reports, Applications, and Other Correspondence to the Administrator	Y	

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Table IV – F
Source-specific Applicable Requirements
S-37 INTERNAL COMBUSTION LEAN BURN ENGINE

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
60.7	Notification and Record Keeping	Y	
60.8	Performance Tests	Y	
60.11	Compliance with Standards and Maintenance Requirements	Y	
60.11(a)	Compliance determined by performance tests	Y	
60.11(d)	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 (2/24/1999)		
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	7/1/02
40 CFR Part 62	Approval and Promulgation of State Plans for Designated Facilities and Pollutants (11/19/2001)		
62.1115	Identification of Sources	Y	
BAAQMD Condition # 17812			
Part 1	Fuel Restrictions (Offsets and Cumulative Increase)	Y	
Part 2	Heat Input Limits (Offsets and Cumulative Increase)	Y	
Part 3	Continuous operating requirement (Regulation 8-34-301.1)	Y	
Part 4	Diverter Valve Requirement (Regulation 8-34-301)	Y	

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Table IV – F
Source-specific Applicable Requirements
S-37 INTERNAL COMBUSTION LEAN BURN ENGINE

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
Part 5	TOC Destruction Efficiency Requirement (Regulation 8-34-301.4)	Y	
Part 6	NO _x Emission Limit (BACT)	Y	
Part 7	CO Emission Limit (BACT)	Y	
Part 8	POC Emission Limit (BACT)	Y	
Part 9	Gas flow meter and recorder requirement (Offsets and Cumulative Increase)	Y	
Part 10	Annual source test requirement (BACT and Regulations 8-34-301.4, 8-34-412, 9-8-302.1, and 9-8-302.3)	Y	
Part 11	Record keeping requirements (BACT, Offsets, Cumulative Increase, and Regulation 8-34-501)	Y	
Part 12	Engine Temperature Limit and Temperature Monitoring Requirements (8-34-301, 8-34-501.3, 8-34-501.11, 8-34-507, 8-34-509)	Y	Limit is effective: 1/1/03 Monitoring is effective: 7/1/02

- 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 on a timely basis.

VI. PERMIT CONDITIONS

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

Proposed changes to permit conditions are identified below by strike-through and underline text. The District's reasons for the proposed changes are listed in the statement of basis that accompanies the proposed permit. This note and the strike-through and underline 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 # 5771

**For S-5, INTERNAL COMBUSTION LEAN BURN ENGINE, and
For S-6, INTERNAL COMBUSTION LEAN BURN ENGINE:**

1. The Internal Combustion Engines (S-5 and S-6) shall be fired exclusively on landfill gas. (basis: Cumulative Increase)
2. The A-8 Flare shall be operated when one or more Internal Combustion Engines (S-5, S-6, or S-37) are not operating, but A-8 shall not be operated when all three engines are operating concurrently. 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, A-8, when one or more engines are down. 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 leaks that do not exceed the limits specified in 8-34-301.2. (basis: Regulation 8-34-301)
3. District approved flow meters, to measure landfill gas flow into each engine, shall be installed prior to any operation and maintained in good working condition. (basis: Cumulative Increase and Regulation 8-34-508)
4. Nitrogen Oxide (NO_x) emissions, calculated as NO₂, from each Internal Combustion Engine (S-5 and S-6) shall not exceed ~~1.0 grams/hp-hr~~ each.76 ppmv, corrected to

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15% O₂, dry basis. (basis: BACT)

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5. Carbon Monoxide (CO) emissions from each Internal Combustion Engine (S-5 and S-6) shall not exceed 3.0 grams/hp-hr each. 376 ppmv, corrected to 15% O₂, dry basis. (basis: BACT)
6. Until July 1, 2002, Non-Methane Organic Compound (NMOC) NMHC (non-methane hydrocarbon) emissions from each Internal Combustion Engine (S-5 and S-6) shall not exceed 0.8 grams/hp-hr each 175 ppmv, expressed as methane, corrected to 15% O₂, dry basis. Effective July 1, 2002, each engine shall comply with the more stringent NMOC limit in Regulation 8-34-301.4 (basis: BACT and Regulation 8-34-301.4).
7. A source test shall be performed on engines S-5 and S-6 within 60 days of start-up to demonstrate compliance with Conditions 4, 5, and 6. Such source test shall be performed annually thereafter. The Source Test Section of the District shall be contacted to obtain their approval of the source test procedures. They shall be notified at least 10 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, within 30 days of the test date. In order to demonstrate compliance with Parts #4, #5, and #6 above, Regulation 8, Rule 34, Sections 114 and 301.4, and Regulation 9, Rule 8, Sections 302.1 and 302.3, the Permit Holder shall ensure that a District approved source test is conducted annually on each Internal Combustion Engine (S-5 and S-6). 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. The Source Test Section shall be notified of the scheduled test date at least 7 days in advance of each source test. The source test report shall be submitted to the Compliance and Enforcement Division within 45 days of the test date. The annual source tests shall determine the following:
 - a. landfill gas flow rate to each engine (dry basis);
 - b. concentrations (dry basis) of carbon dioxide (CO₂), nitrogen (N₂), oxygen (O₂), Methane (CH₄), non-methane organic compounds (NMOC), and total hydrocarbons (THC) in the landfill gas;
 - c. exhaust gas flow rate from each engine (dry basis);
 - d. concentrations (dry basis) of NO_x, CO, CH₄, NMOC, THC, SO₂ and O₂ in the exhaust gas from each engine;
 - e. the CH₄, NMOC, and THC destruction efficiencies achieved by each engine;
and

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f. the average cylinder temperature range (or exhaust temperature range measured at an APCO approved location) for each engine that is required to maintain compliance with Parts 4, 5, and 6 above and Regulation 8-34-301.4.

[basis: BACT, Regulations 8-34-114, 8-34-301.4, 8-34-412, 9-8-302.1, and 9-8-302.3]

~~8. 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, NMHC, 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.~~

~~9. Any landfill gas characterization from the engine header which indicate the presence of toxic compounds in excess of the following unabated concentrations shall require the permit 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	=	8.9	ppmv
Chlorobenzene	=	1.5	ppmv
Trichloroethylene	=	0.873	ppmv
Ethylbenzene	=	41	ppmv
Vinyl Chloride	=	6.4	ppmv
Xylene	=	78	ppmv
Toluene	=	110	ppmv

8. The heat input to each internal combustion engine shall not exceed 259.2 million BTU per day nor 94,608 million BTU per year. (basis: Regulation 2-1-301)

9. Daily records shall be maintained, in a District approved logbook, for the hours of operation of the engines and total amount of landfill gas flow through each engine. On a monthly basis summarize all daily records for each engine. On a monthly basis calculate and record the maximum daily and total monthly heat input rate (in BTU) to each engine based on the average methane concentration in

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the landfill gas (as measured during the most recent source test), a high heating value for methane of 1013 BTU/scf, and the amount of landfill gas burned in each engine. The logbook shall be kept on site and shall be made available to the District staff upon request. All records shall be retained for at least 5 years from the date of entry. (basis: Cumulative Increase and Regulations 2-1-301, 2-6-501, and 8-34-301)

10. Effective January 1, 2003, the average cylinder temperature for each Internal Combustion Engine shall be maintained at the temperature determined by the most recent annual source, plus or minus 10 degrees F (or other appropriate range established by the source test) and averaged over 3 hours, during all times that the engine is operated. In order to demonstrate compliance with this condition, each engine shall be equipped with at least one thermocouple that will continuously monitor engine cylinder temperature (or engine exhaust temperature at an APCO approved location). The engine cylinder temperature (or average cylinder temperature if more than one thermocouple is used) shall be continuously recorded. These temperature monitors and recorders shall be installed and operating by no later than July 1, 2002. The appropriate temperature range for each engine that is established by the source tests shall be added to this part via an administrative amendment. (Basis: Regulations 8-34-301, 8-34-501.3 and 8-34-507)

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For S-22, PRIMARY OIL/WATER SEPARATOR, TK-2;
For S-23, SECONDARY OIL/WATER SEPARATOR, TK-4;
For S-24, LOAD EQUALIZATION TANK, TK-7;
For S-25, PHOTO-OXIDIZER TANK, TK-5;
For S-26, NEUTRALIZATION TANK, TK-9;
For S-27, FIRST STAGE CLARIFIER, TK-8;
For S-28, AIR STRIPPER SUMP;
For S-29, FLOCCULATION/MIXING TANK, TK-8A;
For S-30, AIR STRIPPER;
For S-38, SECONDARY OIL/WATER SEPARATOR, TK-4;
For S-39, SLUDGE STORAGE TANK, TK-3;
For S-40, EQUALIZATION TANK, TK-1;
For A-1, CARBON ADSORBER;
For A-2, CARBON ADSORBER;
For A-3, CARBON ADSORBER;
For A-4, CARBON ADSORBER;
For A-5, CARBON ADSORBER; and
For A-6, CARBON ADSORBER:

~~PERMIT CONDITIONS~~

- ~~1. The wastewater stream shall not bypass the sources S-21, S-22, S-24 through S-30, S-38, S-39, and S-40. (Basis: Cumulative Increase)~~
21. The emissions of precursor organic compounds (POC) from the sources S-22, S-23, S-24, S-25, S-26, S-27, S-28, ~~through~~ S-29, ~~AND~~ S-38, S-39, and S-40 shall be abated by the eCarbon aAdsorbers, A-1 and A-2 arranged in series, during all periods of operations. (Basis: Cumulative Increase and Toxic Risk Management Policy)
32. The emissions of POC from the aAir sStripper, (S-30), shall be abated by the eCarbon aAdsorbers, either A-3 and A-4, arranged in series, or A-5 and A-6, arranged in series, during all periods of operations. (Basis: Cumulative Increase and Toxic Risk Management Policy)
3. The two Secondary Oil/Water Separators (S-23 and S-38) shall not operate concurrently. (Basis: Cumulative Increase)

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4. The Oil/Water Separators (S-22, S-23, and S-38) shall have all the openings kept closed at all times except when the opening is used for the inspection and maintenance of the separators. (Basis: Regulations 8-8-301 and 8-8-303)
45. The ~~operating schedule of wastewater throughput rate to~~ the leachate collection, recovery, and treatment system (LCRTS) ~~is limited to the following conditions: shall not exceed 1200 gallons per hour; nor 28,800 gallons per day; nor 10,512,000 gallons per year.~~
- (i) ~~wastewater throughput rate = 20 gpm.~~
- (ii) ~~24 hrs/day; 7 days/wk.; 52 wks./yr.~~
- (Basis: Cumulative Increase)
56. The detectable POC leak emissions, as measured by a District approved portable monitor, shall not exceed 100 ppm above background at a distance of 1 cm from any of the valves, flanges, or pumps of LCRTS. (Basis: Cumulative Increase)
67. The second to last ~~e~~Carbon ~~a~~Adsorber, A-1; and ~~either~~ A-3 or A-5, shall be replaced with fresh carbon upon the ~~D~~detection of 10% of the inlet stream to the ~~e~~Carbon ~~a~~Adsorber as measured by a flame ionization detector (OVA-FID) or other method approved in writing by the APCO. (Basis: Cumulative Increase and Toxic Risk Management Policy)
78. The last ~~e~~Carbon ~~a~~Adsorber, A-2; and ~~either~~ A-4 or A-6, shall be replaced with fresh carbon upon the detection of break-through of 6 ppm as measured with a flame ionization detector (OVA-FID) or other method approved in writing by the APCO. (Basis: Cumulative Increase and Toxic Risk Management Policy)
89. The limit set forth in ~~conditions parts #67 and #78~~ shall apply to non-methane hydrocarbon emissions. To determine the presence of methane in the exhaust stream, a reading shall be taken with and without a carbon filter tip fitted on the OVA-FID probe. Concentrations measured with the carbon filter tip in place shall be considered methane for the purposes of these permit conditions. (Basis: Cumulative Increase and Toxic Risk Management Policy)
910. The operator of this system shall monitor with an FID, or other method approved in writing by the APCO, at the following locations on a daily basis:
- (i)a. at the inlet of A-1; and ~~either~~ A-3 or A-5;

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- (ii)b. at the exhaust of A-1; and either A-3 or A-5;
- (iii)c. at the exhaust of A-2; and either A-4 or A-6.

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(Basis: Cumulative Increase and Toxic Risk Management Policy)

~~10. The monitor reading shall be recorded in a monitoring log at the time they are taken.~~

~~The monitoring data shall be used to:~~

- ~~(i) calculate the time of predicted breakthrough of hydrocarbons after carbon adsorbers to maintain compliance with condition #7;~~
- ~~(ii) estimate the frequency of carbon change out necessary to maintain compliance with condition #6.~~

~~(Basis: Cumulative Increase)~~

~~11. The monitoring shall be conducted daily to maintain compliance with conditions #6, and #7. Based on actual measurements taken at the site during operation of the LCRTS, the operator may propose, for District review, that monitoring schedule be changed on the basis of the decline in hydrocarbon emissions and/or the demonstrated breakthrough rate of the carbon adsorber units. Written approval shall be obtained by the operator prior to changing the monitoring schedule. (Basis: Cumulative Increase)~~

~~12. The oil/water separators shall have all the openings kept closed at all times except when the opening is used for the inspection and maintenance of the separators. (Basis: 8-8-301, 8-8-309, and Cumulative Increase)~~

1311. The operator of the LCRTS shall maintain, in a District approved logbook, the following information:

- (i)a. daily ~~hours of operation~~ records of wastewater throughput to the LCRTS;
- (ii)b. each monitoring reading and analysis results for the day of operation they were taken;
- (iii)c. ~~the calculations of hydrocarbon breakthrough from the carbon adsorber units~~ calculate and record the frequency of carbon change out necessary to maintain compliance with part 7;
- d. calculate and record the time of predicted hydrocarbon breakthrough from the last Carbon Adsorbers, to demonstrate compliance with part 8;
- (iv)e. ~~the number of carbon beds removed from service.~~ the dates and locations of all carbon bed replacements.

(Basis: Cumulative Increase and Toxic Risk Management Policy)

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~~14. Any exceedance of conditions #6 and/or #7 shall be reported to the Permit Service Division with the log as well as the corrective action taken. In addition, notification of an exceedance of condition #6 and/or #7 shall be submitted to the District Enforcement Section at the time it occurs. The submittal shall detail the corrective action taken and shall include the data showing the exceedance as well as the time of occurrence. (Basis: Cumulative Increase)~~

~~1512.~~ The project is a pilot-scale operation, ~~restricting its operation and is restricted~~ to emission limits set forth in ~~condition part #78~~, and ~~operating schedule throughput rates~~ stipulated in ~~condition part #45~~. Any relaxation of these conditions that increase the emissions and/or throughput of wastewater will be subject to a full permit review as though construction at the site had not yet commenced. (Basis: Cumulative Increase and Toxic Risk Management Policy)

Condition # 17812

For S-37, INTERNAL COMBUSTION LEAN BURN ENGINE:

1. The S-37 Internal Combustion Engine shall be fired on landfill gas exclusively. (basis: Offsets, and Cumulative Increase)
2. The ~~amount of landfill gas burned in~~ heat input to the IC Engine S-37 shall not exceed ~~159,578,401 standard cubic feet~~ 229.2 million BTUs per day nor 83,658 million BTUs, during any consecutive 12-month period. (basis: Offsets, and Cumulative Increase, ~~2-2-313, 2-2-608~~)
3. The S-37 Internal Combustion Engine shall operate continuously during all times that landfill gas is vented to the engine. (basis: Regulation 8-34-301.1)
4. ~~Any amount of collected landfill gas that exceeds the capacity of the IC Engine shall be vented to the back up Flare.~~ In the event of ~~the IC Engine shutdown of S-37~~, landfill gas shall be automatically diverted to the A-8 Flare. The A-8 Flare shall be operated when one or more Internal Combustion Engines (S-5, S-6, or S-37) are not operating,

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but A-8 shall not be operated when all three engines are operating concurrently. 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,

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117, or 118 or to inadvertent component leaks that do not exceed the limits specified in 8-34-301.2. (basis: Regulation 8-34-301)

5. Until July 1, 2002, the IC Engine S-37 shall achieve a minimum destruction efficiency of 97% by weight for total methane and non-methane organic compounds (NMOC).
(basis: Regulation 8-34-301.34)

6. The IC Engine S-37 shall emit no more than:
a. ~~7671~~ ppmv of nitrogen oxides, as NO₂, on dry basis, corrected to 15% oxygen.
b. ~~83.86~~ pounds per any consecutive 24 hour period
c. ~~11.73~~ tons per year
(basis: BACT)

7. The IC Engine S-37 shall emit no more than:
a. ~~328309~~ ppmv of carbon monoxide, dry basis, corrected to 15% oxygen.
b. ~~222.24~~ pounds per any consecutive 24 hour period
c. ~~35.20~~ tons per year
(basis: BACT)

8. Until July 1, 2002, The IC Engine S-37 shall emit no more than:
a. ~~130122~~ ppmv of precursor organic compounds (POC), as methane, dry basis, corrected to 15% oxygen.
b. ~~50.32~~ pounds per any consecutive 24 hour period
c. ~~7.04~~ tons per year
(basis: BACT)

9. ~~Each IC Engine shall emit no more than:~~
a. ~~4~~ ppmv of sulfur dioxide, corrected to 15% oxygen, dry basis
b. ~~25.16~~ pounds per any consecutive 24 hour period
c. ~~3.52~~ tons per year
(basis: Cumulative Increase)

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- ~~109.~~ In order to demonstrate compliance with Part 2, the IC Engine shall be equipped with a gas flow meter and recorder that records the gas flow rate at least every 15 minutes. (basis: Offsets; and Cumulative Increase)

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- ~~11.~~ In order to demonstrate compliance with Part 5 through 9, the Permit Holder of the IC Engine shall conduct an annual compliance demonstration test on the IC Engine. The Permit Holder shall obtain approval from the District's Source Test Section for all source test protocols prior to scheduling any tests. The Permit Holder shall notify the District's Source Test Section of the scheduled test dates at least seven days in advance. As a minimum, the Permit Holder shall determine the concentrations of the following compounds in the landfill gas: methane, carbon dioxide, carbon monoxide, nitrogen, oxygen, water, and total non-methane organic compounds. In addition, the Permit Holder shall determine the concentrations of the following compounds in the outlet gas: nitrogen oxides, carbon monoxide, methane, non-methane organic compounds, sulfur dioxide, oxygen, and water. The Permit Holder shall determine the destruction efficiency for total organic compounds (methane plus NMOC). All source test results shall be submitted to the District's Compliance and Enforcement Division within 30 days of conducting the test. (basis: BACT, Offsets, Cumulative Increase, 8-34-301.2, 9-8-302.1, and 9-8-302.3)
120. In order to demonstrate compliance with Parts 5 through ~~98~~ above and Regulations ~~8-34-301.4, 9-8-302.1, and 9-8-302.3~~, the Permit Holder ~~of the IC Engine~~ shall ~~conduct an annual compliance demonstration test~~ ensure that a District approved source test is conducted annually on the S-37 Internal Combustion Engine. Source tests shall be conducted no sooner than 9 months and no later than 12 months after the previous source test. The Permit Holder shall obtain approval from the District's Source Test Section for all source test protocols prior to scheduling any tests. The Permit Holder shall notify the District's Source Test Section of the scheduled test dates at least seven days in advance. 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. As a minimum, the Permit Holder shall determine the concentrations of the following compounds in the landfill gas:

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~~methane, carbon dioxide, carbon monoxide, nitrogen, oxygen, water, and total non-methane organic compounds. In addition, the Permit Holder shall determine the concentrations of the following compounds in the outlet gas: nitrogen oxides, carbon monoxide, methane, non-methane organic compounds, sulfur dioxide, oxygen, and water. The Permit Holder shall determine the destruction efficiency for total organic compounds (methane plus NMOC). All~~

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~~source test results shall be submitted to the District's Compliance and Enforcement Division within 30 days of conducting the test.~~

- a. ~~landfill gas flow rate to the engine (dry basis);~~
- b. ~~concentrations (dry basis) of carbon dioxide (CO₂), nitrogen (N₂), oxygen (O₂), methane (CH₄), non-methane organic compounds (NMOC), and total hydrocarbons (THC) in the landfill gas;~~
- c. ~~exhaust gas flow rate from the engine (dry basis);~~
- d. ~~concentrations (dry basis) of NO_x, CO, CH₄, NMOC, THC, SO₂ and O₂ in the exhaust gas from the engine;~~
- e. ~~the CH₄, NMOC, and THC destruction efficiencies achieved by the engine; and~~
- f. ~~the average cylinder temperature range (or exhaust temperature range measured at an APCO approved location) for each engine that is required to maintain compliance with Parts 4, 5, and 6 above and Regulation 8-34-301.4.~~

~~(basis: BACT, Offsets, Cumulative Increase, and Regulations 8-34-301.24, 8-34-412, 9-8-302.1, and 9-8-302.3)~~

131. The Permit Holder shall maintain the following records:

- a. Records of all start up and shut down dates and times and the reason for any shut downs for ~~the IC Engine~~S-37.
- b. Records of landfill gas throughput to ~~the IC Engine~~S-37.
- c. On a monthly basis calculate and record the maximum daily and total monthly heat input rate (in BTU) to each engine based on the average methane concentration in the landfill gas (as measured during the most recent source test), a high heating value for methane of 1013 BTU/scf, and the amount of landfill gas burned in each engine.
- ed. Records of all compliance demonstration test data.

All records shall be retained on site for a minimum of 5 years and shall be made available to District staff upon request. (basis: BACT, Offsets, Cumulative Increase, and Regulation 8-34-501)

12. Effective January 1, 2003, the average cylinder temperature for the S-37 Internal

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Combustion Engine shall be maintained at the temperature determined by the most recent annual source, plus or minus 10 degrees F (or other appropriate range established by the source test) and averaged over 3 hours, during all times that the engine is operated. In order to demonstrate compliance with this condition, the engine shall be equipped with at least one thermocouple that will continuously monitor engine cylinder temperature (or engine exhaust temperature at an APCO

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approved location). The engine cylinder temperature (or average cylinder temperature if more than one thermocouple is used) shall be continuously recorded. These temperature monitors and recorders shall be installed and operating by no later than July 1, 2002. The appropriate temperature range for the engine that is established by the source tests shall be added to this part via an administrative amendment. (Basis: Regulations 8-34-301, 8-34-501.3 and 8-34-507)

Condition # 17821

**FOR: S-15, ACTIVE LANDFILL WITH LANDFILL GAS COLLECTION SYSTEM, AND
FOR: A-8, LANDFILL GAS FLARE**

1. Total waste accepted and placed at the landfill shall not exceed 2,500 tons in any single day. The total cumulative amount of all wastes placed in the landfill shall not exceed 10.92 million tons. The maximum design capacity of the landfill (total volume of all wastes and cover materials placed in the landfill, excluding final cover) shall not exceed 18.2 million cubic yards. (basis: Regulation 2-1-301)

- *2. This facility is not subject to Regulation 8, Rule 40 because the landfill does not accept contaminated soil (soil containing more than 50 ppmw of volatile organic compounds, VOCs). The following types of materials may be accepted:
 - a. Materials for which the Permit Holder has appropriate documentation demonstrating that either the organic content of the soil or the organic concentration above the soil is below the "contaminated" level (as defined in Regulation 8, Rule 40, Sections 205, 207, and 211).
 - b. Materials for which the Permit Holder has no documentation to prove that soil is not contaminated, but source of the soil is known and there is no reason to suspect that the soil might contain organic compounds.
 - c. Materials which the Permit Holder plans to test in order to determine the VOC contamination level in the soil, provided that the material is sample within 24 hours of receipt by this site and is handled as if the soil were contaminated until

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the Permit Holder receives the test results. The Permit Holder shall collect soil samples in accordance with Regulation 8-40-601. The organic content of the collected soil samples shall be determined in accordance with Regulation 8-40-602.

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- i. If these test results indicate that the soil is still contaminated or if the soil was not sampled within 24 hours of receipt by the facility, the Permit Holder must continue to handle the soil in accordance with Regulation 8, Rule 40, until the soil has been removed from this site or has completed treatment. Storing soil in a temporary stockpile or pit is not considered treatment. Co-mingling, blending, or mixing of soil lots is not considered treatment.
 - ii. If these test results indicate that the soil, as received at this site, has an organic content of 50 ppmw or less, then the soil may be considered to be not contaminated and need not be handled in accordance with Regulation 8, Rule 40 any longer.
(basis: Regulation 8-40-301)
3. The Permit Holder shall limit the quantity of low VOC soil (soil that contains 50 ppmw or less of VOCs) 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 low VOC soil disposed of in the landfill or used as cover material in the landfill. This total amount (in units of pounds per day) is Q in the equation in subpart c. below.
 - b. Record on a daily basis the VOC content of all low VOC 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:
$$E = Q * C / 10^6$$
(basis: Regulation 8-2-301)
4. Water and/or dust suppressants shall be applied to all unpaved roadways and active soil removal and fill areas associated with this landfill as necessary to prevent visible

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particulate emissions. Paved roadways at the facility shall be kept sufficiently clear of dirt and debris as necessary to prevent visible particulate emissions from vehicle traffic or wind. (basis: Regulations 2-1-403, 6-301, and 6-305)

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15. All collected landfill gas shall be vented to properly operating abatement equipment including the Internal Combustion Engines (S-5, S-6, and S-37) or the Landfill Gas Flare (A-8). 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)

26. ~~Wells shall not be disconnected or removed from operation nor shall isolation or adjustment valves be closed in excess of 90 minutes without written authorization 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 6.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 # 2417.

	Required Components
<u>Total Number of Vertical Wells:</u>	<u>53</u>
<u>Total Number of Horizontal Collectors:</u>	<u>16</u>

b. The Permit Holder has submitted Application # 2789 for a new separate gas collection and control system for the HWMF section of the landfill. This application is under review.

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

37. ~~Routine maintenance or repairs may be performed without written authorization from the District provided that only one well is disconnected at any time for a period not to~~

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~~exceed 90 minutes. The landfill gas collection system described in Part 6.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 8-34-301.1)~~

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- ~~4. If any component of the gas collection or control system breaks down, the District's Enforcement Division shall be notified immediately. Periods of downtime in excess of 24 hours duration require that a variance application be filed, on the following business day, with the District's Hearing Board.~~
- ~~5. The District shall be notified in writing of a change in permit conditions in the event of increasing the number of wells at this site.~~
- ~~6. Landfill gas shall be controlled at all times. The A-8 Flare must be operated when one or more engines are not operating; conversely, the Flare must not be operated if all engines are operating. In the event that more landfill gas is available than the three engines (S-5, S-6, and S-37) can fire the District shall be informed in writing and application to the District shall be made to allow simultaneous firing of the A-8 Flare and three engines.~~
- ~~7. Written annual reports shall be submitted to the District within 30 days after the permit anniversary date of the amount (in tons) of garbage placed in the uncontrolled portion of the landfill during the 12 months prior to the anniversary date. The report shall be submitted to the Permit Services Division, referenced to the above permit number, and shall include the increase (in feet) in refuse depth, area filled (in yd² and acreage), and compacted in place density (lb/yd³) of the garbage filled in the previous 12 months. This information shall be used to re-evaluate the uncontrolled portion of the landfill for compliance with Regulation 8 Rule 34.~~
8. The A-8 Landfill Gas Flare shall be operated when one or more engines (S-5, S-6, or S-37) are not operating. The A-8 Landfill Gas Flare shall not be operated when all three engines (S-5, S-6, and S-37) are operating. The Heat Input to the A-8 Landfill

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Gas Flare shall not exceed 544 million BTU per day nor 198,560 million BTU per year. In order to demonstrate compliance with this part, the Permit Holder shall calculate and record on a monthly basis the maximum daily and total monthly heat input to the flare based on the landfill gas flow rate recorded pursuant to part 14, the average methane concentration in the landfill gas based on the most recent source test, and a high heating value for methane of 1013 BTU/scf. (basis: Cumulative Increase and Regulation 2-1-301)

Condition # 17821

9. The combustion zone temperature of the A-8 Landfill Gas Flare shall be maintained at a minimum of 1400 degrees Fahrenheit, averaged over any 3-hour period. This minimum temperature shall be adjusted via an administrative permit amendment, if a source test demonstrates compliance with all applicable requirements at a different temperature. The minimum combustion zone temperature for the flare shall be equal to the average combustion zone temperature determined during the most recent complying source test minus 50 degrees F, provided that the minimum combustion zone temperature is not less than 1400 degrees F. (basis: Toxic Risk Management Policy and Regulation 8-34-301.3)
10. Total reduced sulfur compounds in the collected landfill gas shall be monitored as a surrogate for monitoring sulfur dioxide in control system's exhaust. The concentration of total reduced sulfur compounds in the collected landfill gas shall not exceed 1300 ppmv (dry). In order to demonstrate compliance with this part, the Permit Holder shall measure the total sulfur content in collected landfill gas on a quarterly 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 quarterly thereafter. (basis: Regulation 9-1-302)
11. In order, to demonstrate compliance with Regulation 8, Rule 34, Sections 301.3 and 412, the Permit Holder shall ensure that a District approved source test is conducted annually on the Landfill Gas Flare (A-8). 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), total hydrocarbons (THC), methane (CH₄), and total non-methane organic

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- compounds (NMOC) in the landfill gas;
- c. stack gas flow rate from the flare (dry basis);
- d. concentrations (dry basis) of NO_x, CO, SO₂, THC, CH₄, NMOC, Benzene, Formaldehyde, Vinyl Chloride, and O₂ in the flare stack gas;
- e. the THC, CH₄, and NMOC destruction efficiencies achieved by the flare; and
- f. the average combustion temperature in the flare during the test period.

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The first annual source test shall be conducted by no later than October 1, 2002. 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)

12. The Permit Holder shall conduct a characterization of the landfill gas concurrent with the annual source test required by part 11 above. The landfill gas sample shall be drawn from the main landfill gas header. In addition to the compounds listed in part 11.b, the landfill gas shall be analyzed for all 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 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. (basis: Toxic Risk Management Policy and Regulation 8-34-412)

- *13. 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.

<u>Benzene</u>	<u>=</u>	<u>8.9</u>	<u>ppmv</u>
<u>Chlorobenzene</u>	<u>=</u>	<u>1.5</u>	<u>ppmv</u>
<u>Trichloroethylene</u>	<u>=</u>	<u>0.873</u>	<u>ppmv</u>
<u>Ethylbenzene</u>	<u>=</u>	<u>41</u>	<u>ppmv</u>
<u>Vinyl Chloride</u>	<u>=</u>	<u>6.4</u>	<u>ppmv</u>

VI. Permit Conditions

<u>Xylene</u>	<u>=</u>	<u>78</u>	<u>ppmv</u>
<u>Toluene</u>	<u>=</u>	<u>110</u>	<u>ppmv</u>

(Basis: Toxic Risk Management Policy)

Condition # 17821

14. 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-15 on a daily basis. Summarize the daily waste acceptance records for each calendar month.
 - b. For each area or cell that is not controlled by a landfill gas collection system, maintain a record of the date that waste was initially placed in the area or cell. Record the cumulative amount of waste placed in each uncontrolled area or cell on a monthly basis.
 - c. If the Permit Holder plans to exclude an uncontrolled area or cell from the collection system requirement, the Permit Holder shall also record the types and amounts of all non-decomposable waste placed in the area and the percentage (if any) of decomposable waste placed in the area.
 - d. Maintain daily records of low VOC soil acceptance rate and emissions, pursuant to part 3.
 - e. Record of the dates, locations, and frequency per day of all watering activities on unpaved roads or active soil or fill areas. Record the dates, locations, and type of any dust suppressant applications. Record the dates and description of all paved roadway cleaning activities. All records shall be summarized on monthly basis.
 - f. Record the initial operation date for each new landfill gas well and collector.
 - g. 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 6.a. Any areas containing only non-decomposable waste shall be clearly identified. This map shall be updated at least once a year to indicate changes in refuse boundaries and to include any newly installed wells and collectors.
 - h. Record the operating times and the landfill gas flow rate to the A-8 Landfill Gas Flare on a daily basis. Summarize these records on a monthly basis. Calculate and record the heat input to A-8, pursuant to part 8.

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- i. Maintain continuous records of the combustion zone temperature for the A-8 Landfill Gas Flare during all hours of operation.
- j. Maintain records of all test dates and test results performed to maintain compliance parts 10, 11, and 12 above or to maintain compliance with any applicable rule or regulation.

Condition # 17821

All records shall be maintained on site or shall be made readily available to District staff upon request for a period of at least 5 years from the date of entry. These record keeping requirements do not replace the record keeping requirements contained in any applicable rules or regulations.

(basis: Cumulative Increase, 2-1-301, 2-6-501, 6-301, 6-305, 8-2-301, 8-34-301, 8-34-304, and 8-34-501)

VII. APPLICABLE LIMITS & COMPLIANCE MONITORING REQUIREMENTS

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

Table VII – A
Applicable Limits and Compliance Monitoring Requirements
S-5 INTERNAL COMBUSTION LEAN BURN ENGINE
S-6 INTERNAL COMBUSTION LEAN BURN ENGINE

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
Opacity	BAAQMD 6-301	Y		Ringelmann No. 1 for < 3 minutes/hr		N	
FP	BAAQMD 6-310	Y		0.15 grains/dscf		N	
TOC (Total Organic Compounds Plus Methane)	BAAQMD 8-34-301.2	Y		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		90% removal by weight	BAAQMD Condition # 5771, Part 7	P/A	Annual Source Test

VII. Applicable Limits and Compliance Monitoring Requirements

Table VII – A
Applicable Limits and Compliance Monitoring Requirements
S-5 INTERNAL COMBUSTION LEAN BURN ENGINE
S-6 INTERNAL COMBUSTION LEAN BURN ENGINE

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
TOC	SIP 8-34-114	Y		90% removal by weight	BAAQMD Condition # 5771, Part 7	P/A	Annual Source Test
Non-Methane Organic Compounds (NMOC)	BAAQMD 8-34-301.4b	Y	7/1/02	98% removal by weight OR < 120 ppmv, dry basis @ 3% O ₂ , expressed as methane	BAAQMD 8-34-412 and 8-34-501.4 and BAAQMD Condition # 5771, Part 7	P/A	Initial and Annual Source Tests and Records
NMOC	BAAQMD Condition # 5771, Part 6	Y	Expires 7/1/02	≤ 175 ppmv, dry basis @ 15% O ₂ , expressed as methane	BAAQMD Condition # 5771, Part 7	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, and ≤ 0.05 ppm for 24 hours		N	
SO ₂	BAAQMD 9-1-302	Y		≤ 300 ppm (dry)	BAAQMD Condition # 17821, Part 10 and BAAQMD Condition # 5771, Part 7	P/Q and P/A	Quarterly Sulfur Analysis of Landfill Gas and Annual Source Test
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 – A
Applicable Limits and Compliance Monitoring Requirements
S-5 INTERNAL COMBUSTION LEAN BURN ENGINE
S-6 INTERNAL COMBUSTION LEAN BURN ENGINE

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
NO _x	BAAQMD 9-8-302.1	Y		Waste Fuel Gas, Lean-Burn ≤ 140 ppmv, dry basis @ 15% O ₂ expressed as NO ₂	BAAQMD Condition # 5771, Part 7	P/A	Annual Source Test
NO _x	BAAQMD Condition # 5771, Part 4	Y		≤ 76 ppmv, dry basis @ 15% O ₂ expressed as NO ₂	BAAQMD Condition # 5771, Part 7	P/A	Annual Source Test
CO	BAAQMD 9-8-302.3	Y		Waste Fuel Gas: ≤ 2000 ppmv, dry basis @ 15% O ₂	BAAQMD Condition # 5771, Part 7	P/A	Annual Source Test
CO	BAAQMD Condition # 5771, Part 5	Y		≤ 315 ppmv, dry basis @ 15% O ₂	BAAQMD Condition # 5771, Part 7	P/A	Annual Source Test
Heat Input	BAAQMD Condition # 5771, Part 8	Y		259.2 MM BTU per day (each engine) and 94,608 MM BTU per year (each engine)	BAAQMD Condition # 5771, Parts 3 and 9	C	Gas Flow Meter and Recorder and Records
Gas Flow	BAAQMD 8-34-301 and 301.1	Y	7/1/02	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 – A
Applicable Limits and Compliance Monitoring Requirements
S-5 INTERNAL COMBUSTION LEAN BURN ENGINE
S-6 INTERNAL COMBUSTION LEAN BURN ENGINE

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
Gas Flow	BAAQMD Condition # 5771, Part 2	Y	7/1/02	Upon shut down of and engine (S-5 or S-6), automatically divert excess collected gas the A-8 Flare	BAAQMD Condition # 5771, Part 3	C	Gas Flow Meter and Recorder
Emission Control System Shutdown Time	BAAQMD 8-34-113.2	Y		240 hours/year	BAAQMD 8-34-501.2 and BAAQMD Condition # 5771, Part 9	P/D	Records
Emission Control System Shutdown Time	SIP 8-34-113.2	Y		12 hours/calendar month	SIP 8-34-501.2	P/D	Records
Engine Cylinder or Exhaust Temperature	BAAQMD Condition # 5771, Part 10	Y	1/1/03	To be established during first source test conducted after permit issuance	BAAQMD 8-34-507 and 8-34-509 (effective 7/1/02)	C	Temperature sensor and continuous recorder; effective 7/1/02
Periods of Inoperation for Parametric Monitors	BAAQMD 1-523.2	Y		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 – A
Applicable Limits and Compliance Monitoring Requirements
S-5 INTERNAL COMBUSTION LEAN BURN ENGINE
S-6 INTERNAL COMBUSTION LEAN BURN ENGINE

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

VII. Applicable Limits and Compliance Monitoring Requirements

Table VII – B
Applicable Limits and Compliance Monitoring Requirements
S-15 WEST CONTRA COSTA SANITARY LANDFILL
A-8 LANDFILL GAS FLARE

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
Collection System Installation Dates	BAAQMD 8-34-304.1	Y		For Inactive/Closed Areas: collection system components must be installed and operating by 2 years + 60 days after initial waste placement	BAAQMD 8-34-501.7 and 501.8 and BAAQMD Condition # 17821, Parts 14.b.-c. and 14.f.-g.	P/E	Records
Collection System Installation Dates	BAAQMD 8-34-304.2	Y		For Active Areas: Collection system components must be installed and operating by 5 years + 60 days after initial waste placement	BAAQMD 8-34-501.7 and 501.8 and BAAQMD Condition # 17821, Parts 14.b.-c. and 14.f.-g.	P/E	Records
Collection System Installation Dates	BAAQMD 8-34-304.3	Y		For Any Uncontrolled Areas or Cells: collection system components must be installed and operating within 60 days after the uncontrolled area or cell accumulates 1,000,000 tons of decomposable waste	BAAQMD 8-34-501.7 and 501.8 and BAAQMD Condition # 17821, Parts 14.a.-c. and 14.f.-g.	P/E	Records

VII. Applicable Limits and Compliance Monitoring Requirements

Table VII – B
Applicable Limits and Compliance Monitoring Requirements
S-15 WEST CONTRA COSTA SANITARY LANDFILL
A-8 LANDFILL GAS FLARE

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
Gas Flow	BAAQMD 8-34-301 and 301.1	Y		Landfill gas collection system shall operate continuously and all collected gases shall be vented to a properly operating control system	BAAQMD 8-34-501.10 and 508 (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
Gas Flow	BAAQMD Condition # 17821, Parts 5, 6, and 7	Y		Landfill gas collection system shall operate continuously and all collected gases shall be vented to a properly operating control system	BAAQMD Condition # 5771, Part 9; BAAQMD Condition # 17812, Part 11; and BAAQMD Condition # 17821, Parts 14.f.-h.	P/D	Records of Landfill Gas Flow Rates, Collection and Control Systems Downtime, and Collection System Components
Collection and Control Systems Shutdown Time	BAAQMD 8-34-113.2	Y		240 hours/year nor 5 consecutive days	BAAQMD 8-34-501.1	P/D	Operating Records

VII. Applicable Limits and Compliance Monitoring Requirements

Table VII – B
Applicable Limits and Compliance Monitoring Requirements
S-15 WEST CONTRA COSTA SANITARY LANDFILL
A-8 LANDFILL GAS FLARE

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
Collection and Control Systems Shutdown Time	SIP 8-34-113.2	Y		12 hours/calendar month	SIP 8-34-501.1	P/D	Operating Records
Periods of Inoperation for Parametric Monitors	BAAQMD 1-523.2	Y		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	Y	7/1/02	< 0 psig	BAAQMD 8-34-414, 501.9 and 505.1	P/M	Monthly Inspection and Records
Temperature of Gas at Wellhead	BAAQMD 8-34-305.2	Y	7/1/02	< 55 °C	BAAQMD 8-34-414, 501.9 and 505.2	P/M	Monthly Inspection and Records
Gas Concentrations at Wellhead	BAAQMD 8-34-305.3 or 305.4	Y	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

VII. Applicable Limits and Compliance Monitoring Requirements

Table VII – B
Applicable Limits and Compliance Monitoring Requirements
S-15 WEST CONTRA COSTA SANITARY LANDFILL
A-8 LANDFILL GAS FLARE

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
Well Shutdown Limits	BAAQMD 8-34-116.2	Y		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	Y		24 hours per well	BAAQMD 8-34-116.5 and 501.1	P/D	Records
Well Shutdown Limits	BAAQMD 8-34-117.4	Y		No more than 5 wells at a time or 10% of total collection system, whichever is less	BAAQMD 8-34-117.6 and 501.1	P/D	Records
Well Shutdown Limits	BAAQMD 8-34-117.5	Y		24 hours per well	BAAQMD 8-34-117.6 and 501.1	P/D	Records
TOC (Total Organic Compounds Plus Methane)	BAAQMD 8-34-301.2	Y		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	

VII. Applicable Limits and Compliance Monitoring Requirements

Table VII – B
Applicable Limits and Compliance Monitoring Requirements
S-15 WEST CONTRA COSTA SANITARY LANDFILL
A-8 LANDFILL GAS FLARE

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
TOC	BAAQMD 8-34-303b	Y	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		1000 ppmv as methane at 3 inches above surface		N	
TOC	BAAQMD 8-34-301.3a	Y	Expires 7/1/02	98% removal by weight (applies to A-8 Flare only)	BAAQMD Condition # 17821, Part 11	P/A	Annual Source Test
TOC	SIP 8-34-301.2	Y		98% removal by weight (applies to A-8 Flare only)	BAAQMD Condition # 17821, Part 11	P/A	Annual Source Test
Non-Methane Organic Compounds (NMOC)	BAAQMD 8-34-301.3b	Y	7/1/02	98% removal by weight OR < 30 ppmv, dry basis @ 3% O ₂ , expressed as methane (applies to A-8 Flare only)	BAAQMD 8-34-412 and 8-34-501.4 and BAAQMD Condition # 17821, Part 11	P/A	Initial and Annual Source Tests and Records

VII. Applicable Limits and Compliance Monitoring Requirements

Table VII – B
Applicable Limits and Compliance Monitoring Requirements
S-15 WEST CONTRA COSTA SANITARY LANDFILL
A-8 LANDFILL GAS FLARE

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
Temperature of Combustion Zone (CT)	BAAQMD Condition # 17821, Part 9	Y		CT \geq 1400 °F, averaged over any 3-hour period (applies to A-8 Flare only)	BAAQMD 8-34-501.3 and 507, SIP 8-34-501.3 and BAAQMD Condition# 17821, Part 14.i.	C	Temperature Sensor and Recorder (continuous)
Total Carbon	BAAQMD 8-2-301	Y		15 pounds/day or 300 ppm, dry basis (applies only to aeration of or use as cover soil of soil containing \leq 50 ppmw of volatile organic compounds)	BAAQMD Condition # 17821, Part 3	P/D	Records
Volatile Organic Compounds	BAAQMD Condition # 17821, Part 2	N		Facility shall not accept soil containing more than 50 ppmw of VOC	BAAQMD Condition # 17821, Part 2	P/E	Records
Opacity	BAAQMD 6-301	Y		Ringelmann No. 1 for < 3 minutes/hr (applies to S-15 Landfill operations)	BAAQMD Condition #17821, Part 14.i.	P/E, M	Records of all site watering and road cleaning events
Opacity	BAAQMD 6-301	Y		Ringelmann No. 1 for < 3 minutes/hr (applies to A-8 Flare)		N	
FP	BAAQMD 6-310	Y		\leq 0.15 grains/dscf (applies to A-8 Flare only)		N	

VII. Applicable Limits and Compliance Monitoring Requirements

Table VII – B
Applicable Limits and Compliance Monitoring Requirements
S-15 WEST CONTRA COSTA SANITARY LANDFILL
A-8 LANDFILL GAS FLARE

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
SO ₂	BAAQMD 9-1-301	Y		Property Line Ground Level Limits: ≤ 0.5 ppm for 3 minutes and ≤ 0.25 ppm for 60 min. and ≤ 0.05 ppm for 24 hours		N	
SO ₂	BAAQMD Regulation 9-1-302	Y		≤ 300 ppm (dry basis) (applies to A-8 Flare only)	BAAQMD Condition # 17821, Part 10	P/A	Source Test
Total Sulfur Content in Landfill Gas	BAAQMD Condition # 17821, Part 10	Y		≤ 1300 ppmv	BAAQMD Condition # 17821, Part 10	P/Q	Sulfur analysis of landfill gas
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	
Amount of Waste Accepted	BAAQMD Condition # 17821, Part 1	Y		≤ 2500 tons/day and ≤ 10,920,000 tons (cumulative amount of all wastes) and ≤ 18,200,000 yd ³ (cumulative amount of all wastes and cover materials)	BAAQMD Condition # 17821, Part 14.a.	P/D	Records
Heat Input	BAAQMD Condition # 17821, Part 8	Y		≤ 544 MM BTU per day and ≤ 198,560 MM BTU per year	BAAQMD Condition # 17821, Part 8	P/D	Records

VII. Applicable Limits and Compliance Monitoring Requirements

Table VII – B
Applicable Limits and Compliance Monitoring Requirements
S-15 WEST CONTRA COSTA SANITARY LANDFILL
A-8 LANDFILL GAS FLARE

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
Toxic Air Contaminants	BAAQMD Condition # 17821, Part 13	N		Benzene 8.9 ppmv Chlorobenzene 1.5 ppmv Trichloroethylene 0.873 ppmv Ethylbenzene 41 ppmv Vinyl Chloride 6.4 ppmv Xylene 78 ppmv Toluene 110 ppmv	BAAQMD Condition # 17821, Part 12	P/A	Annual Landfill Gas Analysis

VII. Applicable Limits and Compliance Monitoring Requirements

Table VII - C
Applicable Limits and Compliance Monitoring Requirements
S-22 PRIMARY OIL/WATER SEPARATOR, TK-2
S-23 SECONDARY OIL WATER SEPARATOR, TK-4
S-38 SECONDARY OIL WATER SEPARATOR, TK-4
A-1 CARBON ADSORBER
A-2 CARBON ADSORBER

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
Organic Compounds	BAAQMD 8-8-301.3	Y		combined collection and removal efficiency of at least 95% by weight	BAAQMD Condition # 7463, Parts 10.a.-c. and 11.a.-e.	P/D	Daily FID Measurements at Carbon Adsorbers and Daily Records of Wastewater Throughput
Organic Compounds	BAAQMD 8-8-303	Y		all gauging and sampling devices shall have vapor tight covers, seals, or lids		N	
NMOC	BAAQMD Condition # 7463, Part 7	Y		carbon replacement upon detection of an outlet NMOC concentration (from A-1) that is 10% or more of the inlet NMOC concentration	BAAQMD Condition # 7463, Parts 10.a., 10.b., 11.b., 11.c., and 11.e.	P/D	Daily FID Measurements at Carbon Adsorber (inlet and outlet) and Records
NMOC	BAAQMD Condition # 7463, Part 8	Y		carbon replacement upon detection of an outlet NMOC concentration (from A-2) of 6 ppmv	BAAQMD Condition # 7463, Parts 10.c., 11.b., 11.d., and 11.e.	P/D	Daily FID Measurement at Carbon Adsorber (outlet) and Records

VII. Applicable Limits and Compliance Monitoring Requirements

Table VII - C
Applicable Limits and Compliance Monitoring Requirements
S-22 PRIMARY OIL/WATER SEPARATOR, TK-2
S-23 SECONDARY OIL WATER SEPARATOR, TK-4
S-38 SECONDARY OIL WATER SEPARATOR, TK-4
A-1 CARBON ADSORBER
A-2 CARBON ADSORBER

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
POC	BAAQMD Condition # 7463, Part 6	Y		Leak Limit for Valves, Flanges, and Pumps of: 100 ppmv of POC above background at 1 cm from any component		N	
Waste-water Through-put Limits	BAAQMD Condition # 7463, Part 5	Y		1200 Gallons/Hour 28,800 Gallons/Day 10,512,000 Gallons/Year	BAAQMD Condition # 7463, Part 11.a.	P/D	Records

VII. Applicable Limits and Compliance Monitoring Requirements

Table VII – D
Applicable Limits and Compliance Monitoring Requirements
S-24 LOAD EQUALIZATION TANK, TK-7
S-25 PHOTO-OXIDIZER TANK, TK-5
S-26 NEUTRALIZATION TANK, TK-9
S-27 FIRST STAGE CLARIFIER, TK-8
S-28 AIR STRIPPER SUMP
S-39 SLUDGE STORAGE TANK, TK-3
S-40 EQUALIZATION TANK, TK-1

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
Total Carbon	BAAQMD 8-2-301	Y		15 Pounds/Day or 300 ppm, dry basis	BAAQMD Condition # 7463, Part 11.a.	P/D	Records
Waste-water Through-put Limits	BAAQMD Condition # 7463, Part 5	Y		1200 Gallons/Hour 28,800 Gallons/Day 10,512,000 Gallons/Year	BAAQMD Condition # 7463, Part 11.a.	P/D	Records
POC	BAAQMD Condition # 7463, Part 6	Y		Leak Limit for Valves, Flanges, and Pumps of: 100 ppmv of POC above background at 1 cm from any component		N	

VII. Applicable Limits and Compliance Monitoring Requirements

Table VII –E
Applicable Limits and Compliance Monitoring Requirements
S-30 AIR STRIPPER
A-3 TO A-6, CARBON ADSORBERS

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
Total Organic Compounds (TOC)	BAAQMD 8-47-301 and 8-47-302	Y		control device shall reduce total organic compound emissions to the atmosphere by at least: 90% by weight	BAAQMD 8-47-501.1, 8-47-501.2, and 8-47-601 and BAAQMD Condition # 7463, Parts 10.a.-c. and 11.a.-e.	P/D, M	Daily FID Measurements at Carbon Adsorbers, Daily Records of Wastewater Throughput and Monthly Records of Water Analyses
NMOC	BAAQMD Condition # 7463, Part 7	Y		carbon replacement upon detection of an outlet NMOC concentration (from A-3 or A-5) that is 10% or more of the inlet NMOC concentration	BAAQMD Condition # 7463, Parts 10.a., 10.b., 11.b., 11.c., and 11.e.	P/D	Daily FID Measurements at Carbon Adsorbers (inlet and outlet) and Records
NMOC	BAAQMD Condition # 7463, Part 8	Y		carbon replacement upon detection of an outlet NMOC concentration (from A-4 or A-6) of 6 ppmv	BAAQMD Condition # 7463, Parts 10.c., 11.b., 11.d., and 11.e.	P/D	Daily FID Measurements at Carbon Adsorbers (outlet) and Records

VII. Applicable Limits and Compliance Monitoring Requirements

Table VII –E
Applicable Limits and Compliance Monitoring Requirements
S-30 AIR STRIPPER
A-3 TO A-6, CARBON ADSORBERS

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
POC	BAAQMD Condition # 7463, Part 6	Y		Leak Limit for Valves, Flanges, and Pumps of: 100 ppmv of POC above background at 1 cm from any component		N	
Waste-water Through-put Limits	BAAQMD Condition # 7463, Part 5	Y		1200 Gallons/Hour 28,800 Gallons/Day 10,512,000 Gallons/Year	BAAQMD Condition # 7463, Part 11.a.	P/D	Records

Table VII – F
Applicable Limits and Compliance Monitoring Requirements
S37 – INTERNAL COMBUSTION LEAN BURN ENGINE

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
Opacity	BAAQMD 6-301	Y		Ringelmann No. 1 for < 3 minutes/hr		N	
FP	BAAQMD 6-310	Y		0.15 grains/dscf		N	
TOC (Total Organic Compounds Plus Methane)	BAAQMD 8-34-301.2	Y		1000 ppmv as methane (component leak limit)	BAAQMD 8-34-501.6 and 8-34-503	P/Q	Quarterly Inspection and Records

VII. Applicable Limits and Compliance Monitoring Requirements

Table VII – F
Applicable Limits and Compliance Monitoring Requirements
S37 – INTERNAL COMBUSTION LEAN BURN ENGINE

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
TOC	SIP 8-34-301.1	Y		1000 ppmv as methane (component leak limit)	SIP 8-34-503	P/Q	Quarterly Inspection
TOC	BAAQMD 8-34-301.4a and BAAQMD Condition # 17812, Part 5	Y	Expires 7/1/02	97% removal by weight	BAAQMD Condition # 17812, Part 10	P/A	Annual Source Test
TOC	SIP 8-34-301.3	Y		97% removal by weight	BAAQMD Condition # 17812, Part 10	P/A	Annual Source Test
Non- Methane Organic Com- pounds (NMOC)	BAAQMD 8-34-301.4b	Y	7/1/02	98% removal by weight OR < 120 ppmv, dry basis @ 3% O ₂ , expressed as methane	BAAQMD 8-34-412 and 8-34-501.4 and BAAQMD Condition # 17812, Part 10	P/A	Initial and Annual Source Tests and Records
POC	BAAQMD Condition # 17812, Part 8	Y	Expires 7/1/02	≤ 122 ppmv, dry basis @ 15% O ₂ , expressed as methane	BAAQMD Condition # 17812, Part 10	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, and ≤ 0.05 ppm for 24 hours		N	

VII. Applicable Limits and Compliance Monitoring Requirements

Table VII – F
Applicable Limits and Compliance Monitoring Requirements
S37 – INTERNAL COMBUSTION LEAN BURN ENGINE

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
SO ₂	BAAQMD 9-1-302	Y		≤ 300 ppm (dry)	BAAQMD Condition # 17821, Part 10 and BAAQMD Condition # 17812, Part 10	P/Q and P/A	Quarterly Sulfur Analysis of Landfill Gas and Annual Source Test
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	
NO _x	BAAQMD 9-8-302.1	Y		Waste Fuel Gas, Lean-Burn ≤ 140 ppmv, dry basis @ 15% O ₂ , expressed as NO ₂	BAAQMD Condition # 17812, Part 10	P/A	Annual Source Test
NO _x	BAAQMD Condition # 17812, Part 6	Y		≤ 71 ppmv, dry basis @ 15% O ₂ , expressed as NO ₂	BAAQMD Condition # 17812, Part 10	P/A	Annual Source Test
CO	BAAQMD 9-8-302.3	Y		Waste Fuel Gas: ≤ 2000 ppmv, dry basis @ 15% O ₂	BAAQMD Condition # 17812, Part 10	P/A	Annual Source Test
CO	BAAQMD Condition # 17812, Part 7	Y		≤ 309 ppmv, dry basis @ 15% O ₂	BAAQMD Condition # 17812, Part 10	P/A	Annual Source Test

VII. Applicable Limits and Compliance Monitoring Requirements

Table VII – F
Applicable Limits and Compliance Monitoring Requirements
S37 – INTERNAL COMBUSTION LEAN BURN ENGINE

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
Heat Input	BAAQMD Condition # 17812, Part 2	Y		229.2 MM BTU per day and 83,658 MM BTU per consecutive 12-month period	BAAQMD Condition # 17812, Parts 9 and 11.c.	C	Gas Flow Meter and Recorder and Records
Gas Flow	BAAQMD 8-34-301 and 301.1	Y	7/1/02	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	BAAQMD Condition # 17812, Parts 3 & 4	Y	7/1/02	Operate S-37 continuously; Upon shutdown of S-37 or if any amount of gas exceeds the capacity of S-37, return gas to A-8 Flare automatically	BAAQMD Condition # 17812, Part 9	C	Gas Flow Meter and Recorder
Emission Control System Shutdown Time	BAAQMD 8-34-113.2	Y		240 hours/year	BAAQMD 8-34-501.2 and BAAQMD Condition # 17812, Part 11.a.	P/D	Records

VII. Applicable Limits and Compliance Monitoring Requirements

Table VII – F
Applicable Limits and Compliance Monitoring Requirements
S37 – INTERNAL COMBUSTION LEAN BURN ENGINE

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
Emission Control System Shutdown Time	SIP 8-34-113.2	Y		12 hours/calendar month	SIP 8-34-501.2	P/D	Records
Engine Cylinder or Exhaust Temperature	BAAQMD Condition # 17812, Part 12	Y	1/1/03	To be established during first source test conducted after permit issuance	BAAQMD 8-34-507 and 8-34-509 (effective 7/1/02)	C	Temperature sensor and continuous recorder; effective 7/1/02
Periods of Inoperation for Parametric Monitors	BAAQMD 1-523.2	Y		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

VIII. TEST METHODS

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

**Table VIII
 Test Methods**

Applicable Requirement	Description of Requirement	Acceptable Test Methods
BAAQMD 6-301	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	Organic Compound Emission Limitation for Miscellaneous Operations	Manual of Procedures, Volume IV, ST-7, Organic Compounds; or EPA Reference Method 25 or 25A
BAAQMD 8-8-301.3	OC Vapor Recovery System, collection and removal efficiency limit	Manual of Procedures, Volume IV, ST-7, Organic Compounds; or EPA Reference Method 25 or 25A
BAAQMD 8-8-303	Gauging and Sampling Devices	EPA Reference Method 21, Determination of Volatile Organic Compound Leaks
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

VIII. Test Methods

**Table VIII
 Test Methods**

Applicable Requirement	Description of Requirement	Acceptable Test Methods
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
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	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	Flare Limit	Manual of Procedures, Volume IV, ST-7, Organic Compounds; or EPA Reference Method 25 or 25A
SIP 8-34-301.3	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	Landfill Surface Requirements	EPA Reference Method 21, Determination of Volatile Organic Compound Leaks
BAAQMD 8-47-301	Emission Control Requirement, Specific Compounds	Manual of Procedures, Volume IV, ST-7, Organic Compounds; or EPA Reference Method 25 or 25A
BAAQMD 8-47-302	Organic Compounds	Manual of Procedures, Volume IV, ST-7, Organic Compounds; or EPA Reference Method 25 or 25A
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

VIII. Test Methods

**Table VIII
 Test Methods**

Applicable Requirement	Description of Requirement	Acceptable Test Methods
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 9-8-302.1	Waste Derived Fuel Gas NO _x 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
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
BAAQMD Condition # 5771, Part 4	NO _x Emissions Limit	Manual of Procedures, Volume IV, ST-13A, Oxides of Nitrogen, Continuous Sampling and ST-14, Oxygen, Continuous Sampling
BAAQMD Condition # 5771, Part 5	CO Emissions Limit	Manual of Procedures, Volume IV, ST-6, Carbon Monoxide, Continuous Sampling and ST-14, Oxygen, Continuous Sampling
BAAQMD Condition # 5771, Part 6	NMOC Emissions Limit	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 Condition # 5771, Part 8	Heat Input Limits	APCO approved gas flow meter and APCO approved calculation procedure described in BAAQMD Condition # 5771, Part 9
BAAQMD Condition # 5771, Part 10	Engine Temperature Limit	APCO Approved Thermocouples

VIII. Test Methods

**Table VIII
 Test Methods**

Applicable Requirement	Description of Requirement	Acceptable Test Methods
BAAQMD Condition # 7463, Part 6	POC Leak Limit for Valves, Flanges, and Pumps	EPA Reference Method 21, Determination of Volatile Organic Compound Leaks
BAAQMD Condition # 7463, Part 7	Replacement requirements for second to last carbon adsorber	APCO Approved Organic Vapor Analyzer, Flame Ionization Detector (OVA -FID) and APCO Approved Procedures Described in BAAQMD Condition # 7463, Parts 9 and 10
BAAQMD Condition # 7463, Part 8	Replacement requirements for last carbon adsorber	APCO Approved Organic Vapor Analyzer, Flame Ionization Detector (OVA -FID) and APCO Approved Procedures Described in BAAQMD Condition # 7463, Parts 9 and 10
BAAQMD Condition # 17812, Part 2	Heat Input Limits	APCO approved gas flow meter and APCO approved calculation procedure described in BAAQMD Condition # 17812, Part 11.c.
BAAQMD Condition # 17812, Part 5	TOC Destruction Efficiency Requirement	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 Condition # 17812, Part 6	NO _x Emissions Limit	Manual of Procedures, Volume IV, ST-13A, Oxides of Nitrogen, Continuous Sampling and ST-14, Oxygen, Continuous Sampling
BAAQMD Condition # 17812, Part 7	CO Emissions Limit	Manual of Procedures, Volume IV, ST-6, Carbon Monoxide, Continuous Sampling and ST-14, Oxygen, Continuous Sampling
BAAQMD Condition # 17812, Part 8	POC Emissions Limit	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 Condition # 17812, Part 12	Engine Temperature Limit	APCO Approved Thermocouples
BAAQMD Condition # 17821, Part 2	Acceptance Criteria for Soils containing VOCs (VOC determination)	BAAQMD 8-40-601 and EPA Reference Methods 8015B and 8021B; or EPA Reference Method 21
BAAQMD Condition # 17821, Part 3	Emission Limit for Low VOC Soils	BAAQMD 8-40-601 and EPA Reference Methods 8015B and 8021B; or EPA Reference Method 21 and APCO Approved Calculation Procedure Described in BAAQMD Condition # 17821, Part 3

VIII. Test Methods

**Table VIII
 Test Methods**

Applicable Requirement	Description of Requirement	Acceptable Test Methods
BAAQMD Condition # 17821, Part 8	Heat Input Limits	APCO approved gas flow meter and APCO approved calculation procedure described in BAAQMD Condition # 17821, Part 8
BAAQMD Condition # 17821, Part 9	Flare Combustion Temperature Limit	APCO Approved Device
BAAQMD Condition # 17821, Part 10	Landfill Gas Sulfur Content Limit	Draeger Tube: used in accordance with manufacturer's recommended procedures
BAAQMD Condition # 17821, Part 13	Toxic Compound Concentration Limits (in landfill gas)	APCO approved sampling procedures described in BAAQMD Condition # 17821, Part 12 and GC Analysis for all compounds listed in AP-42 Chapter 2.4

IX. PERMIT SHIELD

Not Applicable

X. GLOSSARY

ACT

Federal Clean Air Act

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

X. Glossary

those requirements developed pursuant to 40 CFR Part 51, subpart I (NSR), Part 52.21 (PSD), Part 60 (NSPS) Part 61, (NESHAPs), Part 63 (HAP), and Part 72 (Permits Regulation, Acid Rain), and also including limitations and conditions contained in operating permits issued under an EPA-approved program that has been incorporated into the SIP.

FID

Flame Ionization Detector

FP

Filterable particulate as measured by BAAQMD Method ST-15, Particulate.

HAP

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

Major Facility

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

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. See in 40 CFR Parts 61 and 63.

NMHC

Non-methane Hydrocarbons (same as NMOC).

NMOC

Non-methane Organic Compounds (same as NMHC).

NO_x

Oxides of nitrogen.

X. Glossary

NSPS

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

NSR

New Source Review. A federal program for pre-construction review and permitting of new and modified sources of air pollutants for which the District is classified "non-attainment". Mandated by Title I of the Clean Air Act and implemented by 40 CFR Parts 51 and 52 as well as District Regulation 2, Rule 2. (Note: There are additional NSR requirements mandated by the California Clean Air Act.)

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 is not exempted by 40 CFR 72 from 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 Act.

SO₂

Sulfur dioxide

X. Glossary

THC

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

Title V

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

TOC

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

TRMP

Toxic Risk Management Policy.

TSP

Total Suspended Particulate

VOC

Volatile Organic Compounds

Units of Measure:

bhp	=	brake-horsepower
btu	=	British Thermal Unit
BTU	=	British Thermal Unit
°C	=	degrees Centigrade
cfm	=	cubic feet per minute
dscf	=	dry standard cubic feet
°F	=	degrees Fahrenheit
ft ³	=	cubic feet
g	=	grams
gal	=	gallon
gpm	=	gallons per minute
gr	=	grains
hp	=	horsepower
hr	=	hour
lb	=	pound
lbmol	=	pound-mole
in	=	inches
max	=	maximum
m ²	=	square meter
m ³	=	cubic meters
min	=	minute
mm	=	million

X. Glossary

MM	=	million
MM BTU	=	million BTU
MMcf	=	million cubic feet
Mg	=	mega grams
ppm	=	parts per million
ppmv	=	parts per million, by volume
ppmw	=	parts per million, by weight
psia	=	pounds per square inch, absolute
psig	=	pounds per square inch, gauge
scf	=	standard cubic feet
scfm	=	standard cubic feet per minute
yd	=	yard
yd ³	=	cubic yards
yr	=	year

XI. APPLICABLE STATE IMPLEMENTATION PLAN

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

<http://yosemite1.epa.gov/r9/r9sips.nsf/California?ReadForm&Start=1&Count=30&Expand=3.1>