

Bay Area Air Quality Management District

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

Final

MAJOR FACILITY REVIEW PERMIT

Issued To:

**Napa-Vallejo Waste Management Authority
Facility #A9183**

Facility Address:

End of Eucalyptus Road
Napa, CA 94558

Mailing Address:

1195 Third Street, Room 101
Napa, CA 94559

Responsible Official

Richard F. Luthy, Jr., Executive Director
707-299-1314

Facility Contact

Richard F. Luthy, Jr., Executive Director
707-299-1314

Type of Facility: Landfill
Primary SIC: 4953
Product: Inactive Solid Waste Landfill

BAAQMD Permit Division Contact:
Carol S. Allen

ISSUED BY THE BAY AREA AIR QUALITY MANAGEMENT DISTRICT

Signed by Jeff McKay for Jack J. Broadbent
Jack Broadbent, Executive Officer/Air Pollution Control Officer

March 29, 2011
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 19, 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.** If the permit renewal has not been issued by November 30, 2008, but a complete application for renewal has been submitted in accordance with the above deadlines, the existing permit will continue in force until the District takes final action on the renewal application. (Regulation 2-6-307, 404.2, 407 & 409.6; MOP Volume II, Part 3, §4.2)

I. Standard Conditions

2. The permit holder shall comply with all conditions of this permit. The permit consists of this document and all appendices. Any non-compliance with the terms and conditions of this permit will constitute a violation of the law and will be grounds for enforcement action; permit termination, revocation and re-issuance, or modification; or denial of a permit renewal application. (Regulation 2-6-307; MOP Volume II, Part 3, §4.11)
3. In the event any enforcement action is brought as a result of a violation of any term or condition of this permit, the fact that it would have been necessary for the permittee to halt or reduce the permitted activity in order to maintain compliance with such term or condition shall not be a defense to such enforcement action. (MOP Volume II, Part 3, §4.11)
4. This permit may be modified, revoked, reopened and reissued, or terminated for cause. (Regulation 2-6-307, 409.8, 415; MOP Volume II, Part 3, §4.11)
5. The filing of a request by the facility for a permit modification, revocation and 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)

I. Standard Conditions

10. The emissions inventory submitted with the application for this Major Facility Review Permit is an estimate of actual emissions or the potential to emit for the time period stated and is included only as one means of determining applicable requirements for emission sources. It does not establish, or constitute a basis for establishing, any new emission limitations. (MOP Volume II, Part 3, §4.11)
11. The responsible official shall certify all documents submitted by the facility pursuant to the major facility review permit. The certification shall state that based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete. The certifications shall be signed by a responsible official for the facility. (MOP Volume II, Part 3, §4.11)

C. Requirement to Pay Fees

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

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 19, 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

I. Standard Conditions

calendar days of the discovery of the incident. Within 30 calendar days of the discovery of any incident of non-compliance, the facility shall submit a written report including the probable cause of non-compliance and any corrective or preventative actions. The reports shall be sent to the following address:

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

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

G. Compliance Certification

Compliance certifications shall be submitted annually by the responsible official of this facility to the Bay Area Air Quality Management District and to the Environmental Protection Agency. The certification period will be 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	American Canyon Sanitary Landfill	Inactive Class III Solid Waste Disposal Site		Max. Design Capacity = 7 E6 yd ³ (5.35 E6 m ³) Max. Waste Acceptance Rate = 0 tons/day Max. Cumulative Waste In Place = 4.23 E6 tons
	Gas Collection System	Active		64 vertical gas extraction wells and 33 gas/leachate extraction wells

Table II B – Abatement Devices

A-#	Description	Source(s) Controlled	Applicable Requirement	Operating Parameters	Limit or Efficiency
A-2	Landfill Gas Flare, 24 MM BTU/hour	S-1	BAAQMD 8-34-301.3, see also Table IV-A	Minimum combustion zone temperature of 1400 °F (3-hour average), see also Table VII-A	Either 98% destruction of NMOC or < 30 ppmv of NMOC, as CH ₄ , at 3% O ₂ , dry

III. GENERALLY APPLICABLE REQUIREMENTS

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

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

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

The full language of 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

III. Generally Applicable Requirements

**Table III
 Generally Applicable Requirements**

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/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	Odororous Substances (3/17/82)	N
BAAQMD Regulation 8, Rule 1	Organic Compounds - General Provisions (6/15/94)	Y
BAAQMD Regulation 8, Rule 2	Organic Compounds – Miscellaneous Operations (6/15/94)	Y
BAAQMD Regulation 8, Rule 3	Organic Compounds - Architectural Coatings (11/21/01)	N
SIP Regulation 8, Rule 3	Organic Compounds - Architectural Coatings (2/18/98)	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 40	Organic Compounds – Aeration of Contaminated Soil and Removal of Underground Storage Tanks (12/15/99)	Y
BAAQMD 8-40-116	Exemption, Small Volume	Y
BAAQMD 8-40-117	Exemption, Accidental Spills	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
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

III. Generally Applicable Requirements

Table III
Generally Applicable Requirements

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/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 of Directors
2. Any federal requirement, including a version of a District regulation that has been approved into the SIP: The most recent date of EPA approval of any portion of the rule, encompassing all actions on the rule through that date

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

Table IV – A
Source-Specific Applicable Requirements
S-1 AMERICAN CANYON SANITARY LANDFILL
A-2 LANDFILL GAS FLARE

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

IV. Source Specific Applicable Requirements

Table IV – A
Source-Specific Applicable Requirements
S-1 AMERICAN CANYON SANITARY LANDFILL
A-2 LANDFILL GAS FLARE

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
1-523.5	Maintenance and Calibration	Y ¹	
BAAQMD Regulation 6	Particulate Matter and Visible Emissions (12/19/90)		
6-301	Ringelmann No. 1 Limitation (applies to A-2 Flare only)	Y	
6-305	Visible Particles (applies to A-2 Flare only)	Y	
6-310	Particle Weight Limitation (applies to A-2 Flare only)	Y	
6-401	Appearance of Emissions (applies to A-2 Flares 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	
8-34-117	Limited Exemption, Gas Collection System Components	Y	
8-34-117.1	Necessity of Existing Component Repairs/Adjustments	Y	
8-34-117.2	New Components are Described in Collection and Control System Design Plan	Y	
8-34-117.3	Meets Section 8-34-118 Requirements	Y	
8-34-117.4	Limits on Number of Wells Shutdown	Y	
8-34-117.5	Shutdown Duration Limit	Y	
8-34-117.6	Well Disconnection Records	Y	
8-34-118	Limited Exemption, Construction Activities	Y	
8-34-118.1	Construction Plan	Y	
8-34-118.2	Activity is Required to Maintain Compliance with this Rule	Y	
8-34-118.3	Required or Approved by Other Enforcement Agencies	Y	
8-34-118.4	Emission Minimization Requirement	Y	
8-34-118.5	Excavated Refuse Requirements	Y	
8-34-118.6	Covering Requirements for Exposed Refuse	Y	
8-34-118.7	Installation Time Limit	Y	
8-34-118.8	Capping Required for New Components	Y	
8-34-118.9	Construction Activity Records	Y	

IV. Source Specific Applicable Requirements

Table IV – A
Source-Specific Applicable Requirements
S-1 AMERICAN CANYON SANITARY LANDFILL
A-2 LANDFILL GAS FLARE

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
8-34-301	Landfill Gas Collection and Emission Control System Requirements	Y	
8-34-301.1	Continuous Operation	Y	
8-34-301.2	Collection and Control Systems Leak Limitations	Y	
8-34-301.3	Limits for Enclosed Flares (applies to A-2 Flare only)	Y	
8-34-303	Landfill Surface Requirements	Y	
8-34-304	Gas Collection System Installation Requirements	Y	
8-34-304.1	Based on Waste Age For Inactive or Closed Areas	Y	
8-34-304.4	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	
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	

IV. Source Specific Applicable Requirements

Table IV – A
Source-Specific Applicable Requirements
S-1 AMERICAN CANYON SANITARY LANDFILL
A-2 LANDFILL GAS FLARE

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
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-2 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	
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	
8-34-506.1	Criteria for Annual Monitoring: Closed Landfill	Y	
8-34-506.2	Criteria for Annual Monitoring: No Excess in 3 Quarters	Y	
8-34-506.3	Criteria for Annual Monitoring: Revert to Quarterly Monitoring if an Excess is Detected	Y	
8-34-507	Continuous Temperature Monitor and Recorder (applies to A-2 Flare only)	Y	
8-34-508	Gas Flow Meter	Y	
8-34-510	Cover Integrity Monitoring	Y	

IV. Source Specific Applicable Requirements

Table IV – A
Source-Specific Applicable Requirements
S-1 AMERICAN CANYON SANITARY LANDFILL
A-2 LANDFILL GAS FLARE

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
BAAQMD Regulation 9, Rule 1	Inorganic Gaseous Pollutants – Sulfur Dioxide (3/15/95)		
9-1-301	Limitations on Ground Level Concentrations (applies to A-2 Flare only)	Y	
9-1-302	General Emission Limitations (applies to A-2 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	
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	

IV. Source Specific Applicable Requirements

Table IV – A
Source-Specific Applicable Requirements
S-1 AMERICAN CANYON SANITARY LANDFILL
A-2 LANDFILL GAS FLARE

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
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 (6/9/03)		
62.1100	Identification of Plan	Y	
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	
63.10(d)(5)	Startup, Shutdown, and Malfunction (SSM) Reports	Y	
40 CFR Part 63, Subpart AAAA	National Emission Standards for Hazardous Air Pollutants: Municipal Solid Waste Landfills (1/16/03)		
63.1945	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 WWWW or a State Plan implementing 40 CFR Part 60, Subpart Cc	Y	

IV. Source Specific Applicable Requirements

Table IV – A
Source-Specific Applicable Requirements
S-1 AMERICAN CANYON SANITARY LANDFILL
A-2 LANDFILL GAS FLARE

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
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 # 12418			
Part 1	Design capacity and waste acceptance rate limits (Regulation 2-1-301)	Y	
Part 2	Landfill gas control system requirements (Regulation 8-34-301)	Y	
Part 3	Landfill gas collection system description (Regulations 2-1-301, 8-34-301.1, 8-34-303, 8-34-304, and 8-34-305)	Y	
Part 4	Landfill gas collection system operating requirements (Regulation 8-34-301.1)	Y	
Part 5	Alarm Requirements for A-2 Landfill Gas Flare (Regulation 8-34-301)	Y	
Part 6	Flow Meter Requirement for A-2 Landfill Gas Flare (Cumulative Increase and Regulations 8-34-301, 8-34-501.10, and 8-34-508)	Y	
Part 7	Heat Input Limits for A-2 Landfill Gas Flare (Cumulative Increase)	Y	
Part 8	Combustion Zone Temperature Limit for A-2 Landfill Gas Flare (Toxic Risk Management Policy and Regulation 8-34-301.3)	Y	
Part 9	NOx Emission Limit for A-2 Landfill Gas Flare (RACT and Cumulative Increase)	Y	

IV. Source Specific Applicable Requirements

Table IV – A
Source-Specific Applicable Requirements
S-1 AMERICAN CANYON SANITARY LANDFILL
A-2 LANDFILL GAS FLARE

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
Part 10	CO Emission Limit for A-2 Landfill Gas Flare (RACT and Cumulative Increase)	Y	
Part 11	Landfill gas sulfur content limit and monitoring requirements (Cumulative Increase)	Y	
Part 12	Toxic compound concentrations that trigger a permit application (Toxic Risk Management Policy and AB-2588 Air Toxics Hot Spots Act)	N	
Part 13	Annual source test (RACT, Cumulative Increase, Toxic Risk Management Policy, and Regulations 8-34-301.3 and 8-34-412)	Y	
Part 14	Annual landfill gas characterization test (Toxic Risk Management Policy, AB-2588 Air Toxics Hot Spots Act, Cumulative Increase, and Regulations 8-34-412 and 9-1-302)	Y	
Part 15	Record keeping requirements (Cumulative Increase and Regulations 2-6-501, 8-34-301, 8-34-303, 8-34-304, 8-34-501, and 9-1-302)	Y	
Part 16	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.

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 # 12418

FOR: S-1 AMERICAN CANYON SANITARY LANDFILL; AND A-2 LANDFILL GAS FLARE

1. The S-1 American Canyon Sanitary Landfill is inactive. The Permit Holder shall apply for and receive a Change of Permit Conditions before accepting any solid waste for disposal at S-1. The total cumulative amount of all wastes placed in the landfill shall not exceed 4.23 million tons. The maximum design capacity of the landfill (total volume of all wastes and cover materials placed in the landfill, excluding final cover) shall not exceed 7 million cubic yards. (Basis: Regulation 2-1-301)

2. All collected landfill gas shall be vented to properly operating landfill gas control equipment (A-2 Landfill Gas Flare at Site # A9183, or S-2 and S-3 IC Engines at Site # B1671, or A-2 and S-2, or A-2 and S-3). In the event that collected landfill gas that exceeds the capacity of the S-2 and S-3 IC Engines, any amount of excess gas shall be vented to the A-2 Landfill Gas Flare. In the event of a shut down of one IC Engines at Site # B1671, the collected landfill gas that exceeds the capacity of the remaining operational engine shall be automatically diverted to the A-2 Landfill Gas Flare. In the event of a shut down of both engines at Site # B1671, all collected landfill gas shall be automatically diverted to A-2. Raw landfill gas shall not be vented to the atmosphere, except for unavoidable landfill gas emissions that occur during collection system installation, maintenance, or repair that is performed in compliance with Regulation 8, Rule 34, Sections 113, 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)

3. The Permit Holder shall apply for and receive an Authority to Construct before modifying the landfill gas collection system described in Part 3a below. Increasing or decreasing the number of wells or changing the locations of wells are all considered to be modifications that are subject to the Authority to Construct requirement.

VI. Permit Conditions

Condition # 12418

FOR: S-1 AMERICAN CANYON SANITARY LANDFILL; AND A-2 LANDFILL GAS FLARE

- a. The Permit Holder has been issued a Permit to Operate for the landfill gas collection system components listed below. Well and collector locations, depths, and lengths are as described in detail in Permit Application #8677.

Required Components

Vertical Gas Extraction Wells:	64
Gas/Leachate Extraction Wells:	33

- 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 # 8677.

Install up to 20 new vertical wells

Decommission up to 18 vertical wells

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

(Basis: Regulations 2-1-301, 8-34-301.1, 8-34-303, 8-34-304, and 8-34-305)

4. The landfill gas collection system described in Part 3a shall be operated continuously. Wells shall not be shut off, disconnected, or removed from operation and isolation or adjustment valves shall not be completely closed without written authorization from the District, unless the Permit Holder complies with all applicable requirements of Regulation 8, Rule 34, Sections 113, 117, and 118. (Basis: Regulation 8-34-301.1)
5. The A-2 Landfill Gas Flare shall be equipped with both local and remote alarm systems. (Basis: Regulation 8-34-301)
6. The A-2 Landfill Gas Flare shall be equipped with a flow meter and recorder meeting the requirements of Regulation 8-34-508. (Basis: Cumulative Increase and Regulations 8-34-301, 8-34-501.10, and 8-34-508)
7. The Heat Input to the A-2 Landfill Gas Flare shall not exceed 576 million BTU per day and shall not exceed 210,240 million BTU per year. (Basis: Cumulative Increase)

VI. Permit Conditions

Condition # 12418

FOR: S-1 AMERICAN CANYON SANITARY LANDFILL; AND A-2 LANDFILL GAS FLARE

8. The combustion zone temperature of the A-2 Landfill Gas Flare shall be maintained at a minimum of 1400 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 this 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 A-2 shall be equal to the average combustion zone temperature determined during the most recent complying source test minus 50 degrees F, provided that the minimum combustion zone temperature is not less than 1400 degrees F. (Basis: Toxic Risk Management Policy and Regulation 8-34-301.3)
9. Nitrogen oxide (NO_x) emissions from the A-2 Landfill Gas Flare shall not exceed 45 ppmv of NO_x, corrected to 3% oxygen, dry basis. (Basis: RACT and Cumulative Increase)
10. Carbon monoxide (CO) emissions from the A-2 Landfill Gas Flare shall not exceed 247 ppmv of CO, corrected to 3% oxygen, dry basis. (Basis: RACT and Cumulative Increase)
11. The concentration of total reduced sulfur compounds in the collected landfill gas shall not exceed 200 ppmv (dry) expressed as hydrogen sulfide (H₂S). (Basis: Cumulative Increase)
- *12. The Permit Holder shall submit a permit application for a change of permit conditions, if any site-specific landfill gas characterization test indicates that the landfill gas at this site contains any of the following compounds at a level greater than the concentration listed below or if any source test indicates that formaldehyde emissions from the A-2 Landfill Gas Flare exceed 0.4 pounds/day. The Permit Application shall be submitted to the Permit Services Division within 45 days of receipt of test results indicating a concentration or emission rate above the levels listed in this part.

VI. Permit Conditions

Condition # 12418

FOR: S-1 AMERICAN CANYON SANITARY LANDFILL; AND A-2 LANDFILL GAS FLARE

<u>Compound</u>	<u>Concentration (ppbv)</u>
Acrylonitrile	12000
Benzene	4000
Carbon Tetrachloride	100
Chloroform	500
1,4 Dichlorobenzene	3500
Ethylene Dibromide	100
Ethylene Dichloride	1000
Ethylidene Dichloride	5000
Methylene Chloride	28000
Perchloroethylene	7500
1,1,2,2 Tetrachloroethane	2000
Trichloroethylene	5500
Vinyl Chloride	14500

(Basis: Toxic Risk Management Policy and AB-2588 Air Toxics Hot Spots Act)

13. In order, to demonstrate compliance with Regulation 8, Rule 34, Sections 301.3 and 412, and Parts 7-12 above, the Permit Holder shall ensure that a District approved source test is conducted annually on the Landfill Gas Flare (A-2). The annual source test shall determine the following:
- landfill gas flow rate to the flare (dry basis);
 - concentrations (dry basis) of carbon dioxide (CO₂), nitrogen (N₂), oxygen (O₂), total hydrocarbons (THC), methane (CH₄), and total non-methane organic compounds (NMOC) in the landfill gas;
 - stack gas flow rate from the flare (dry basis);
 - concentrations (dry basis) of NO_x, CO, NMOC, and O₂ in the flare stack gas;
 - NMOC destruction efficiency achieved by the flare;
 - average combustion zone temperature of the A-2 Landfill Gas Flare during the test period; and
 - emission rates (in pounds/hour) of benzene, formaldehyde, and vinyl chloride from the flare (once every four years).

VI. Permit Conditions

Condition # 12418

FOR: S-1 AMERICAN CANYON SANITARY LANDFILL; AND A-2 LANDFILL GAS FLARE

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 60 days of the test date. (Basis: RACT, Cumulative Increase, Toxic Risk Management Policy, and Regulations 8-34-301.3 and 8-34-412)

14. To demonstrate compliance with Parts 11-12 above and Regulations 8-34-412 and 9-1-302, the Permit Holder shall conduct a characterization of the landfill gas concurrent with the annual source test required by Part 13 above. The landfill gas sample shall be drawn from the main landfill gas header. In addition to the compounds listed in Part 13b, the landfill gas shall be analyzed for all the organic and sulfur compounds listed below. All concentrations shall be reported on a dry basis. The test report shall be submitted to the Compliance and Enforcement Division and the Source Test Section within 60 days of the test date. (Basis: Toxic Risk Management Policy, AB-2588 Air Toxics Hot Spots Act, Cumulative Increase, and Regulations 8-34-412 and 9-1-302)

<u>Organic Compounds</u>	<u>Organic Compounds</u>	<u>Sulfur Compounds</u>
acrylonitrile	ethylene dibromide	carbon disulfide
benzene	fluorotrichloromethane	carbonyl sulfide
carbon tetrachloride	hexane	dimethyl sulfide
chlorobenzene	isopropyl alcohol	ethyl mercaptan
chlorodifluoromethane	methyl ethyl ketone	hydrogen sulfide
chloroethane	methylene chloride	methyl mercaptan
chloroform	perchloroethylene	
1,1 dichloroethane	toluene	
1,1 dichlorethene	1,1,1 trichloroethane	
1,2 dichlorethene	1,1,2,2 tetrachloroethane	
1,4 dichlorbenzene	trichloroethylene	
dichlorodifluoromethane	vinyl chloride	
dichlorofluoromethane	xylenes	
ethylbenzene		

VI. Permit Conditions

Condition # 12418

FOR: S-1 AMERICAN CANYON SANITARY LANDFILL; AND A-2 LANDFILL GAS FLARE

15. In order to demonstrate compliance with the above conditions, the Permit Holder shall maintain the following records in a District approved logbook.
 - a. Record the initial operation date for each new landfill gas well and collector.
 - b. Maintain an accurate map of the landfill, which indicates the locations of all refuse boundaries and the locations of all wells and collectors (using unique identifiers) that are required to be operating continuously pursuant to Part 3a. Any areas containing only non-decomposable waste shall be clearly identified. This map shall be updated at least once a year to include any newly installed wells and collectors.
 - c. Calculate and record on a monthly basis the maximum daily and total monthly heat input to the A-2 Landfill Gas Flare based on the landfill gas flow rate recorded pursuant to Part 6, the average methane concentration in the landfill gas as determined by the most recent source test, and a high heating value for methane of 1013 BTU/ft³ of landfill gas at 60 degrees F.
 - d. Maintain records of all test dates and test results performed to maintain compliance with Parts 12 and 13 or 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, 2-6-501, 8-34-301, 8-34-303, 8-34-304, 8-34-501, and 9-1-302)

16. 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 and for all semi-annual increments of MSW Landfill NESHAP report (required pursuant to 40 CFR Part 63.1980(a)) 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))

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 AMERICAN CANYON SANITARY LANDFILL
A-2 LANDFILL GAS FLARE

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
Collection System Installation Dates	BAAQMD 8-34-304.1	Y		For Inactive/Closed Areas: collection system components must be installed and operating by 2 years + 60 days after initial waste placement	BAAQMD 8-34-501.7 and 501.8 and BAAQMD Condition # 12418, Part 15	P/E	Records
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)

VII. Applicable Limits and Compliance Monitoring Requirements

Table VII – A
Applicable Limits and Compliance Monitoring Requirements
S-1 AMERICAN CANYON SANITARY LANDFILL
A-2 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 Condition # 12418, Parts 2-4	Y		Landfill gas collection system shall operate continuously and all collected gases shall be vented to a properly operating control system	BAAQMD Condition # 12418, Parts 5 and 6 and BAAQMD Regulation 8-34-501.1 and 8-34-501.2	P/D	Gas Flow Meter, Flare Alarms, and 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 and 5 consecutive days	BAAQMD 8-34-501.1	P/D	Operating Records
Startup Shutdown or Mal-function Procedures	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, corrective actions)

VII. Applicable Limits and Compliance Monitoring Requirements

Table VII – A
Applicable Limits and Compliance Monitoring Requirements
S-1 AMERICAN CANYON SANITARY LANDFILL
A-2 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
Periods of Inoperation for Parametric Monitors	BAAQMD 1-523.2	Y		15 consecutive days/incident and 30 calendar days/12 month period	BAAQMD 1-523.4	P/D	Operating Records for All Parametric Monitors (for gas flow and temperature monitors)
Continuous Monitors	40 CFR 60.13(e)	Y		Requires Continuous Operation except for breakdowns, repairs, calibration, and required span adjustments	40 CFR 60.7(b)	P/D	Operating Records for All Continuous Monitors (for gas flow and temperature monitors)
Wellhead Pressure	BAAQMD 8-34-305.1	Y		< 0 psig	BAAQMD 8-34-414, 501.9 and 505.1	P/M	Monthly Inspection and Records
Temperature of Gas at Wellhead	BAAQMD 8-34-305.2	Y		< 55 °C (131 °F)	BAAQMD 8-34-414, 501.9 and 505.2	P/M	Monthly Inspection and Records
Gas Concentrations at Wellhead	BAAQMD 8-34-305.3 or 305.4	Y		N ₂ < 20% OR O ₂ < 5%	BAAQMD 8-34-414, 501.9 and 505.3 or 505.4	P/M	Monthly Inspection and Records

VII. Applicable Limits and Compliance Monitoring Requirements

Table VII – A
Applicable Limits and Compliance Monitoring Requirements
S-1 AMERICAN CANYON SANITARY LANDFILL
A-2 LANDFILL GAS FLARE

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
Well Shutdown Limits	BAAQMD 8-34-117.4	Y		No more than 5 wells at a time or 10% of total collection system, whichever is less	BAAQMD 8-34-117.6 and 501.1	P/D	Records
Well Shutdown Limits	BAAQMD 8-34-117.5	Y		24 hours per well	BAAQMD 8-34-117.6 and 501.1	P/D	Records
TOC (Total Organic Compounds Plus Methane)	BAAQMD 8-34-301.2	Y		Component Leak Limit: 1000 ppmv as methane at 1 cm from component	BAAQMD 8-34-501.6 and 503	P/Q	Quarterly Inspection of collection and control system components with OVA and Records
TOC	BAAQMD 8-34-303	Y		Surface Leak Limit: 500 ppmv as methane at 2 inches above surface	BAAQMD 8-34-415, 416, 501.6, 506 and 510	P/M, Q, and E	Monthly Visual Inspection of Cover, Quarterly Inspection of Surface with Portable Analyzer, Reinspections as Needed, and Records

VII. Applicable Limits and Compliance Monitoring Requirements

Table VII – A
Applicable Limits and Compliance Monitoring Requirements
S-1 AMERICAN CANYON SANITARY LANDFILL
A-2 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
Non-Methane Organic Compounds (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-2 Flare only)	BAAQMD 8-34-412 and 8-34-501.4 and BAAQMD Condition # 12418, Part 13	P/A	Annual Source Tests and Records
Temperature of Combustion Zone (CT)	BAAQMD Condition # 12418, Part 8	Y		CT ≥ 1400 °F, averaged over any 3-hour period (applies to A-2 Flare only)	BAAQMD 8-34-501.3 and 507	C	Temperature Sensor and Recorder (continuous)
Opacity	BAAQMD 6-301	Y		Ringelmann No. 1 for < 3 minutes/hr (applies to A-2 Landfill Gas Flare)	None	N	NA
FP	BAAQMD 6-310	Y		≤ 0.15 grains/dscf (applies to A-2 Flare only)	None	N	NA
SO ₂	BAAQMD 9-1-301	Y		Property Line Ground Level Limits: ≤ 0.5 ppm for 3 minutes and ≤ 0.25 ppm for 60 min. and ≤ 0.05 ppm for 24 hours (applies to A-2 Flare only)	None	N	NA
SO ₂	BAAQMD 9-1-302	Y		≤ 300 ppm (dry basis) (applies to A-2 Flare only)	BAAQMD Condition # 12418, Part 14	P/A	Landfill Gas Analysis

VII. Applicable Limits and Compliance Monitoring Requirements

Table VII – A
Applicable Limits and Compliance Monitoring Requirements
S-1 AMERICAN CANYON SANITARY LANDFILL
A-2 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 Sulfur Content in Landfill Gas	BAAQMD Condition # 12418, Part 11	Y		≤ 200 ppmv	BAAQMD Condition # 12418, Part 14	P/A	Landfill Gas Analysis
H ₂ S	BAAQMD 9-2-301	N		Property Line Ground Level Limits: ≤ 0.06 ppm, averaged over 3 minutes and ≤ 0.03 ppm, averaged over 60 minutes	None	N	NA
Amount of Waste Accepted	BAAQMD Condition # 12418, Part 1	Y		0 tons/day and ≤ 4,230,000 tons (cumulative amount of all wastes) and ≤ 7,000,000 yd ³ (cumulative amount of all wastes and cover materials)	BAAQMD 8-34-501.7	P/A	Records
Heat Input	BAAQMD Condition # 12418, Part 7	Y		≤ 576 MM BTU per day and ≤ 210,240 MM BTU per year	BAAQMD Condition # 12418, Parts 6 and 15c	P/C, M	Gas Flow Meter and Records
NO _x	BAAQMD Condition # 12418, Part 9	Y		≤ 45 ppmv of NO _x , expressed as NO ₂ , corrected to 3% O ₂ , dry	BAAQMD Condition # 12418, Part 13d	P/A	Source Test
CO	BAAQMD Condition # 12418, Part 10	Y		≤ 247 ppmv of CO, corrected to 3% O ₂ , dry	BAAQMD Condition # 12418, Part 13d	P/A	Source Test

VII. Applicable Limits and Compliance Monitoring Requirements

Table VII – A
Applicable Limits and Compliance Monitoring Requirements
S-1 AMERICAN CANYON SANITARY LANDFILL
A-2 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
Acrylonitrile	BAAQMD Condition # 12418, Part 12	N		Permit application required if the concentration in landfill gas > 12000 ppbv	BAAQMD Condition # 12418, Part 14	P/A	Landfill Gas Analysis
Benzene	BAAQMD Condition # 12418, Part 12	N		Permit application required if the concentration in landfill gas > 4000 ppbv	BAAQMD Condition # 12418, Parts 13d and 14	P/A	Landfill Gas Analysis and Source Test
Carbon Tetrachloride	BAAQMD Condition # 12418, Part 12	N		Permit application required if the concentration in landfill gas > 100 ppbv	BAAQMD Condition # 12418, Part 14	P/A	Landfill Gas Analysis
Chloroform	BAAQMD Condition # 12418, Part 12	N		Permit application required if the concentration in landfill gas > 500 ppbv	BAAQMD Condition # 12418, Part 14	P/A	Landfill Gas Analysis
1,4 Dichlorobenzene	BAAQMD Condition # 12418, Part 12	N		Permit application required if the concentration in landfill gas > 3500 ppbv	BAAQMD Condition # 12418, Part 14	P/A	Landfill Gas Analysis
Ethylene Dibromide	BAAQMD Condition # 12418, Part 12	N		Permit application required if the concentration in landfill gas > 100 ppbv	BAAQMD Condition # 12418, Part 14	P/A	Landfill Gas Analysis
Ethylene Dichloride	BAAQMD Condition # 12418, Part 12	N		Permit application required if the concentration in landfill gas > 1000 ppbv	BAAQMD Condition # 12418, Part 14	P/A	Landfill Gas Analysis
Ethylidene Dichloride	BAAQMD Condition # 12418, Part 12	N		Permit application required if the concentration in landfill gas > 5000 ppbv	BAAQMD Condition # 12418, Part 14	P/A	Landfill Gas Analysis

VII. Applicable Limits and Compliance Monitoring Requirements

Table VII – A
Applicable Limits and Compliance Monitoring Requirements
S-1 AMERICAN CANYON SANITARY LANDFILL
A-2 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
Formaldehyde	BAAQMD Condition # 12418, Part 12	N		Permit application required if emissions > 0.4 pounds/day	BAAQMD Condition # 12418, Part 13d	P/A	Source Test
Methylene Chloride	BAAQMD Condition # 12418, Part 12	N		Permit application required if the concentration in landfill gas > 28000 ppbv	BAAQMD Condition # 12418, Part 14	P/A	Landfill Gas Analysis
Perchloroethylene	BAAQMD Condition # 12418, Part 12	N		Permit application required if the concentration in landfill gas > 7500 ppbv	BAAQMD Condition # 12418, Part 14	P/A	Landfill Gas Analysis
1,1,2,2 Tetra-chloro-ethane	BAAQMD Condition # 12418, Part 12	N		Permit application required if the concentration in landfill gas > 2000 ppbv	BAAQMD Condition # 12418, Part 14	P/A	Landfill Gas Analysis
Trichloroethylene	BAAQMD Condition # 12418, Part 12	N		Permit application required if the concentration in landfill gas > 5500 ppbv	BAAQMD Condition # 12418, Part 14	P/A	Landfill Gas Analysis
Vinyl Chloride	BAAQMD Condition # 12418, Part 12	N		Permit application required if the concentration in landfill gas > 14500 ppbv	BAAQMD Condition # 12418, Parts 13d and 14	P/A	Landfill Gas Analysis and Source Test

VIII. TEST METHODS

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

**Table VIII
 Test Methods**

Applicable Requirement	Description of Requirement	Acceptable Test Methods
BAAQMD 6-301	Ringelmann No. 1 Limitation	Manual of Procedures, Volume I, Evaluation of Visible Emissions
BAAQMD 6-310	Particulate Weight Limitation	Manual of Procedures, Volume IV, ST-15, Particulate
BAAQMD 8-34-301.2	Collection and Control System Leak Limitations	EPA Reference Method 21, Determination of Volatile Organic Compound Leaks
BAAQMD 8-34-301.3	Limits for Flares	Manual of Procedures, Volume IV, ST-7, Organic Compounds and ST-14, Oxygen, Continuous Sampling; or EPA Reference Method 18, 25, 25A, or 25C
BAAQMD 8-34-303	Landfill Surface Requirements	EPA Reference Method 21, Determination of Volatile Organic Compound Leaks
BAAQMD 8-34-305.1	Wellhead Gauge Pressure	APCO Approved Device
BAAQMD 8-34-305.2	Wellhead Temperature	APCO Approved Device
BAAQMD 8-34-305.3	Wellhead Nitrogen	EPA Reference Method 3C, Determination of Carbon Dioxide, Methane, Nitrogen, and Oxygen from Stationary Sources
BAAQMD 8-34-305.4	Wellhead Oxygen	EPA Reference Method 3C, Determination of Carbon Dioxide, Methane, Nitrogen, and Oxygen from Stationary Sources
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 9-1-301	Limitations on Ground Level Concentrations (SO ₂)	Manual of Procedures, Volume VI, Part 1, Ground Level Monitoring for Hydrogen Sulfide and Sulfur Dioxide

VIII. Test Methods

**Table VIII
 Test Methods**

Applicable Requirement	Description of Requirement	Acceptable Test Methods
BAAQMD 9-1-302	General Emission Limitation (SO ₂)	Manual of Procedures, Volume IV, ST-19A, Sulfur Dioxide, Continuous Sampling
BAAQMD 9-2-301	Limitations on Hydrogen Sulfide	Manual of Procedures, Volume VI, Part 1, Ground Level Monitoring for Hydrogen Sulfide and Sulfur Dioxide
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 # 12418, Part 7	Heat Input Limits for Flare	APCO approved gas flow meter and APCO approved calculation procedure described in BAAQMD Condition # 12418, Part 15c
BAAQMD Condition # 12418, Part 8	Combustion Zone Temperature Limit for Flare	APCO Approved Device
BAAQMD Condition # 12418, Part 9	NO _x Emission Limit for Flare	Manual of Procedures, Volume IV, ST-13A, Oxides of Nitrogen, Continuous Sampling and ST-14, Oxygen, Continuous Sampling
BAAQMD Condition # 12418, Part 10	CO Emission Limit for Flare	Manual of Procedures, Volume IV, ST-6, Carbon Monoxide, Continuous Sampling and ST-14, Oxygen, Continuous Sampling
BAAQMD Condition # 12418, Part 11	Landfill Gas Sulfur Content Limit	Manual of Procedures, Volume III, Method 44, Determination of Reduced Sulfur Gases and Sulfur Dioxide in Effluent Samples by Gas Chromatographic Method
BAAQMD Condition # 12418, Part 12	Landfill Gas Toxic Compound Concentration Limits and Flare Formaldehyde Emission Limit	EPA Reference Method 18, Measurement of Gaseous Organic Compound Emissions by Gas Chromatography
BAAQMD Condition # 12418, Part 14	Annual Landfill Gas Characterization Test	EPA Reference Method 18, Measurement of Gaseous Organic Compound Emissions by Gas Chromatography; and Manual of Procedures, Volume III, Method 44, Determination of Reduced Sulfur Gases and Sulfur Dioxide in Effluent Samples by Gas Chromatographic Method

IX. PERMIT SHIELD

Not applicable

X. REVISION HISTORY

- | | |
|--|--------------------------|
| Title V Permit Issuance (Application #2631): | December 19, 2003 |
| Administrative Amendment (Application #8677): | March 19, 2004 |
| <ul style="list-style-type: none">• Updated standard text in Section I.B.1 and Section III.• Corrected a typographical error in Table VII-A. The correct reference oxygen concentration for the Flare's NOx and CO limits should have been 3% (as identified in Condition # 12418, Parts 9 and 10). | |
| Minor Revision (Application #8677): | June 17, 2004 |
| <ul style="list-style-type: none">• Corrected the collection system description in Table II-A to reflect the current collection system (after the December 2003 modifications).• Added text to Condition # 12418, Part 3 that describes the approved collection system modifications that the District is issuing an Authority to Construct for.• Deleted future effective dates that have passed in Tables IV-A and VII-A.• Added Section X Revision History and revised subsequent section numbers. | |
| Administrative Amendment (Application #23035): | March 29, 2011 |
| <ul style="list-style-type: none">• Revised Responsible Official and Facility Contact | |

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 which 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 CH₄

Methane

XI. Glossary

CO

Carbon Monoxide

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 H₂S

Hydrogen Sulfide

XI. Glossary

HAP

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

HHV

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

LFG

Landfill gas

LHV

Lower Heating Value. Similar to the higher heating value (see HHV) except that the water produced by the combustion is not condensed but retained as vapor at 60 °F.

Major Facility

A facility with potential emissions of: (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 N₂

Nitrogen

XI. Glossary

NA

Not Applicable

NAAQS

National Ambient Air Quality Standards

NESHAPS

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

NMHC

Non-methane Hydrocarbons (Same as NMOC)

NMOC

Non-methane Organic Compounds (Same as NMHC)

NO_x 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.)

NVWMA

Napa-Vallejo Waste Management Authority

O₂ or O₂

Oxygen

Offset Requirement

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

XI. Glossary

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 PM₁₀

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

PSD

Prevention of Significant Deterioration. A federal program for permitting new and modified sources of 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 SO₂

Sulfur dioxide

SSM

Startup, Shutdown, or Malfunction

XI. Glossary

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

TRMP

Toxic Risk Management Plan

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

XI. Glossary

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	=	millimeter
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>