Bay Area Air Quality Management District

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

Final

MAJOR FACILITY REVIEW PERMIT

Issued To:

City of Palo Alto Landfill
Facility #A2721

Facility Address:
2380 Embarcadero Road
Palo Alto, CA 94303

Mailing Address:
P. O. Box 10250
Palo Alto, CA 94303

Responsible Official	**Facility Contact**
Frank Benest, City Manager	Sean Kennedy, Manager, Environmental Control Program
(650)-496-5937	(650)-496-5937

Type of Facility: Landfill
Primary SIC: 4953
Product: Landfill Gas

BAAQMD Permit Division Contact:
Hari S. Doss

ISSUED BY THE BAY AREA AIR QUALITY MANAGEMENT DISTRICT

Signed by Jack P. Broadbent _____ October 13, 2004

Jack P. Broadbent, Executive Officer/Air Pollution Control Officer — Date

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I. STANDARD CONDITIONS

A. Administrative Requirements

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

BAAQMD Regulation 1 - General Provisions and Definitions
(as amended by the District Board on 5/2/01);

SIP Regulation 1 - General Provisions and Definitions
(as approved by EPA through 6/28/99);

BAAQMD Regulation 2, Rule 1 - Permits, General Requirements
(as amended by the District Board on 8/1/01);

SIP Regulation 2, Rule 1 - Permits, General Requirements
(as approved by EPA through 1/26/99);

BAAQMD Regulation 2, Rule 2 - Permits, New Source Review
(as amended by the District Board on 5/17/00);

SIP Regulation 2, Rule 2 - Permits, New Source Review and Prevention of Significant Deterioration
(as approved by EPA through 1/26/99);

BAAQMD Regulation 2, Rule 4 - Permits, Emissions Banking
(as amended by the District Board on 5/17/00);

SIP Regulation 2, Rule 4 - Permits, Emissions Banking
(as approved by EPA through 1/26/99); and

BAAQMD Regulation 2, Rule 6 - Permits, Major Facility Review
(as amended by the District Board on 4/16/03).

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

1. This Major Facility Review Permit was issued on December 4, 2003, and expires on November 30, 2008. The permit holder shall submit a complete application for renewal of this Major Facility Review Permit no later than May 31, 2008, and no earlier than November 30, 2007. **If a complete application for renewal has not been submitted in accordance with this deadline, the facility may not operate after** November 30, 2008**.** (Regulation 2-6-307, 404.2, & 409.6; MOP Volume II, Part 3, §4.2)

2. The permit holder shall comply with all conditions of this permit. The permit consists of this document and all appendices. Any non-compliance with the terms and conditions of this permit will constitute a violation of the law and will be grounds for enforcement action; permit termination, revocation and re-issuance, or modification; or denial of a permit renewal application. (Regulation 2-6-307; MOP Volume II, Part 3, §4.11)

I. Standard Conditions

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

I. Standard Conditions

11. The responsible official shall certify all documents submitted by the facility pursuant to the major facility review permit. The certification shall state that based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete. The certifications shall be signed by a responsible official for the facility. (MOP Volume II, Part 3, §4.11)

C. Requirement to Pay Fees

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

D. Inspection and Entry

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

E. Records

1. The permit holder must provide any information, records, and reports requested or specified by the APCO. (Regulation 1-441, Regulation 2-6-409.4)
2. Notwithstanding the specific wording in any requirement, all records for federally enforceable requirements shall be maintained for at least five years from the date of creation of the record. (Regulation 2-6-501, 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 December 4, 2003 to May 31, 2004. The report shall be submitted by June 30, 2004. Subsequent reports shall be for the following periods: June 1st through November 30th and December 1st through May 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

I. Standard Conditions

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 December 1st to November 30th. The certification shall be submitted by December 31st of each year. The certification must list each applicable requirement, the compliance status, whether compliance was continuous or intermittent, the method used to determine compliance, and any other specific information required by the permit. The permit holder may satisfy this requirement through submittal of District-generated Compliance Certification forms. The certification should be directed to the District's Compliance and Enforcement Division at the address above, and a copy of the certification shall be sent to the Environmental Protection Agency at the following address:

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

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

H. Emergency Provisions

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

I. Standard Conditions

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

I. Severability

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

J. Miscellaneous Conditions

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

II. EQUIPMENT

Table II A - Permitted Sources

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

S-#	Description	Make or Type	Model	Capacity
S-1	Palo Alto Landfill with Gas Collection System	Active solid waste disposal site that accepts municipal, commercial, industrial, and construction wastes. active		Max. Waste Acceptance Rate = 400 tons per day Max. Design Capacity = 7,759,000 yd^3 (5,932,000 m^3) Max. Cumulative Waste In Place = 5,830,000 tons (5,289,000 Mg) 92 vertical wells
S-5	Wood Grinder	Morbark	Model 5600 CPA #4304	50 tons per hour
S-6	Diesel Engine, Driver for S-5 Wood Grinder	Caterpillar, Model Year 2000	3412EC	860 bhp, 2100 rpm, 1649 in^3, 44.4 gallons/hour of diesel oil, 6.172 MM BTU/hour
S-7	Trommel Screen	Powerscreen	Model 620 CPA #4307	50 tons per hour
S-8	Diesel Engine, Driver for S-7 Trommel Screen	Deutz Model Year 2000	BF4M-1012C	96 bhp, 2200 rpm, 195 in^3, 4.7 gallons/hour of diesel oil, 0.653 MM BTU/hour

Table II B – Abatement Devices

A-#	Description	Source(s) Controlled	Applicable Requirement	Operating Parameters	Limit or Efficiency
A-3	Landfill Gas Flare, Sur Lite, 30 MM BTU/hour, 1000 cfm of landfill gas	S-1	BAAQMD 8-34-301.3, see also Table IV-A	Minimum combustion zone temperature of 1420 °F, see also Table VII-A	98% by weight destruction of NMOC or < 30 ppmv of NMOC, as CH_4, at 3% O_2, dry
A-5	Water Sprays	S-5 and S-7	BAAQMD 6-301	Visible emission	Ringelmann 1

III. GENERALLY APPLICABLE REQUIREMENTS

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

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

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

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

NOTE:

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

Table III
Generally Applicable Requirements

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)
BAAQMD Regulation 1	General Provisions and Definitions (5/2/01)	N
SIP Regulation 1	General Provisions and Definitions (6/28/99)	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 (1/26/99)	Y
BAAQMD Regulation 5	Open Burning (3/6/02)	N
SIP Regulation 5	Open Burning (9/4/98)	Y
BAAQMD Regulation 6	Particulate Matter and Visible Emissions (12/19/90)	Y
BAAQMD Regulation 7	Odorous Substances (3/17/82)	N
BAAQMD Regulation 8, Rule 1	Organic Compounds - General Provisions (6/15/94)	Y

III. Generally Applicable Requirements

Table III
Generally Applicable Requirements

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)
BAAQMD Regulation 8, Rule 2	Organic Compounds – Miscellaneous Operations (6/15/94)	Y
BAAQMD Regulation 8, Rule 3	Organic Compounds - Architectural Coatings (11/21/01)	N
SIP Regulation 8, Rule 3	Organic Compounds - Architectural Coatings (2/18/98)	Y
BAAQMD Regulation 8, Rule 4	Organic Compounds - General Solvent and Surface Coating Operations (10/16/02)	N
SIP Regulation 8, Rule 4	Organic Compounds - General Solvent and Surface Coating Operations (12/23/97)	Y
BAAQMD Regulation 8, Rule 16	Organic Compounds - Solvent Cleaning Operations (10/16/02)	N
SIP Regulation 8, Rule 16	Organic Compounds - Solvent Cleaning Operations (12/9/94)	Y
BAAQMD Regulation 8, Rule 47	Organic Compounds - Air Stripping and Soil Vapor Extraction Operations (6/15/94)	Y
BAAQMD Regulation 8, Rule 49	Organic Compounds - Aerosol Paint Products (12/20/95)	N
SIP Regulation 8, Rule 49	Organic Compounds - Aerosol Paint Products (3/22/95)	Y
BAAQMD Regulation 8, Rule 51	Organic Compounds - Adhesive and Sealant Products (7/17/02)	N
SIP Regulation 8, Rule 51	Organic Compounds - Adhesive and Sealant Products (2/26/02)	Y
BAAQMD Regulation 11, Rule 1	Hazardous Pollutants – Lead (3/17/82)	N
SIP Regulation 11, Rule 1	Hazardous Pollutants – Lead (9/2/81)	Y
BAAQMD Regulation 11, Rule 2	Hazardous Pollutants - Asbestos Demolition, Renovation and Manufacturing (10/7/98)	N
BAAQMD Regulation 11, Rule 14	Hazardous Pollutants - Asbestos Containing Serpentine (7/17/91)	N
BAAQMD Regulation 12, Rule 4	Miscellaneous Standards of Performance - Sandblasting (7/11/90)	N
SIP Regulation 12, Rule 4	Miscellaneous Standards of Performance - Sandblasting (9/2/81)	Y
California Health and Safety Code Section 44300 et seq.	Air Toxics “Hot Spots” Information and Assessment Act of 1987	N
40 CFR Part 61, Subpart M	National Emission Standards for Hazardous Air Pollutants – National Emission Standard for Asbestos (6/19/95)	Y

IV. SOURCE-SPECIFIC APPLICABLE REQUIREMENTS

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

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

1. BAAQMD regulation(s): The date(s) of adoption or most recent amendment of the regulation by the District Board
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 at the end of this permit. All other text may be found in the regulations themselves.

Table IV – A
Source-Specific Applicable Requirements
S-1 PALO ALTO LANDFILL WITH GAS COLLECTION SYSTEM;
AND A-3 LANDFILL GAS FLARE

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
BAAQMD Regulation 1	**General Provisions and Definitions (5/2/01)**		
1-523	Parametric Monitoring and Recordkeeping Procedures	N	
1-523.1	Reporting requirement for periods of inoperation > 24 hours	Y	
1-523.2	Limit on duration of inoperation	Y	
1-523.3	Reporting requirement for violations of any applicable limits	N	
1-523.4	Records of inoperation, tests, calibrations, adjustments, & maintenance	Y	
1-523.5	Maintenance and calibration	N	
SIP Regulation 1	**General Provisions and Definitions (6/28/99)**		
1-523	Parametric Monitoring and Recordkeeping Procedures	Y[1]	
1-523.3	Reports of Violations	Y[1]	
1-523.5	Maintenance and Calibration	Y[1]	

IV. Source-Specific Applicable Requirements

Table IV – A
Source-Specific Applicable Requirements
S-1 PALO ALTO LANDFILL WITH GAS COLLECTION SYSTEM; AND A-3 LANDFILL GAS FLARE

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
BAAQMD Regulation 6	**Particulate Matter and Visible Emissions (12/19/90)**		
6-301	Ringelmann No. 1 Limitation	Y	
6-305	Visible Particles	Y	
6-310	Particle Weight Limitation (applies to A-3 Flare only)	Y	
6-401	Appearance of Emissions	Y	
BAAQMD Regulation 8, Rule 2	**Organic Compounds – Miscellaneous Operations (6/15/94)**		
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 (10/6/99)**		
8-34-113	Limited Exemption, Inspection and Maintenance	Y	
8-34-113.1	Emission Minimization Requirement	Y	
8-34-113.2	Shutdown Time Limitation	Y	
8-34-113.3	Recordkeeping Requirement	Y	
8-34-116	Limited Exemption, Well Raising	Y	
8-34-116.1	New Fill	Y	
8-34-116.2	Limits on Number of Wells Shutdown	Y	
8-34-116.3	Shutdown Duration Limit	Y	
8-34-116.4	Capping Well Extensions	Y	
8-34-116.5	Well Disconnection Records	Y	
8-34-117	Limited Exemption, Gas Collection System Components	Y	
8-34-117.1	Necessity of Existing Component Repairs/Adjustments	Y	
8-34-117.2	New Components are Described in Collection and Control System Design Plan	Y	
8-34-117.3	Meets Section 8-34-118 Requirements	Y	
8-34-117.4	Limits on Number of Wells Shutdown	Y	
8-34-117.5	Shutdown Duration Limit	Y	
8-34-117.6	Well Disconnection Records	Y	

IV. Source-Specific Applicable Requirements

Table IV – A
Source-Specific Applicable Requirements
S-1 PALO ALTO LANDFILL WITH GAS COLLECTION SYSTEM; AND A-3 LANDFILL GAS FLARE

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
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	
8-34-301.3	Limits for Enclosed Flares	Y	
8-34-301.4	Limits for Other Emission Control Systems (Permit Holder shall ensure that Facility # A9794 will comply with this requirement whenever landfill gas is vented to the IC Engines: S-1 or S-2 at Facility # A9794)	Y	
8-34-303	Landfill Surface Requirements	Y	
8-34-304	Gas Collection System Installation Requirements	Y	
8-34-304.1	Based on Waste Age For Inactive or Closed Areas	Y	
8-34-304.2	Based on Waste Age For Active Areas	Y	
8-34-304.3	Based on Amount of Decomposable Waste Accepted	Y	
8-34-304.4	Based on NMOC Emission Rate	Y	
8-34-305	Wellhead Requirements	Y	
8-34-305.1	Operate Under Vacuum	Y	
8-34-305.2	Temperature < 55 °C	Y	
8-34-305.3	Nitrogen < 20% or	Y	
8-34-305.4	Oxygen < 5%	Y	
8-34-405	Design Capacity Reports	Y	
8-34-408	Collection and Control System Design Plans	Y	
8-34-408.2	Sites With Existing Collection and Control Systems	Y	

IV. Source-Specific Applicable Requirements

Table IV – A
Source-Specific Applicable Requirements
S-1 PALO ALTO LANDFILL WITH GAS COLLECTION SYSTEM; AND A-3 LANDFILL GAS FLARE

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
8-34-411	Annual Report	Y	
8-34-412	Compliance Demonstration Tests	Y	
8-34-413	Performance Test Report	Y	
8-34-414	Repair Schedule for Wellhead Excesses	Y	
8-34-414.1	Records of Excesses	Y	
8-34-414.2	Corrective Action	Y	
8-34-414.3	Collection System Expansion	Y	
8-34-414.4	Operational Due Date for Expansion	Y	
8-34-415	Repair Schedule for Surface Leak Excesses	Y	
8-34-415.1	Records of Excesses	Y	
8-34-415.2	Corrective Action	Y	
8-34-415.3	Re-monitor Excess Location Within 10 Days	Y	
8-34-415.4	Re-monitor Excess Location Within 1 Month	Y	
8-34-415.5	If No More Excesses, No Further Re-Monitoring	Y	
8-34-415.6	Additional Corrective Action	Y	
8-34-415.7	Re-monitor Second Excess Within 10 days	Y	
8-34-415.8	Re-monitor Second Excess Within 1 Month	Y	
8-34-415.9	If No More Excesses, No Further Re-monitoring	Y	
8-34-415.10	Collection System Expansion for Third Excess in a Quarter	Y	
8-34-415.11	Operational Due Date for Expansion	Y	
8-34-416	Cover Repairs	Y	
8-34-501	Operating Records	Y	
8-34-501.1	Collection System Downtime	Y	
8-34-501.2	Emission Control System Downtime	Y	
8-34-501.3	Continuous Temperature Records for Enclosed Combustors (applies to A-3 Flare only)	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	
8-34-501.10	Gas Flow Rate Records for All Emission Control Systems	Y	

IV. Source-Specific Applicable Requirements

Table IV – A
Source-Specific Applicable Requirements
S-1 PALO ALTO LANDFILL WITH GAS COLLECTION SYSTEM; AND A-3 LANDFILL GAS FLARE

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
8-34-501.11	Records of Key Emission Control System Operating Parameters (Permit Holder shall ensure that Facility # A9794 will comply with this requirement whenever landfill gas is vented to the IC Engines: S-1 or S-2 at Facility # A9794)	Y	
8-34-501.12	Records Retention for 5 Years	Y	
8-34-503	Landfill Gas Collection and Emission Control System Leak Testing	Y	
8-34-504	Portable Hydrocarbon Detector	Y	
8-34-505	Well Head Monitoring	Y	
8-34-506	Landfill Surface Monitoring	Y	
8-34-507	Continuous Temperature Monitor and Recorded	Y	
8-34-508	Gas Flow Meter	Y	
8-34-509	Key Emission Control System Operating Parameter(s) (Permit Holder shall ensure that Facility # A9794 will comply with this requirement whenever landfill gas is vented to the IC Engines: S-1 or S-2 at Facility # A9794)	Y	
8-34-510	Cover Integrity Monitoring	Y	
BAAQMD Regulation 9, Rule 1	**Inorganic Gaseous Pollutants – Sulfur Dioxide (3/15/95)**		
9-1-301	Limitations on Ground Level Concentrations (applies to A-3 Flare only)	Y	
9-1-302	General Emission Limitations (applies to A-3 Flare only)	Y	
BAAQMD Regulation 9, Rule 2	**Inorganic Gaseous Pollutants – Hydrogen Sulfide (10/6/99)**		
9-2-301	Limitations on Hydrogen Sulfide	N	
40 CFR Part 60, Subpart A	**Standards of Performance for New Stationary Sources – General Provisions (5/4/98)**		
60.4(b)	Requires Submission of Requests, Reports, Applications, and Other Correspondence to the Administrator	Y	
60.7	Notification and Record Keeping	Y	
60.8	Performance Tests	Y	

IV. Source-Specific Applicable Requirements

Table IV – A
Source-Specific Applicable Requirements
S-1 PALO ALTO LANDFILL WITH GAS COLLECTION SYSTEM; AND A-3 LANDFILL GAS FLARE

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
60.11	Compliance with Standards and Maintenance Requirements	Y	
60.11(a)	Compliance determined by performance tests	Y	
60.11(d)	Control devices operated using good air pollution control practice	Y	
60.12	Circumvention	Y	
60.13	Monitoring Requirements	Y	
60.13(a)	Applies to all continuous monitoring systems	Y	
60.13(b)	Monitors shall be installed and operational before performing performance tests	Y	
60.13(e)	Continuous monitors shall operate continuously	Y	
60.13(f)	Monitors shall be installed in proper locations	Y	
60.13(g)	Requires multiple monitors for multiple stacks	Y	
60.14	Modification	Y	
60.15	Reconstruction	Y	
60.19	General Notification and Reporting Requirements	Y	
40 CFR Part 60, Subpart Cc	**Standards of Performance for New Stationary Sources – Emission Guidelines and Compliance Times for Municipal Solid Waste Landfills (2/24/99)**		
60.36c(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 (9/20/01)**		
62.1115	Identification of Sources	Y	
40 CFR Part 63, Subpart A	**National Emission Standards for Hazardous Air Pollutants: General Provisions (3/16/94)**		
63.4	Prohibited activities and circumvention	Y	
63.5(b)	Requirements for existing, newly constructed, and reconstructed sources	Y	
63.6(e)	Operation and maintenance requirements and SSM Plan	Y	
63.6(f)	Compliance with non-opacity emission standards	Y	
63.10(b)(2)(i-v)	Records for startup, shutdown, malfunction, and maintenance	Y	

IV. Source-Specific Applicable Requirements

Table IV – A
Source-Specific Applicable Requirements
S-1 PALO ALTO LANDFILL WITH GAS COLLECTION SYSTEM; AND A-3 LANDFILL GAS FLARE

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
63.10(d)(5)	Startup, Shutdown, and Malfunction (SSM) Reports	Y	
40 CFR Part 63, Subpart AAAA	**National Emission Standards for Hazardous Air Pollutants: Municipal Solid Waste Landfills (1/16/2003)**		
63.1945	When do I have to comply with this subpart?	Y	
63.1945(b)	Compliance date for existing affected landfills	Y	
63.1955	What requirements must I meet?	Y	
63.1955(a)(2)	Comply with State Plan that implements 40 CFR Part 60, Subpart Cc	Y	
63.1955(b)	Comply with 63.1960-63.1985, if a collection and control system is required by 40 CFR Part 60, Subpart WWW or a State Plan implementing 40 CFR Part 60, Subpart Cc	Y	
63.1955(c)	Comply with all approved alternatives to standards for collection and control systems plus all SSM requirements and 6 month compliance reporting requirements	Y	
63.1960	How is compliance determined?	Y	
63.1965	What is a deviation?	Y	
63.1975	How do I calculate the 3-hour block average used to demonstrate compliance?	Y	
63.1980	What records and reports must I keep and submit?	Y	
63.1980(a)	Comply with all record keeping and reporting requirements in 40 CFR Part 60, Subpart WWW or the State Plan implementing 40 CFR Part 60, Subpart Cc, except that the annual report required by 40 CFR 60.757(f) must be submitted every 6 months	Y	
63.1980(b)	Comply with all record keeping and reporting requirements in 40 CFR Part 60, Subpart A and 40 CFR Part 63, Subpart A, including SSM Plans and Reports	Y	
BAAQMD Condition # 1028			
Part 1	Design capacity and waste acceptance rate limits (Regulations 2-1-301 and 2-1-234.3)	Y	
Part 2	VOC content limit for soil accepted at this site (Regulation 8-40-301)	Y	

IV. Source-Specific Applicable Requirements

Table IV – A
Source-Specific Applicable Requirements
S-1 PALO ALTO LANDFILL WITH GAS COLLECTION SYSTEM; AND A-3 LANDFILL GAS FLARE

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
Part 3	Total carbon emission limit and test procedures for VOC-laden soil (Regulations 8-2-301, 8-40-205, and 8-40-60)	Y	
Part 4	Particulate emission control measures (Regulations 2-1-403, 6-301, and 6-305)	Y	
Part 5	Control requirements for collected landfill gas (Regulation 8-34-301)	Y	
Part 6	Landfill gas collection system operating requirements (Regulation 8-34-301.1)	Y	
Part 7	Landfill gas collection system description and Authority to Construct requirement for collection system modifications (Regulations 2-1-301, 8-34-301.1, 8-34-304, and 8-34-305)	Y	
Part 8	Flare heat input limits (Regulation 2-1-301)	Y	
Part 9	Flare temperature limit (Toxic Risk Management Policy and Regulation 8-34-301.3)	Y	
Part 10	Flare alarm requirements (Regulation 8-34-301)	Y	
Part 11	NO_x concentration limit in flare exhaust (Basis: Cumulative Increase)	Y	
Part 12	CO concentration limit in flare exhaust (Basis: Cumulative Increase)	Y	
Part 13	Chlorinated compound concentration limit in landfill gas (Toxic Risk Management Policy)	N	
Part 14	Landfill gas sulfur content limit and monitoring requirements (Regulation 9-1-302)	Y	
Part 15	Annual source test (Cumulative Increase, Toxic Risk Management Policy, and Regulations 8-34-301.3 and 8-34-412)	Y	
Part 16	Annual landfill gas characterization test (Toxic Risk Management Policy and Regulation 8-34-412)	Y	
Part 17	Record keeping requirements (Cumulative Increase, Toxic Risk Management Policy, and Regulations 2-1-301, 2-6-501, 6-301, 6-305, 8-2-301, 8-34-301, 8-34-304, and 8-34-501)	Y	
Part 18	Reporting periods and report submittal due dates for the Regulation 8, Rule 34 report (Regulation 8-34-411 and 40 CFR 63.1980(a))	Y	

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-5 WOOD GRINDER AND A-5 WATER SPRAYS

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
BAAQMD Regulation 6	**Particulate Matter and Visible Emissions (12/19/90)**		
6-301	Ringelmann No. 1 Limitation	Y	
6-305	Visible Particles	Y	
6-311	General Operations: Emission Limit Based on Process Weight Rate	Y	
6-401	Appearance of Emissions	Y	
BAAQMD Condition # 20476			
Part 1	Wood throughput limit (Cumulative Increase)	Y	
Part 2	Throughput Records (Cumulative Increase)	Y	
Part 3	Abatement Requirement (Cumulative Increase)	Y	
Part 4	Visible Emissions Limits and Particulate Fallout Restrictions (Regulations 1-301, 6-301, and 6-305)	Y	
Part 5	Visual Monitoring and Corrective Action Requirements (Regulations 2-1-403, 6-301 and 6-305)	Y	

IV. Source-Specific Applicable Requirements

Table IV – C
Source-Specific Applicable Requirements
S-6 DIESEL ENGINE, DRIVER FOR S-5 WOOD GRINDER

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
BAAQMD Regulation 6	**Particulate Matter and Visible Emissions (12/19/90)**		
6-301	Ringelmann No. 1 Limitation	Y	
6-305	Visible Particles	Y	
6-310	Particulate Weight Limitation	Y	
6-401	Appearance of Emissions	Y	
BAAQMD Regulation 9, Rule 1	**Inorganic Gaseous Pollutants – Sulfur Dioxide (3/15/95)**		
9-1-301	Limitations on Ground Level Concentrations	Y	
9-1-304	Liquid and Solid Fuels	Y	
BAAQMD Condition # 20477			
Part 1	Fuel Throughput Limit (Cumulative Increase and Toxic Risk Management Policy)	Y	
Part 2	Fuel Sulfur Content Limit (Cumulative Increase and Toxic Risk Management Policy)	Y	
Part 3	POC Emission Limit (BACT)	Y	
Part 4	NOx Emission Limit (BACT)	Y	
Part 5	CO Emission Limit (BACT)	Y	
Part 6	Fuel Usage and Sulfur Content Records (Cumulative Increase and Regulation 9-1-304)	Y	
Part 7	Source Test Requirement (BACT and Cumulative Increase)	Y	
Part 8	Visible Monitoring and Corrective Action Requirements (Regulations 2-1-403, 6-301, and 6-305)	Y	

IV. Source-Specific Applicable Requirements

Table IV – D
Source-Specific Applicable Requirements
S-7 TROMMEL SCREEN AND A-5 WATER SPRAYS

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
BAAQMD Regulation 6	**Particulate Matter and Visible Emissions (12/19/90)**		
6-301	Ringelmann No. 1 Limitation	Y	
6-305	Visible Particles	Y	
6-311	General Operations: Emission Limit Based on Process Weight Rate	Y	
6-401	Appearance of Emissions	Y	
BAAQMD Condition # 20478			
Part 1	Wood throughput limit (Cumulative Increase)	Y	
Part 2	Throughput Records (Cumulative Increase)	Y	
Part 3	Abatement Requirement (Cumulative Increase)	Y	
Part 4	Visible Emissions Limits and Particulate Fallout Restrictions (Regulations 1-301, 6-301, and 6-305)	Y	
Part 5	Visual Monitoring and Corrective Action Requirements (Regulations 2-1-403, 6-301, and 6-305)	Y	

IV. Source-Specific Applicable Requirements

Table IV – E
Source-Specific Applicable Requirements
S-8 DIESEL ENGINE, DRIVER FOR S-7 TROMMEL SCREEN

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
BAAQMD Regulation 6	**Particulate Matter and Visible Emissions (12/19/90)**		
6-303	Ringelmann No. 2 Limitation	Y	
6-303.1	Internal combustion engines below 1500 cubic inches displacement or standby engines	Y	
6-310	Particulate Weight Limitation	Y	
6-401	Appearance of Emissions	Y	
BAAQMD Regulation 9, Rule 1	**Inorganic Gaseous Pollutants – Sulfur Dioxide (3/15/95)**		
9-1-301	Limitations on Ground Level Concentrations	Y	
9-1-304	Liquid and Solid Fuels	Y	
BAAQMD Condition # 20479			
Part 1	Fuel Throughput Limit (Cumulative Increase and Toxic Risk Management Policy)	Y	
Part 2	Fuel Sulfur Content Limit (Cumulative Increase and Toxic Risk Management Policy)	Y	
Part 3	POC Emission Limit (BACT)	Y	
Part 4	NOx Emission Limit (BACT)	Y	
Part 5	CO Emission Limit (BACT)	Y	
Part 6	Fuel Usage and Sulfur Content Records (Cumulative Increase and Regulation 9-1-304)	Y	
Part 7	Source Test Requirement (BACT and Cumulative Increase)	Y	

V. SCHEDULE OF COMPLIANCE

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

VI. PERMIT CONDITIONS

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

Condition # 1028
For: S-1 PALO ALTO LANDFILL WITH GAS COLLECTION SYSTEM AND A-3 LANDFILL GAS FLARE

1. The Permit Holder shall comply with the following waste acceptance and disposal limits and shall obtain the appropriate New Source Review permit, if one of the following limits is exceeded:
   a. Total waste accepted and placed at the landfill shall not exceed 400 tons in any day. (Basis: Regulation 2-1-301)
   b. The total cumulative amount of all waste placed in the landfill shall not exceed 5,830,000 tons. Exceedance of the cumulative tonnage limit is not a violation of the permit and does not trigger the requirement to obtain a New Source review permit, if the operator can, within 30 days of the date of discovery of the exceedance, provide documentation to the District demonstrating, in accordance with BAAQMD Regulation 2-1-234.3, that the limit should be higher. (Basis: Regulation 2-1-234.3)
   c. The maximum design capacity of the landfill (total volume of all wastes and cover materials placed in the landfill, excluding final cover) shall not exceed 7,759,000 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 lacks 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 sampled within 24 hours of receipt by this site and is handled as if the soil were contaminated until the Permit Holder receives the test results. The Permit Holder shall collect soil samples in accordance with Regulation 8-40-601. The organic content of the collected soil samples shall be determined in accordance with Regulation 8-40-602.

VI. Permit Conditions

Condition # 1028
For: S-1 PALO ALTO LANDFILL WITH GAS COLLECTION SYSTEM AND A-3 LANDFILL GAS FLARE

i. If the test results indicate that the soil is contaminated or if the soil was not sampled within 24 hours of receipt by the facility, the Permit Holder must continue to handle the soil in accordance with Regulation 8, Rule 40, until the soil has been removed from this site 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 the test results indicate that the soil, as received at this site, has an organic content of 50 ppmw or less, then the soil need not be handled in accordance with Regulation 8, Rule 40 any longer.

(Basis: Regulation 8-40-301)

3. VOC laden soil is any material that contains volatile organic compounds, as defined in Regulation 8-40-213, at a concentration of 50 ppm by weight or less. Soil containing more than 50 ppmw of VOC is considered to be "contaminated soil" and is subject to Part 2 instead of this part. Materials containing only non-volatile hydrocarbons and meeting the requirements of Regulation 8-40-113 are not subject to this part. The Permit Holder shall demonstrate compliance with Regulation 8-2-301 by randomly screening each lot of VOC laden soil for VOC surface emissions (in such a manner as to be representative of the entire lot and using the testing procedures outlined in Regulation 8-40-604) to show that each lot of VOC laden soil is not contaminated soil and could therefore not result in emissions in excess of 300 ppmv of total carbon. Soil presumed to be VOC laden soil that is found to have a surface VOC concentration greater than 50 ppmv shall be considered contaminated soil and will be subject to the requirements of Part 2 of these conditions. In order to demonstrate compliance with this condition, the Permit Holder shall maintain the following records in a District approved log.

a. Record a lot number for each shipment of VOC laden soil.

b. Record the soil delivery date, the testing date for the VOC surface emissions screening test, the name and affiliation of the person conducting the screening test, and the results of the screening test for each lot of VOC laden soil accepted at the site.

c. Maintain certifications that the Regulation 8-40-604 procedures were followed for each screening test.

All records shall be maintained on site or shall be made readily available to District staff upon request for at least 5 years from the date of entry.
(Basis: Regulations 8-2-301, 8-40-205, and 8-40-604)

VI. Permit Conditions

Condition # 1028
For: S-1 PALO ALTO LANDFILL WITH GAS COLLECTION SYSTEM AND A-3 LANDFILL GAS FLARE

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 particulate emissions that persist for longer than 3 minutes in any hour. Paved roadways at the facility shall be kept sufficiently clear of dirt and debris as necessary to prevent visible particulate emissions (that persist for longer than 3 minutes in any hour) from vehicle traffic.
(Basis: Regulations 2-1-403, 6-301, and 6-305)

5. All collected landfill gas shall be vented to the properly operating Landfill Gas Flare (A-3) or to the IC Engines (S-1 and S-2 at Site # A9794). If the IC engines at Site # A9794 are not operating, all collected landfill gas shall be vented to the A-3 Landfill Gas Flare. If one or both of the IC engines at Site #9794 are operating, any amount of collected landfill gas that exceeds the capacity of the operating engines shall be vented to the flare. Raw landfill shall not be vented to the atmosphere, except for unavoidable landfill gas emissions that occur during collection system installation, maintenance, or repair (which is performed in compliance with Regulation 8, Rule 34, Sections 113, 116, 117, or 118) and for inadvertent component or surface leaks that do not exceed the limits specified in 8-34-301.2 or 8-34-303. (Basis: Regulation 8-34-301)

6. The landfill gas collection system described in Part 7a shall be operated continuously, as defined in Regulation 8-34-219. Wells and adjustment valves shall not be shut off, disconnected, or removed from operation without written authorization from the District, unless the Permit Holder complies with all applicable requirements of Regulation 8, Rule 34, Sections 113, 116, 117, and 118. (Basis: Regulation 8-34-301.1)

7. The Permit Holder shall apply for and receive an Authority to Construct before modifying the landfill gas collection system described in Parts 7a below. Increasing or decreasing the number of wells or collectors, changing the length of collectors, or changing 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 # 2230.

VI. Permit Conditions

Condition # 1028
For: S-1 PALO ALTO LANDFILL WITH GAS COLLECTION SYSTEM AND A-3 LANDFILL GAS FLARE

	Required Components
Total Number of Vertical Wells:	92

b. The Permit Holder has been issued an Authority to Construct for the landfill gas collection system modifications described below. Well and collector locations, depths, and lengths are as described in detail in Permit Application # 2230.

	Minimum	Maximum
Vertical Wells:	5	22

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

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

8. The Heat Input to the A-3 Landfill Gas Flare shall not exceed 720 million BTU per day and shall not exceed 262,800 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: (a) the landfill gas flow rate recorded pursuant to Regulation 8-34-508 and 8-34-501.10, (b) the average methane concentration in the landfill gas measured in most recent source test, and (c) a high heating value for methane of 1013 BTU per cubic foot at 60 degrees F. (Basis: Regulation 2-1-301)

9. The combustion zone temperature of the A-3 Landfill Gas Flare shall be maintained at a minimum of 1420 degrees Fahrenheit, averaged over any 3-hour period. If a source test demonstrates compliance with all applicable requirements at a different temperature, the APCO may revise the minimum combustion zone temperature limit, in accordance with the procedures identified in Regulation 2-6-414 or 2-6-415, based on the following criteria. The minimum combustion zone temperature for the flare shall be equal to the average combustion zone temperature measured during the most recent complying source test minus 50 degrees F, provided that the minimum combustion zone temperature shall not be less than 1400 degrees F.
(Basis: Toxic Risk Management Policy and Regulation 8-34-301.3)

10. The A-3 Landfill Gas Flare shall be equipped with both local and remote alarm systems. (Basis: Regulation 8-34-301)

VI. Permit Conditions

Condition # 1028
For: S-1 PALO ALTO LANDFILL WITH GAS COLLECTION SYSTEM AND A-3 LANDFILL GAS FLARE

11. Nitrogen oxide (NO_x) emissions from the A-3 Landfill Gas Flare shall not exceed 32 ppmv of NO_x, corrected to 15% oxygen, dry basis.
(Basis: Cumulative Increase)

12. Carbon monoxide (CO) emissions from the A-3 Landfill Gas Flare shall not exceed 208 ppmv of CO, corrected to 15% oxygen, dry basis.
(Basis: Cumulative Increase)

*13. If the total chlorinated compound concentration in the landfill gas is determined to exceed 104 ppmv (dry), the Permit Holder shall submit a permit application to the District for a change in permit conditions within 30 days of receipt of the test results. (Basis: Toxic Risk Management Policy)

14. 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) expressed as hydrogen sulfide. In order to demonstrate compliance with this part, the Permit Holder shall test collected landfill gas on a quarterly basis. The landfill gas sample shall be taken from the main landfill gas header. The Permit Holder shall either test the gas for total reduced sulfur compounds (carbon disulfide, carbonyl sulfide, dimethyl sulfide, hydrogen sulfide, ethyl mercaptan, and methyl mercaptan) using District approved methods (MOP, Volume III, Methods 5, 25, or 44) or test the gas for hydrogen sulfide using a draeger tube and following the manufacturer's recommended procedures for using the draeger tube and interpreting the results. If the draeger tube method is used, the measured hydrogen sulfide concentration shall be multiplied by 1.2 to obtain the total reduced sulfur concentration. The Permit Holder shall conduct the first test no later than 3 months after the issue date of the MFR Permit and quarterly thereafter. (Basis: Regulation 9-1-302)

VI. Permit Conditions

Condition # 1028
For: S-1 PALO ALTO LANDFILL WITH GAS COLLECTION SYSTEM AND A-3 LANDFILL GAS FLARE

15. To demonstrate compliance with Parts 8-12 above and Regulation 8, Rule 34, Sections 301.3 and 412, the Permit Holder shall ensure that a District approved source test is conducted annually on the Landfill Gas Flare (A-3). 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 (CO_2), nitrogen (N_2), oxygen (O_2), total hydrocarbons (THC), methane (CH_4), and total non-methane organic compounds (NMOC) in the landfill gas;
    c. stack gas flow rate from the flare (dry basis);
    d. concentrations (dry basis) of NO_x, CO, THC, CH_4, NMOC, and O_2 in the flare stack gas;
    e. the NMOC destruction efficiency achieved by the flare; and
    f. the average combustion zone temperature in the flare during the test period.

    Each annual source test shall be conducted no earlier than 9 months and no later than 12 months after the previous annual source test. The Source Test Section of the District shall be contacted to obtain approval of the source test procedures at least 14 days in advance of each source test. The Source Test Section shall be notified of the scheduled test date at least 7 days in advance of each source test. The source test report shall be submitted to the Compliance and Enforcement Division and the Source Test Section within 45 days of the test date.
    (Basis: Cumulative Increase, Toxic Risk Management Policy, and Regulations 8-34-301.3 and 8-34-412)

16. To demonstrate compliance with Part 13 above and Regulation 8-34-412, the Permit Holder shall conduct a characterization of the landfill gas concurrent with the annual source test required by Part 15 above. The landfill gas sample shall be drawn from the main landfill gas header. In addition to the compounds listed in part 15b, the landfill gas shall be analyzed for the organic compounds listed below. All concentrations shall be reported on a dry basis. The test report shall be submitted to the Compliance and Enforcement Division and the Source Test Section within 45 days of the test date.
    (Basis: Toxic Risk Management Policy and Regulation 8-34-412)

VI. Permit Conditions

Condition # 1028
For: S-1 PALO ALTO LANDFILL WITH GAS COLLECTION SYSTEM AND A-3 LANDFILL GAS FLARE

Organic Compounds	Organic Compounds	Organic Compounds
acrylonitrile	1,2 dichloroethane	methyl ethyl ketone
benzene	1,4 dichlorobenzene	methylene chloride
carbon tetrachloride	dichlorodifluoromethane	perchloroethylene
chlorobenzene	dichlorofluoromethane	toluene
chlorodifluoromethane	ethylbenzene	1,1,1 trichloroethane
chloroethane	ethylene dibromide	1,1,2,2 tetrachloroethane
chloroform	fluorotrichloromethane	trichloroethylene
1,1 dichloroethane	hexane	vinyl chloride
1,1 dichlorethene	isopropyl alcohol	xylenes

17. To demonstrate compliance with the above conditions, the Permit Holder shall maintain the following records in a District approved logbook.
    a. Record the total amount of municipal solid waste received at S-1 on a daily basis. 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. 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 road-cleaning activities. The Permit Holder may use District approved checklists that describe the standard dust mitigation measures employed at this site in lieu of these daily records, provided that the checklists are completed on a daily basis and any deviations from standard procedures are described. All records shall be summarized on monthly basis.
    e. Record the initial operation date for each new landfill gas well and collector.

VI. Permit Conditions

Condition # 1028
For: S-1 PALO ALTO LANDFILL WITH GAS COLLECTION SYSTEM AND A-3 LANDFILL GAS FLARE

f. Maintain an accurate map of the landfill that 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 7a. Any areas containing only non-decomposable waste shall be clearly identified. This map shall be updated at least once a year to indicate changes in refuse boundaries and to include any newly installed wells and collectors.

g. Calculate and record the heat input to A-3, pursuant to Part 8.

h. Maintain records of all test dates and test results performed to maintain compliance Parts 14-16 above or to maintain compliance with any applicable rule or regulation

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

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

VI. Permit Conditions

Condition # 20476
FOR: S-5 WOOD GRINDER AND A-5 WATER SPRAYS

1. The tonnage of wood processed through S-5 shall not exceed 50,000 tons per year. (Basis: Cumulative Increase)

2. A District approved logbook of tonnage of wood processed at S-5 shall be maintained on a daily basis. Records shall be kept for a period of five years from the date of entry and shall be made readily available to District staff upon request. (Basis: Cumulative Increase)

3. The S-5 Wood Grinder shall be abated by the A-5 Water Sprays during all periods of operation. (Basis: Cumulative Increase)

4. Visible particulate emissions from S-5 shall not exceed Ringelmann 1.0 or result in particulate fallout on adjacent property in such quantities as to cause a public nuisance as per Regulation 1-301. (Basis: Regulations 1-301, 6-301, and 6-305)

5. The Permit Holder shall observe the S-5 Wood Grinder for visible particulate emissions during all periods of operation. If visible emissions that persist for longer than 3 minutes in any hour are detected, the operator of the source shall take the necessary corrective action to stop the emissions.
(Basis: Regulations 2-1-403, 6-301, and 6-305)

VI. Permit Conditions

Condition # 20477
FOR: S-6 DIESEL ENGINE, DRIVER FOR S-5 WOOD GRINDER

1. The total amount of fuel combusted at the Diesel Engine (S-6) shall not exceed 35,000 gallons per year.
(Basis: Cumulative Increase and Toxic Risk Management Policy)

2. Only low sulfur fuel (<0.05% sulfur by weight) shall be combusted at the S-6 Diesel Engine. (Basis: Cumulative Increase and Toxic Risk Management Policy)

3. Emissions of Precursor Organic Compounds (POC) from S-6 shall not exceed 1.5 grams/brake horsepower-hour of operation (g/bhp-hr).
(Basis: BACT)

4. Emissions of Nitrogen Oxides (NOx), calculated as NO2, from S-6 shall not exceed 6.9 g/bhp-hr. (Basis: BACT)

5. Carbon Monoxide (CO) emissions from S-6 shall not exceed 2.75 g/bhp-hr. (Basis: BACT)

6. In order to demonstrate compliance with Parts 1 and 2, the Permit Holder shall keep records of daily fuel usage and the vendor certified sulfur content for the fuels combusted at this source. These records shall be kept on-site and be available for District inspection for a period of five years from the date on which a record was made. (Basis: Cumulative Increase and Regulation 9-1-304)

7. In order to demonstrate compliance with Parts 3-5, the Permit Holder shall conduct annual source tests to determine the emission factors for POC, NOx, and CO in (g/bhp-hr) at the exhaust of the engine. Annual 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 approval of the source test procedures at least 14 days in advance of each source test. The Source Test Section shall be notified of the scheduled test date at least 7 days in advance of each source test. The source test report shall be submitted to the Compliance and Enforcement Division and the Source Test Section within 45 days of the test date. (Basis: BACT and Cumulative Increase)

VI. Permit Conditions

Condition # 20477
FOR: S-6 DIESEL ENGINE, DRIVER FOR S-5 WOOD GRINDER

8. The exhaust of the S-6 Diesel Engine shall be observed for visible smoke during all periods of operation. If visible emissions that persist for longer than 3 minutes in any hour are detected, the operator of the source shall take the necessary corrective action to stop the emissions.
(Basis: Regulations 2-1-403, 6-301, and 6-305)

VI. Permit Conditions

Condition # 20478
FOR: S-7 TROMMEL SCREEN AND A-5 WATER SPRAYS

1. The tonnage of wood processed through S-7 shall not exceed 50,000 tons per year. (Basis: Cumulative Increase)

2. A District approved logbook of tonnage of wood processed at S-7 shall be maintained on a daily basis. Records shall be kept for a period of five years from the date of entry and shall be made readily available to District staff upon request. (Basis: Cumulative Increase)

3. The S-7 Trommel Screen shall be abated by the A-5 Water Sprays during all periods of operation. (Basis: Cumulative Increase)

4. Visible particulate emissions from S-7 shall not exceed Ringelmann 1.0 or result in particulate fallout on adjacent property in such quantities as to cause a public nuisance as per Regulation 1-301. (Basis: Regulations 1-301, 6-301, and 6-305)

5. The Permit Holder shall observe the S-7 Trommel Screen for visible particulate emissions during all periods of operation. If visible emissions that persist for longer than 3 minutes in any hour are detected, the operator of the source shall take the necessary corrective action to stop the emissions.
(Basis: Regulations 2-1-403, 6-301, and 6-305)

VI. Permit Conditions

Condition # 20479
FOR: S-8 DIESEL ENGINE, DRIVER FOR S-7 TROMMEL SCREEN

1. The total amount of fuel combusted at the Diesel Engine (S-8) shall not exceed 7,557 gallons per year.
(Basis: Cumulative Increase and Toxic Risk Management Policy)

2. Only low sulfur fuel (<0.05% sulfur by weight) shall be combusted at the S-8 Diesel Engine. (Basis: Cumulative Increase and Toxic Risk Management Policy)

3. Emissions of Precursor Organic Compounds (POC) from S-8 shall not exceed 1.5 grams/brake horsepower-hour of operation (g/bhp-hr).
(Basis: BACT)

4. Emissions of Nitrogen Oxides (NOx), calculated as NO2, from S-8 shall not exceed 6.9 g/bhp-hr. (basis: BACT)

5. Carbon Monoxide (CO) emissions from S-8 shall not exceed 2.75 g/bhp-hr.
(Basis: BACT)

6. In order to demonstrate compliance with Parts 1 and 2, the Permit Holder shall keep records of daily fuel usage and the vendor certified sulfur content for the fuels combusted at this source. These records shall be kept on-site and be available for District inspection for a period of five years from the date on which a record was made. (Basis: Cumulative Increase and Regulation 9-1-304)

7. In order to demonstrate compliance with Parts 3-5, the Permit Holder shall conduct annual source tests to determine the emission factors for POC, NOx, and CO in (g/bhp-hr) at the exhaust of the engine. Annual 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 approval of the source test procedures at least 14 days in advance of each source test. The Source Test Section shall be notified of the scheduled test date at least 7 days in advance of each source test. The source test report shall be submitted to the Compliance and Enforcement Division and the Source Test Section within 45 days of the test date. (Basis: Cumulative Increase)

VII. APPLICABLE LIMITS & COMPLIANCE MONITORING REQUIREMENTS

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

Table VII – A
Applicable Limits and Compliance Monitoring Requirements
S-1 PALO ALTO LANDFILL WITH GAS COLLECTION SYSTEM;
AND A-3 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 Installa-tion 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 # 1028, Parts 12a-c, 12e-f	P/E	Records
Collection System Installa-tion 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 # 1028, Parts 12a-c, 12e-f	P/E	Records

VII. Applicable Limits and Compliance Monitoring Requirements

Table VII – A
Applicable Limits and Compliance Monitoring Requirements
S-1 PALO ALTO LANDFILL WITH GAS COLLECTION SYSTEM; AND A-3 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	C	Gas Flow Meter and Recorder (every 15 minutes)
Gas Flow	BAAQMD Condition # 1028, 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 8-34-501.1, 501.2, 501.10 and 508 and BAAQMD Condition # 1028, Part 17f	C, P/E	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
Periods of Inopera-tion for Para-metric 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 (gas flow meters and temperature monitors)

VII. Applicable Limits and Compliance Monitoring Requirements

Table VII – A
Applicable Limits and Compliance Monitoring Requirements
S-1 PALO ALTO LANDFILL WITH GAS COLLECTION SYSTEM; AND A-3 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
Contin-uous 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 (gas flow meters and temperature monitors)
Startup Shutdown or Mal-function Pro-cedures	40 CFR 63.6(e)	Y		Minimize Emissions by Implementing SSM Plan	40 CFR 63.1980(a-b)	P/E	Records (all occurrences, duration of each, and corrective actions)
Wellhead Pressure	BAAQMD 8-34-305.1	Y		< 0 psig	BAAQMD 8-34-414, 501.9 and 505.1 and BAAQMD Condition # 1028, Part 17h	P/M	Monthly Inspection and Records
Temper-ature of Gas at Wellhead	BAAQMD 8-34-305.2	Y		< 55 ^{o}C	BAAQMD 8-34-414, 501.9 and 505.2 and BAAQMD Condition # 1028, Part 17h	P/M	Monthly Inspection and Records

VII. Applicable Limits and Compliance Monitoring Requirements

Table VII – A
Applicable Limits and Compliance Monitoring Requirements
S-1 PALO ALTO LANDFILL WITH GAS COLLECTION SYSTEM; AND A-3 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 Concen-trations at Wellhead	BAAQMD 8-34-305.3 or 305.4	Y		$N_2 < 20\%$ **OR** $O_2 < 5\%$	BAAQMD 8-34-414, 501.9 and 505.3 or 505.4 and BAAQMD Condition # 1028, Part 17h	P/M	Monthly Inspection and Records
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 Com-pounds Plus Methane)	BAAQMD 8-34-301.2	Y		1000 ppmv as methane (component leak limit)	BAAQMD 8-34-501.6 and 503 and BAAQMD Condition # 1028, Part 17h	P/Q	Quarterly Inspection of collection and control system components with portable analyzer and Records

VII. Applicable Limits and Compliance Monitoring Requirements

Table VII – A
Applicable Limits and Compliance Monitoring Requirements
S-1 PALO ALTO LANDFILL WITH GAS COLLECTION SYSTEM; AND A-3 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 8-34-303	Y		500 ppmv as methane at 2 inches above surface	BAAQMD 8-34-415, 416, 501.6, 506 and 510 and BAAQMD Condition # 1028, Part 17h	P/M, Q, and E	Monthly Visual Inspection of Cover, Quarterly Inspection of Surface with portable analyzer, Various Reinspec-tion Times for Leaking Areas, and Records
Non-Methane Organic Com-pounds (NMOC)	BAAQMD 8-34-301.3	Y		98% removal by weight OR < 30 ppmv, dry basis @ 3% O_2, expressed as methane (applies to A-3 only)	BAAQMD 8-34-412 and 8-34-501.4 and BAAQMD Condition # 1028, Parts 15 and 17h	P/A	Annual Source Tests and Records
Temper-ature of Combus-tion Zone (CT)	BAAQMD Condition # 1028, Part 9	Y		CT $\geq$ 1420 °F, averaged over any 3-hour period (applies to A-3 only)	BAAQMD 8-34-501.3 and 507	C	Temperature Sensor and Recorder (continuous)

VII. Applicable Limits and Compliance Monitoring Requirements

Table VII – A
Applicable Limits and Compliance Monitoring Requirements
S-1 PALO ALTO LANDFILL WITH GAS COLLECTION SYSTEM; AND A-3 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
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 # 1028, Part 3	P/E	Surface VOC Analysis and Records
Opacity	BAAQMD 6-301	Y		Ringelmann No. 1 for < 3 minutes/hr (applies to S-1)	BAAQMD Condition # 1028, Part 17d	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-3)	None	N	NA
FP	BAAQMD 6-310	Y		$\leq$ 0.15 grains/dscf (applies to A-3 only)	None	N	NA
NOx	BAAQMD Condition # 1028, Part 11	Y		$\leq$ 32 ppmv at 15% O_2, dry	BAAQMD Condition # 1028, Parts 15 and 17h	P/A	Annual Source Test and Records
CO	BAAQMD Condition # 1028, Part 12	Y		$\leq$ 208 ppmv at 15% O_2, dry	BAAQMD Condition # 1028, Parts 15 and 17h	P/A	Annual Source Test and Records

VII. Applicable Limits and Compliance Monitoring Requirements

Table VII – A
Applicable Limits and Compliance Monitoring Requirements
S-1 PALO ALTO LANDFILL WITH GAS COLLECTION SYSTEM; AND A-3 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: $\leq$ 0.5 ppm for 3 minutes and $\leq$ 0.25 ppm for 60 min. and $\leq$0.05 ppm for 24 hours (applies to A-3 only)	None	N	NA
SO_2	BAAQMD Regulation 9-1-302	Y		$\leq$ 300 ppm (dry basis) (applies to A-3 only)	BAAQMD Condition # 1028, Parts 14 and 17h	P/Q	Sulfur analysis of landfill gas
Total Sulfur Content in Landfill Gas	BAAQMD Condition # 1028, Part 14	Y		$\leq$ 1300 ppmv (expressed as H_2S)	BAAQMD Condition # 1028, Parts 14 and 17h	P/Q	Sulfur analysis of landfill gas
H_2S	BAAQMD 9-2-301	N		Property Line Ground Level Limits: $\leq$ 0.06 ppm, averaged over 3 minutes and $\leq$ 0.03 ppm, averaged over 60 minutes	None	N	NA
Amount of Waste Accepted	BAAQMD Condition # 1028, Part 1	Y		$\leq$ 400 tons/day and $\leq$ 5,830,000 tons (cumulative amount of all wastes) and $\leq$ 7,759,000 yd^3 (cumulative amount of all wastes and cover materials)	BAAQMD Condition # 1028, Part 17a	P/D	Records
Heat Input	BAAQMD Condition # 1028, Part 8	Y		$\leq$ 720 MM BTU per day and $\leq$ 262,8000 MM BTU per year	BAAQMD Condition # 1028, Parts 8 and 17g	P/D	Records

VII. Applicable Limits and Compliance Monitoring Requirements

Table VII – A
Applicable Limits and Compliance Monitoring Requirements
S-1 PALO ALTO LANDFILL WITH GAS COLLECTION SYSTEM; AND A-3 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
Total Chlor-inated Com-pounds in Landfill Gas	BAAQMD Condition # 1028, Part 13	N		$\leq$ 104 ppmv, dry	BAAQMD Condition # 1028, Parts 16 and 17h	P/A	Annual Gas Character-ization Analysis and Records

VII. Applicable Limits and Compliance Monitoring Requirements

Table VII – B
Applicable Limits and Compliance Monitoring Requirements
S-5 WOOD GRINDER AND A-5 WATER SPRAYS

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 Regulation 6-301	Y		Ringelmann 1.0 for 3 minutes in any hour	BAAQMD Condition # 20476, Part 5	P/E	Visual Observation of Operations
Opacity	BAAQMD Condition # 20476, Part 4	Y		Ringelmann 1.0	BAAQMD Condition # 20476, Part 5	P/E	Visual Observation of Operations
FP	BAAQMD Regulation 6-311	Y		40 pounds/hour	None	N	NA
Wood Through-put	BAAQMD Condition # 20476, Part 1	Y		50,000 tons/year	BAAQMD Condition # 20476, Part 2	P/D	Records

VII. Applicable Limits and Compliance Monitoring Requirements

Table VII – C
Applicable Limits and Compliance Monitoring Requirements
S-6 DIESEL ENGINE, DRIVER FOR S-5 WOOD GRINDER

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 Regulation 6-301	Y		Ringelmann 1.0 for 3 minutes in any hour	BAAQMD Condition # 20477, Part 8	P/E	Visual Observation of Exhaust
FP	BAAQMD Regulation 6-310	Y		0.15 grains/dscf	None	N	NA
POC	BAAQMD Condition # 20477, Part 3	Y		1.5 grams/bhp-hr	BAAQMD Condition # 20477, Part 7	P/A	Annual Source Test
NOx	BAAQMD Condition # 20477, Part 4	Y		6.9 grams/bhp-hr	BAAQMD Condition # 20477, Part 7	P/A	Annual Source Test
CO	BAAQMD Condition # 20477, Part 5	Y		2.75 grams/bhp-hr	BAAQMD Condition # 20477, Part 7	P/A	Annual Source Test
SO_2	BAAQMD Regulation 9-1-301	Y		Property Line Ground Level Limits: $\leq$ 0.5 ppm for 3 minutes and $\leq$ 0.25 ppm for 60 min. and $\leq$0.05 ppm for 24 hours	None	N	NA
SO_2	BAAQMD Regulation 9-1-304	Y		Fuel Sulfur Limit 0.5%	BAAQMD Condition # 20477, Part 6	P/E	Records of Fuel Sulfur Content
SO_2	BAAQMD Condition # 20477, Part 2	Y		Fuel Sulfur Limit 0.05%	BAAQMD Condition # 20477, Part 6	P/E	Records of Fuel Sulfur Content
Fuel Through-put	BAAQMD Condition # 20477, Part 1	Y		35,000 gallons/year of diesel oil	BAAQMD Condition # 20477, Part 6	P/D	Records of Fuel Throughput

VII. Applicable Limits and Compliance Monitoring Requirements

Table VII – D
Applicable Limits and Compliance Monitoring Requirements
S-7 TROMMEL SCREEN AND A-5 WATER SPRAYS

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 Regulation 6-301	Y		Ringelmann 1.0 for 3 minutes in any hour	BAAQMD Condition # 20478, Part 5	P/E	Visual Observation of Operations
Opacity	BAAQMD Condition # 20478, Part 4	Y		Ringelmann 1.0	BAAQMD Condition # 20478, Part 5	P/E	Visual Observation of Operations
FP	BAAQMD Regulation 6-311	Y		40 pounds/hour	None	N	NA
Wood Through-put	BAAQMD Condition # 20478, Part 1	Y		50,000 tons/year	BAAQMD Condition # 20478, Part 2	P/D	Records

VII. Applicable Limits and Compliance Monitoring Requirements

Table VII – E
Applicable Limits and Compliance Monitoring Requirements
S-8 DIESEL ENGINE, DRIVER FOR S-7 TROMMEL SCREEN

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 Regulation 6-303	Y		Ringelmann 2.0 for 3 minutes in any hour	None	N	NA
FP	BAAQMD Regulation 6-310	Y		0.15 grains/dscf	None	N	NA
POC	BAAQMD Condition # 20479, Part 3	Y		1.5 grams/bhp-hr	BAAQMD Condition # 20479, Part 7	P/A	Annual Source Test
NOx	BAAQMD Condition # 20479, Part 4	Y		6.9 grams/bhp-hr	BAAQMD Condition # 20479, Part 7	P/A	Annual Source Test
CO	BAAQMD Condition # 20479, Part 5	Y		2.75 grams/bhp-hr	BAAQMD Condition # 20479, Part 7	P/A	Annual Source Test
SO_2	BAAQMD Regulation 9-1-301	Y		Property Line Ground Level Limits: $\leq$ 0.5 ppm for 3 minutes and $\leq$ 0.25 ppm for 60 min. and $\leq$0.05 ppm for 24 hours	None	N	NA
SO_2	BAAQMD Regulation 9-1-304	Y		Fuel Sulfur Limit 0.5%	BAAQMD Condition # 20479, Part 6	P/E	Records of Fuel Sulfur Content
SO_2	BAAQMD Condition # 20479, Part 2	Y		Fuel Sulfur Limit 0.05%	BAAQMD Condition # 20479, Part 6	P/E	Records of Fuel Sulfur Content
Fuel Through-put	BAAQMD Condition # 20479, Part 1	Y		7,557 gallons/year of diesel oil	BAAQMD Condition # 20479, Part 6	P/D	Records of Fuel Throughput

VIII. TEST METHODS

The test methods associated with the emission limit of a District regulation are generally found in Section 600 of the regulation. The following table indicates only the test methods associated with the emission limits 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 6-303	Ringelmann No. 2 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 6-311	Process Weight Rate Based Emissions Limits	Manual of Procedures, Volume IV, ST-15, Particulates Sampling, or Calculate Emissions in Accordance with EPA AP-42 Procedures
BAAQMD 8-2-301	Organic Compound Emission Limitation for Miscellaneous Operations	BAAQMD Regulation 8-40-604 measurement procedures and EPA Method 21 (or any method determined to be equivalent by the US EPA and approved by the APCO)
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-14, Oxygen, Continuous Sampling; and Manual of Procedures, Volume IV, ST-7, Organic Compounds; 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-14, Oxygen, Continuous Sampling; and Manual of Procedures, Volume IV, ST-7, Organic Compounds; or EPA Reference Method 18, 25, 25A, or 25C
BAAQMD 8-34-303	Landfill Surface Requirements	EPA Reference Method 21, Determination of Volatile Organic Compound Leaks
BAAQMD 8-34-305.1	Wellhead Gauge Pressure	APCO Approved Device
BAAQMD 8-34-305.2	Wellhead Temperature	APCO Approved Device
BAAQMD 8-34-305.3	Wellhead Nitrogen	EPA Reference Method 3C, Determination of Carbon Dioxide, Methane, Nitrogen, and Oxygen from Stationary Sources

VIII. Test Methods

Table VIII
Test Methods

Applicable Requirement	Description of Requirement	Acceptable Test Methods
BAAQMD 8-34-305.4	Wellhead Oxygen	EPA Reference Method 3C, Determination of Carbon Dioxide, Methane, Nitrogen, and Oxygen from Stationary Sources
BAAQMD 8-34-301.2	Collection and Control System Leak Limit	EPA Reference Method 21, Determination of Volatile Organic Compound Leaks
BAAQMD 8-34-301.3	NMOC Emission Limits for Flares	Manual of Procedures, Volume IV, ST-14, Oxygen, Continuous Sampling; and Manual of Procedures, Volume IV, ST-7, Organic Compounds; or EPA Reference Method 18, 25, 25A, or 25C
BAAQMD 8-34-305.1	Gauge Pressure Limit at Wellheads	APCO Approved Device
BAAQMD 8-34-305.2	Temperature Limit for Gas at Wellheads	APCO Approved Device
BAAQMD 8-34-305.3	Nitrogen Concentration in Gas at Wellheads	EPA Reference Method 3C, Determination of Carbon Dioxide, Methane, Nitrogen, and Oxygen from Stationary Sources
BAAQMD 8-34-305.4	Oxygen Concentration in Gas at Wellheads	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
BAAQMD 8-40-116.2	Organic Content Limit for Small Volume Exemption	BAAQMD 8-40-601 and EPA Reference Methods 8015B and 8021B
BAAQMD 8-40-301	Limits on Uncontrolled Aeration of Contaminated Soil	BAAQMD 8-40-601 and EPA Reference Methods 8015B and 8021B; or EPA Reference Method 21
BAAQMD 9-1-301	Limitations on Ground Level Concentrations (SO_2)	Manual of Procedures, Volume VI, Part 1, Ground Level Monitoring for Hydrogen Sulfide and Sulfur Dioxide
BAAQMD 9-1-302	General Emission Limitation (SO_2)	Manual of Procedures, Volume IV, ST-19A, Sulfur Dioxide, Continuous Sampling, or ST-19B, Total Sulfur Oxides, Integrated Sample
BAAQMD 9-1-304	Fuel Sulfur Content	Manual of Procedures, Volume III, Method 10, Determination of Sulfur in Fuel Oil
BAAQMD 9-2-301	Limitations on Hydrogen Sulfide	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
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 # 1028, Part 2	VOC Determination for Soils Containing VOCs	BAAQMD 8-40-601 and EPA Reference Methods 8015B and 8021B; or EPA Reference Method 21
BAAQMD Condition # 1028, Part 3	Total Carbon 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 # 1028, Part 3
BAAQMD Condition # 1028, Part 8	Heat Input Limits	APCO approved gas flow meter and APCO approved calculation procedure described in BAAQMD Condition # 1028, Part 8
BAAQMD Condition # 1028, Part 9	Flare Combustion Zone Temperature Limit	APCO Approved Device
BAAQMD Condition # 1028, Part 11	NO_x Concentration Limit for Flare	Manual of Procedures, Volume IV, ST-13A, Oxides of Nitrogen, Continuous Sampling and ST-14, Oxygen, Continuous Sampling
BAAQMD Condition # 1028, Part 12	CO Concentration Limit for Flare	Manual of Procedures, Volume IV, ST-6, Carbon Monoxide, Continuous Sampling and ST-14, Oxygen, Continuous Sampling
BAAQMD Condition # 1028, Part 13	Total Chlorinated Compound Concentration Limit in Landfill Gas	EPA Reference Method 18, Measurement of Gaseous Organic Compound Emissions by Gas Chromatography
BAAQMD Condition # 1028, Part 14	Landfill Gas Sulfur Content Limit	Manual of Procedures, Volume III, Method 5 Determination of Total Mercaptans in Effluents and Method 25 Determination of Hydrogen Sulfide in Effluents, or Method 44 Determination of Reduced Sulfur Gases and Sulfur Dioxide in Effluent Samples by Gas Chromatographic Methods; or Draeger Tube: measuring hydrogen sulfide, used in accordance with manufacturer's recommended procedures

VIII. Test Methods

Table VIII
Test Methods

Applicable Requirement	Description of Requirement	Acceptable Test Methods
BAAQMD Condition # 1028, Part 15	Compliance Demonstration Test	Manual of Procedures, Volume IV, ST-17, Stack Gas Velocity and Volumetric Flow Rate; ST-23 Water Vapor; ST-14, Oxygen, Continuous Sampling; ST-13A, Oxides of Nitrogen, Continuous Sampling; ST-6, Carbon Monoxide, Continuous Sampling; and Manual of Procedures, Volume IV, ST-7, Organic Compounds or EPA Reference Methods 18, 25, 25A, or 25C
BAAQMD Condition # 1028, Part 16	Gas Characterization Analyses	EPA Reference Method 18, Measurement of Gaseous Organic Compound Emissions by Gas Chromatography
BAAQMD Condition # 20476, Part 4	Ringelmann No. 1 Limitation	Manual of Procedures, Volume I, Evaluation of Visible Emissions
BAAQMD Condition # 20477, Part 2	Fuel Sulfur Content Limit	Manual of Procedures, Volume III, Method 10, Determination of Sulfur in Fuel Oil
BAAQMD Condition # 20477, Part 3	POC Emissions Limit for Diesel Engine	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 # 20477, Part 4	NOx Emissions Limit for Diesel Engine	Manual of Procedures, Volume IV, ST-13A, Oxides of Nitrogen, Continuous Sampling and ST-14, Oxygen, Continuous Sampling
BAAQMD Condition # 20477, Part 5	CO Emissions Limit for Diesel Engine	Manual of Procedures, Volume IV, ST-6, Carbon Monoxide, Continuous Sampling and ST-14, Oxygen, Continuous Sampling
BAAQMD Condition # 20478, Part 4	Ringelmann No. 1 Limitation	Manual of Procedures, Volume I, Evaluation of Visible Emissions
BAAQMD Condition # 20479, Part 2	Fuel Sulfur Content Limit	Manual of Procedures, Volume III, Method 10, Determination of Sulfur in Fuel Oil
BAAQMD Condition # 20479, Part 3	POC Emissions Limit for Diesel Engine	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 # 20479, Part 4	NOx Emissions Limit for Diesel Engine	Manual of Procedures, Volume IV, ST-13A, Oxides of Nitrogen, Continuous Sampling and ST-14, Oxygen, Continuous Sampling

VIII. Test Methods

Table VIII
Test Methods

Applicable Requirement	Description of Requirement	Acceptable Test Methods
BAAQMD Condition # 20479, Part 5	CO Emissions Limit for Diesel Engine	Manual of Procedures, Volume IV, ST-6, Carbon Monoxide, Continuous Sampling and ST-14, Oxygen, Continuous Sampling

IX. PERMIT SHIELD

A. SUBSUMED REQUIREMENTS

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

Table IX-A
S-1 PALO ALTO LANDFILL WITH GAS COLLECTION SYSTEM

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

The Regulation 8, Rule 2 total carbon test procedure is subsumed by the Regulation 8, Rule 40 VOC test procedure for the Palo Alto Landfill (S-1), because testing performed pursuant to Regulation 8-40-604 will rule out the need to test in accordance with Regulation 8-2-601.

Regulation 8, Rule 2 "Miscellaneous Operations" is only applicable to sources of precursor organic compounds that are not otherwise limited by Regulation 8 or Regulation 10 rules. In the case of the landfill, Regulation 8, Rule 2 would apply to storage, handling, reuse (such as for cover material), and disposal of soil that contains some VOC, but is not defined as "contaminated soil" by Regulation 8-40-205. Soil which has an organic content exceeding 50 ppmw or that registers an organic concentration greater than 50 ppmv (expressed as methane, C1) is subject to Regulation 8, Rule 40.

IX. Permit Shield

Regulation 8-2-301 limits organic compound emissions (expressed as total carbon) from an operation to 15 pounds per day, if the emission from the operation has an organic compound concentration greater than 300 ppmv (expressed as total carbon, dry basis). Since soil found not to be contaminated using the procedures of Regulation 8-40-604 will have a surface VOC concentration of less than 50 ppmv (expressed as methane, C1) it can reasonably be assumed that the concentration is also less than 300 ppmv (total carbon, dry basis) as determined by the procedures of Regulation 8-2-601. Since the operation complies with the total carbon concentration limit (< 300 ppmv), it complies with Regulation 8-2-301.

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

X. REVISION HISTORY

Title V Permit Issuance (Application 3047): **December 4, 2003**

Minor Revision (Application 2230): **April 9, 2004**

- Corrected a date in Section I.B.1.
- Revised the minimum flare temperature in Condition # 1028, Part 9 and Tables II-B and VII-A based on new source test data.
- Corrected the peak waste disposal limit in Condition # 1028, Part 1a and Tables II-A and VII-A based on the Solid Waste Facility Permit for the landfill.
- Added text to Condition # 1028, Part 7 that describes the proposed vertical wells that the District is planning to issue an Authority to Construct for.
- Corrected typographical errors in Condition # 1028, Part 12 and Table VII-A.
- Deleted future effective dates that have passed in Tables IV-A and VII-A.
- Added Section X Revision History and revised subsequent section numbers.

Minor Revision (Application 9783): **October 13, 2004**

- Revised Condition #20477 and Table VII-C for S-6, Diesel Engine, to reflect BACT2 emission factors for POC, NO_X and CO. POC from 0.042 g/bhp-hr to 1.5 g/bhp-hr, NO_X 6.2 g/bhp-hr to 6.9 g/bhp-hr and CO from 0.48 g/bhp-hr to 2.75 g/bhp-hr.
- Revised Condition #20479 and the Table VII-E for S-8, Diesel Engine, to reflect BACT2 emission factors for POC, NO_X and CO. POC from 0.3 g/bhp-hr to 1.5 g/bhp-hr, NO_X 6.5 g/bhp-hr to 6.9 g/bhp-hr and CO from 1.3 g/bhp-hr to 2.75 g/bhp-hr.

XI. GLOSSARY

ACT
Federal Clean Air Act

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

ARB
Air Resources Board

BAAQMD
Bay Area Air Quality Management District

BACT
Best Available Control Technology

Basis
The underlying authority that allows the District to impose requirements.

CAA
The federal Clean Air Act

CAAQS
California Ambient Air Quality Standards

CAPCOA
California Air Pollution Control Officers Association

CARB
California Air Resources Board (same as ARB)

CEQA
California Environmental Quality Act

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

CH4 or CH_4
Methane

CO
Carbon Monoxide

XI. Glossary

CT
Combustion Zone Temperature

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

District
The Bay Area Air Quality Management District

EG
Emission Guidelines

EO
Executive Order

EPA
The federal Environmental Protection Agency.

Excluded
Not subject to any District regulations.

Federally Enforceable, FE
All limitations and conditions which are enforceable by the Administrator of the EPA including those requirements developed pursuant to 40 CFR Part 51, subpart I (NSR), Part 52.21 (PSD), Part 60 (NSPS), Part 61 (NESHAPs), Part 63 (MACT), and Part 72 (Permits Regulation, Acid Rain), including limitations and conditions contained in operating permits issued under an EPA-approved program that has been incorporated into the SIP.

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

GDF
Gasoline Dispensing Facility

H2S or H_2S
Hydrogen Sulfide

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

XI. Glossary

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

LFG
Landfill gas

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

MAX or Max.
Maximum

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

MIN or Min.
Minimum

MOP
The District's Manual of Procedures.

MSW
Municipal solid waste

MW
Molecular weight

N2 or N_2
Nitrogen

NA
Not Applicable

NAAQS
National Ambient Air Quality Standards

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

XI. Glossary

NMHC
Non-methane Hydrocarbons (Same as NMOC)

NMOC
Non-methane Organic Compounds (Same as NMHC)

NOx or NO_x
Oxides of nitrogen.

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

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

O2 or O_2
Oxygen

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

Phase II Acid Rain Facility
A facility that generates electricity for sale through fossil-fuel combustion and is not exempted by 40 CFR 72 from Titles IV and V of the Clean Air Act.

POC
Precursor Organic Compounds

PM
Particulate Matter

PM10 or PM_{10}
Particulate matter with aerodynamic equivalent diameter of less than or equal to 10 microns

XI. Glossary

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

PV or P/V Valve
Pressure / Vacuum Valve

RMP
Risk Management Plan

S
Sulfur

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

SO2 or SO_2
Sulfur dioxide

SSM
Startup, Shutdown, or Malfunction

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

THC
Total Hydrocarbons (NMHC + Methane)

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

TOC
Total Organic Compounds (NMOC + Methane, Same as THC)

TPH
Total Petroleum Hydrocarbons

XI. Glossary

TRMP
Toxic Risk Management Policy

TRS
Total Reduced Sulfur

TSP
Total Suspended Particulate

VOC
Volatile Organic Compounds

Symbols:

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

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
m^2	=	square meter
m^3	=	cubic meters
min	=	minute
mm	=	million

XI. Glossary

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

XII. APPLICABLE STATE IMPLEMENTATION PLAN

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

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