Bay Area Air Quality Management District

375 Beale Street, Suite 600
San Francisco, CA 94105
(415) 749-5000

Final

MAJOR FACILITY REVIEW PERMIT

Issued To:

Keller Canyon Landfill Company
Facility #A4618

Facility Address:
901 Bailey Road
Pittsburg, CA 94565

Mailing Address:
901 Bailey Road
Pittsburg, CA 94565

Responsible Official	**Facility Contact**
Joshua Mills	Antonia Gunner,
General Manager	Plant Site Manager
(925) 447-0491	(619) 201-3764

Type of Facility: Municipal Solid Waste Landfill
Primary SIC: 4953
Product: Class II Solid Waste Disposal

BAAQMD Engineering Division Contact:
Nimrat Sandhu

ISSUED BY THE BAY AREA AIR QUALITY MANAGEMENT DISTRICT

Pamela Leong
Digitally signed by Pamela Leong
DN: cn=Pamela Leong, o, ou, email=pleong@baaqmd.gov, c=US
Date: 2022.09.26 14:08:42 -07'00'

Pamela J. Leong, Director of Engineering

September 22, 2022
Date

TABLE OF CONTENTS

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 5/4/11);
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 12/6/17);
SIP Regulation 2, Rule 1 - Permits, General Requirements
(as approved by EPA through 5/21/18);
BAAQMD Regulation 2, Rule 2 - Permits, New Source Review
(as amended by the District Board on 12/6/17);
SIP Regulation 2, Rule 2 - Permits, New Source Review and Prevention of Significant Deterioration
(as approved by EPA through 5/21/18);
BAAQMD Regulation 2, Rule 4 - Permits, Emissions Banking
(as amended by the District Board on 12/6/17);
SIP Regulation 2, Rule 4 - Permits, Emissions Banking
(as approved by EPA through 5/21/18);
BAAQMD Regulation 2, Rule 5 – Permits, New Source Review of Toxic Air Contaminants (as amended by the District Board on 12/7/16);
BAAQMD Regulation 2, Rule 6 - Permits, Major Facility Review
(as amended by the District Board on 12/6/17); and
SIP Regulation 2, Rule 6 – Permits, Major Facility Review
(as approved by EPA through 6/23/95).

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

1. This Major Facility Review Permit was issued on August 18, 2021 and expires on August 17, 2026. The permit holder shall submit a complete application for renewal of this Major Facility Review Permit no later than February 17, 2025 and no earlier than August 17, 2025. **If a complete application for renewal has not been submitted in accordance with this deadline, the facility may not operate after August 17, 2026.** If the permit renewal has not been issued by August 17, 2026, 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 2-6-409.7 & 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. (Regulation 2-6-409.20, MOP Volume II, Part 3, §4.11)
12. The permit holder is responsible for compliance, and certification of compliance, with all conditions of the permit, regardless of whether it acts through employees, agents, contractors, or subcontractors. (Regulation 2-6-307)

C. Requirement to Pay Fees

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

D. Inspection and Entry

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

E. Records

1. The permit holder must provide any information, records, and reports requested or specified by the APCO. (Regulation 1-441, Regulation 2-6-409.4)
2. Notwithstanding the specific wording in any requirement, all records for federally enforceable requirements shall be maintained for at least five years from the date of creation of the record. (Regulation 2-6-501, 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. Reports shall be for the following periods: March 1st through August 31st and September 1st through February 28th or 29th, 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

I. Standard Conditions

official as true, accurate, and complete. In addition, all instances of non-compliance with the permit shall be reported in writing to the District's Compliance and Enforcement Division within 10 calendar days of the discovery of the incident. Within 30 calendar days of the discovery of any incident of non-compliance, the facility shall submit a written report including the probable cause of non-compliance and any corrective or preventative actions. The reports shall be sent to the following address:

Director of Compliance and Enforcement
Bay Area Air Quality Management District
375 Beale Street, Suite # 600
San Francisco, CA 94105
Attn: Title V Reports

(Regulation 2-6-502, 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 September 1st through August 31st. The certification shall be submitted by September 30th of each year. The certification must list each applicable requirement, the compliance status, whether compliance was continuous or intermittent, the method used to determine compliance, and any other specific information required by the permit. The 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 by e-mail to r9.aeo@epa.gov or postal mail to the Environmental Protection Agency at the following address:

Director
Enforcement Division, TRI & Air Section (ENF-2-1)
USEPA Region 9
75 Hawthorne Street
San Francisco, California 94105

(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

A. Permitted Source List

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.

Table II – A
Permitted Sources

S-#	Description	Make or Type	Model	Capacity
S-1	Keller Canyon Landfill – Waste Decomposition Process; equipped with Active Gas Collection System:	Class II Disposal Operations (MSW, commercial, industrial, construction, designated, and special wastes)		Max. Design Capacity (waste and cover, excluding final cover) = 75 million yd^3 (57.3 million m^3) Max. Waste Acceptance Rate = 3500 tons/day Max. Cumulative Waste In-Place = 38.4 million tons (34.8 million Mg)
	Main Gas Collection System			1760 vertical wells 2 horizontal collectors
	Other Components (with Intermittent Vacuum)			1 horizontal collector 2 leachate cleanout risers
S-3	Yard and Green Waste Stockpiles	Yard and Green Waste		1,000 tons/day
S-4	Keller Canyon Landfill – Waste and Cover Material Dumping	Wastes: MSW, commercial, industrial, construction, designated and special wastes Daily Cover Materials: clean soil, non-hazardous VOC-laden soil, and shredded green waste.		Max. Waste Acceptance Rate = 3,500 tons/day Max. Daily Cover Placement Rate = 300 tons/day (estimated by BAAQMD)
S-5	Keller Canyon Landfill – Excavating, Bulldozing, and Compacting Activities			as needed

II. Equipment

B. Abatement Device List

Table II – B
Abatement Devices

A-#	Description	Source(s) Controlled	Applicable Requirement	Operating Parameters	Limit or Efficiency
A-1	Enclosed Ground Flare, burning propane (during start-up only) and landfill gas, 72.7 MM BTU/hour	S-1	BAAQMD 8-34-301.3, See also Table IV-A	Minimum combustion zone temperature of: 1504 °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, See also Table VII-A
A-2	Enclosed Ground Flare, burning propane (during start-up only) and landfill gas, 76 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, See also Table VII-A

III. GENERALLY APPLICABLE REQUIREMENTS

The permit holder shall comply with all applicable requirements, including those specified in the BAAQMD, SIP Rules and Regulations, California Air Resources Board (CARB) Landfill Methane Regulation (LMR), 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:

https://www.epa.gov/sips-ca/epa-approved-bay-area-air-district-regulations-california-sip

The full language of CARB's LMR is on the CARB website. The address is:
https://ww3.arb.ca.gov/regact/2009/landfills09/landfillfinalfro.pdf

NOTE:

There are differences between the current BAAQMD rules and the version 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 (5/4/11)	N
SIP Regulation 1	General Provisions and Definitions (6/28/99)	Y

III. Generally Applicable Requirements

Table III
Generally Applicable Requirements

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)
BAAQMD Regulation 2, Rule 1	Permits – General Requirements (12/6/17)	N
SIP Regulation 2, Rule 1	Permits - General Requirements (5/21/18)	Y
BAAQMD Regulation 2-1-429	Permits - Federal Emissions Statement (12/21/04)	N
SIP Regulation 2-1-429	Permits - Federal Emissions Statement (4/3/95)	Y
BAAQMD Regulation 2, Rule 5	Permits – New Source Review of Toxic Air Contaminants (12/6/16)	N
BAAQMD Regulation 4	Air Pollution Episode Plan (3/20/91)	N
SIP Regulation 4	Air Pollution Episode Plan (8/6/90)	Y
SIP Regulation 4, Table 1	Air Pollution Episode Plan, Episode Stage Criteria (8/6/90)	Y
BAAQMD Regulation 5	Open Burning (11/20/2019)	N
SIP Regulation 5	Open Burning (9/4/98)	Y
BAAQMD Regulation 6, Rule 1	Particulate Matter – General Requirements (7/31/18)	N
SIP Regulation 6	Particulate Matter and Visible Emissions (9/4/98)	Y
BAAQMD Regulation 6, Rule 6	Particulate Matter - Prohibition of Trackout (7/31/18)	N
BAAQMD Regulation 7	Odorous Substances (3/17/82)	N
BAAQMD Regulation 8, Rule 1	Organic Compounds – General Provisions (6/15/94)	Y
BAAQMD Regulation 8, Rule 2	Organic Compounds – Miscellaneous Operations (7/20/05)	N
SIP Regulation 8, Rule 2	Organic Compounds – Miscellaneous Operations (3/22/95)	Y
BAAQMD Regulation 8, Rule 3	Organic Compounds – Architectural Coatings (7/1/09)	N
SIP Regulation 8, Rule 3	Organic Compounds – Architectural Coatings (1/2/04)	Y
BAAQMD Regulation 8, Rule 4	Organic Compounds – General Solvent and Surface Coating Operations (10/16/02)	Y
BAAQMD Regulation 8, Rule 15	Organic Compounds – Emulsified and Liquid Asphalts (6/1/94)	Y
BAAQMD Regulation 8, Rule 16	Organic Compounds – Solvent Cleaning Operations (10/16/02)	Y
BAAQMD Regulation 8, Rule 40	Organic Compounds – Aeration of Contaminated Soil and Removal of Underground Storage Tanks (6/15/05)	N
BAAQMD Regulation 8-40-116	Exemption, Small Volume	Y
BAAQMD Regulation 8-40-117	Exemption, Accidental Spills	Y
SIP Regulation 8, Rule 40	Organic Compounds – Aeration of Contaminated Soil and Removal of Underground Storage Tanks (4/19/01)	Y
BAAQMD Regulation 8, Rule 47	Organic Compounds – Air Stripping and Soil Vapor Extraction Operations (6/15/05)	N
SIP Regulation 8, Rule 47	Organic Compounds – Air Stripping and Soil Vapor Extraction Operations (4/26/95)	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

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 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 9, Rule 1	Inorganic Gaseous Pollutants – Sulfur Dioxide (3/15/95)	N
SIP Regulation 9, Rule 1	Inorganic Gaseous Pollutants – Sulfur Dioxide (6/8/99)	Y
BAAQMD Regulation 9, Rule 2	Inorganic Gaseous Pollutants – Hydrogen Sulfide (10/6/99)	N
BAAQMD Regulation 11, Rule 1	Hazardous Pollutants – Lead (3/17/82)	N
SIP Regulation 11, Rule 1	Hazardous Pollutants – Lead (9/2/81)	Y
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 11, Rule 18	Reduction of Risk from Air Toxics Emissions at Existing Facilities (11/14/17)	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
BAAQMD Regulation 14, Rule 1	Mobile Source Emission Reduction Methods – Bay Area Commuter Benefits Program (3/19/14)	N
California Health and Safety Code Section 41750 et seq.	Portable Equipment	N
California Health and Safety Code Section 44300 et seq.	Air Toxics “Hot Spots” Information and Assessment Act of 1987	N
California Code of Regulations Title 17, Section 93105	Asbestos Airborne Toxic Control Measure for Construction, Grading, Quarrying, and Surface Mining Operations (7/26/01)	N
California Code of Regulations Title 17, Section 93106	Asbestos Airborne Toxic Control Measure for Asbestos-Containing Serpentine (7/20/00)	N
California Code of Regulations Title 17, Section 93116	Airborne Toxic Control Measure for Diesel Particulate Matter from Portable Engines Rated at 50 Horsepower and Greater (2/19/11)	N
California Code of Regulations, Article 4, Subarticle 6, Title 17, Section 95460-95476	Methane Emissions from Municipal Solid Waste Landfills (6/17/2010)	Y
40 CFR Part 61, Subpart A	National Emission Standards for Hazardous Air Pollutants – General Provisions (2/16/12)	Y
40 CFR Part 61, Subpart M	National Emission Standards for Hazardous Air Pollutants – National Emission Standard for Asbestos (1/16/91)	Y

IV. SOURCE-SPECIFIC APPLICABLE REQUIREMENTS

The permit holder shall comply with all applicable requirements, including those specified in the BAAQMD, SIP Rules and Regulations, CARB LMR, 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:

https://www.epa.gov/sips-ca/epa-approved-bay-area-air-district-regulations-california-sip

The CARB LMR can be found at:

https://ww3.arb.ca.gov/regact/2009/landfills09/landfillfinalfro.pdf

All other text may be found in the regulations themselves.

Table IV – A
Source-Specific Applicable Requirements
S-1 KELLER CANYON LANDFILL – WASTE DECOMPOSITION PROCESS; ABATED BY A-1 LANDFILL GAS FLARE, AND A-2 LANDFILL GAS FLARE; S-4 KELLER CANYON LANDFILL – WASTE AND COVER MATERIAL DUMPING; AND S-5 KELLER CANYON LANDFILL – EXCAVATING, BULLDOZING, AND COMPACTING ACTIVITIES

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
BAAQMD Regulation 1	**General Provisions and Definitions (5/4/11)**		
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	

IV. Source-Specific Applicable Requirements

Table IV – A
Source-Specific Applicable Requirements
S-1 KELLER CANYON LANDFILL – WASTE DECOMPOSITION PROCESS; ABATED BY A-1 LANDFILL GAS FLARE, AND A-2 LANDFILL GAS FLARE; S-4 KELLER CANYON LANDFILL – WASTE AND COVER MATERIAL DUMPING; AND S-5 KELLER CANYON LANDFILL – EXCAVATING, BULLDOZING, AND COMPACTING ACTIVITIES

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
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	
1-523.3	Reports of Violations	Y	
BAAQMD Regulation 6, Rule 1	**Particulate Matter – General Requirements (7/31/18)**		
6-1-301	Ringelmann No. 1 Limitation	N	
6-1-305	Visible Particles	N	
6-1-310	Total Suspended Particulate (TSP) Concentration Limits (applies to flares only)	N	
6-1-401	Appearance of Emissions	N	
SIP Regulation 6	**Particulate Matter and Visible Emissions (9/4/98)**		
6-301	Ringelmann No. 1 Limitation	Y	
6-305	Visible Particles	Y	
6-310.1	Total Suspended Particulate (TSP) Concentration Limits (applies to flares only)	Y	
6-401	Appearance of Emissions	Y	
BAAQMD Regulation 6, Rule 6	**Particulate Matter – Prohibition of Trackout (7/31/18)**		
6-6-301	Prohibition of Trackout onto Paved Roadways	N	7/1/19
6-6-302	Prohibition of Visible Emissions During Cleanup of Trackout	N	7/1/19
6-6-501	Monitoring and Recordkeeping	N	7/1/19
BAAQMD Regulation 8, Rule 2	**Organic Compounds – Miscellaneous Operations (7/20/05)**		
8-2-301	Miscellaneous Operations (applies to low VOC soil handling and disposal activities only)	Y	

IV. Source-Specific Applicable Requirements

Table IV – A
Source-Specific Applicable Requirements
S-1 KELLER CANYON LANDFILL – WASTE DECOMPOSITION PROCESS; ABATED BY A-1 LANDFILL GAS FLARE, AND A-2 LANDFILL GAS FLARE; S-4 KELLER CANYON LANDFILL – WASTE AND COVER MATERIAL DUMPING; AND S-5 KELLER CANYON LANDFILL – EXCAVATING, BULLDOZING, AND COMPACTING ACTIVITIES

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
BAAQMD Regulation 8, Rule 34	**Organic Compounds – Solid Waste Disposal Sites (6/15/05)**		
8-34-113	Limited Exemption, Inspection and Maintenance	Y	
8-34-113.1	Emission Minimization Requirement	Y	
8-34-113.2	Shutdown Time Limitation	Y	
8-34-113.3	Recordkeeping Requirement	Y	
8-34-116	Limited Exemption, Well Raising	Y	
8-34-116.1	New Fill	Y	
8-34-116.2	Limits on Number of Wells Shutdown	Y	
8-34-116.3	Shutdown Duration Limit	Y	
8-34-116.4	Capping Well Extensions	Y	
8-34-116.5	Well Disconnection Records	Y	
8-34-117	Limited Exemption, Gas Collection System Components	Y	
8-34-117.1	Necessity of Existing Component Repairs/Adjustments	Y	
8-34-117.2	New Components are Described in Collection and Control System Design Plan	Y	
8-34-117.3	Meets Section 8-34-118 Requirements	Y	
8-34-117.4	Limits on Number of Wells Shutdown	Y	
8-34-117.5	Shutdown Duration Limit	Y	
8-34-117.6	Well Disconnection Records	Y	
8-34-118	Limited Exemption, Construction Activities	Y	
8-34-118.1	Construction Plan	Y	
8-34-118.2	Activity is Required to Maintain Compliance with this Rule	Y	
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 KELLER CANYON LANDFILL – WASTE DECOMPOSITION PROCESS; ABATED BY A-1 LANDFILL GAS FLARE, AND A-2 LANDFILL GAS FLARE; S-4 KELLER CANYON LANDFILL – WASTE AND COVER MATERIAL DUMPING; AND S-5 KELLER CANYON LANDFILL – EXCAVATING, BULLDOZING, AND COMPACTING ACTIVITIES

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 flares only)	Y	
8-34-303	Landfill Surface Requirements	Y	
8-34-304	Gas Collection System Installation Requirements	Y	
8-34-304.1	Based on Waste Age For Inactive or Closed Areas	Y	
8-34-304.2	Based on Waste Age For Active Areas	Y	
8-34-304.3	Based on Amount of Decomposable Waste Accepted	Y	
8-34-304.4	Based on NMOC Emission Rate	Y	
8-34-305	Wellhead Requirements	Y	
8-34-305.1	Wellhead Vacuum Requirement	Y	
8-34-305.2	Wellhead Temperature Limit	Y	
8-34-305.3	Nitrogen Concentration Limit for Wellhead Gas or	Y	
8-34-305.4	Oxygen Concentration Limit for Wellhead Gas (except for wells identified in Condition # 17309, Part 20c(i))	Y	
8-34-404	Less than Continuous Operation Petition	Y	
8-34-405	Design Capacity Reports	Y	
8-34-408	Collection and Control System Design Plan	Y	
8-34-408.2	Sites With Existing Collection and Control Systems	Y	
8-34-411	Annual Report	Y	
8-34-412	Compliance Demonstration Tests	Y	
8-34-413	Performance Test Report	Y	
8-34-414	Repair Schedule for Wellhead Excesses	Y	
8-34-414.1	Records of Excesses	Y	
8-34-414.2	Corrective Action	Y	
8-34-414.3	Collection System Expansion	Y	
8-34-414.4	Operational Due Date for Expansion	Y	
8-34-415	Repair Schedule for Surface Leak Excesses	Y	
8-34-415.1	Records of Excesses	Y	
8-34-415.2	Corrective Action	Y	

IV. Source-Specific Applicable Requirements

Table IV – A
Source-Specific Applicable Requirements
S-1 KELLER CANYON LANDFILL – WASTE DECOMPOSITION PROCESS; ABATED BY A-1 LANDFILL GAS FLARE, AND A-2 LANDFILL GAS FLARE; S-4 KELLER CANYON LANDFILL – WASTE AND COVER MATERIAL DUMPING; AND S-5 KELLER CANYON LANDFILL – EXCAVATING, BULLDOZING, AND COMPACTING ACTIVITIES

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
8-34-415.3	Re-monitor Excess Location Within 10 Days	Y	
8-34-415.4	Re-monitor Excess Location Within 1 Month	Y	
8-34-415.5	If No More Excesses, No Further Re-Monitoring	Y	
8-34-415.6	Additional Corrective Action	Y	
8-34-415.7	Re-monitor Second Excess Within 10 days	Y	
8-34-415.8	Re-monitor Second Excess Within 1 Month	Y	
8-34-415.9	If No More Excesses, No Further Re-monitoring	Y	
8-34-415.10	Collection System Expansion for Third Excess in a Quarter	Y	
8-34-415.11	Operational Due Date for Expansion	Y	
8-34-416	Cover Repairs	Y	
8-34-501	Operating Records	Y	
8-34-501.1	Collection System Downtime	Y	
8-34-501.2	Emission Control System Downtime (applies to flares only)	Y	
8-34-501.3	Continuous Temperature Records for Enclosed Combustors (applies to flares 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	
8-34-507	Continuous Temperature Monitor and Recorder (applies to flares only)	Y	
8-34-508	Gas Flow Meter	Y	
8-34-510	Cover Integrity Monitoring	Y	

IV. Source-Specific Applicable Requirements

Table IV – A
Source-Specific Applicable Requirements
S-1 KELLER CANYON LANDFILL – WASTE DECOMPOSITION PROCESS; ABATED BY A-1 LANDFILL GAS FLARE, AND A-2 LANDFILL GAS FLARE; S-4 KELLER CANYON LANDFILL – WASTE AND COVER MATERIAL DUMPING; AND S-5 KELLER CANYON LANDFILL – EXCAVATING, BULLDOZING, AND COMPACTING ACTIVITIES

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
BAAQMD Regulation 8, Rule 40	**Organic Compounds – Aeration of Contaminated Soil and Removal of Underground Storage Tanks (6/15/05)**		
8-40-110	Exemption, Storage Pile	Y	
8-40-112	Exemption, Sampling	Y	
8-40-113	Exemption, Non-Volatile Hydrocarbons	Y	
8-40-116	Exemption, Small Volume	Y	
8-40-116.1	Volume does not exceed 1 cubic yard	Y	
8-40-116.2	Volume does not exceed 8 cubic yards, organic content does not exceed 500 ppmw, may be used only once per quarter	Y	
8-40-117	Exemption, Accidental Spills	Y	
8-40-118	Exemption, Aeration Projects of Limited Impact	Y	
8-40-301	Uncontrolled Contaminated Soil Aeration	Y	
8-40-304	Active Storage Piles	Y	
8-40-305	Inactive Storage Piles	Y	
BAAQMD Regulation 9, Rule 1	**Inorganic Gaseous Pollutants – Sulfur Dioxide (3/15/95)**		
9-1-301	Limitations on Ground Level Concentrations (applies to flares only)	Y	
9-1-302	General Emission Limitations (applies to flares 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 (2/16/12)**		
60.4	Address	Y	
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 KELLER CANYON LANDFILL – WASTE DECOMPOSITION PROCESS; ABATED BY A-1 LANDFILL GAS FLARE, AND A-2 LANDFILL GAS FLARE; S-4 KELLER CANYON LANDFILL – WASTE AND COVER MATERIAL DUMPING; AND S-5 KELLER CANYON LANDFILL – EXCAVATING, BULLDOZING, AND COMPACTING ACTIVITIES

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)	Multiple monitors are required for multiple stacks	Y	
60.14	Modification	Y	
60.15	Reconstruction	Y	
60.19	General Notification and Reporting Requirements	Y	
40 CFR Part 60, Subpart WWW	**Standards of Performance for New Stationary Sources – Standards of Performance for Municipal Solid Waste Landfills That Commenced Construction, Reconstruction, or Modification on or After May 30, 1991, but Before July 18, 2014. (9/21/06)**		
60.752	Standards for Air Emissions from Municipal Solid Waste Landfills	Y	
60.752(b)	Requirements for MSW Landfills with Design Capacity equal to or greater than 2.5 million Mg and 2.5 million m^3 (Large Designated Facilities)	Y	
60.752(b)(2)	Comply with all requirements in sections (b)(2)(i through iv)	Y	
60.752 (b)(2)(i)	Submit a Collection and Control System Design Plan	Y	
60.752 (b)(2)(i)(A)	The collection and control system in the Design Plan shall comply with 60.752(b)(2)(ii)	Y	
60.752 (b)(2)(i)(B)	Design Plan shall include all proposed alternatives to 60.753 through 60.758	Y	
60.752 (b)(2)(i)(C)	Design Plan shall conform to 60.759 (active collection system) or demonstrate sufficiency of proposed alternatives	Y	

IV. Source-Specific Applicable Requirements

Table IV – A
Source-Specific Applicable Requirements
S-1 KELLER CANYON LANDFILL – WASTE DECOMPOSITION PROCESS; ABATED BY A-1 LANDFILL GAS FLARE, AND A-2 LANDFILL GAS FLARE; S-4 KELLER CANYON LANDFILL – WASTE AND COVER MATERIAL DUMPING; AND S-5 KELLER CANYON LANDFILL – EXCAVATING, BULLDOZING, AND COMPACTING ACTIVITIES

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
60.752 (b)(2)(ii)	Install a collection and control system	Y	
60.752 (b)(2)(iii)	Route collected gases to a control system.	Y	
60.752 (b)(2)(iii)(B)	Reduce NMOC emissions by 98% by weight or reduce NMOC outlet concentration to less than 20 ppmv as hexane at 3% O_2, dry basis, as demonstrated by initial performance test within 180 days of start-up. (applies to flares only)	Y	
60.752 (b)(2)(iii)(C)	Process the collected gas for subsequent sale or use in a treatment system, where any atmospheric vents from this treatment system comply with paragraph (b)(2)(iii)(B) above.	Y	
60.752 (b)(2)(iv)	Operate in accordance with 60.753, 60.755, and 60.756	Y	
60.752(c)	Title V Operating Permit Requirements	Y	
60.752(c)(1)	Subject date is June 10, 1996 for Landfills new or modified between May 30, 1991 and March 12, 1996	Y	
60.753	Operational Standards for Collection and Control Systems	Y	
60.753(a)	Operate a Collection System in each area or cell in which:	Y	
60.753(a)(1)	Active Cell – solid waste in place for 5 years or more	Y	
60.753(a)(2)	Closed/Final Grade – solid waste in place for 2 years or more	Y	
60.753(b)	Operate each wellhead under negative pressure unless:	Y	
60.753(b)(1)	Fire or increased well temperature or to prevent fire	Y	
60.753(b)(2)	Use of geomembrane or synthetic cover (subject to alternative pressure limits)	Y	
60.753(b)(3)	Decommissioned well after approval received for shut-down	Y	
60.753(c)	Operate each wellhead at < 55 °C, and either < 20% N_2 or < than 5% O_2 (or other approved alternative levels for wells identified in Condition # 17309, Part 20c(i))	Y	
60.753(c)(1)	N_2 determined by Method 3C	Y	
60.753(c)(2)	O_2 determined by 3A and as described in (2)(i-v)	Y	

IV. Source-Specific Applicable Requirements

Table IV – A
Source-Specific Applicable Requirements
S-1 KELLER CANYON LANDFILL – WASTE DECOMPOSITION PROCESS; ABATED BY A-1 LANDFILL GAS FLARE, AND A-2 LANDFILL GAS FLARE; S-4 KELLER CANYON LANDFILL – WASTE AND COVER MATERIAL DUMPING; AND S-5 KELLER CANYON LANDFILL – EXCAVATING, BULLDOZING, AND COMPACTING ACTIVITIES

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
60.753(d)	Surface Leak Limit is less than 500 ppm methane above background at landfill surface. This section also describes some surface monitoring procedures.	Y	
60.753(e)	Vent all collected gases to a control system complying with 60.752(b)(2)(iii). If collection or control system inoperable, shut down gas mover and close all vents within 1 hour.	Y	
60.753(f)	Operate the control system at all times when collected gas is routed to the control system (applies to flares only).	Y	
60.753(g)	If monitoring demonstrates that 60.753(b), (c), or (d) are not being met, corrective action must be taken.	Y	
60.754	Test Methods and Procedures	Y	
60.754(a)	NMOC Calculation Procedures for NMOC Emission Rate Reports and Comparison to 50 Mg/Year Standard.	Y	
60.754(a)(1)	Calculate NMOC Emission Rate using either or both of the equations in 60.754(a)(1)(i-ii) with the listed default values.	Y	
60.754 (a)(1)(i)	Equation for known year-to-year waste acceptance rate	Y	
60.754 (a)(1)(ii)	Equation for unknown year-to-year waste acceptance rate	Y	
60.754(a)(2)	Tier 1 - compare calculated NMOC emission rate to 50 Mg/year	Y	
60.754 (a)(2)(ii)	If NMOC Emission Rate $\geq$ 50 Mg/year, comply with 60.752(b)(2) or determine a site-specific NMOC concentration and follow 60.754(a)(3).	Y	
60.754(c)	For PSD, NMOC emissions shall be calculated using AP-42	Y	
60.754(d)	Test Methods for Performance Test (Method 18 or 25C)	Y	
60.755	Compliance Provisions	Y	
60.755(a)	For Gas Collection Systems	Y	
60.755(a)(1)	Calculation procedures for maximum expected gas generation flow rate	Y	
60.755 (a)(1)(i)	Equation for unknown year-to-year waste acceptance rate	Y	

IV. Source-Specific Applicable Requirements

Table IV – A
Source-Specific Applicable Requirements
S-1 KELLER CANYON LANDFILL – WASTE DECOMPOSITION PROCESS; ABATED BY A-1 LANDFILL GAS FLARE, AND A-2 LANDFILL GAS FLARE; S-4 KELLER CANYON LANDFILL – WASTE AND COVER MATERIAL DUMPING; AND S-5 KELLER CANYON LANDFILL – EXCAVATING, BULLDOZING, AND COMPACTING ACTIVITIES

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
60.755 (a)(1)(ii)	Equation for known year-to-year waste acceptance rate	Y	
60.755(a)(2)	Vertical wells and horizontal collectors shall be of sufficient density to meet all performance specifications.	Y	
60.755(a)(3)	Measure wellhead pressure monthly. If pressure is positive, take corrective action (final corrective action = expand system within 120 days of initial positive pressure reading).	Y	
60.755(a)(4)	Expansion not required during first 180 days after startup.	Y	
60.755(a)(5)	Monitor wellheads monthly for temperature and either nitrogen or oxygen. If readings exceed limits, take corrective action up to expanding system within 120 days of first excess.	Y	
60.755(b)	Wells shall be placed in cells as described in Design Plan and no later than 60 days after:	Y	
60.755(b)(1)	Five years after initial waste placement in cell, for active cells	Y	
60.755(b)(2)	Two years after initial waste placement in cell, for closed/final grade cells.	Y	
60.755(c)	Procedures for complying with surface methane standard	Y	
60.755(c)(1)	Quarterly monitoring of surface and perimeter	Y	
60.755(c)(2)	Procedure for determining background concentration	Y	
60.755(c)(3)	Method 21 except probe inlet placed 5-10 cm above ground	Y	
60.755(c)(4)	Excess is any reading of 500 ppmv or more. Take corrective action indicated below (i-v).	Y	
60.755 (c)(4)(i)	Mark and record location of excess	Y	
60.755 (c)(4)(ii)	Repair cover or adjust vacuum. Re-monitor within 10calendar days.	Y	
60.755 (c)(4)(iii)	If still exceeding 500 ppmv, take additional corrective action. Re-monitor within 10 calendar days of 2nd excess.	Y	
60.755 (c)(4)(iv)	Re-monitor within 1 month of initial excess.	Y	

IV. Source-Specific Applicable Requirements

Table IV – A
Source-Specific Applicable Requirements
S-1 KELLER CANYON LANDFILL – WASTE DECOMPOSITION PROCESS; ABATED BY A-1 LANDFILL GAS FLARE, AND A-2 LANDFILL GAS FLARE; S-4 KELLER CANYON LANDFILL – WASTE AND COVER MATERIAL DUMPING; AND S-5 KELLER CANYON LANDFILL – EXCAVATING, BULLDOZING, AND COMPACTING ACTIVITIES

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
60.755 (c)(4)(v)	For any location with 3 monitored excesses in a quarter, additional collectors (or other approved collection system repairs) shall be operational within 120 days of 1st excess.	Y	
60.755(c)(5)	Monitor cover integrity monthly and repair as needed.	Y	
60.755(d)	Instrumentation and procedures for complying with 60.755(c).	Y	
60.755(d)(1)	Portable analyzer meeting Section 3 of Method 21	Y	
60.755(d)(2)	Calibrated with methane diluted to 500 ppmv in air	Y	
60.755(d)(3)	Use Method 21, Section 4.4 instrument evaluation procedures	Y	
60.755(d)(4)	Calibrate per Method 21, Section 4.2 immediately before monitoring.	Y	
60.755(e)	Provisions apply at all times except during startup, shutdown, or malfunction, provided the duration of these shall not exceed 5 days for collection systems or 1 hour for control systems.	Y	
60.756	Monitoring of Operations	Y	
60.756(a)	For active collection systems, install wellhead sampling port	Y	
60.756(a)(1)	Measure gauge pressure in wellhead on a monthly basis	Y	
60.756(a)(2)	Measure nitrogen or oxygen concentration in wellhead gas on a monthly basis.	Y	
60.756(a)(3)	Measure temperature of wellhead gas on a monthly basis.	Y	
60.756(b)	Enclosed combustors shall comply with (b)(1) and (b)(2)	Y	
60.756(b)(1)	Temperature monitor and continuous recorder (not required for boilers and process heaters with capacity > 44 MW)	Y	
60.756(b)(2)	Device that records flow to or bypass of the control device (i or ii below)	Y	
60.756 (b)(2)(i)	Install, calibrate, and maintain a device that records flow to the control device at least every 15 minutes.	Y	
60.756 (b)(2)(ii)	Secure the bypass line valve in closed position, visual inspection of the lock at least once every month	Y	
60.756(e)	Procedures for requesting alternative monitoring parameters	Y	
60.756(f)	Monitor surface on a quarterly basis.	Y	
60.757	Reporting Requirements	Y	
60.757(a)	Submit an Initial Design Capacity Report	Y	

IV. Source-Specific Applicable Requirements

Table IV – A
Source-Specific Applicable Requirements
S-1 KELLER CANYON LANDFILL – WASTE DECOMPOSITION PROCESS; ABATED BY A-1 LANDFILL GAS FLARE, AND A-2 LANDFILL GAS FLARE; S-4 KELLER CANYON LANDFILL – WASTE AND COVER MATERIAL DUMPING; AND S-5 KELLER CANYON LANDFILL – EXCAVATING, BULLDOZING, AND COMPACTING ACTIVITIES

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
60.757(a)(3)	Amended Design Capacity Report required within 90 days of receiving a permitted increase in design capacity or within 90 days of an annual density calculation that results in a design capacity over the thresholds.	Y	
60.757(b)	Submit Initial and Annual NMOC Emission Rate Report	Y	
60.757(b)(3)	Sites with collection and control systems operating in compliance with this subpart are exempt from (b)(1) and (b)(2) above.	Y	
60.757(c)	Submit a Collection and Control System Design Plan within 1 year of first NMOC emission rate report showing NMOC > 50 MG/year.	Y	
60.757(f)	Submit Annual Reports containing information required by (f)(1) through (f)(6)	Y	
60.757(f)(1)	Value and length of time for exceedance of parameters monitored per 60.756(a), (b) or (d)	Y	
60.757(f)(2)	Description and duration of all periods when gas is diverted from the control device by a by-pass line	Y	
60.757(f)(3)	Description and duration of all periods when control device was not operating for more than 1 hour	Y	
60.757(f)(4)	All periods when collection system was not operating for more than 5 days.	Y	
60.757(f)(5)	Location of each surface emission excess and all re-monitoring dates and concentrations.	Y	
60.757(f)(6)	Location and installation dates for any wells or collectors added as a result of corrective action for a monitored excess.	Y	
60.757(g)	Initial Performance Test Report Requirements (g)(1-6)	Y	
60.757(g)(1)	Diagram of collection system showing positions of all existing collectors, proposed positions for future collectors, and areas to be excluded from control.	Y	
60.757(g)(2)	Basis for collector positioning to meet sufficient density req.	Y	
60.757(g)(3)	Documentation supporting percentage of asbestos or non-degradable material claims for areas without a collection system.	Y	

IV. Source-Specific Applicable Requirements

Table IV – A
Source-Specific Applicable Requirements
S-1 KELLER CANYON LANDFILL – WASTE DECOMPOSITION PROCESS; ABATED BY A-1 LANDFILL GAS FLARE, AND A-2 LANDFILL GAS FLARE; S-4 KELLER CANYON LANDFILL – WASTE AND COVER MATERIAL DUMPING; AND S-5 KELLER CANYON LANDFILL – EXCAVATING, BULLDOZING, AND COMPACTING ACTIVITIES

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
60.757(g)(4)	For areas excluded from collection due to non-productivity, calculations and gas generation rates for each non-productive area and the sum for all nonproductive areas.	Y	
60.757(g)(5)	Provisions for increasing gas mover equipment if current system is inadequate to handle maximum projected gas flow rate.	Y	
60.757(g)(6)	Provisions for control of off-site migration	Y	
60.758	Recordkeeping Requirements	Y	
60.758(a)	Design Capacity and Waste Acceptance Records (retain 5 years)	Y	
60.758(b)	Collection and Control Equipment Records (retain for life of control equipment except 5 years for monitoring data)	Y	
60.758(b)(1)	Collection System Records	Y	
60.758 (b)(1)(i)	Maximum expected gas generation flow rate.	Y	
60.758 (b)(1)(ii)	Density of wells and collectors	Y	
60.758(b)(2)	Control System Records - enclosed combustors other than boilers or process heaters with heat input > 44 MW (applies to flares only)	Y	
60.758 (b)(2)(i)	Combustion temperature measured every 15 minutes and averaged over the same time period as the performance test (applies to flares only)	Y	
60.758 (b)(2)(ii)	Percent NMOC reduction achieved by the control device (applies to flares only)	Y	
60.758(c)	Records of parameters monitored pursuant to 60.756 and periods of operation when boundaries are exceeded (retain for 5 years).	Y	
60.758(c)(1)	Exceedances subject to record keeping are	Y	
60.758 (c)(1)(i)	All 3-hour periods when average combustion temperature was more than 28 ºC below the average combustion temperature during the most recent complying performance test (applies to flares only)	Y	
60.758(c)(2)	Records of continuous flow to control device or monthly inspection records if seal and lock for bypass valves	Y	

IV. Source-Specific Applicable Requirements

Table IV – A
Source-Specific Applicable Requirements
S-1 KELLER CANYON LANDFILL – WASTE DECOMPOSITION PROCESS; ABATED BY A-1 LANDFILL GAS FLARE, AND A-2 LANDFILL GAS FLARE; S-4 KELLER CANYON LANDFILL – WASTE AND COVER MATERIAL DUMPING; AND S-5 KELLER CANYON LANDFILL – EXCAVATING, BULLDOZING, AND COMPACTING ACTIVITIES

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
60.758(d)	Plot map showing location of all existing and planned collectors with a unique label for each collector (retain for life of collection system).	Y	
60.758(d)(1)	Installation date and location of all newly installed collectors	Y	
60.758(d)(2)	Records of nature, deposition date, amount, and location of asbestos or non-degradable waste excluded from control	Y	
60.758(e)	Records of any exceedance of 60.753, location of exceedance and re-monitoring dates and data (for wellheads and surface). Retain for 5 years.	Y	
60.759	Specifications for Active Collection Systems	Y	
60.759(a)	Active wells and collectors shall be at sufficient density	Y	
60.759(a)(1)	Collection System in refuse shall be certified by PE to achieve comprehensive control of surface gas emissions.	Y	
60.759(a)(2)	Collection Systems (active or passive) outside of refuse shall address migration control.	Y	
60.759(a)(3)	All gas producing areas shall be controlled except as described below (i-iii).	Y	
60.759 (a)(3)(i)	Any segregated area of asbestos or non-degradable material only may be excluded, if documented adequately per 60.758(d).	Y	
60.759 (a)(3)(ii)	Any non-productive areas may be excluded from control, provided total NMOC emissions from all excluded areas is < 1% of total NMOC emissions from landfill. Document amount, location, and age of waste and all calculations for each excluded area.	Y	
60.759 (a)(3)(iii)	For calculating NMOC emissions, values for k and concentration of NMOC that have been previously approved shall be used or defaults if no values were approved. All non-degradable wastes that are being subtracted from total wastes for NMOC calculations must be documented adequately.	Y	
60.759(b)	Gas Collection System Components	Y	
60.759(b)(1)	Must be constructed of PVC, HDPE, fiberglass, stainless steel, or other approved material and of suitable dimensions to convey projected gas amounts and withstand settling, traffic, etc.	Y	

IV. Source-Specific Applicable Requirements

Table IV – A
Source-Specific Applicable Requirements
S-1 KELLER CANYON LANDFILL – WASTE DECOMPOSITION PROCESS; ABATED BY A-1 LANDFILL GAS FLARE, AND A-2 LANDFILL GAS FLARE; S-4 KELLER CANYON LANDFILL – WASTE AND COVER MATERIAL DUMPING; AND S-5 KELLER CANYON LANDFILL – EXCAVATING, BULLDOZING, AND COMPACTING ACTIVITIES

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
60.759(b)(2)	Collectors shall not endanger liner, shall manage condensate and leachate, and shall prevent air intrusion and surface leaks.	Y	
60.759(b)(3)	Header connection assemblies shall include positive closing throttle valve, seals and couplings to prevent leaks, at least one sampling port, and shall be constructed of PVC, HDPE, fiberglass, stainless steel, or other approved materials.	Y	
60.759(c)	Gas Mover Equipment shall be sized to handle maximum expected gas generation rate over the intended period of use.	Y	
60.759(c)(1)	For existing systems, flow data shall be used to project maximum flow rate.	Y	
60.759(c)(2)	For new systems, gas generation rate shall be calculated per 60.755(a)(1).	Y	
40 CFR Part 63, Subpart A	**National Emission Standards for Hazardous Air Pollutants: General Provisions (2/16/12)**		
63.4	Prohibited activities and circumvention	Y	
63.5	Preconstruction review and notification requirements	Y	
63.5(b)	Requirements for existing, newly constructed, and reconstructed sources	Y	
63.6	Compliance with standards and maintenance requirements	Y	
63.6(e)	Operation and maintenance requirements and SSM Plan	Y	
63.6(f)	Compliance with non-opacity emission standards	Y	
63.10	Record keeping and reporting requirements	Y	
63.10(b)	General record keeping requirements	Y	
63.10(b)(2)	For affected sources, maintain relevant records of:	Y	
63.10(b)(2)(i-v)	Records for startup, shutdown, malfunction, and maintenance	Y	
63.10(d)	General reporting requirements	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 (4/20/06)**		

IV. Source-Specific Applicable Requirements

Table IV – A
Source-Specific Applicable Requirements
S-1 KELLER CANYON LANDFILL – WASTE DECOMPOSITION PROCESS; ABATED BY A-1 LANDFILL GAS FLARE, AND A-2 LANDFILL GAS FLARE; S-4 KELLER CANYON LANDFILL – WASTE AND COVER MATERIAL DUMPING; AND S-5 KELLER CANYON LANDFILL – EXCAVATING, BULLDOZING, AND COMPACTING ACTIVITIES

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
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)	Comply with either 63.1955(a)(1) or (a)(2)	Y	
63.1955(a)(1)	Comply with 40 CFR Part 60, Subpart WWW	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	
CARB, CCR, Title 17, Sections 95460- 95476	**Methane Emissions from Municipal Solid Waste Landfills**	**Y**	
95460	Purpose of Regulation	Y	
95461	Applicability	Y	
95463	Determination for Installing a Landfill Gas Collection and Control System	Y	
95463(b)	MSW landfills greater than or equal to 450,000 tons of waste-in-place	Y	
	Must Submit a Landfill Gas Heat Input Capacity Report to Executive Officer	Y	

IV. Source-Specific Applicable Requirements

Table IV – A
Source-Specific Applicable Requirements
S-1 KELLER CANYON LANDFILL – WASTE DECOMPOSITION PROCESS; ABATED BY A-1 LANDFILL GAS FLARE, AND A-2 LANDFILL GAS FLARE; S-4 KELLER CANYON LANDFILL – WASTE AND COVER MATERIAL DUMPING; AND S-5 KELLER CANYON LANDFILL – EXCAVATING, BULLDOZING, AND COMPACTING ACTIVITIES

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
95463(b)(2)	Comply with Sections 95464 through 95476 if the heat input capacity is more than 3 MM BTU/hr	Y	
95464(b)	Gas Collection and Control System Requirements	Y	
95464(b)(1)	General Requirements	Y	
95464(b)(1)(A)	Route the collected gas to a gas control device and operate the gas collection and control system continuously	Y	
95464(b)(1)(B)	No LFG leak exceeding 500 ppmv, as methane, at any component under positive pressure	Y	
95464(b)(1)(C)	System must be designed and operated to draw all LFG to gas control device	Y	
95464(b)(2)	Requirements for Flares	Y	
95464(b)(2)(A)(1)	LFG must be routed to an enclosed flare with a minimum methane destruction efficiency of 99% by wt.	Y	
95464(b)(2)(A)(2)	Enclosed flare must be equipped with automatic dampers, automatic shutdown device, flame arrestors, and continuous recording temperature sensors	Y	
95464(b)(2)(A)(3)	Sufficient flow of propane or commercial natural gas during startup to prevent emission of unburned methane	Y	
95464(b)(2)(A)(4)	Control device must be operated within the parameter ranges established during the source test	Y	
95464(b)(3)	Requirements for Gas Control Devices other than Flares	Y	
95464(b)(3)(A)	Route the LFG to an energy recovery device which has minimum methane destruction efficiency of 99% by wt. Lean burn IC engines must reduce the outlet methane concentration to less than 3000 ppmv corrected to 15% O_2	Y	
95464(b)(3)(B)	Route the collected gas to a treatment system that processes the gas for subsequent sale or use	Y	
95464(b)(4)	Source Test Requirements: Initial source test must be conducted within 180 days of the start up of the gas control device. Annual source must be completed no later than 45 days after the anniversary date of the initial source test	Y	

IV. Source-Specific Applicable Requirements

Table IV – A
Source-Specific Applicable Requirements
S-1 KELLER CANYON LANDFILL – WASTE DECOMPOSITION PROCESS; ABATED BY A-1 LANDFILL GAS FLARE, AND A-2 LANDFILL GAS FLARE; S-4 KELLER CANYON LANDFILL – WASTE AND COVER MATERIAL DUMPING; AND S-5 KELLER CANYON LANDFILL – EXCAVATING, BULLDOZING, AND COMPACTING ACTIVITIES

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
95464(b)(4)(A)	If in compliance after 3 consecutive source tests, frequency can be reduced to once every 3 years. If subsequent source testing shows out of compliance, frequency shall return to annual.	Y	
95464(c)	Each wellhead shall be operated under negative pressure except for a decommissioned well	Y	
95464(d)	Exemption for well raising	Y	
95464(e)	Repairs and Temporary Shutdown of Gas Collection system	Y	
95465	Surface Methane Emission Standards	Y	
95465(a)(1)	No location of the MSW landfill surface can exceed 500 ppmv of methane as determined by instantaneous surface emissions monitoring	Y	
95465(a)(2)	No location of the MSW landfill surface can exceed an average of 25 ppmv as determined by integrated surface emissions monitoring	Y	
95466	Exemption for Construction Activities	Y	
95467	Permanent Shutdown and Removal of LFG Collection and Control System	Y	
95467(a)(1-3)	LFG collection and control system can be capped at a closed landfill if it was operational for at least 15 years, surface emissions meet the standards in 95465 and an Equipment Removal Report is submitted to the Executive Officer	Y	
95468	Alternative Compliance Options	Y	
95469	Monitoring Requirements	Y	
95469(a)	Surface Emission Monitoring Requirements: Must conduct instantaneous and integrated surface emission monitoring quarterly	Y	
95469(a)(1)	Instantaneous Surface Emission Monitoring:	Y	
95469(a)(1)(A)	Exceedances (> 500 ppmv as methane) must be marked, recorded and corrective action initiated.	Y	
95469(a)(1)(B)	Re-monitoring shall be conducted within 10 days of a measured exceedance.	Y	
95469(a)(1)(B)(1)	If re-monitoring shows a second exceedance, more corrective action shall be taken and re-monitoring shall be conducted within 10 days of the second exceedance.	Y	

IV. Source-Specific Applicable Requirements

Table IV – A
Source-Specific Applicable Requirements
S-1 KELLER CANYON LANDFILL – WASTE DECOMPOSITION PROCESS; ABATED BY A-1 LANDFILL GAS FLARE, AND A-2 LANDFILL GAS FLARE; S-4 KELLER CANYON LANDFILL – WASTE AND COVER MATERIAL DUMPING; AND S-5 KELLER CANYON LANDFILL – EXCAVATING, BULLDOZING, AND COMPACTING ACTIVITIES

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
95469(a)(1)(B)(2)	If the re-monitoring shows a third exceedance, well shall be replaced and compliance must be determined within 120 days of the third exceedance.	Y	
95469(a)(1)(C)	Can monitor annually if four consecutive monitoring events show no exceedances. Any exceedances which can not be corrected within 10 calendar days will return the frequency to quarterly monitoring	Y	
95469(a)(1)(D)	Any exceedance discovered during a compliance inspection will return the monitoring to quarterly frequency.	Y	
95469(a)(2)	Integrated Surface Emissions Monitoring:	Y	
95469(a)(2)(A)	Exceedances (> 25 ppmv as methane) must be marked, recorded and corrective action initiated.	Y	
95469(a)(2)(B)	Re-monitoring shall be conducted within 10 days of a measured exceedance.	Y	
95469(a)(2)(B)(1)	If re-monitoring shows a second exceedance, more corrective action shall be taken and re-monitoring shall be conducted within 10 days of the second exceedance.	Y	
95469(a)(2)(B)(2)	If the re-monitoring shows a third exceedance, well shall be replaced and compliance must be determined within 120 days of the third exceedance.	Y	
95469(a)(2)(C)	Can monitor annually if four consecutive monitoring events show no exceedances. Any exceedances which cannot be corrected within 10 calendar days will return the frequency to quarterly monitoring	Y	
95469(a)(2)(D)	Any exceedance discovered during a compliance inspection will return the monitoring to quarterly frequency.	Y	
95469(b)	Gas Control System Equipment Monitoring: The equipment must be installed, calibrated, maintained and operated as per the manufacturer specifications	Y	
95469(b)(1)(A)	Enclosed flares must be equipped with a temperature (accuracy of +/- 1% of the temperature being measured)	Y	

IV. Source-Specific Applicable Requirements

Table IV – A
Source-Specific Applicable Requirements
S-1 KELLER CANYON LANDFILL – WASTE DECOMPOSITION PROCESS; ABATED BY A-1 LANDFILL GAS FLARE, AND A-2 LANDFILL GAS FLARE; S-4 KELLER CANYON LANDFILL – WASTE AND COVER MATERIAL DUMPING; AND S-5 KELLER CANYON LANDFILL – EXCAVATING, BULLDOZING, AND COMPACTING ACTIVITIES

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
95469(b)(1)(B)	Enclosed flares must be equipped with at least one flow rate measuring device (capability of measuring flow rate every 15 minutes)	Y	
95469(b)(2)	For equipment other than enclosed flares, describe operation of the device, operating parameters, and monitoring requirements.	Y	
95469(b)(3)	Components containing LFG and under positive pressure must be monitored quarterly for leaks, leaks must be repaired within 10 days	Y	
95469(b)(3)(A)	Leak Testing at MSW landfills with LFGTE facilities may be conducted prior to scheduled maintenance of planned outage	Y	
95469(c)	Wellhead Monitoring: Monitoring shall be done monthly.	Y	
95469(c)(1)	Initiate corrective action within 5 days of a positive pressure	Y	
95469(c)(2)	If it cannot be resolved within 15 days from the positive measurement date, additional corrective actions shall be taken such as expansion of gas collection system	Y	
95469(c)(3)	Corrective actions, including operation of any new wells, shall be completed within 120 days from the first positive measurement.	Y	
95470(a)	Recordkeeping Requirements	Y	
95470(a)(1)	Following records must be maintained:	Y	
95470(a)(1)(A)	Gas collection system downtime exceeding 5 calendar days, list of components shut down and the reason for downtime	Y	
95470(a)(1)(B)	Gas collection system downtime exceeding one hour, the reason and duration of downtime	Y	
95470(a)(1)(C)	Expected gas generation flow rate	Y	

IV. Source-Specific Applicable Requirements

Table IV – A
Source-Specific Applicable Requirements
S-1 KELLER CANYON LANDFILL – WASTE DECOMPOSITION PROCESS; ABATED BY A-1 LANDFILL GAS FLARE, AND A-2 LANDFILL GAS FLARE; S-4 KELLER CANYON LANDFILL – WASTE AND COVER MATERIAL DUMPING; AND S-5 KELLER CANYON LANDFILL – EXCAVATING, BULLDOZING, AND COMPACTING ACTIVITIES

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
95470(a)(1)(D)	All instantaneous surface readings of 200 ppmv or greater; all exceedances of the limits in 95464(b)(1)(B). Records shall include location of the leak, concentration in ppmv, date and time of measurement, the corrective action taken, date of action, re-monitoring and the re-monitored concentration in ppmv, and wind speed during surface sampling; the installation date and location of each well installed as part of well field expansion	Y	
95470(a)(1)(E)	Any positive wellhead gauge pressure measurements, the date of measurements, the well identification number, and the corrective action taken	Y	
95470(a)(1)(F)	Annual solid waste acceptance rate and the current amount of waste-in-place	Y	
95470(a)(1)(G)	Nature, location, amount, and date of deposition of non-degradable waste for any landfill areas excluded from the collection system	Y	
95470(a)(1)(H)	Results of any source tests conducted pursuant to section 95464(b)(4)	Y	
95470(a)(1)(I)	Mitigation measures taken to prevent the release of methane or other emissions.	Y	
95470(a)(1)(I)(1)	When solid waste was brought to the surface during the installation of wells, piping, or other equipment;	Y	
95470(a)(1)(I)(2)	During repairs or temporary shutdown of gas collection system components	Y	
95470(a)(1)(I)(3)	When solid waste was excavated and moved	Y	
95470(a)(1)(J)	Any construction activities pursuant to section 95466	Y	
95470(a)(1)(J)(1)	A description of the actions being taken, affected areas, reason the actions are required, and any affected components	Y	

IV. Source-Specific Applicable Requirements

Table IV – A
Source-Specific Applicable Requirements
S-1 KELLER CANYON LANDFILL – WASTE DECOMPOSITION PROCESS; ABATED BY A-1 LANDFILL GAS FLARE, AND A-2 LANDFILL GAS FLARE; S-4 KELLER CANYON LANDFILL – WASTE AND COVER MATERIAL DUMPING; AND S-5 KELLER CANYON LANDFILL – EXCAVATING, BULLDOZING, AND COMPACTING ACTIVITIES

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
95470(a)(1)(J)(2)	Construction start and finish dates, projected equipment installation dates, and projected shut down times for individual components	Y	
95470(a)(1)(J)(3)	Description of the mitigation measures taken to minimize methane emissions and other potential air quality impacts	Y	
95470(a)(1)(K)	Equipment operating parameters specified under sections 95469(b)(1) and 95469(b)(2) as well as exceedance records	Y	
95470(a)(1)(K)(1)	For enclosed flares, all 3-hour periods of operation during which the average temperature difference was more than 28 degrees Celsius (or 50 degrees Fahrenheit) below the average combustion temperature during the most recent source test at which compliance with sections 95464(b)(2) and 95464(b)(3)(A) was determined	Y	
95470(a)(2)	Following records must be maintained for the life of each gas control device	Y	
95470(a)(2)(A)	Vendor specifications	Y	
95470(a)(2)(B)	Expected gas generation flow rate	Y	
95470(a)(2)(C)	Percent reduction of methane achieved by the control device	Y	
95470(a)(3)	Maintain copies of all records in the State of CA and provide them to Executive Officer within 5 business days upon request	Y	
95470(b)	Reporting Requirements	Y	
95470(b)(1)	Submit a Closure Notification to the Executive Officer within 30 days of waste acceptance cessation	Y	
95470(b)(1)(A)	Closure Notification must include the last day solid waste was accepted, the anticipated closure date of the MSW landfill, and the estimated waste-in-place	Y	
95470(b)(1)(B)	Executive Officer may request additional information to verify that permanent closure took place in accordance with the local, state or federal requirements	Y	

IV. Source-Specific Applicable Requirements

Table IV – A
Source-Specific Applicable Requirements
S-1 KELLER CANYON LANDFILL – WASTE DECOMPOSITION PROCESS; ABATED BY A-1 LANDFILL GAS FLARE, AND A-2 LANDFILL GAS FLARE; S-4 KELLER CANYON LANDFILL – WASTE AND COVER MATERIAL DUMPING; AND S-5 KELLER CANYON LANDFILL – EXCAVATING, BULLDOZING, AND COMPACTING ACTIVITIES

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
95470(b)(2)	Submit an Equipment Removal Report to the Executive Officer 30 days prior to well capping, removal or cessation which contains:	Y	
95470(b)(2)(A)	A copy of the Closure Notification submitted pursuant to section 95470(b)(1)	Y	
95470(b)(2)(B)	A copy of the initial source test report or other documentation demonstrating that the gas collection and control system has been installed and operated for a minimum of 15 years unless demonstrated otherwise	Y	
95470(b)(2)(C)	Surface emissions monitoring results verifying that surface methane concentration measurements do not exceed the limits specified in section 95465.	Y	
95470(b)(3)	Prepare an annual report for the period of January 1 through December 31 of each year and submit to the Executive Officer by March 15 of the following year. The annual report must contain:	Y	
95470(b)(3)(A)	MSW landfill name, owner and operator, address, and solid waste information system (SWIS) identification number	Y	
95470(b)(3)(B)	Total volume of landfill gas collected in standard cubic feet	Y	
95470(b)(3)(C)	Average composition of the landfill gas collected over the reporting period (reported in percent methane and percent carbon dioxide by volume	Y	
95470(b)(3)(D)	Gas control device type, year of installation, rating, fuel type, and total amount of landfill gas combusted in each device	Y	
95470(b)(3)(E)	Date that the gas collection and control system was installed and in full operation	Y	
95470(b)(3)(F)	Percent methane destruction efficiency of each gas control device	Y	
95470(b)(3)(G)	Type and amount of supplemental fuels burned with the landfill gas in each device	Y	
95470(b)(3)(H)	Total volume of landfill gas shipped off-site, the composition of the landfill gas collected, and the recipient of the gas	Y	

IV. Source-Specific Applicable Requirements

Table IV – A
Source-Specific Applicable Requirements
S-1 KELLER CANYON LANDFILL – WASTE DECOMPOSITION PROCESS; ABATED BY A-1 LANDFILL GAS FLARE, AND A-2 LANDFILL GAS FLARE; S-4 KELLER CANYON LANDFILL – WASTE AND COVER MATERIAL DUMPING; AND S-5 KELLER CANYON LANDFILL – EXCAVATING, BULLDOZING, AND COMPACTING ACTIVITIES

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
95470(b)(3)(I)	Most recent topographic map of the site	Y	
95470(b)(3)(J)	Information required by pertinent sections of 95470(a)(1)	Y	
95470(b)(5)	Submit a Landfill Gas Heat Input Capacity Report: Calculate the heat input capacity and report the results to the Executive Officer within 90 days of the effective date of this subarticle or upon reaching 450,000 tons of waste-in-place.	Y	
95470(b)(6)	Submit certification by a responsible official of truth, accuracy, and completeness	Y	
95471	Test Methods and Procedures	Y	
95471(a)	Hydrocarbon Detector Specifications: Any instrument used for the measurement of methane must be a gas detector approved by the Executive Officer that meets the EPA Reference Method 21, Determination of Volatile Organic Compound Leaks, 40 CFR Part 60, Appendix A	Y	
95471(b)(1)	Landfill gas heat input capacity for MSW landfills without carbon adsorption or passive venting system shall be calculated using the procedure specified in Appendix I	Y	
95471(c)	Surface Emission Monitoring Procedures: Landfill surface concentration of methane must be measured using a hydrocarbon detector using the following procedures:	Y	
95471(c)(1)	Entire landfill surface must be divided into individually identified 50,000 square foot grids	Y	
95471(c)(1)(A)	Testing must be performed by holding the hydrocarbon detector's probe within 3 inches of the landfill surface while traversing the grid	Y	
95471(c)(1)(B)	The walking pattern must be no more than a 25-foot spacing interval and must traverse each monitoring grid	Y	

IV. Source-Specific Applicable Requirements

Table IV – A
Source-Specific Applicable Requirements
S-1 KELLER CANYON LANDFILL – WASTE DECOMPOSITION PROCESS; ABATED BY A-1 LANDFILL GAS FLARE, AND A-2 LANDFILL GAS FLARE; S-4 KELLER CANYON LANDFILL – WASTE AND COVER MATERIAL DUMPING; AND S-5 KELLER CANYON LANDFILL – EXCAVATING, BULLDOZING, AND COMPACTING ACTIVITIES

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
95471(c)(1)(B)(1)	Spacing may be increased to 100-foot intervals if no exceedances of the limits in section 95465 are observed after any four consecutive quarterly monitoring events. It must return to a 25-foot spacing interval upon observation of any exceedances	Y	
95471(c)(1)(C)	Surface testing must be terminated when the average wind speed exceeds 5 mph or the instantaneous wind speed exceeds 10 mph. Alternatives can be approved for sites with consistently higher wind speeds by the Executive Officer. Average wind speed must be determined on a 15-minute average using an on-site anemometer with a continuous recorder	Y	
95471(c)(1)(D)	Surface emissions testing must be conducted only when there has been no measurable precipitation in the preceding 72 hours	Y	
95471(c)(2)	Instantaneous Surface Emissions Monitoring Procedures	Y	
95471(c)(2)(A)	Record any instantaneous surface readings of methane 200 ppmv or greater	Y	
95471(c)(2)(B)	Exceedances of methane concentration limit of 500 ppmv must be marked and remediated pursuant to section 95469(a)(1)	Y	
95471(c)(2)(C)	The wind speed must be recorded during the sampling period	Y	
95471(c)(2)(D)	Areas with cover penetrations/distressed vegetation/cracks/ seeps must be inspected visually and with a hydrocarbon detector	Y	
95471(c)(3)	Integrated Surface Emissions Monitoring Procedures	Y	
95471(c)(3)(A)	Record and average integrated surface readings for each grid	Y	
95471(c)(3)(B)	Exceedances of methane concentration limit of 25 ppmv must be marked and remediated pursuant to section 95469(a)(2)	Y	
95471(c)(2)(C)	The wind speed must be recorded during the sampling period	Y	
95471(d)	Measure leaks using a hydrocarbon detector	Y	

IV. Source-Specific Applicable Requirements

Table IV – A
Source-Specific Applicable Requirements
S-1 KELLER CANYON LANDFILL – WASTE DECOMPOSITION PROCESS; ABATED BY A-1 LANDFILL GAS FLARE, AND A-2 LANDFILL GAS FLARE; S-4 KELLER CANYON LANDFILL – WASTE AND COVER MATERIAL DUMPING; AND S-5 KELLER CANYON LANDFILL – EXCAVATING, BULLDOZING, AND COMPACTING ACTIVITIES

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
95471(e)	Determine the expected gas generation flow rate as per the 2006 IPCC Guidelines for National Greenhouse Gas Inventories, Chapter 3, using a recovery rate of 75 percent	Y	
95471(f)(1)	Determine the destruction efficiency of the control device using EPA Methods 18, 25, 25A, and 25C	Y	
95471(g)	Determine gauge pressure using a hand-held manometer, magnahelic gauge, or other pressure measuring device approved by the Executive Officer.	Y	
95471(h)	Alternative test methods may be used if approved in writing by the Executive Officer	Y	
95472	Penalties	Y	
95473	Implementation, Enforcement, and Related Fees	Y	
95474	Applicability of Other Rules and Regulations	Y	
BAAQMD Condition #17309			
Part 1	Operating Time Restrictions (Cumulative Increase)	Y	
Part 2	Waste Acceptance Rate Limits (Cumulative Increase and Regulation 2-1-301)	Y	
Part 3	Daily Cover Requirements and Limitations (Regulation 1-301 and Cumulative Increase)	Y	
Part 4	Road Surfacing Requirements for Parking and Maintenance Areas (Cumulative Increase)	Y	
Part 5	Road Surfacing Requirements for On-Site Road Ways (Cumulative Increase)	Y	
Part 6	Speed Limits for Unpaved Roads (Cumulative Increase)	Y	
Part 7	Road Surfacing Requirements for Unpaved Roads (Cumulative Increase)	Y	
Part 8	Minimum Water and Dust Suppressant Application Rates for Unpaved Roads (Cumulative Increase)	Y	
Part 9	Water Truck Requirements (Cumulative Increase)	Y	
Part 10	Watering Requirements for Paved and Aggregate Based Road Ways (Cumulative Increase)	Y	

IV. Source-Specific Applicable Requirements

Table IV – A
Source-Specific Applicable Requirements
S-1 KELLER CANYON LANDFILL – WASTE DECOMPOSITION PROCESS; ABATED BY A-1 LANDFILL GAS FLARE, AND A-2 LANDFILL GAS FLARE; S-4 KELLER CANYON LANDFILL – WASTE AND COVER MATERIAL DUMPING; AND S-5 KELLER CANYON LANDFILL – EXCAVATING, BULLDOZING, AND COMPACTING ACTIVITIES

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
Part 11	Traffic Volume Limitations (Cumulative Increase)	Y	
Part 12	Trip Length Limitations for Heavy Duty Vehicles (Cumulative Increase)	Y	
Part 13	Watering Requirements for Active Face, Cover Soil Areas, and Off-Road Soil Areas (Cumulative Increase)	Y	
Part 14	Vegetation Requirements for Inactive Cover Soil Stockpiles (CEQA, Dust Mitigation Measures)	N	
Part 15	Vegetation Requirements for Completed Landfill Phases (CEQA, Dust Mitigation Measures)	N	
Part 16	Record Keeping Requirements (Cumulative Increase and Regulation 2-6-501)	Y	
Part 17	Reporting Periods and Report Submittal Due Dates for the Regulation 8, Rule 34 and NESHAP Reports (Regulation 8-34-411 and 40 CFR 63.1980(a))	Y	
Part 18	Landfill Gas Collection System Design and Alteration Requirements (Regulations 2-1-301, 8-34-301.1, 8-34-303, 8-34-304, and 40 CFR 60.755(a) and 60.759)	Y	
Part 19	Operating Requirements for Landfill Gas Collection System and Collection System Components (Regulations 8-34-301, 8-34-305, and 8-34-404, and 40 CFR 60.753(b and c) and 60.755(e))	Y	
Part 20	Control Requirements for Collected Landfill Gas (Regulations 8-34-301 and 8-34-303 and 40 CFR 60.752(b)(2)(ii-iii), 60.753(d-f) and 60.755(e))	Y	
Part 21	Continuous Operation Requirement for Flares (Regulation 8-34-301 and 40 CFR 60.752(b)(2)(iii), 60.753(e), and 60.755(e))	Y	
Part 22	Temperature Monitoring and Recording Requirements for Flares (Regulations 2-6-501 and 8-34-501 and 40 CFR 60.756(b))	Y	
Part 23	Minimum Temperature Requirement for Flares (RACT, Regulations 2-5-301 and 8-34-301, and 40 CFR 60.758(c)(1)(i))	Y	
Part 24	Nitrogen Oxide Emission Limit for Flares (RACT)	Y	
Part 25	Carbon Monoxide Emission Limit for Flares (RACT)	Y	
Part 26	[deleted]		
Part 27	Gas Flow Meter Requirement (Regulation 8-34-508 and 40 CFR 60.756(b))	Y	

IV. Source-Specific Applicable Requirements

Table IV – A
Source-Specific Applicable Requirements
S-1 KELLER CANYON LANDFILL – WASTE DECOMPOSITION PROCESS; ABATED BY A-1 LANDFILL GAS FLARE, AND A-2 LANDFILL GAS FLARE; S-4 KELLER CANYON LANDFILL – WASTE AND COVER MATERIAL DUMPING; AND S-5 KELLER CANYON LANDFILL – EXCAVATING, BULLDOZING, AND COMPACTING ACTIVITIES

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
Part 28	Alarm and Automated Control Requirements for Flares (Regulation 8-34-301)	Y	
Part 29	[deleted]		
Part 30	Annual Source Testing Requirement (RACT, Regulation 8-34-301.3, and 40 CFR 60.752(b)(2)(iii))	Y	
Part 31	Annual Landfill Gas Characterization Test (Air Toxics Hot Spots Act, Regulations 2-5-501, 8-34-301 and 9-1-302, and 40 CFR 60.754(d))	Y	
Part 32	Limits on Toxic Air Contaminants in Landfill Gas (Air Toxics Hot Spots Act and Regulation 2-5-302)	N	
Part 33	Precursor Organic Compound Emission Limit and Calculation Procedures (Offsets)	Y	
Part 34	Landfill Gas Sulfur Content Limit and Testing Procedures (Cumulative Increase and Regulations 9-1-302 and 2-6-503)	Y	
Part 35	Heat Input Limits for Flares (Offsets, Cumulative Increases, and Regulation 2-1-301)	Y	
Part 36	Contaminated Soil Throughput Limit and Records (Regulation 8-2-301)	Y	
Part 37	Handling Procedures for Soil Containing Volatile Organic Compounds (Regulations 2-1-403, 8-40-301, 8-40-304, and 8-40-305)	Y	
Part 38	Prohibition of trackout and cleanup of trackout (Regulation 6-6-301, 302)	N	

IV. Source-Specific Applicable Requirements

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

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
BAAQMD Regulation 6, Rule 1	**Particulate Matter – General Requirements (7/31/18)**		
6-1-301	Ringelmann No. 1 Limitation	N	
6-1-305	Visible Particles	N	
6-1-311.1	Total Suspended Particulate (TSP) Weight Limits	N	
6-1-401	Appearance of Emissions	N	
SIP Regulation 6	**Particulate Matter and Visible Emissions (9/4/98)**		
6-301	Ringelmann No. 1 Limitation	Y	
6-305	Visible Particles	Y	
6-311	Process Weight Limitations	Y	
6-401	Appearance of Emissions	Y	
BAAQMD Regulation 6, Rule 6	**Particulate Matter – Prohibition of Trackout (7/31/18)**		
6-6-301	Prohibition of Trackout onto Paved Roadways	N	7/1/19
6-6-302	Prohibition of Visible Emissions During Cleanup of Trackout	N	7/1/19
6-6-501	Monitoring and Recordkeeping	N	7/1/19
BAAQMD Condition #16462			
Part 1	Limit on Yard and Green Waste Received (Cumulative Increase)	Y	
Part 2	Watering Requirements (Regulations 6-1-301, 6-1-305, and 2-6-503)	Y	
Part 3	Maximum Storage Time for Incoming Waste Prior to Processing (Regulation 1-301)	N	
Part 4	Maximum Storage Time for “Odorous” Stockpile (Regulation 1-301)	N	
Part 5	Public Nuisance Control Measures (Regulation 1-301)	N	
Part 6	Record Keeping Requirements (Cumulative Increase and Regulations 1-301, 2-6-501, 6-1-301 and 6-1-305)	Y	

V. SCHEDULE OF COMPLIANCE

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

VI. PERMIT CONDITIONS

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

Condition # 16462
For S-3 YARD AND GREEN WASTE STOCKPILES:

1. The total amount of yard and green waste received at S-3 shall not exceed 1,000 tons during any day nor 70,200 tons during any consecutive 12-month period. (Basis: Cumulative Increase)

2. The yard and green waste stockpiles shall be watered down as necessary to prevent visible dust emissions during loading or unloading. Dry, dusty material shall be watered down before unloading from truck beds as necessary to prevent visible emissions. To ensure compliance with this part, the Permit Holder shall visually observe all unloading, stockpiling, and loading operations and shall immediately initiate corrective actions if any visible dust emissions are detected. (Basis: Regulations 6-1-301, 6-1-305, and 2-6-503)

*3. Yard and green waste shall be removed from the stockpiles within 4 days of the time it is received to prevent decomposition and odors. If any stockpiles are deemed to be odorous by a District inspector, the allowable stockpile storage time shall be reduced from 4 days to 72 hours. (Basis: Regulation 1-301)

*4. Any stockpile that is deemed to be odorous by a District inspector shall be removed within 24 hours. (Basis: Regulation 1-301)

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

   (Basis: Regulation 1-301)

VI. Permit Conditions

Condition # 16462
For S-3 YARD AND GREEN WASTE STOCKPILES:

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

   All records shall be kept on site for a minimum of 5 years from the date of entry and shall be made available to District staff upon request. (Basis: Cumulative Increase and Regulations 2-6-501, 6-1-301, and 6-1-305)

VI. Permit Conditions

Condition # 17309
For S-1 KELLER CANYON LANDFILL – WASTE DECOMPOSITION PROCESS, ABATED BY:
A-1 LANDFILL GAS FLARE AND A-2 LANDFILL GAS FLARE
S-4 KELLER CANYON LANDFILL – WASTE AND COVER MATERIAL DUMPING; AND
S-5 KELLER CANYON LANDFILL – EXCAVATING, BULLDOZING, AND COMPACTING ACTIVITIES:

1. All landfill operations, including the acceptance and placement of waste and earthmoving and construction activities, shall be restricted to six days per week, Monday through Saturday. No operation shall take place on Sunday. (Basis: Cumulative Increase)

2. The Permit Holder shall apply for and receive written authorization from the District (in the form of an MFR Permit Revision and either a District Authority to Construct or Change of Permit Conditions) prior to exceeding any of the waste acceptance or waste disposal limits listed in subparts a-c below, unless the subpart below specifically states otherwise. Any changes in waste acceptance rates, types of waste accepted, or other practices that will result in emissions increases above the maximum permitted emission rates at the Keller Canyon Landfill (S-1) or the Landfill Gas Flares (A-1 and A-2) shall be considered a modification of S-1, A-1, or A-2 as defined in Regulation 2-1-234. (Basis: Cumulative Increase and Regulation 2-1-301)
   a. Total waste accepted and placed at the landfill shall not exceed 3,500 tons in any single day (except during temporary emergency situations approved by the Local Enforcement Agency).
   b. The total cumulative amount of all wastes placed in the landfill shall not exceed 38.4 million tons. However, an exceedance of this amount is not a violation of the permit and does not trigger the requirement to obtain an NSR permit, if the Permit Holder provides documentation to the District, within 30 days of the date of discovery of the exceedance, that demonstrates to the satisfaction of the APCO that the higher cumulative tonnage in place will not result in an increase of the Part 33 emission limit.
   c. The maximum design capacity of the landfill (total volume of all wastes and cover materials placed in the landfill, excluding final cover) shall not exceed 75 million cubic yards.

3. All waste shall be covered on a daily basis with suitable cover material meeting the requirements of the CalRecycle. This cover frequency shall be increased as necessary for the control of odors and litter. Approved daily cover materials for this site include:
   a. Clean soil compacted to a depth of least 6 inches,
   b. Green waste compacted to a depth of at least 6 inches, but not exceeding an average depth of 12 inches, and

VI. Permit Conditions

Condition # 17309
For S-1 KELLER CANYON LANDFILL – WASTE DECOMPOSITION PROCESS, ABATED BY:
A-1 LANDFILL GAS FLARE AND A-2 LANDFILL GAS FLARE
S-4 KELLER CANYON LANDFILL – WASTE AND COVER MATERIAL DUMPING; AND
S-5 KELLER CANYON LANDFILL – EXCAVATING, BULLDOZING, AND COMPACTING ACTIVITIES:

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

(Basis: Regulation 1-301 and Cumulative Increase)

4. All on-site parking and maintenance areas for vehicles and mobile equipment shall either be paved, or provided with a gravel surface, except parking areas for landfill operation employees located directly adjacent to the working face. (Basis: Cumulative Increase)

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

   (Basis: Cumulative Increase)

VI. Permit Conditions

Condition # 17309
For S-1 KELLER CANYON LANDFILL – WASTE DECOMPOSITION PROCESS, ABATED BY:
A-1 LANDFILL GAS FLARE AND A-2 LANDFILL GAS FLARE
S-4 KELLER CANYON LANDFILL – WASTE AND COVER MATERIAL DUMPING; AND
S-5 KELLER CANYON LANDFILL – EXCAVATING, BULLDOZING, AND COMPACTING ACTIVITIES:

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

7. All unpaved roads shall be provided with a gravel surface, excluding the fire access road, the 400-foot section of roadway from the end of the main access haul road to the working face, and the 3,000-foot scraper haul road segment from the working face to the soil stockpile area. (Basis: Cumulative Increase)

8. Operator shall control dust emissions from all unpaved roads, excluding the fire access road, by applying water as necessary and chemical dust suppressants at the following frequency and intensity:
   a. Except as provided below, all applications of dust suppressant shall consist of 0.5 gallons per square yard of 10% $MgCl_2$ applied along the entire length of all unpaved roads.
   b. Beginning May 1st and ending November 1st, dust suppressants shall be applied every 30 days.
   c. From November 1 through May 1, dust suppressants shall be applied following any 30 consecutive dry days. For the purposes of this permit, a dry operating day shall be defined as any 24-hour period, midnight to midnight, with less than 0.09 inches of rain.
   d. Upon written request of the operator, the above dust suppression program may be modified to allow for the use of dust suppressants other than $MgCl_2$ provided an 85% control efficiency for TSP can be demonstrated to the satisfaction of the APCO. All such changes must be approved by the APCO in writing (in the form of a letter or email concurring that no permit revisions are required) prior to implementation.

   (Basis: Cumulative Increase)

9. Operator shall maintain a fleet of at least two water trucks at all times to wash down paved roadway surfaces and wet unpaved roads (excluding the fire access road) and work areas. (Basis: Cumulative Increase)

VI. Permit Conditions

Condition # 17309

For S-1 KELLER CANYON LANDFILL – WASTE DECOMPOSITION PROCESS, ABATED BY:
A-1 LANDFILL GAS FLARE AND A-2 LANDFILL GAS FLARE
S-4 KELLER CANYON LANDFILL – WASTE AND COVER MATERIAL DUMPING; AND
S-5 KELLER CANYON LANDFILL – EXCAVATING, BULLDOZING, AND COMPACTING ACTIVITIES:

10. On all dry operating days, all paved and AB roads shall be completely washed down at regular intervals throughout operating hours. Rinsing frequency shall average once every fifth heavy-duty vehicle (gross weight > 5 tons) pass, excluding water trucks. Averaging shall be done on a daily basis. (Basis: Cumulative Increase)

11. On-site traffic volume of the following heavy-duty vehicles shall not exceed the following number of round trips in any single day, calculated on an annual basis, except as otherwise provided in this permit:
    a. 175 transfer truck trips
    b. 4 leachate transfer truck trips
    c. 45 scraper trips
    d. For all heavy-duty vehicles, such other on-site travel as may be approved in writing by the APCO.

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

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

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

13. On all dry operating days, all off-road soil areas, including the active face area and the active portion of the cover stockpiles, trafficked or otherwise disturbed by vehicles, equipment or operations shall be wetted down with 0.5 gallons of water per square yard or 2,420 gallons of water per acre, at least twice per day. (Basis: Cumulative Increase)

*14. All inactive portions of the cover stockpiles shall either be covered by a latex sealer or revegetated. (Basis: CEQA, Dust Mitigation Measures)

VI. Permit Conditions

Condition # 17309
For S-1 KELLER CANYON LANDFILL – WASTE DECOMPOSITION PROCESS, ABATED BY:
A-1 LANDFILL GAS FLARE AND A-2 LANDFILL GAS FLARE
S-4 KELLER CANYON LANDFILL – WASTE AND COVER MATERIAL DUMPING; AND
S-5 KELLER CANYON LANDFILL – EXCAVATING, BULLDOZING, AND COMPACTING ACTIVITIES:

*15. All completed landfill phases shall be revegetated as soon as possible. (Basis: CEQA, Dust Mitigation Measures)

16. In order to demonstrate compliance with the above parts, the owner/operator of S-1 shall maintain the following records:
    a. Daily records of the quantity of waste accepted and placed in the landfill.
    b. Summarize the daily waste acceptance records for each calendar month.
    c. Summarize monthly waste acceptance records for each preceding 12-month period.
    d. For each area or cell that is not controlled by a landfill gas collection system, maintain a record of the date that waste was initially placed in the area or cell.
    e. Record the cumulative amount of waste placed in each uncontrolled area or cell on a monthly basis.
    f. If the Permit Holder plans to exclude an uncontrolled area or cell from the collection system requirement, the Permit Holder shall also record the types and amounts of all non-decomposable waste placed in the area and the percentage (if any) of decomposable waste placed in the area.
    g. Record the initial operation date for each new landfill gas well and collector.
    h. Maintain an accurate map of the landfill, which indicates the locations of all refuse boundaries and the locations of all wells and collectors (using unique identifiers). Any areas containing only non-decomposable waste shall be clearly identified. This map shall be updated at least every six months to indicate changes in refuse boundaries and to include any newly installed wells and collectors.
    i. Daily records of the number of site trips made by heavy-duty vehicles by type of vehicle (transfer trucks, leachate trucks, scrapers, etc.)
    j. Daily records of the number of water truck rinses on paved and unpaved roads. Alternatively, the Permit Holder may maintain daily checklists instead of the records required by this subpart, provided the Permit Holder has received written approval from the District for the site's dust control plan, checklists, and implementation procedures.

VI. Permit Conditions

Condition # 17309
For S-1 KELLER CANYON LANDFILL – WASTE DECOMPOSITION PROCESS, ABATED BY:
A-1 LANDFILL GAS FLARE AND A-2 LANDFILL GAS FLARE
S-4 KELLER CANYON LANDFILL – WASTE AND COVER MATERIAL DUMPING; AND
S-5 KELLER CANYON LANDFILL – EXCAVATING, BULLDOZING, AND COMPACTING ACTIVITIES:

k. Records of all chemical dust suppressant applications including the date of treatment, length of roads treated, and amount of dust suppressant applied. Alternatively, the Permit Holder may maintain daily checklists instead of the records required by this subpart, provided the Permit Holder has received written approval from the District for the site's dust control plan, checklists, and implementation procedures.

l. Daily records of all water applications to the working face, cover soil stockpiles, or other areas including the number of times that water was applied and the amount of water applied. Alternatively, the Permit Holder may maintain daily checklists instead of the records required by this subpart, provided the Permit Holder has received written approval from the District for the site's dust control plan, checklists, and implementation procedures.

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

17. The annual report required by BAAQMD Regulation 8-34-411 shall be submitted in two semi-annual increments. The reporting periods and report submittal due dates for the semi-annual increments of the Regulation 8-34-411 report and the MSW Landfill NESHAP report shall be synchronized with the reporting periods and report submittal due dates for the semi-annual MFR Permit monitoring reports that are required by Section I.F of the MFR Permit for this site. A single report may be submitted to satisfy the requirements of Section I.F, Regulation 8-34-411, and 40 CFR Part 63.1980(a), provided that all items required by each applicable reporting requirement are included in the single report. (Basis: Regulation 8-34-411 and 40 CFR Part 63.1980(a))

18. Landfill Gas Collection System Design and Alteration Requirements:
The Permit Holder shall have a properly operated and properly maintained active landfill gas collection system at the S-1 Keller Canyon Landfill that complies with the design and alteration requirements listed below. (Basis: Regulations 2-1-301, 8-34-301.1, 8-34-303, 8-34-304, 40 CFR 60.755(a) and 60.759)

VI. Permit Conditions

Condition # 17309

For S-1 KELLER CANYON LANDFILL – WASTE DECOMPOSITION PROCESS, ABATED BY: A-1 LANDFILL GAS FLARE AND A-2 LANDFILL GAS FLARE
S-4 KELLER CANYON LANDFILL – WASTE AND COVER MATERIAL DUMPING; AND
S-5 KELLER CANYON LANDFILL – EXCAVATING, BULLDOZING, AND COMPACTING ACTIVITIES:

a. The Permit Holder has been issued a Permit to Operate for the landfill gas collection system components listed below. Well and collector locations, depths, and lengths of associated piping are as described in detail in Permit Application #28398. The authorized number of landfill gas collection system components is the baseline count listed below plus any components installed and minus any components permanently decommissioned pursuant to Part 18b, as evidenced by start-up and decommissioning notification letters submitted to the District.

i. The following components constitute the main landfill gas collection system as of12/14/2020.

Well Station	Vertical Wells
EW	175
ID	Horizontal Collectors
HC-2	1
HC-2001	1

ii. The following components have been installed to prevent or control landfill gas migration and are not part of the main landfill gas collection and control system.

	Horizontal Collectors
HC-3	1
	Other Components
LCRS-1	1
LCRS-2	1

b. The Permit Holder has been authorized to conduct the landfill gas collection system alterations listed below pursuant to Application #28398. All collection system alterations shall comply with subparts i-vii below. Components installed or decommissioned pursuant to Part 18b shall be added to or removed from Part 18a(i) in accordance with the procedures identified in Regulations 2-6-414 or 2-6-415.

i. As of 12/14/2020, the authorized collection system alterations left are:

- Install up to 22 vertical gas collection wells.
- Install up to 39 horizontal collectors.
- Permanently decommission up to 50 vertical wells.
- Permanently decommission up to 40 horizontal collectors.
- Unlimited replacement of vertical wells.

VI. Permit Conditions

Condition # 17309
For S-1 KELLER CANYON LANDFILL – WASTE DECOMPOSITION PROCESS, ABATED BY:
A-1 LANDFILL GAS FLARE AND A-2 LANDFILL GAS FLARE
S-4 KELLER CANYON LANDFILL – WASTE AND COVER MATERIAL DUMPING; AND
S-5 KELLER CANYON LANDFILL – EXCAVATING, BULLDOZING, AND COMPACTING ACTIVITIES:

ii. The Permit Holder shall apply for and receive a Change of Conditions from the District before implementing any changes to the landfill gas collection system described in Part 18a, other than those authorized by Part 18b. Installing, decommissioning, and relocating vertical wells and horizontal collectors are alterations that are subject to this requirement, unless this change constitutes a replacement as defined in subpart iii below.

iii. Replacement of landfill gas collection system components with identical or functionally equivalent components will not be deemed an alteration and will not subject to the Authority to Construct requirement under the following circumstances. If a well or collector will be shut down and replaced by a new well or collector in essentially the same location as the old component and this decommission/installation will be accomplished in accordance with Regulations 8-34-117 and 8-34-118, then this activity shall be considered a component replacement that is not subject to an Authority to Construct or Change of Conditions requirement. For each individual well or collector replacement, this subpart authorizes a maximum vacuum disconnection time of five consecutive days for compliance with Regulation 8-34-117.5. The disconnected component and the new component shall not be counted toward the Part 18b(i) component alteration limits; the numbers of replacement wells and replacement collectors are not limited. Alterations, repairs, or replacements of non-perforated piping sections (such as risers, laterals, or header pipes), piping connectors, or valves are not subject to the Authority to Construct requirement.

iv. At least three days prior to initiating operation of a well or collector installed pursuant to Part 18b, the Permit Holder shall submit a start-up notice to the District that contains the component ID number for each new well or collector and the anticipated initial start-up date for each new component.

VI. Permit Conditions

Condition # 17309
For S-1 KELLER CANYON LANDFILL – WASTE DECOMPOSITION PROCESS, ABATED BY:
A-1 LANDFILL GAS FLARE AND A-2 LANDFILL GAS FLARE
S-4 KELLER CANYON LANDFILL – WASTE AND COVER MATERIAL DUMPING; AND
S-5 KELLER CANYON LANDFILL – EXCAVATING, BULLDOZING, AND COMPACTING ACTIVITIES:

v. For each well or collector that is permanently decommissioned after April 16, 2007, the Permit Holder shall submit a decommissioning notice to the District within no later than three working days after the component was disconnected from vacuum system. This decommissioning notice shall contain the component ID for each well or collector that was decommissioned, the date and time that each component was disconnected from the vacuum system, and the reason the component was decommissioned.

vi. Within six months of installing a new component or permanently decommissioning an existing component, the Permit Holder shall prepare an updated map of the landfill gas collection system that identifies the ID numbers and locations of all operable wells and collectors. On this map or in accompanying documentation, the Permit Holder shall summarize all component changes that were made since the last map was prepared. The previous collection system map, the updated collection system map, and the component change summary shall be provided to District staff upon request.

vii. If the Permit Holder has a net reduction (number of decommissioned components minus the number of installed components) of more than five components within a 120-day period, the Permit Holder shall submit a more comprehensive decommissioning notice to the District. In addition to the information required by subpart v, this comprehensive decommissioning notice shall include the maps and documentation required by subpart vi, shall identify all component changes that have occurred but that are not included on the most recently updated map, shall identify any components that are temporarily disconnected from vacuum pursuant to Part 19c, shall provide estimated vacuum reconnection dates for these components, shall include a list of all well installations that are expected to occur within the next 120 days, and shall discuss the reasons why this reduction in gas collection components is not expected to result in surface emission leaks.

VI. Permit Conditions

Condition # 17309
For S-1 KELLER CANYON LANDFILL – WASTE DECOMPOSITION PROCESS, ABATED BY:
A-1 LANDFILL GAS FLARE AND A-2 LANDFILL GAS FLARE
S-4 KELLER CANYON LANDFILL – WASTE AND COVER MATERIAL DUMPING; AND
S-5 KELLER CANYON LANDFILL – EXCAVATING, BULLDOZING, AND COMPACTING ACTIVITIES:

Upon request, the Permit Holder shall provide wellhead monitoring data, surface leak monitoring data, records of repair attempts made to date, and other information to support the need for a net component reduction of more than five wells. The District may require additional surface monitoring to verify that this net component reduction is not causing landfill surface leaks. The District will notify the Permit Holder in writing of any additional surface monitoring that is required pursuant to this subpart.

19. Operating Requirements for Landfill Gas Collection System and Collection System Components:
    a. The landfill gas collection system described in Part 18a(i) shall be operated continuously. Each component that is subject to this continuous operation requirement shall not be shut off, disconnected, or removed from operation without prior written authorization from the District, unless the Permit Holder complies with Part 19c or with all applicable requirements of Regulation 8, Rule 34, Sections 113, 116, 117, and 118. (Basis: Regulation 8-34-301, 40 CFR 60.753(b and c) and 60.755(e))
        i. The components identified in Part 18a(ii) are not required to operate continuously and may be connected to or disconnected from the main vacuum system at the operator's discretion, provided the owner/operator either connects each component to the vacuum system at least once per quarter or inspects each component to determine if vacuum connection is necessary at least once each quarter. The operator shall record the date, time, and reason for each vacuum connection/disconnection event and for each inspection.
    b. Each landfill gas collection system component listed in Part 18a(i) shall be operated in compliance with the wellhead limits of Regulation 8-34-305, unless an alternative wellhead limit has been approved for that component, (as identified in subpart i below), and the Permit Holder complies with all of the additional requirements for that component, as identified in subparts ii-vii below. (Basis: Regulation 8-34-305)

VI. Permit Conditions

Condition # 17309

For S-1 KELLER CANYON LANDFILL – WASTE DECOMPOSITION PROCESS, ABATED BY:
A-1 LANDFILL GAS FLARE AND A-2 LANDFILL GAS FLARE
S-4 KELLER CANYON LANDFILL – WASTE AND COVER MATERIAL DUMPING; AND
S-5 KELLER CANYON LANDFILL – EXCAVATING, BULLDOZING, AND COMPACTING ACTIVITIES:

i. For each of the wells identified below, the Regulation 8-34-305.2 wellhead temperature shall not apply; and the landfill gas temperature at each wellhead listed below shall not exceed 150ºF. The wells that are subject to this alternative wellhead temperature limit are:

KCLEW-12A, KCLEW-148, KCLEW-14A, KCLEW-154, KCLEW-26A, KCLFEW-27, KCLFEW-34, KCLFEW-53, KCLFEW-54, KCLFEW-57, KCLFEW-68, KCLFEW-73

The nitrogen and oxygen concentration limits in Regulation 8-34-305.3 and 8-34-305.4 shall not apply to the landfill gas collection wells listed below, provided that the oxygen concentration in each of the following wells does not exceed 15% by volume.

E027R

ii. The Permit Holder shall demonstrate compliance with the alternative wellhead temperature and oxygen limit in subpart i by monitoring each wellhead for temperature and oxygen on a monthly basis, in accordance with the provisions of Regulations 8-34-501.8, 501.9 and 8-34-604.

iii. If the temperature of the landfill gas in any of the above wellheads exceeds 145ºF, the owner/operator shall investigate the possibility of a subsurface fire at the noncompliant wellhead by monitoring the CO concentration in the wellhead gases and by searching for smoke, smoldering odors, combustion residues, and other fire indicators in the wellhead and in the landfill area near the wellhead. Within 5 days of triggering a fire investigation, the owner/operator shall measure the CO concentration in the landfill gas at the noncompliant wellhead using a portable CO monitor, CO Draeger tube, or an EPA approved test method. CO monitoring shall continue according to the frequency specified below:

A. If the CO concentration is greater than 500 ppmv, the owner/operator shall immediately take all steps necessary to prevent or extinguish the subsurface fire, including

VI. Permit Conditions

Condition # 17309

For S-1 KELLER CANYON LANDFILL – WASTE DECOMPOSITION PROCESS, ABATED BY: A-1 LANDFILL GAS FLARE AND A-2 LANDFILL GAS FLARE
S-4 KELLER CANYON LANDFILL – WASTE AND COVER MATERIAL DUMPING; AND
S-5 KELLER CANYON LANDFILL – EXCAVATING, BULLDOZING, AND COMPACTING ACTIVITIES:

disconnecting the well from the vacuum system if necessary. If the well is not disconnected from the vacuum system or upon reconnecting the well to the vacuum system, the owner/ operator shall monitor the well for CO concentration, wellhead temperature, and other fire indicators on at least a weekly basis until CO concentration drops to 500 ppmv or less.

B. If the CO concentration is less than or equal to 500 ppmv but greater than 100 ppmv, the owner/operator shall monitor for CO concentration at least twice per month (not less than once every 15 days) until the CO concentration drops to 100 ppmv or less. Wellhead temperature and other fire indicators shall be evaluated at each of these semi-monthly monitoring events.

C. If the CO concentration is less than or equal to 100 ppmv, the owner/operator shall monitor for CO concentration on a monthly basis. CO monitoring may be discontinued if three consecutive CO measurements are 100 ppmv or less and the wellhead temperature during each of these three monitoring events is 145ºF or less. If a component has three or more CO measurements of 100 ppmv or less but the wellhead temperature was greater than 145ºF, the owner/operator must receive written approval from the District before discontinuing the monthly CO monitoring for that component.

iv. To demonstrate that the alternative wellhead oxygen limit in subpart i will not cause surface emission leaks, the Permit Holder shall conduct additional surface emission monitoring within a 15-meter vicinity of each component listed in subpart i at the specific locations discussed below. For each component in subpart i subject to the alternate wellhead oxygen limit, the Permit Holder shall maintain a map showing the location of the buried collection component and identifying the approximate radius of influence for the component. For each component in subpart i, the Permit Holder shall monitor for landfill surface emissions – in accordance with

VI. Permit Conditions

Condition # 17309
For S-1 KELLER CANYON LANDFILL – WASTE DECOMPOSITION PROCESS, ABATED BY:
A-1 LANDFILL GAS FLARE AND A-2 LANDFILL GAS FLARE
S-4 KELLER CANYON LANDFILL – WASTE AND COVER MATERIAL DUMPING; AND
S-5 KELLER CANYON LANDFILL – EXCAVATING, BULLDOZING, AND COMPACTING ACTIVITIES:

Regulations 8-34-506 and 8-34-607 – at three representative points on the landfill surface that are within the radius of influence of the component and that are not more than 15 meters from the surface location of the component. This additional surface emission monitoring shall be conducted on a monthly basis for a period of at least six consecutive months.

v. If no excesses of the Regulation 8-34-303 surface emission limit are detected within a 15-meter vicinity of a component for six consecutive months, the Permit Holder may discontinue the additional monthly surface emission monitoring in the vicinity of that component and shall continue with the routine quarterly surface emission monitoring requirements for that component.

vi. If one or more excesses of the Regulation 8-34-303 surface emission limit are detected within a 15-meter vicinity of a component during a six consecutive month period, the Permit Holder shall follow all applicable requirements for recording and reporting the excess and shall follow the Regulation 8-34-415 repair schedule for landfill surface leak excesses. The additional monthly surface emission monitoring in the vicinity of that component shall continue until either the no surface excess requirements of subpart v have been achieved or the repair and compliance restoration requirements of subpart vii have been satisfied.

vii. If excesses of the Regulation 8-34-303 surface emission limit are detected within a 15-meter vicinity of a component for three or more monitoring events during a six consecutive month period, the subpart i alternative wellhead oxygen limit shall be revoked for that component. The Permit Holder shall conduct all necessary repairs to the landfill gas collection well, to any piping associated with the well or the remote wellhead monitoring system, to valves, flanges, or other connectors, and to any test ports or other openings that are necessary to eliminate air intrusion into the well or the monitoring point, to prevent impairment of vacuum application or vacuum adjustment at the collection well, and to restore the

VI. Permit Conditions

Condition # 17309
For S-1 KELLER CANYON LANDFILL – WASTE DECOMPOSITION PROCESS, ABATED BY:
A-1 LANDFILL GAS FLARE AND A-2 LANDFILL GAS FLARE
S-4 KELLER CANYON LANDFILL – WASTE AND COVER MATERIAL DUMPING; AND
S-5 KELLER CANYON LANDFILL – EXCAVATING, BULLDOZING, AND COMPACTING ACTIVITIES:

collection well and associated monitoring point to proper function. The Permit Holder shall complete all of the above repairs and any necessary landfill surface repairs and shall restore compliance with the Regulation 8-34-303 surface emission limit (at each location where an excess of the surface limit was measured) and the Regulation 8-34-305.4 wellhead oxygen concentration limit by the earlier of the following dates: (a) within 120 days of the date that the first excess was discovered if the three excess events are discovered within a single quarterly period pursuant to the re-monitoring requirements of 8-34-415 or (b) within 60 days of detection of the third excess.

viii. All test dates, wellhead oxygen concentration data, any deviations from the subpart i limit, repair actions, repair dates, re-monitoring dates and results, and compliance restoration dates shall be recorded in a District approved log and made available to District staff upon request in accordance with Regulations 8-34-34-501.4, 8-34-501.9, and 8-34-414.

c. The Permit Holder may temporarily disconnect individual wells or collectors listed in Part 18a(i) from the vacuum system, provided that all requirements of this subpart are satisfied. (Basis: Regulation 8-34-404)

i. No more than five (5) landfill gas collection system components (wells or collectors) may be temporarily disconnected from the vacuum system at any one time pursuant to Part 19c.

ii. For each individual well or collector that is temporarily disconnected from the vacuum system pursuant to Part 19c, the total vacuum system disconnection time shall not exceed 120 days during any 12-month period.

iii. Collection system components that are disconnected from the vacuum system are not subject to wellhead limits (Regulation 8-34-305 or Part 19b) or to monthly wellhead monitoring requirements (Regulation 8-34-505) during this vacuum disconnection time.

iv. Wells or collectors that are temporarily disconnected from the vacuum system continue to be subject to the component leak limit (Regulation 8-34-301.2) and the quarterly leak testing requirement

VI. Permit Conditions

Condition # 17309
For S-1 KELLER CANYON LANDFILL – WASTE DECOMPOSITION PROCESS, ABATED BY:
A-1 LANDFILL GAS FLARE AND A-2 LANDFILL GAS FLARE
S-4 KELLER CANYON LANDFILL – WASTE AND COVER MATERIAL DUMPING; AND
S-5 KELLER CANYON LANDFILL – EXCAVATING, BULLDOZING, AND COMPACTING ACTIVITIES:

(Regulation 8-34-503) at all times. In addition, the Permit Holder shall conduct the following component leak monitoring at each component that has been disconnected from the vacuum system pursuant to Part 19c: test for component leaks using the procedures identified in Regulation 8-34-602 within 10 calendar days of disconnection from vacuum and again within 1 month of disconnection from vacuum. If a component leak is detected at the well, the Permit Holder shall take all steps necessary to reduce the leak below the applicable limit, including reconnecting the well to the vacuum system, if no other corrective action measures are successful within the time frames allowed by Rule 34.

v. For each temporary component disconnection event, the Permit Holder shall record each affected well ID number, all well disconnection dates and times, all well reconnection dates and times, all related monitoring dates and monitoring results in a District approved log. This log shall also include an explanation of why the temporary vacuum disconnection was necessary and shall describe all adjustments or repairs that were made in order to allow this well to operate continuously, to reduce leaks, or to achieve compliance with an applicable limit. All records shall be retained for a minimum of five years and shall be made available to District staff upon request.

20. All landfill gas collected by the gas collection system for S-1 shall be abated at all times by the on-site enclosed flares, A-1 or A-2 or shall be vented off-site to the Ameresco Keller Canyon LLC facility (Site # B7667) for gas processing and control. A sufficient amount of landfill gas shall be collected at all times to prevent violation of the applicable landfill surface leak limits. If only one off-site landfill gas fired engine is operating, at least one on-site flare (A-1 or A-2) must also be operating. If both off-site engines are operating, collected landfill gas may be vented to these off-site engines alone – without concurrent operation of either on-site flare – until January 1, 2013. Effective January 1, 2013 through December 31, 2020, collected gas shall be vented to either a minimum of: (a) one on-site

VI. Permit Conditions

Condition # 17309
For S-1 KELLER CANYON LANDFILL – WASTE DECOMPOSITION PROCESS, ABATED BY: A-1 LANDFILL GAS FLARE AND A-2 LANDFILL GAS FLARE
S-4 KELLER CANYON LANDFILL – WASTE AND COVER MATERIAL DUMPING; AND
S-5 KELLER CANYON LANDFILL – EXCAVATING, BULLDOZING, AND COMPACTING ACTIVITIES:

flare operating alone or (b) one on-site flare and two off-site engines operating concurrently. Effective January 1, 2021, collected landfill gas shall be vented to either a minimum of: (a) two on-site flares operating concurrently or (b) one on-site flare and two off-site engines operating concurrently. Under no circumstances shall raw landfill gas be vented to the atmosphere. This limitation does not apply to unavoidable landfill gas emissions that occur during collection system installation, maintenance, or repair performed in compliance with Regulation 8, Rule 34 Sections 113, 116, 117, or 118 or to inadvertent component or surface leaks that do not exceed the limits specified in 8-34-301.2 or 8-34-303. (Basis: Regulations 8-34-301, 8-34-303, 40 CFR 60.752(b)(2)(ii-iii), 60.753(d-f), and 60.755(e))

21. Each flare shall be operated continuously during any time that landfill gas is being vented to the flare. (Basis: Regulation 8-34-301, 40 CFR 60.752(b)(2)(iii), 60.753(e), and 60.755(e))

22. A temperature monitor with readout display and continuous recorder shall be installed and maintained on each flare. One or more thermocouples shall be placed in the primary combustion zone of the flare and shall accurately indicate flue gas temperature at all times. Temperature charts shall be retained for five years and made readily available to District Staff upon request. (Basis: Regulations 8-34-501 and 2-6-501 and 40 CFR 60.756(b))

23. The combustion zone temperature of the A-1 Flare shall be maintained at a minimum temperature of 1504 degrees F, averaged over any 3-hour period. The combustion zone temperature of the A-2 Flare shall be maintained at a minimum temperature of 1400 degrees F, averaged over any 3-hour period. If a source test demonstrates compliance with all applicable requirements at a different temperature, the APCO may revise these minimum temperature requirements in accordance with the procedures identified in Regulation 2-6-414 or 2-6-415 and the following criteria. The minimum combustion zone temperature for the flare shall be equal to the average combustion zone temperature determined during the most recent complying source test minus 50 degrees F, provided that the minimum combustion zone temperature is not less than 1400 degrees F. (Basis: Regulations 2-5-301 and 8-34-301, RACT, and 40 CFR 60.758(c)(1)(i))

VI. Permit Conditions

Condition # 17309
For S-1 KELLER CANYON LANDFILL – WASTE DECOMPOSITION PROCESS, ABATED BY:
A-1 LANDFILL GAS FLARE AND A-2 LANDFILL GAS FLARE
S-4 KELLER CANYON LANDFILL – WASTE AND COVER MATERIAL DUMPING; AND
S-5 KELLER CANYON LANDFILL – EXCAVATING, BULLDOZING, AND COMPACTING ACTIVITIES:

24. NOx emissions from either the A-1 Flare or the A-2 Flare shall not exceed 15 ppmv of NO_x, expressed as NO_2 at 15% oxygen on a dry basis. (Basis: RACT)

25. CO emissions from the A-1 Flare shall not exceed 114 ppmv of CO at 15% oxygen on a dry basis. CO emissions from the A-2 Flare shall not exceed 81 ppmv of CO at 15% oxygen on a dry basis. (Basis: RACT)

26. [deleted]

27. A flow meter to measure gas flow into each flare shall be installed prior to operation and maintained in good working condition. (Basis: Regulation 8-34-508 and 40 CFR 60.756(b))

28. Each flare shall be equipped with both local and remote alarms, automatic combustion air control, and automatic start/restart system. (Basis: Regulation 8-34-301)

29. [deleted]

30. In order to demonstrate compliance with Parts 24 and 25 above, Regulations 8-34-301.3 and 8-34-412, 40 CFR 60.8, and 40 CFR 60.752(b)(2)(iii)(B), the owner/operator shall conduct a source test at each flare once every year. The source tests shall be conducted no sooner than 9 months and no later than 12 months after the previous source test. The first source test for A-2 shall be conducted within 60 days of initial start-up of A-2. The Source Test Section of the District shall be contacted to obtain approval of the source test procedures at least 14 days in advance of each source test. The Source Test Section shall be notified of the scheduled test date at least 7 days in advance of each source test. The source test report shall be submitted to the Compliance and Enforcement Division and the Source Test Section within 60 days of the test date. Each annual source test shall determine the following:
    a. landfill gas flow rate to the flare (dry basis);
    b. concentrations (dry basis) of carbon dioxide (CO_2), nitrogen (N_2), oxygen (O_2), methane (CH_4), and total non-methane organic compounds (NMOC) in the landfill gas;

VI. Permit Conditions

Condition # 17309
For S-1 KELLER CANYON LANDFILL – WASTE DECOMPOSITION PROCESS, ABATED BY:
A-1 LANDFILL GAS FLARE AND A-2 LANDFILL GAS FLARE
S-4 KELLER CANYON LANDFILL – WASTE AND COVER MATERIAL DUMPING; AND
S-5 KELLER CANYON LANDFILL – EXCAVATING, BULLDOZING, AND COMPACTING ACTIVITIES:

c. stack gas flow rate from the flare (dry basis);
d. concentrations (dry basis) of NO_x, CO, NMOC, and O_2 in the flare stack gas;
e. NMOC destruction efficiency achieved by the flare;
f. NO_x and CO emission rates from the flare in units of pounds per MM BTU,
g. average combustion zone temperature in the flare during the test period.

(Basis: Regulation 8-34-301.3, RACT, 40 CFR 60.752(b)(2)(iii))

31. The Permit Holder shall conduct a characterization of the landfill gas concurrent with the annual source test required by Part 30 above. The landfill gas sample shall be drawn from the main landfill gas header. In addition to the compounds listed in Part 30b, the landfill gas shall be analyzed for the organic and sulfur compounds listed below. All concentrations shall be reported on a dry basis. The sulfur compound data collected pursuant to this part may be used to determine the total reduced sulfur compound concentration expressed as H2S (TRS) and the ratio (R) of total reduced sulfur content versus hydrogen sulfide content, where R=TRS/H2S. This ratio (R) may be used in Part 34 below (in place of the default value of R=1.2) to calculate TRS based on H2S measured by the Draeger tube method. The test report shall be submitted to the Compliance and Enforcement Division and the Source Test Section within 60 days of the test date. (Basis: Air Toxics Hot Spots Act, Regulations 2-5-501, 8-34-301, and 9-1-302, and 40 CFR 60.754(d))

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

VI. Permit Conditions

Condition # 17309

For S-1 KELLER CANYON LANDFILL – WASTE DECOMPOSITION PROCESS, ABATED BY:
A-1 LANDFILL GAS FLARE AND A-2 LANDFILL GAS FLARE
S-4 KELLER CANYON LANDFILL – WASTE AND COVER MATERIAL DUMPING; AND
S-5 KELLER CANYON LANDFILL – EXCAVATING, BULLDOZING, AND COMPACTING ACTIVITIES:

*32. The owner/operator shall ensure that fugitive toxic air contaminant (TAC) emissions from S-1 do not exceed any of the emission rates listed below. The owner/operator shall demonstrate compliance with these emission rate limits by using the following procedures. (Basis: Air Toxics Hot Spots Act and Regulation 2-5-302)

a. The owner/operator shall compare the concentration measured for each TAC, pursuant to the Part 31 landfill gas characterization analysis, to the concentration limit listed below. Compliance with the TAC concentration limits shall demonstrate compliance with the associated fugitive TAC emission rate limit.

b. If the concentration of a TAC exceeds the concentration limit listed below, this excess shall be deemed to be a violation of this permit condition, unless the owner/operator satisfies the following requirement. The owner/operator shall, within 30 days of receiving test results showing an excess of a TAC concentration limit below, submit documentation to the District that demonstrates - to the District's satisfaction - that the higher measured concentration level has not resulted in an excess of the associated annual fugitive emission rate limit using District-approved calculation procedures.

Compound	Concentration (ppbv)	Fugitive Emissions pounds/year
Acrylonitrile	500	60
Benzene	20,000	3557
Carbon Tetrachloride	100	35
Chloroform	100	27
Ethylene Dibromide	100	40
Ethylene Dichloride	750	169
Methylene Chloride	7,600	1470
Perchloroethylene	3,300	1246
Trichloroethylene	1,500	449
Vinyl Chloride	1,700	242

VI. Permit Conditions

Condition # 17309

For S-1 KELLER CANYON LANDFILL – WASTE DECOMPOSITION PROCESS, ABATED BY:
A-1 LANDFILL GAS FLARE AND A-2 LANDFILL GAS FLARE
S-4 KELLER CANYON LANDFILL – WASTE AND COVER MATERIAL DUMPING; AND
S-5 KELLER CANYON LANDFILL – EXCAVATING, BULLDOZING, AND COMPACTING ACTIVITIES:

33. The fugitive emissions of Precursor Organic Compounds (POC) from the S-1 Landfill shall not exceed 112.828 tons per year (expressed as methane). Fugitive POC emissions from the landfill shall be determined using the procedures and assumptions described in Parts 33a-f below. POC emissions from the landfill shall be calculated at least once every five years or whenever the capacity of the landfill gas emissions control system, A-1 and A-2 Flares, is expanded, whichever is sooner. (Basis: Offsets)
    a. The current methane generation rate and uncontrolled POC emissions from the S-1 Landfill shall be calculated using the equations described in the most recent revision of AP-42 Chapter 2.4.
    b. The methane generation rate shall be based on the total amount of waste accepted at the landfill to date. The Permit Holder may use either average annual or year-to-year waste acceptance rates.
    c. The Permit Holder shall use the AP-42 recommended default values for the methane generation potential and methane generation rate constant. As of April 1, 2005, these default values were:
    Lo = 100 m^3 CH_4/Mg and k = 0.02 year^-1.
    d. When calculating uncontrolled POC emissions (UEPOC, pounds/year of POC), the Permit Holder shall use site-specific NMOC, NPOC, and methane concentrations (after correcting for air infiltration) and the site-specific landfill gas temperature. The site-specific values shall be the average of at least three previous years of data collected pursuant to Part 31 above.
    e. Total non-methane organic compounds (NMOC) measured in the landfill gas pursuant to Part 31 may be assumed to be 100% POC, or a site specific POC concentration (CPOC) can be calculated using data from Part 33d above, where CPOC = NMOC – NPOC (all concentrations expressed as methane).
    f. The fugitive POC emissions from the landfill (FEPOC, pounds/year of POC) shall be calculated using the equation below:
    FEPOC = 0.25 * UEPOC

VI. Permit Conditions

Condition # 17309
For S-1 KELLER CANYON LANDFILL – WASTE DECOMPOSITION PROCESS, ABATED BY:
A-1 LANDFILL GAS FLARE AND A-2 LANDFILL GAS FLARE
S-4 KELLER CANYON LANDFILL – WASTE AND COVER MATERIAL DUMPING; AND
S-5 KELLER CANYON LANDFILL – EXCAVATING, BULLDOZING, AND COMPACTING ACTIVITIES:

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

35. The heat input to the flares shall not exceed the following limits: (a) 1744.8 million BTU per day and 636,852 million BTU per year for A-1 and (b) 1824 million BTU per day and 665,760 million BTU per year for A-2. In order to demonstrate compliance with this part, the Permit Holder shall calculate and record on a monthly basis the maximum daily and total monthly heat input to each flare based on the landfill gas flow rate recorded pursuant to Part 27, the average methane concentration in the landfill gas based on the most recent source test, and a high heating value for methane of 1013 BTU/scf. The records shall be retained for five years and shall be made available to the District staff upon request. (Basis: Offsets, Cumulative Increase, and Regulation 2-1-301)

VI. Permit Conditions

Condition # 17309
For S-1 KELLER CANYON LANDFILL – WASTE DECOMPOSITION PROCESS, ABATED BY:
A-1 LANDFILL GAS FLARE AND A-2 LANDFILL GAS FLARE
S-4 KELLER CANYON LANDFILL – WASTE AND COVER MATERIAL DUMPING; AND
S-5 KELLER CANYON LANDFILL – EXCAVATING, BULLDOZING, AND COMPACTING ACTIVITIES:

36. The Permit Holder shall limit the quantity of VOC soil handled per day so that no more than 15 pounds of total carbon could be emitted to the atmosphere per day. VOC soil is any soil that contains volatile organic compounds, as defined in Regulation 8-40-213, at a concentration of 50 ppmw or less. Soil containing more than 50 ppmw of VOC is considered to be "contaminated soil" and is subject to Part 37 instead of Part 36. Soil containing only non-volatile hydrocarbons and meeting the requirements of Regulation 8-40-113 is not subject to Part 36. In order to demonstrate compliance with this condition, the Permit Holder shall maintain the following records in a District approved log.
    a. Record on a daily basis the amount of VOC soil handled at the landfill. This total amount (in units of pounds per day) is Q in the equation in subpart c below.
    b. Record on a daily basis the VOC content of all soils handled at the landfill. This VOC Content (C in the equation below) should be expressed as parts per million by weight as total carbon (or C_1).
    c. Calculate and record on a daily basis the VOC Emission Rate (E) using the following equation:
    E = Q * C / 1E6
    All records shall be maintained on site or shall be made readily available to District staff upon request for at least 5 years from the date of entry. (Basis: Regulation 8-2-301)

37. Handling Procedures for Soil Containing Volatile Organic Compounds (Basis: Regulations 2-1-403, 8-40-301, 8-40-304 and 8-40-305)
    a. The procedures listed below in subparts b-l do not apply if the following criteria are satisfied. However, the record keeping requirements in subpart m below are applicable.
        i. The Permit Holder has appropriate documentation demonstrating that either the organic content of the soil or the organic concentration above the soil is below the "contaminated" level (as defined in Regulation 8, Rule 40, Sections 205, 207, and 211). The handling of soil containing VOCs in concentrations below the "contaminated" level is subject to Part 36 above.
        ii. The Permit Holder has no documentation to prove that soil is not contaminated, but source of the soil is known and there is no reason to suspect that the soil might contain organic compounds.

VI. Permit Conditions

Condition # 17309
For S-1 KELLER CANYON LANDFILL – WASTE DECOMPOSITION PROCESS, ABATED BY:
A-1 LANDFILL GAS FLARE AND A-2 LANDFILL GAS FLARE
S-4 KELLER CANYON LANDFILL – WASTE AND COVER MATERIAL DUMPING; AND
S-5 KELLER CANYON LANDFILL – EXCAVATING, BULLDOZING, AND COMPACTING ACTIVITIES:

b. The Permit Holder shall provide notification to the Compliance and Enforcement Division of the Permit Holder's intention to accept contaminated soil at the facility at least 24 hours in advance of receiving the contaminated soil. The Permit Holder shall provide an estimate of the amount of contaminated soil to be received, the degree of contamination (range and average VOC Content), and the type or source of contamination.

c. Any soil received at the facility that is known or suspected to contain volatile organic compounds (VOCs) shall be handled as if the soil were contaminated, unless the Permit Holder receives test results proving that the soil is not contaminated. To prove that the soil is not contaminated, the Permit Holder shall collect soil samples in accordance with Regulation 8-40-601 within 24 hours of receipt of the soil by the facility. The organic content of the collected soil samples shall be determined in accordance with Regulation 8-40-602.
    i. If these test results indicate that the soil is still contaminated or if the soil was not sampled within 24 hours of receipt by the facility, the Permit Holder must continue to handle the soil in accordance with the procedures subparts d-l below, until the soil has completed treatment or has been placed in a final disposal location and adequately covered. Storing soil in a temporary stockpile or pit is not considered treatment. Co-mingling, blending, or mixing of soil lots is not considered treatment.
    ii. If these test results indicate that the soil – as received at the facility – has an organic content of 50 ppmw or less, then the soil may be considered to be not contaminated and need not be handled in accordance with the procedures listed in subparts d-l below, but shall be handled in accordance with Part 36 above.

d. Any contaminated soil received at the facility shall be clearly identified as contaminated soil, shall be handled in accordance with subparts e-l below, and shall be segregated from non-contaminated soil. Contaminated soil lots may not be co-mingled, blended, or otherwise mixed with non-contaminated soil lots prior to treatment, reuse, or disposal. Mixing soil lots in an attempt to reduce the overall concentration of the contaminated soil or to circumvent any requirements or limits is strictly prohibited.

VI. Permit Conditions

Condition # 17309
For S-1 KELLER CANYON LANDFILL – WASTE DECOMPOSITION PROCESS, ABATED BY:
A-1 LANDFILL GAS FLARE AND A-2 LANDFILL GAS FLARE
S-4 KELLER CANYON LANDFILL – WASTE AND COVER MATERIAL DUMPING; AND
S-5 KELLER CANYON LANDFILL – EXCAVATING, BULLDOZING, AND COMPACTING ACTIVITIES:

e. On-site handling of contaminated soil shall be limited to no more than 2 on-site transfers per soil lot. For instance, unloading soil from off-site transport vehicles into a temporary storage pile is considered one transfer. Moving soil from a temporary storage to a staging area is considered one transfer. Moving soil from a temporary storage pile to a final disposal site is considered one transfer. Moving soil from a staging area to a final disposal site is considered one transfer. Therefore, unloading soil from off-site transport into a temporary storage pile and then moving the soil from that temporary storage pile to the final disposal site is allowed. Unloading soil from off-site transport into a staging area and then moving the soil from that staging area to the final disposal site would be allowed. However, unloading soil from off-site transport to a temporary storage pile, moving this soil to a staging area, and then moving the soil again to a final disposal site would be 3 on-site transfers and is not allowed.

f. If the contaminated soil has an organic content of less than 500 ppmw, the contaminated soil shall be either treated or deposited in a final disposal site or transported off-site for treatment, within 90 days of receipt at the facility.

g. If the contaminated soil has an organic content 500 ppmw or more, the contaminated soil shall be either treated or deposited in a final disposal site or transported off-site for treatment, within 45 days of receipt at the facility.

h. All active storage piles shall meet the requirements of Regulation 8-40-304 by using water sprays, vapor suppressants or approved coverings to minimize emissions. The exposed surface area of any active storage pile (including the active face at a landfill) shall be limited to 6000 ft^2. The types of storage piles that may become subject to these provisions include (but are not limited to) truck unloading areas, staging areas, temporary stockpiles, soil on conveyors, bulldozers or trucks, the active face of a landfill, or other permanent storage pile at the final disposal location.

VI. Permit Conditions

Condition # 17309
For S-1 KELLER CANYON LANDFILL – WASTE DECOMPOSITION PROCESS, ABATED BY:
A-1 LANDFILL GAS FLARE AND A-2 LANDFILL GAS FLARE
S-4 KELLER CANYON LANDFILL – WASTE AND COVER MATERIAL DUMPING; AND
S-5 KELLER CANYON LANDFILL – EXCAVATING, BULLDOZING, AND COMPACTING ACTIVITIES:

i. All inactive storage piles shall meet the requirements of Regulation 8-40-305 including the requirement to cover contaminated soil during periods of inactivity longer than one hour. The types of storage piles that may become subject to these provisions include (but are not limited to) soil on trucks or other on-site equipment, staging areas, temporary stockpiles, and the permanent storage pile at the final disposal location. District approved coverings for inactive storage piles include continuous heavy-duty plastic sheeting (in good condition, joined at the seams, and securely anchored) or encapsulating vapor suppressants (with re-treatment as necessary to prevent emissions).

j. The Permit Holder must:
   i. Keep contaminated soil covered with continuous heavy-duty plastic sheeting (in good condition, joined at the seams, and securely anchored) whenever soil is to be stored in temporary stockpiles or during on-site transport in trucks. Soil in trucks shall not be left uncovered for more than 1 hour.
   ii. Establish a tipping area for contaminated soils near the active face that is isolated from the tipping area for other wastes.
   iii. Spray contaminated soil with water or vapor suppressant immediately after dumping the soil from a truck at the tipping area.
   iv. Ensure that all contaminated soil is transferred from the tipping area to the active face immediately after spraying with water or vapor suppressant.
   v. Ensure that contaminated soil in the tipping area is not disturbed by subsequent trucks. Trucks shall not drive over contaminated soil in the tipping area or track contaminated soil out of the tipping area on their wheels.
   vi. Spray contaminated soil on the active face with water or vapor suppressant (to keep the soil visibly moist) until the soil can be covered with an approved covering.
   vii. Limit the area of exposed soil on the active face to no more than 6000 ft^2.

VI. Permit Conditions

Condition # 17309

For S-1 KELLER CANYON LANDFILL – WASTE DECOMPOSITION PROCESS, ABATED BY:
A-1 LANDFILL GAS FLARE AND A-2 LANDFILL GAS FLARE
S-4 KELLER CANYON LANDFILL – WASTE AND COVER MATERIAL DUMPING; AND
S-5 KELLER CANYON LANDFILL – EXCAVATING, BULLDOZING, AND COMPACTING ACTIVITIES:

viii. Ensure that contaminated soil spread on the active face is completely covered on all sides with one of the following approved coverings: at least 6 inches of clean compacted soil, at least 12 inches of compacted garbage, or at least 12 inches of compacted green waste.

ix. Ensure that covering of soil on the active face is completed within one hour of the time that the soil was first dumped from a truck at the tipping area.

k. Contaminated soil shall not be used as daily, intermediate, or final cover material for landfill waste operations unless the requirements of Regulation 8, Rule 40, Sections 116 or 117 have been satisfied.

l. Contaminated soil is considered to be a decomposable solid waste pursuant to Regulation 8, Rule 34. All contaminated soil disposed of at a site shall be included in any calculations of the amount of decomposable waste in place for annual reporting requirements or for purposes of 8-34-111 or 8-34-304.

m. The Permit Holder shall keep the following records for each lot of soil received, in order to demonstrate on-going compliance with the applicable provisions of Regulation 8, Rule 40.

i. For all soil received by the facility (including soil with no known contamination), record the arrival date at the facility, the soil lot number, the amount of soil in the lot, the organic content or organic concentration of the lot (if known), the type of contamination (if any), and keep copies of any test data or other information that documents whether the soil is contaminated (as defined in 8-40-205) or not contaminated, with what, and by how much.

ii. If the soil is tested for organic content after receipt by the facility, a report with the sampling date, test results, and the date results were received.

iii. For all on-site handling of contaminated soil, use a checklist or other approved method to demonstrate that appropriate procedures were followed during all on-site handling activities. One checklist shall be completed for each day and for each soil lot (if multiple lots are handled per day).

VI. Permit Conditions

Condition # 17309
For S-1 KELLER CANYON LANDFILL – WASTE DECOMPOSITION PROCESS, ABATED BY:
A-1 LANDFILL GAS FLARE AND A-2 LANDFILL GAS FLARE
S-4 KELLER CANYON LANDFILL – WASTE AND COVER MATERIAL DUMPING; AND
S-5 KELLER CANYON LANDFILL – EXCAVATING, BULLDOZING, AND COMPACTING ACTIVITIES:

iv. For soil aerated in accordance with 8-40-116 or 117 record the soil lot number, the amount of soil in the lot, the organic content, the final placement date, the final placement location, and describe how the soil was handled or used on-site.

v. For final disposal at a landfill, record on a daily basis the soil lot number, the amount of soil placed in the landfill, the disposal date, and the disposal location.

All records shall be retained for at least 5 years from the date of entry and shall be made available for District inspection upon request.

38. The Permit Holder shall not cause trackout onto an adjacent paved public roadway or shoulder of the roadway any more than 25 linear feet. The trackout shall be cleaned within 4 hours without causing more than 1 quart of trackout to remain at the end of a workday. Cleanup of trackout shall not create fugitive visible emissions greater than 20% opacity.
(Basis: Regulation 6-6-301, Regulation 6-6-302)

VII. APPLICABLE LIMITS AND COMPLIANCE MONITORING REQUIREMENTS

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

This section is only a summary of the limits and monitoring requirements. In the case of a conflict with any requirement in Sections I-VI, the preceding sections take precedence over Section VII.

Table VII – A
Applicable Limits and Compliance Monitoring Requirements
S-1 KELLER CANYON LANDFILL – WASTE DECOMPOSITION PROCESS;
ABATED BY: A-1 LANDFILL GAS FLARE AND A-2 LANDFILL GAS FLARE;
S-4 KELLER CANYON LANDFILL – WASTE AND COVER MATERIAL DUMPING; AND
S-5 KELLER CANYON LANDFILL – EXCAVATING, BULLDOZING, AND COMPACTING ACTIVITIES

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 8-34-304.1	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 # 17309, Part 16d-h	P/E	Records

VII. Applicable Limits and Compliance Monitoring Requirements

Table VII – A
Applicable Limits and Compliance Monitoring Requirements
S-1 KELLER CANYON LANDFILL – WASTE DECOMPOSITION PROCESS; ABATED BY: A-1 LANDFILL GAS FLARE AND A-2 LANDFILL GAS FLARE; S-4 KELLER CANYON LANDFILL – WASTE AND COVER MATERIAL DUMPING; AND S-5 KELLER CANYON LANDFILL – EXCAVATING, BULLDOZING, AND COMPACTING ACTIVITIES

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 and BAAQMD Condition # 17309, Part 18b	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 # 17309, Part 16d-h	P/E	Records
Collection System Installa-tion Dates	BAAQMD 8-34-304.3 and BAAQMD Condition # 17309, Part 18b	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 # 17309, Part 16d-h	P/E	Records
Collection System Installa-tion Dates	40 CFR 60.753 (a)(2) and 60.755 (b)(2)	Y		For Inactive/Closed Areas: collection system components must be installed and operating by 2 years + 60 days after initial waste placement	40 CFR 60.758(a), (d)(1) and (d)(2), and 60.759(a)(3)	P/E	Records

VII. Applicable Limits and Compliance Monitoring Requirements

Table VII – A
Applicable Limits and Compliance Monitoring Requirements
S-1 KELLER CANYON LANDFILL – WASTE DECOMPOSITION PROCESS; ABATED BY: A-1 LANDFILL GAS FLARE AND A-2 LANDFILL GAS FLARE; S-4 KELLER CANYON LANDFILL – WASTE AND COVER MATERIAL DUMPING; AND S-5 KELLER CANYON LANDFILL – EXCAVATING, BULLDOZING, AND COMPACTING ACTIVITIES

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	40 CFR 60.753 (a)(1) and 60.755 (b)(1)	Y		For Active Areas: Collection system components must be installed and operating by 5 years + 60 days after initial waste placement	40 CFR 60.758(a), (d)(1) and (d)(2)	P/E	Records
Gas Flow	BAAQMD 8-34-301 and 301.1 and BAAQMD Condition # 17309, Parts 19, 20, 21	Y		Landfill gas collection system shall operate continuously, all collected gases shall be vented to a properly operating control system, and control system shall operate continuously	BAAQMD 8-34-501.10 and 508 and BAAQMD Condition # 17309, Parts 27 and 28	C	Gas Flow Meter and Recorder (every 15 minutes), Records and Alarms
Gas Flow	40 CFR 60.752 (b)(2)(iii) and 40 CFR 60.753(a) and (e)	Y		Operate a collection system in each area or cell, vent all collected gases to a properly operating control system, and operate control system at all times when gas is vented to it	40 CFR 60.756(b)(2) (i or ii) and 60.758(c)(2)	C or P/M	Gas Flow Meter and Recorder (every 15 minutes) or Monthly Inspection of Bypass Valve and Lock and Records

VII. Applicable Limits and Compliance Monitoring Requirements

Table VII – A
Applicable Limits and Compliance Monitoring Requirements
S-1 KELLER CANYON LANDFILL – WASTE DECOMPOSITION PROCESS; ABATED BY: A-1 LANDFILL GAS FLARE AND A-2 LANDFILL GAS FLARE; S-4 KELLER CANYON LANDFILL – WASTE AND COVER MATERIAL DUMPING; AND S-5 KELLER CANYON LANDFILL – EXCAVATING, BULLDOZING, AND COMPACTING ACTIVITIES

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	CARB LMR 95464(b)(1)	Y		Route all collected gases to a properly operating control system, and operate control system at all times so that no gas leak exceed 500 ppmv as methane	CARB LMR 95469(b)(1)(B)	C	Gas Flow Meter and Recorder (every 15 minutes)
Collection and Control Systems Shutdown Time	BAAQMD 8-34-113.2	Y		For Collection and Control Systems: $\leq$ 240 hours/year and $\leq$ 5 consecutive days	BAAQMD 8-34-501.1 and 501.2	P/D	Operating Records (all occurrences and duration of each)
Collection and Control Systems Startup Shutdown or Malfunc-tion	40 CFR 60.755(e)	Y		For Collection System: $\leq$ 5 days per event and For Control System: $\leq$ 1 hour per event	40 CFR 60.7(b), 60.757(f)(2-4)	P/D	Operating Records (all occurrences and duration of each)
Collection and Control Systems Shutdown Time	CARB LMR 95464(a)(1)(D) and 95464(e)	Y		For Collection System: $\leq$ 5 days per event and For Control System: $\leq$ 1 hour per event	CARB LMR 95470(a)(1)(A-B)	P/E	Operating Records (all occurrences and duration of each)

VII. Applicable Limits and Compliance Monitoring Requirements

Table VII – A
Applicable Limits and Compliance Monitoring Requirements
S-1 KELLER CANYON LANDFILL – WASTE DECOMPOSITION PROCESS; ABATED BY: A-1 LANDFILL GAS FLARE AND A-2 LANDFILL GAS FLARE; S-4 KELLER CANYON LANDFILL – WASTE AND COVER MATERIAL DUMPING; AND S-5 KELLER CANYON LANDFILL – EXCAVATING, BULLDOZING, AND COMPACTING ACTIVITIES

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
Startup Shutdown or Malfunction 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)
Startup Shutdown or Malfunction Procedures	CARB LMR 95464(e)(1-2)	Y		Include any new components in Design Plan and minimize methane emissions	CARB LMR 95470(a)(1)(I)	P/E	Records of mitigation measures taken
Periods of Inoperation for Parametric Monitors	BAAQMD 1-523.2	Y		$\leq$ 15 consecutive days per incident and $\leq$ 30 calendar days per 12 month period	BAAQMD 1-523.4	P/D	Operating Records for All Parametric Monitors
Continuous Monitors	40 CFR 60.13(e)	Y		Requires Continuous Operation except for breakdowns, repairs, calibrations, and required span adjustments	40 CFR 60.7(b)	P/D	Operating Records for All Continuous Monitors
Wellhead Pressure	BAAQMD 8-34-305.1	Y		< 0 psig (Applies to all wells that are connected to the vacuum system)	BAAQMD 8-34-414, 501.9 and 505.1	P/M	Monthly Inspection and Records

VII. Applicable Limits and Compliance Monitoring Requirements

Table VII – A
Applicable Limits and Compliance Monitoring Requirements
S-1 KELLER CANYON LANDFILL – WASTE DECOMPOSITION PROCESS; ABATED BY: A-1 LANDFILL GAS FLARE AND A-2 LANDFILL GAS FLARE; S-4 KELLER CANYON LANDFILL – WASTE AND COVER MATERIAL DUMPING; AND S-5 KELLER CANYON LANDFILL – EXCAVATING, BULLDOZING, AND COMPACTING ACTIVITIES

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
Wellhead Pressure	40 CFR 60.753(b)	Y		< 0 psig (Applies to all wells that are connected to the vacuum system)	40 CFR 60.755(a)(3), 60.756(a)(1), and 60.758(c) and (e)	P/M	Monthly Inspection and Records
Wellhead Pressure	CARB LMR 95464(c)	Y		< 0 psig (Applies to all wells that are connected to the vacuum system)	CARB LMR 95469(c)	P/M	Monthly Inspection and Records
Temper-ature of Gas at Wellhead	BAAQMD 8-34-305.2 and BAAQMD Condition # 17309, Part 19	Y		< 55 ºC (Applies to all wells that are connected to the vacuum system), except for wells identified in Condition # 17309, Part 19(b)(i)	BAAQMD 8-34-414, 501.9 and 505.2 and BAAQMD Condition # 17309, Part 19	P/M, bimonthly or weekly	Monthly, or more frequent Inspection and Records
Temper-ature of Gas at Wellhead	40 CFR 60.753(c)	Y		< 55 ºC (Applies to all wells that are connected to the vacuum system)	40 CFR 60.755(a)(5), 60.756(a)(3), and 60.758(c) and (e)	P/M	Monthly Inspection and Records
Temperat ure of Gas at Wellhead	BAAQMD 8-34-305 and BAAQMD Condition 17309, Part 19	Y		<150 degrees F (Alternative wellhead temperature limit that applies only to wells specified in BAAQMD Condition #17309, Part 19(b)(i)	BAAQMD 8-34-414, 501.9, 505.2, and BAAQMD Condition #17309, Part 19	P/M, bimonthly, or weekly	Monthly or more frequent Inspection and Records

VII. Applicable Limits and Compliance Monitoring Requirements

Table VII – A
Applicable Limits and Compliance Monitoring Requirements
S-1 KELLER CANYON LANDFILL – WASTE DECOMPOSITION PROCESS; ABATED BY: A-1 LANDFILL GAS FLARE AND A-2 LANDFILL GAS FLARE; S-4 KELLER CANYON LANDFILL – WASTE AND COVER MATERIAL DUMPING; AND S-5 KELLER CANYON LANDFILL – EXCAVATING, BULLDOZING, AND COMPACTING ACTIVITIES

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 $O_2 < 5\%$ (Applies to all wells that are connected to the vacuum system, except for wells identified in Condition # 17309, Part 19b(i))	BAAQMD 8-34-414, 501.9 and 505.3 or 505.4	P/M	Monthly Inspection and Records
Gas Concen-trations at Wellhead	40 CFR 60.753(c)	Y		$N_2 < 20\%$ OR $O_2 < 5\%$ (Applies to all wells that are connected to the vacuum system, except for wells identified in Condition # 17309, Part 19b(i))	40 CFR 60.755(a)(5), 60.756(a)(2), and 60.758(c) and (e)	P/M	Monthly Inspection and Records
Gas Concen-trations at Wellhead	BAAQMD Condition # 17309, Part 19b(i)	Y		$O_2 \leq 15\%$ (Applies to wells identified in Condition # 17309, Part 19b(i) that are connected to the vacuum system)	BAAQMD Condition # 17309, Part 19b(ii and iii)	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		$\leq$ 24 hours per well	BAAQMD 8-34-116.5 and 501.1	P/D	Records

VII. Applicable Limits and Compliance Monitoring Requirements

Table VII – A
Applicable Limits and Compliance Monitoring Requirements
S-1 KELLER CANYON LANDFILL – WASTE DECOMPOSITION PROCESS; ABATED BY: A-1 LANDFILL GAS FLARE AND A-2 LANDFILL GAS FLARE; S-4 KELLER CANYON LANDFILL – WASTE AND COVER MATERIAL DUMPING; AND S-5 KELLER CANYON LANDFILL – EXCAVATING, BULLDOZING, AND COMPACTING ACTIVITIES

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		$\leq$ 24 hours per well or $\leq$ 5 days per well for component replacements	BAAQMD 8-34-117.6 and 501.1	P/D	Records
Well Shutdown Limits	BAAQMD Condition # 17309, Parts 19c (i and ii)	Y		For individual components that are temporarily disconnected from the vacuum system: $\leq$ 5 components disconnected at any one time and $\leq$ 120 days of vacuum disconnection time during any 12-month period for each individual component	BAAQMD Condition # 17309, Part 19c(v)	P/E	Records

VII. Applicable Limits and Compliance Monitoring Requirements

Table VII – A
Applicable Limits and Compliance Monitoring Requirements
S-1 KELLER CANYON LANDFILL – WASTE DECOMPOSITION PROCESS; ABATED BY: A-1 LANDFILL GAS FLARE AND A-2 LANDFILL GAS FLARE; S-4 KELLER CANYON LANDFILL – WASTE AND COVER MATERIAL DUMPING; AND S-5 KELLER CANYON LANDFILL – EXCAVATING, BULLDOZING, AND COMPACTING ACTIVITIES

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
TOC (Total Organic Com-pounds Plus Methane)	BAAQMD 8-34-301.2 and BAAQMD Condition # 17309, Part 19c(iv)	Y		Component Leak Limit: ≤ 1000 ppmv as methane	BAAQMD 8-34-501.6 and 503 and BAAQMD Condition # 17309, Part 19c(iv and v)	P/Q P/E	Quarterly Inspection of collection and control system components with OVA, Additional Inspection of Temporarily Disconnected Components, 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 with OVA of Surface, Various Reinspection Times for Leaking Areas, and Records

VII. Applicable Limits and Compliance Monitoring Requirements

Table VII – A
Applicable Limits and Compliance Monitoring Requirements
S-1 KELLER CANYON LANDFILL – WASTE DECOMPOSITION PROCESS; ABATED BY: A-1 LANDFILL GAS FLARE AND A-2 LANDFILL GAS FLARE; S-4 KELLER CANYON LANDFILL – WASTE AND COVER MATERIAL DUMPING; AND S-5 KELLER CANYON LANDFILL – EXCAVATING, BULLDOZING, AND COMPACTING ACTIVITIES

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 and BAAQMD Condition # 17309, Part 19b(iv)	Y		Surface Leak Limit: ≤ 500 ppmv as methane at 2 inches above surface (Applies to surface vicinity near wells identified in Condition # 17309, Part 19b(i) that are complying with an alternative wellhead oxygen standard instead of the 8-34-305.4 limit)	Condition # 17309, Part 19b(iv-vi)	P/M	Monthly Inspection with OVA of Surface (3 points within 15 m of well), Various Reinspection Times for Leaking Areas, and Records
TOC	40 CFR 60.753(d)	Y		Surface Leak Limit: ≤ 500 ppmv as methane at 5-10 cm from surface	40 CFR 60.755(c)(1), (4) and (5), 60.756(f), and 60.758(c) and (e)	P/M, Q and E	Monthly Visual Inspection of Cover, Quarterly Inspection with OVA of Surface, Various Reinspection Times for Leaking Areas, and Records
Methane	CARB LMR 95465(a)	Y		Surface Leak Limit: ≤ 500 ppmv as methane	CARB LMR 95469(a-b)	P/Q/E	Quarterly Monitoring, Various Reinspection Times for Leaking Areas, and Records

VII. Applicable Limits and Compliance Monitoring Requirements

Table VII – A
Applicable Limits and Compliance Monitoring Requirements
S-1 KELLER CANYON LANDFILL – WASTE DECOMPOSITION PROCESS; ABATED BY: A-1 LANDFILL GAS FLARE AND A-2 LANDFILL GAS FLARE; S-4 KELLER CANYON LANDFILL – WASTE AND COVER MATERIAL DUMPING; AND S-5 KELLER CANYON LANDFILL – EXCAVATING, BULLDOZING, AND COMPACTING ACTIVITIES

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 Com-pounds (NMOC)	BAAQMD 8-34-301.3	Y		For Flares: ≥ 98% removal by weight OR ≤ 30 ppmvd @ 3% O_2, expressed as methane	BAAQMD 8-34-412 and 8-34-501.4 and BAAQMD Condition # 17309, Parts 30 and 31	P/A	Initial and Annual Source Tests
NMOC	40 CFR 60.752(b)(2)(iii)(B)	Y		For Flares: ≥ 98% removal by weight OR ≤ 20 ppmvd @ 3% O_2, expressed as hexane	40 CFR 60.8 and 60.752(b)(2)(iii)(B) and 60.758 (b)(2)(ii)	P/E	Initial Source Test and Records
Methane	CARB LMR 95464(b)(2)(A)	Y		For Flares: ≥ 99% Methane removal by weight	CARB LMR 95469(b)(1)	C	Temperature Sensor and Recorder (continuous) and gas flow rate measuring device
Temper-ature of Combus-tion Zone (CT)	BAAQMD Condition # 17309, Part 23	Y		For A-1 Flare: CT ≥ 1504 °F (3-hour average) For A-2 Flare: CT ≥ 1400 °F (3-hour average)	BAAQMD 8-34-501.3 and 507, and BAAQMD Condition # 17309, Part 22	C	Temperature Sensor and Recorder (continuous)

VII. Applicable Limits and Compliance Monitoring Requirements

Table VII – A
Applicable Limits and Compliance Monitoring Requirements
S-1 KELLER CANYON LANDFILL – WASTE DECOMPOSITION PROCESS; ABATED BY: A-1 LANDFILL GAS FLARE AND A-2 LANDFILL GAS FLARE; S-4 KELLER CANYON LANDFILL – WASTE AND COVER MATERIAL DUMPING; AND S-5 KELLER CANYON LANDFILL – EXCAVATING, BULLDOZING, AND COMPACTING ACTIVITIES

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
Temper-ature of Combus-tion Zone (CT)	40 CFR 60.758 (c)(1)(i)	Y		For A-1 Flare: CT $\geq$ 1504 °F (3-hour average) from (CT $\geq$ CT_{PF} – 28 °C), where CT_{PF} is the average combustion temperature during the most recent complying performance test, CT_{PF} was 1554 °F during 10/13/04 test For A-2 Flare: CT will be determined during initial performance test	40 CFR 60.756(b)(1) and 60.758 (b)(2)(i)	C	Temperature Sensor and Recorder (measured every 15 minutes and averaged over performance test time period and 3-hours)
POC	BAAQMD Condition # 17309, Part 33	Y		$\leq$ 112.828 tons per year (fugitive POC from all landfill operations)	BAAQMD Condition # 17309, Part 33	P/E	Calculation Procedure (once every 5 years)
Total Carbon	BAAQMD 8-2-301	Y		$\leq$ 15 pounds/day or $\leq$ 300 ppm, dry basis only for aeration of or use as cover soil of soil containing $\leq$ 50 ppmw of volatile organic compounds	BAAQMD Condition # 17309, Part 36a-c	P/E	Records

VII. Applicable Limits and Compliance Monitoring Requirements

Table VII – A
Applicable Limits and Compliance Monitoring Requirements
S-1 KELLER CANYON LANDFILL – WASTE DECOMPOSITION PROCESS; ABATED BY: A-1 LANDFILL GAS FLARE AND A-2 LANDFILL GAS FLARE; S-4 KELLER CANYON LANDFILL – WASTE AND COVER MATERIAL DUMPING; AND S-5 KELLER CANYON LANDFILL – EXCAVATING, BULLDOZING, AND COMPACTING ACTIVITIES

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
Amount of Contaminated Soil Aerated or Used as Cover	BAAQMD 8-40-116.1	Y		< 1 cubic yard per project	BAAQMD Condition # 17309, Parts 36a-c and 37m	P/E	Records
Amount of Contaminated Soil Aerated or Used as Cover	BAAQMD 8-40-116.2	Y		≤ 8 cubic yards per project, provided organic content ≤ 500 ppmw and limited to 1 exempt project per 3 month period	BAAQMD 8-40-116.2 and BAAQMD Condition # 17309, Parts 36a-c and 37m	P/E	Records
Amount of Accidental Spillage	BAAQMD 8-40-117	Y		Soil Contaminated by Accidental Spillage of ≤ 5 gallons of Liquid Organic Compounds	None	N	NA
Total Aeration Project Emissions	BAAQMD 8-40-118	Y		≤ 150 pounds per project and toxic air contaminant emissions per year < BAAQMD Table 2-5-1 limits	BAAQMD Condition # 17309, Part 37m	P/E	Records
Amount of Contaminated Soil Aerated or Used as Cover	BAAQMD 8-40-301 and BAAQMD Condition # 17309, Part 37k	Y		Prohibited for Soil with Organic Content > 50 ppmw unless exempt per BAAQMD 8-40-116, 117, or 118	BAAQMD Condition # 17309, Parts 36a-c and 37m	P/E	Calculations and Records

VII. Applicable Limits and Compliance Monitoring Requirements

Table VII – A
Applicable Limits and Compliance Monitoring Requirements
S-1 KELLER CANYON LANDFILL – WASTE DECOMPOSITION PROCESS; ABATED BY: A-1 LANDFILL GAS FLARE AND A-2 LANDFILL GAS FLARE; S-4 KELLER CANYON LANDFILL – WASTE AND COVER MATERIAL DUMPING; AND S-5 KELLER CANYON LANDFILL – EXCAVATING, BULLDOZING, AND COMPACTING ACTIVITIES

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
Contaminated Soil Handling	BAAQMD Condition # 17309, Part 37e	Y		Limited to 2 on-site transfers per lot of contaminated soil	BAAQMD Condition # 17309, Part 37m	P/E	Records
Contaminated Soil On-Site Storage Time	BAAQMD Condition # 17309, Part 37f-g	Y		If organic content is: < 500 ppmw, storage time $\leq$ 90 days; If organic content is: $\geq$ 500 ppmw, storage time $\leq$ 45 days	BAAQMD Condition # 17309, Part 37m	P/E	Records
SO_2	BAAQMD 9-1-301	Y		Property Line Ground Level Limits: $\leq$ 0.5 ppm for 3 minutes, $\leq$ 0.25 ppm for 60 minutes, and $\leq$0.05 ppm for 24 hours	None	N	NA
SO_2	BAAQMD 9-1-302	Y		In Exhaust Gases From Flares: $\leq$ 300 ppm (dry)	BAAQMD Condition # 17309, Parts 31 and 34	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

VII. Applicable Limits and Compliance Monitoring Requirements

Table VII – A
Applicable Limits and Compliance Monitoring Requirements
S-1 KELLER CANYON LANDFILL – WASTE DECOMPOSITION PROCESS; ABATED BY: A-1 LANDFILL GAS FLARE AND A-2 LANDFILL GAS FLARE; S-4 KELLER CANYON LANDFILL – WASTE AND COVER MATERIAL DUMPING; AND S-5 KELLER CANYON LANDFILL – EXCAVATING, BULLDOZING, AND COMPACTING ACTIVITIES

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
Total Reduced Sulfur (TRS) Com-pounds	BAAQMD Condition # 17309, Part 34	Y		In Collected Landfill Gas: ≤ 300 ppmv (dry)	BAAQMD Condition # 17309, Parts 31 and 34	P/Q	Sulfur Analysis of Landfill Gas
Opacity	BAAQMD 6-1-301 and SIP 6-301	Y		For Landfill Operations: ≤ Ringelmann No. 1 for 3 minutes in any hour	BAAQMD Condition # 17309, Part 16j-l	P/D	Records of Water and Dust Suppressant Application
Opacity	BAAQMD 6-1-301 and SIP 6-301	Y		For Flares: ≤ Ringelmann No. 1 for 3 minutes in any hour	BAAQMD 8-34-501.3 and 507, and BAAQMD Condition # 17309, Part 22	C	Temperature Sensor and Recorder (continuous)
FP	BAAQMD 6-1-310 and SIP 6-310	Y		For Flares: ≤ 0.15 grains/dscf	None	N	NA
Operating Time	BAAQMD Condition # 17309, Part 1	Y		Monday through Friday	BAAQMD Condition # 17309, Parts 16a and 16i	P/D	Records of Waste Received and Truck Traffic
Waste Received	BAAQMD Condition # 17309, Part 2a	Y		≤ 3500 tons per day	BAAQMD Condition # 17309, Part 16a	P/D	Records of Waste Received

VII. Applicable Limits and Compliance Monitoring Requirements

Table VII – A
Applicable Limits and Compliance Monitoring Requirements
S-1 KELLER CANYON LANDFILL – WASTE DECOMPOSITION PROCESS; ABATED BY: A-1 LANDFILL GAS FLARE AND A-2 LANDFILL GAS FLARE; S-4 KELLER CANYON LANDFILL – WASTE AND COVER MATERIAL DUMPING; AND S-5 KELLER CANYON LANDFILL – EXCAVATING, BULLDOZING, AND COMPACTING ACTIVITIES

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
Cumula-tive Waste In-Place	BAAQMD Condition # 17309, Part 2b	Y		$\leq$ 38.4 million tons ($\leq$ 34.8 million Mg)	BAAQMD Condition # 17309, Part 16a	P/D	Records of Waste Placed in Landfill
Design Capacity	BAAQMD Condition # 17309, Part 2c	Y		$\leq$ 75 million yd^3 ($\leq$ 57.3 million m^3) of all wastes and cover materials (excluding final cover)	BAAQMD Condition # 17309, Parts 16a, 36a, and 37m	P/D	Records of Materials Placed in Landfill
Unpaved Road Length	BAAQMD Condition # 17309, Part 5a	Y		$\leq$ 3000 feet from cover stockpile to working face midpoint	BAAQMD Condition # 17309, Part 12	P/E	Site Maps
Unpaved Road Length	BAAQMD Condition # 17309, Part 5b	Y		$\leq$ 400 feet from end of main access road to working face midpoint	BAAQMD Condition # 17309, Part 12	P/E	Site Maps
Unpaved Road Length	BAAQMD Condition # 17309, Part 5c	Y		$\leq$ 750 feet from end of paved road to end of main access road (this section must have 12 inches of gravel or crushed asphalt)	BAAQMD Condition # 17309, Part 12	P/E	Site Maps
Unpaved Road Length	BAAQMD Condition # 17309, Part 5d	Y		< 1400 feet of fire access roads	BAAQMD Condition # 17309, Part 12	P/E	Site Maps
Vehicle Speed	BAAQMD Condition # 17309, Part 6	Y		$\leq$ 10 mph on unpaved roads and $\leq$ 25 mph on fire access roads	BAAQMD Condition # 17309, Part 6	P/E	Posted Signs and Enforcement if Necessary

VII. Applicable Limits and Compliance Monitoring Requirements

Table VII – A
Applicable Limits and Compliance Monitoring Requirements
S-1 KELLER CANYON LANDFILL – WASTE DECOMPOSITION PROCESS; ABATED BY: A-1 LANDFILL GAS FLARE AND A-2 LANDFILL GAS FLARE; S-4 KELLER CANYON LANDFILL – WASTE AND COVER MATERIAL DUMPING; AND S-5 KELLER CANYON LANDFILL – EXCAVATING, BULLDOZING, AND COMPACTING ACTIVITIES

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

VII. Applicable Limits and Compliance Monitoring Requirements

Table VII – A
Applicable Limits and Compliance Monitoring Requirements
S-1 KELLER CANYON LANDFILL – WASTE DECOMPOSITION PROCESS; ABATED BY: A-1 LANDFILL GAS FLARE AND A-2 LANDFILL GAS FLARE; S-4 KELLER CANYON LANDFILL – WASTE AND COVER MATERIAL DUMPING; AND S-5 KELLER CANYON LANDFILL – EXCAVATING, BULLDOZING, AND COMPACTING ACTIVITIES

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
Truck Traffic Volume	BAAQMD Condition # 17309, Part 11c	Y		≤ 45 scraper trips per annual average day	BAAQMD Condition # 17309, Part 16i	P/D	Records
Truck Traffic Trip Length	BAAQMD Condition # 17309, Part 12a	Y		≤ 7800 feet for transfer trucks	BAAQMD Condition # 17309, Part 12	P/E	Site Maps and Records
Truck Traffic Trip Length	BAAQMD Condition # 17309, Part 12b	Y		≤ 3600 feet for leachate trucks	BAAQMD Condition # 17309, Part 12	P/E	Site Maps and Records
Truck Traffic Trip Length	BAAQMD Condition # 17309, Part 12c	Y		≤ 3000 feet for scrapers	BAAQMD Condition # 17309, Part 12	P/E	Site Maps and Records
NO_x	BAAQMD Condition # 17309, Part 24	Y		For both A-1 Flare and A-2 Flare: ≤ 15 ppmv of NO_x, expressed as NO_2 at 15% O_2, dry	BAAQMD Condition # 17309, Part 30	P/A	Annual Source Test
CO	BAAQMD Condition # 17309, Part 25	Y		For A-1 Flare: ≤ 114 ppmv of CO at 15% O_2, dry For A-2 Flare: ≤ 81 ppmv of CO at 15% O_2, dry	BAAQMD Condition # 17309, Part 30	P/A	Annual Source Test
Acrylo-nitrile	BAAQMD Condition # 17309, Part 32	N		Concentration in Landfill Gas: ≤ 500 ppbv or Fugitive Emissions: ≤ 60 pounds/year	BAAQMD Condition # 17309, Part 31	P/A	Annual Laboratory Analysis

VII. Applicable Limits and Compliance Monitoring Requirements

Table VII – A
Applicable Limits and Compliance Monitoring Requirements
S-1 KELLER CANYON LANDFILL – WASTE DECOMPOSITION PROCESS; ABATED BY: A-1 LANDFILL GAS FLARE AND A-2 LANDFILL GAS FLARE; S-4 KELLER CANYON LANDFILL – WASTE AND COVER MATERIAL DUMPING; AND S-5 KELLER CANYON LANDFILL – EXCAVATING, BULLDOZING, AND COMPACTING ACTIVITIES

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
Benzene	BAAQMD Condition # 17309, Part 32	N		Concentration in Landfill Gas: ≤ 20,000 ppbv or Fugitive Emissions: ≤ 3557 pounds/year	BAAQMD Condition # 17309, Part 31	P/A	Annual Laboratory Analysis
Carbon Tetra-chloride	BAAQMD Condition # 17309, Part 32	N		Concentration in Landfill Gas: ≤ 100 ppbv or Fugitive Emissions: ≤ 35 pounds/year	BAAQMD Condition # 17309, Part 31	P/A	Annual Laboratory Analysis
Chloro-form	BAAQMD Condition # 17309, Part 32	N		Concentration in Landfill Gas: ≤ 100 ppbv or Fugitive Emissions: ≤ 27 pounds/year	BAAQMD Condition # 17309, Part 31	P/A	Annual Laboratory Analysis
Ethylene Di-bromide	BAAQMD Condition # 17309, Part 32	N		Concentration in Landfill Gas: ≤ 100 ppbv or Fugitive Emissions: ≤ 40 pounds/year	BAAQMD Condition # 17309, Part 31	P/A	Annual Laboratory Analysis
Ethylene Di-chloride	BAAQMD Condition # 17309, Part 32	N		Concentration in Landfill Gas: ≤ 750 ppbv or Fugitive Emissions: ≤ 169 pounds/year	BAAQMD Condition # 17309, Part 31	P/A	Annual Laboratory Analysis
Methyl-ene Chloride	BAAQMD Condition # 17309, Part 32	N		Concentration in Landfill Gas: ≤ 7,600 ppbv or Fugitive Emissions: ≤ 1470 pounds/year	BAAQMD Condition # 17309, Part 31	P/A	Annual Laboratory Analysis

VII. Applicable Limits and Compliance Monitoring Requirements

Table VII – A
Applicable Limits and Compliance Monitoring Requirements
S-1 KELLER CANYON LANDFILL – WASTE DECOMPOSITION PROCESS; ABATED BY: A-1 LANDFILL GAS FLARE AND A-2 LANDFILL GAS FLARE; S-4 KELLER CANYON LANDFILL – WASTE AND COVER MATERIAL DUMPING; AND S-5 KELLER CANYON LANDFILL – EXCAVATING, BULLDOZING, AND COMPACTING ACTIVITIES

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
Perchloro-ethylene	BAAQMD Condition # 17309, Part 32	N		Concentration in Landfill Gas: ≤ 3,300 ppbv or Fugitive Emissions: ≤ 1246 pounds/year	BAAQMD Condition # 17309, Part 31	P/A	Annual Laboratory Analysis
Trichloro-ethylene	BAAQMD Condition # 17309, Part 32	N		Concentration in Landfill Gas: ≤ 1,500 ppbv or Fugitive Emissions: ≤ 449 pounds/year	BAAQMD Condition # 17309, Part 31	P/A	Annual Laboratory Analysis
Vinyl Chloride	BAAQMD Condition # 17309, Part 32	N		Concentration in Landfill Gas: ≤ 1,700 ppbv or Fugitive Emissions: ≤ 242 pounds/year	BAAQMD Condition # 17309, Part 31	P/A	Annual Laboratory Analysis
Heat Input	BAAQMD Condition # 17309, Part 35	Y		For A-1 Flare: ≤ 1744.8 MM BTU per day and ≤ 636,852 MM BTU per year For A-2 Flare: ≤ 1824 MM BTU per day and ≤ 665,760 MM BTU per year	BAAQMD Condition # 17309, Part 35	P/M	Records

VII. Applicable Limits and Compliance Monitoring Requirements

Table VII – A
Applicable Limits and Compliance Monitoring Requirements
S-1 KELLER CANYON LANDFILL – WASTE DECOMPOSITION PROCESS; ABATED BY: A-1 LANDFILL GAS FLARE AND A-2 LANDFILL GAS FLARE; S-4 KELLER CANYON LANDFILL – WASTE AND COVER MATERIAL DUMPING; AND S-5 KELLER CANYON LANDFILL – EXCAVATING, BULLDOZING, AND COMPACTING ACTIVITIES

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
Trackout onto Paved Roadways	BAAQMD 6-6-301	N	7/1/19	Trackout causing visible emissions: < 25 linear feet for no more than 4 hours; and Trackout remaining on adjacent paved public roadway or paved shoulder: ≤ 1 quart at end of each workday	BAAQMD 6-6-501, BAAQMD Permit Condition #17309, Part 38	P/D	Records
Visible Emissions from Cleaning Trackout	BAAQMD 6-6-302	N	7/1/19	≤ Ringelmann No. 1 Limitation for no more than 3 minutes in any 60-minute period	BAAQMD 6-6-501, BAAQMD Permit Condition #17309, Part 38	P/D	Records

VII. Applicable Limits and Compliance Monitoring Requirements

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

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
Opacity	BAAQMD 6-1-301 and SIP 6-301	Y		≤ Ringelmann No. 1 for 3 minutes in any hour	BAAQMD Condition # 16462, Part 2	C	Visual Observation of Source in Operation
Waste Received	BAAQMD Condition # 16462, Part 1	Y		≤ 1,000 tons per day and ≤ 70,200 tons per 12-month period	BAAQMD Condition # 16462, Part 6a and b	P/E	Records of Amount of Waste Received
Waste Storage Time	BAAQMD Condition # 16462, Part 3	N		≤ 4 days from receipt of waste	BAAQMD Condition # 16462, Part 6a and c	P/E	Records of Date and Time for Waste Receipt and Processing
Odorous Stockpile Storage Time	BAAQMD Condition # 16462, Part 4	N		≤ 24 hours from the time the stockpile is deemed “odorous”	BAAQMD Condition # 16462, Part 6a and c	P/E	Records of Date and Time for Waste Receipt and Processing

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 included 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 6-1-301 and SIP 6-301	Ringelmann No. 1 Limitation	Manual of Procedures, Volume I, Evaluation of Visible Emissions or US EPA Reference Method 9, Visual Determination of the Opacity of Emissions from Stationary Sources
BAAQMD 6-1-310 and SIP 6-310	Particulate Weight Limitation	Manual of Procedures, Volume IV, ST-15, Particulates Sampling; or For Combustion Equipment: US EPA Reference Method 5 Determination of Particulate Matter Emissions from Stationary Sources
BAAQMD 8-2-301 and SIP 8-2-301	TOC Limit for Miscellaneous Operations	Manual of Procedures, Volume IV, ST-7, Organic Compounds; or US EPA Reference Method 25, Determination of Total Gaseous Nonmethane Organic Emissions as Carbon, or US EPA Reference Method 25A, Determination of Total Gaseous Organic Concentration Using a Flame Ionization Analyzer
BAAQMD 8-34-301.2	Collection and Control System Component Leak Limitation	US EPA Reference Method 21, Determination of Volatile Organic Compound Leaks
BAAQMD 8-34-301.3	NMOC Limits for Flares	Manual of Procedures, Volume IV, ST-7, Organic Compounds and ST-14, Oxygen, Continuous Sampling; or US EPA Reference Method 18, 25, 25A, or 25C
BAAQMD 8-34-303	Landfill Surface Leak Limit	US EPA Reference Method 21, Determination of Volatile Organic Compound Leaks
BAAQMD 8-34-305.1	Wellhead Gauge Pressure Limit	APCO Approved Device
BAAQMD 8-34-305.2	Wellhead Temperature Limit	APCO Approved Device
BAAQMD 8-34-305.3	Wellhead Nitrogen Limit	US EPA Reference Method 3C, Determination of Carbon Dioxide, Methane, Nitrogen, and Oxygen from Stationary Sources
BAAQMD 8-34-305.4	Wellhead Oxygen Limit	US 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 8-34-412	Compliance Demonstration Test	US 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 US EPA Reference Methods 8015B and 8021B
BAAQMD 8-40-301	Limits on Uncontrolled Aeration of Contaminated Soil	BAAQMD 8-40-601 and US 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
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	US EPA Reference Method 18, Measurement of Gaseous Organic Compound Emissions by Gas Chromatography, Method 25, Determination of Total Gaseous Nonmethane Organic Emissions as Carbon, Method 25A, Determination of Total Gaseous Organic Concentration Using a Flame Ionization Analyzer, or Method 25C, Determination of Nonmethane Organic Compounds (NMOC) in MSW Landfill Gases
40 CFR 60.752 (b)(2)(iii)(B)	NMOC Outlet Concentration and Destruction Efficiency Limits	US EPA Reference Method 18, Measurement of Gaseous Organic Compound Emissions by Gas Chromatography, Method 25, Determination of Total Gaseous Nonmethane Organic Emissions as Carbon, Method 25A, Determination of Total Gaseous Organic Concentration Using a Flame Ionization Analyzer, or Method 25C, Determination of Nonmethane Organic Compounds (NMOC) in MSW Landfill Gases
40 CFR 60.753(b)	Wellhead Pressure Limit	APCO Approved Device
40 CFR 60.753(c)	Temperature, N_2, and O_2 Concentration Limits in Wellhead Gas	US EPA Reference Method 3C, Determination of Carbon Dioxide, Methane, Nitrogen, and Oxygen from Stationary Sources
40 CFR 60.753(d)	Methane Limit at Landfill Surface	US EPA Reference Method 21, Determination of Volatile Organic Compound Leaks

VIII. Test Methods

Table VIII
Test Methods

Applicable Requirement	Description of Requirement	Acceptable Test Methods
CARB LMR 95464 (b)	Performance Tests	US 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
CARB LMR 95464(c)	Wellhead Pressure Limit	Hydrocarbon Detector - APCO Approved Device and meets US EPA Reference Method 21, Determination of Volatile Organic Compound Leaks
CARB LMR 95465(a)(1-2)	Methane Limit at Landfill Surface	US EPA Reference Method 21, Determination of Volatile Organic Compound Leaks
BAAQMD Condition # 17309, Part 19b(i)	Alternative Wellhead Oxygen Limit	US EPA Reference Method 3C, Determination of Carbon Dioxide, Methane, Nitrogen, and Oxygen from Stationary Sources
BAAQMD Condition # 17309, Part 19b(iv)	Landfill Surface Leak Limit in the Vicinity of Components Subject to Alternative Wellhead Standard	US EPA Reference Method 21, Determination of Volatile Organic Compound Leaks
BAAQMD Condition # 17309, Part 19c(iv)	Component Leak Limit for Temporarily Disconnected Components	US EPA Reference Method 21, Determination of Volatile Organic Compound Leaks
BAAQMD Condition # 17309, Part 23	Combustion Temperature Limits for Flares	APCO Approved Device
BAAQMD Condition # 17309, Part 24	NO_x Limit for Flares	Manual of Procedures, Volume IV, Oxides of Nitrogen, Continuous Sampling, and ST-14, Oxygen, Continuous Sampling; or US EPA Reference Method 20
BAAQMD Condition # 17309, Part 25	CO Limit for Flares	Manual of Procedures, Volume IV, ST-6, Carbon Monoxide, Continuous Sampling, and ST-14, Oxygen, Continuous Sampling; or EPA Reference Method 10

VIII. Test Methods

Table VIII
Test Methods

Applicable Requirement	Description of Requirement	Acceptable Test Methods
BAAQMD Condition # 17309, Part 32	Limits for Specified Toxic Air Contaminants (Acylonitrile, Benzene, Carbon Tetrachloride, Ethylene Dibromide, Ethylene Dichloride, Methylene Chloride, Perchloroethylene, Trichloro-ethylene, and Vinyl Chloride) in Landfill Gas	US EPA Reference Method 18, Measurement of Gaseous Organic Compound Emissions by Gas Chromatography
BAAQMD Condition # 17309, Part 33	Fugitive POC Emission Limit for Landfill	Calculation Procedure Described in BAAQMD Condition # 17309, Part 33
BAAQMD Condition # 17309, Part 34	Limit for Total Reduced Sulfur Compounds in Landfill Gas	Draeger Tube Method for H_2S, used in accordance with manufacturer's recommended procedures, and calculation procedures described in BAAQMD, Condition # 17309, Part 34; OR Manual of Procedures, Volume III, Method 5 Determination of Total Mercaptans in Effluents and Method 25 Determination of Hydrogen Sulfide in Effluents, or Method 44 Determination of Reduced Sulfur Gases and Sulfur Dioxide in Effluent Samples by Gas Chromatographic Methods
BAAQMD Condition # 17309, Part 35	Heat Input Limits for Flares	APCO approved calculation procedure as described in BAAQMD Condition # 17309, Part 35
BAAQMD Condition # 17309, Part 36	Total Carbon Emission Limit for Use or Disposal of Soil Containing VOCs	VOC Content as determined by EPA Reference Methods 8015B, 8021B (or any method determined to be equivalent by the US EPA and approved by the APCO) and converted to Total Carbon as defined in BAAQMD Regulation 8-2-202. Total Carbon Emissions determined by APCO approved equation described in BAAQMD Condition #17309, Part 36c
BAAQMD Condition # 17309, Part 37	Limits on Volatile Organic Compounds Concentrations in Soil and Above Soil	US EPA Reference Methods 8015B, 8021B, or any method determined to be equivalent by the US EPA and approved by the APCO

IX. PERMIT SHIELD

Not Applicable

X. REVISION HISTORY

Title V Permit Issuance (Application # 17348): September 20, 2001

Minor Revision (Application # 7939): December 17, 2003

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

X. Revision History

Reopening (Application # 10393): **March 16, 2006**

- Add the NESHAP General Provisions (40 CFR, Part 63, Subpart A) and the NESHAP for MSW Landfills (40 CFR, Part 63, Subpart AAAA) to Table IV-A.
- Combine Table IV-A for the S-1 Keller Canyon Landfill and Table IV-D for the A-1 Landfill Gas Flare into a single Table IV-A for S-1 and A-1, and delete Table IV-D.
- Delete an erroneous citation for SIP Regulation 1 from Table IV-A.
- Update the Regulation 8, Rule 34 amendment date in Table IV-A and correct a related citation reference in Table VII-A.
- Delete Regulation 11, Rules 1 and 3 from Tables IV-A, VII-A, and VIII.
- Update amendment dates for federal requirements in Table IV-A.
- In Condition # 17309, Part 2, clarify the NSR applicability requirements for the waste acceptance limits.
- Clarify notification procedures in Condition # 17309, Parts 3 and 8.
- Clarify record keeping procedures in Condition # 17309, Part 16.
- Clarify the basis for Condition # 17309, Part 18.
- Revise the Condition # 17309, Part 19 reporting requirement and revise the basis for Part 19 in Table IV-A.
- Revise the minimum combustion zone temperature limit for A-1 in Table II-B, Condition # 17309, Part 23, and Table VII-A, and correct the temperature revision procedures in Part 23.
- Correct the NO_x limit for A-1 in Condition # 17309, Part 24 and Table VII-A. Clarify the basis for this limit in Part 24 and in Table IV-A.
- Delete the obsolete POC and NMOC limits listed in Condition # 17309, Parts 26 and 29, and delete the associated references to these limits in Part 30 and Tables IV-A, VII-A, and VIII.

X. Revision History

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

Significant Revision (Application # 11385): **March 16, 2006**

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

X. Revision History

- In Condition # 17309, Part 31 and Table VIII, add a laboratory analysis for six sulfur compounds to the annual landfill gas characterization test, and add a calculation procedure for the TRS/H2S ratio that will be used in conjunction with the revised TRS calculation procedure listed in Part 34.
- In Condition # 17309, Part 32 and Table VII-A, increase the concentration limits for acrylonitrile, benzene, and ethylene dichloride.
- In Condition # 17309, Part 33 and Table VII-A, delete the A-1 Flare from the combined POC emission limit for S-1 and A-1 in Condition # 17309, Part 33, and revised the POC limit and calculation procedures for fugitive POC emissions from S-1.
- In Condition # 17309, Part 34 and Table VII-A, revise the limit on total reduced sulfur compounds in landfill gas, and correct the basis accordingly in Part 34 and Table IV-A. Clarify that the Draeger tube analysis method measures hydrogen sulfide (H_2S), and add a TRS calculation method to Part 34.

Significant Revision (Application # 13196): September 20, 2006

- Add an alternative wellhead oxygen standard to Condition # 17309, Part 20c(i) and Table VII-A.
- Identify wells that are subject to this alternative oxygen standard in Table IV-A, Table VII-A, and Condition # 17309, Part 20c(i).
- Add monitoring and record keeping requirements and procedures for wells subject to the alternative wellhead oxygen standard and the surface vicinity near these wells to Table VII-A, Table VIII, and Condition # 17309, Part 20c(ii-vi).
- Identify criteria for revoking the alternative wellhead oxygen standard for a particular well and state corrective measures to be taken in such situations in Condition # 17309, Part 20c(vii).
- In Section X, correct a date citation and update the revision history to include this proposed revision.

Administrative Amendments (Application # 14795): October 4, 2006

- On the title page and headers, change the facility from Allied Waste Industries, Inc. to Keller Canyon Landfill Company.
- Delete the S-2 Wipe Cleaning Operation from the permit by amending Table II-A and by deleting Table IV-B, Condition # 9527, and Table VII-B.
- For the S-3 Yard and Green Waste Stockpiles, renumber Tables IV-C and VII-C as Tables IV-B and VII-B.
- For the S-1 Keller Canyon Landfill, modify the TAC concentration limits in Condition # 17309, Part 32 and Table

X. Revision History

VII-A.
- For S-1, modify the condition bases in Table IV-A and Condition # 17309, Parts 23, 31, and 32.
- Update the Section X Revision History.

Minor Revision (Application # 14656): **March 2, 2007**
- Correct the responsible official and plant contact information on the Title Page.
- In Table II-A, change the number of installed and operating landfill gas collection wells from 50 to 88.
- Modify well station descriptions and the number of wells at these well stations in Condition # 17309, Part 20a.
- Describe additional authorized collection system modifications in Condition # 17309, Part 20b.
- Identify additional wells that are subject to the alternative wellhead oxygen limit in Condition # 17309, Part 20c.
- Add the correct approval date for Application # 13196 and update the revision history for Application # 14656.

Renewal (Application # 14306): **January 3, 2008**
- Update regulatory amendment dates in Section I.A.
- Correct the bases for standard conditions I.B.1, I.B.11, I.E.2, and I.F, and make other corrections to standard text in Section I.G.
- Add standard condition text to Section I.B.1 concerning the application shield.
- Add standard condition text to Section I.B.12 that identifies the facility's compliance responsibilities for all equipment including equipment operated by contractors or other agents.
- Add standard language to Section III concerning temporary sources.
- Add EPA's web site address for SIP provisions to Sections III and IV.
- In Table III, update regulatory amendment dates for: Regulation 1, Regulation 2, Rule 1, and for Regulation 8, Rules 2 and 40.
- Delete obsolete SIP citations from Table III for: Regulation 8, Rules 3, 4, and 16.
- Add the following recently adopted or missing requirements to Table III: Regulation 2, Rule 5; Regulation 4; Regulation 8, Rule 15; Regulation 8, Rule 47; Regulation 9, Rule 1; California H&SC requirements for Portable Equipment; California ATCMs for asbestos, stationary IC engines, and

X. Revision History

portable engines; and 40 CFR, Part 61, Subparts A and M.

- In Table IV-A update regulatory amendment dates for Regulation 1; Regulation 8, Rules 2 and 40; 40 CFR Part 60, Subparts A and WWW; and 40 CFR Part 63, Subparts A and AAAA.
- Remove Regulation 11, Rule 14 from Tables IV-A, VII-A, and VIII.
- Remove an unnecessary citation from Condition # 17309, Part 16h.
- Rearrange Condition # 17309, Parts 17-20 to improve readability: Part 17 is now Part 20, Part 18 is now Part 19, Part 19 is now Part 17, and Part 20 is now Part 18 except that Part 20c was moved to Part 19b. Make the associated corrections to part number citations in Tables IV-A, VII-A, and VIII.
- Remove 12 wells from the list of components subject to alternative wellhead standards per the Applicant's request.
- Add the new standard temporary well disconnection provisions to Condition # 17309, Part 19c. Add the related requirement, Regulation 8-34-404, to Table IV-A. Add the limits on the number and duration of the temporary disconnections to Table VII-A and clarify applicability of wellhead requirements in Table IV-A. Also, in Tables VII-A and VIII, reference the additional component leak monitoring requirements and procedures for temporarily disconnected components.
- Update standard text that describes the gas collection system alteration requirements, the component replacement provisions, and the individual component decommissioning procedures in Condition # 17309, Part 18.
- Correct the basis for Condition # 17309, Part 31 in Section VI and in Table IV-A.
- Update standard text in Section VII.
- Clarify SO2 and TRS limits in Table VII-A.
- In Table VII-B, correct an opacity citation and clarify requirements by adding $\leq$ symbols where appropriate.
- Revise introductory text for Section VIII.
- Clarify the description of the limit for several test method citations in Table VIII.
- Add descriptions of these renewal revisions to Section X
- Add numerous terms to the glossary.
- Delete Section XII.

Administrative Amendment (Application # 18931): October 9, 2008

- On the title page, change the Responsible Official and Facility

X. Revision History

Contact from Kevin Chiapello to Lochlin Caffey.
- In Section I.B.1, correct the due dates for the next MFR renewal permit.

Minor Revision (Applications # 20205 and #23461): January 11, 2012

- On the title page, change the Responsible Official and Facility Contact from Lochlin Caffey to Rick King.
- In Section I.A, update regulatory amendment dates and add BAAQMD Regulation 2, Rule 5 and SIP Regulation 2, Rule 6.
- Correct basis for Section I.B.7.
- In Table II-A, update the description of the main landfill gas collection system.
- In Table III, update regulatory amendment dates and add SIP 2-1-429; BAAQMD Regulation 6, Rule 1; and BAAQMD Regulation 8, Rule 3.
- In Tables IV-A and IV-B, update regulatory amendment dates and add BAAQMD Regulation 6, Rule 1. In Table IV-A, correct description of Regulation 8, Rule 34 requirements and add missing citations from 40 CFR Part 60, Subpart WWW and from 40 CFR Part 63, Subpart AAAA.
- In Condition #16462 (Parts 2 and 6), correct citation references.
- In Condition #17309 (Parts 18 and 19), update the list of components that are part of the main landfill gas collection and identify other components that may be connected to the vacuum system for different reasons, clarify the separate operating requirements for the main gas collection system components and these other components, and correct typographical errors.
- In Condition #17309 (Part 20), clarify that collected landfill gas may be vented to a new off-site landfill gas energy facility, describe the specific circumstances under which one or more on-site flares must operate concurrently with the engines at this off-site energy facility to ensure that sufficient landfill gas will be collected to prevent surface leaks, and correct the basis of this part.
- In Tables VII-A, VII-B, and VIII, correct citation references.
- Add the descriptions of this minor revision to Section X.
- In Section XI, add text to explain that the BAAQMD Toxic Risk Management Policy has been replaced by BAAQMD Regulation 2, Rule 5.

Renewal (Application # 24616): June 12, 2014

- Update regulatory amendment dates in Section I.A.

X. Revision History

- Update standard text in Sections I.B, I.F, and I.G.
- Update standard text in Section II.A.
- In Table II-A, update description for S-1 and add missing descriptions for S-4 and S-5.
- In Table III, update regulatory amendment dates for: Regulation 2, Rule 1 and 40 CFR, Part 61, Subparts A and M. Remove CCR, Title 17, Section 93115, because these requirements, when applicable, will be identified in Section IV.
- In Table IV-A update subject source list in table title, update regulatory amendment dates, and add a missing section from 40 CFR, Part 60 Subpart A.
- In Section VI, Condition # 17309: update subject source list, update landfill gas collection system description and list of authorized alterations in Parts 18a-b, update list of wells subject to alternative wellhead limits in Part 19b, and clarify equation in Part 36c.
- In Table VII-A, update subject source list and clarify NMOC emission limits for flares.
- In Table VIII, add US EPA Reference Methods for particulate emission limits and clarify several other test method citations.
- Add descriptions of these renewal revisions to Section X
- Add terms to the glossary in Section XI.

X. Revision History

Minor Revision (Application # 26271): January 27, 2015

- In Table II-A, update the landfill gas collection system description.
- In Table III, update the amendment date for BAAQMD Regulation 5.
- In Section VI, revise the current gas collection system description and the allowable gas collection system alterations in Condition # 17309, Parts 18a and 18b, and update the list of wellheads subject to the alternative oxygen content limit in Part 19b.i.
- Add a description of these minor revisions to Section X.

Administrative Amendment (Application # 27143): March 17, 2016

- Revise the landfill gas collection system description in Table II-A.
- Update the gas collection system description and authorized alterations in Condition # 17309, Part 18.
- Revise toxic air contaminant limits and update record keeping procedures in Condition # 17309, Part 32 and in Table VII-A.
- Add a description of this amendment to Section X.

Minor Revision (Application # 28399): July 16, 2019

- Update the BAAQMD address and Engineering contact information in Title Page.
- In Section I, update the BAAQMD and EPA postal and email addresses.
- In Table II-A, update the landfill gas collection system description.
- In Section VI, revise the current gas collection system description and the allowable gas collection system alterations in Condition # 17309, Parts 18a and 18b.
- Add a description of these minor revisions to Section X.

Administrative Amendment (Application # 29989): July 26, 2019

- On the title page, change the Responsible Official and Facility Contact from Rick King to Matt Ketchem.

Significant Revision (Application # 29942) August 18, 2021

- Updated Condition #17309, Part 33 to show the new fugitive POC emission limit as a result of NSR Application # 29941.
- In Table VII-A updated the fugitive POC emission limit in response to NSR Application # 29941.

X. Revision History

- Added a description of these above significant revisions to Section X.

Minor Revision (Application # 30223): **August 18, 2021**

- In Section VI, revised Condition # 17309, Part 19(b) to add wells subject to a higher operating value for wellhead temperature (150F instead of 131F). In Part 19(b)(iii), added the CO monitoring requirements. Added Part 19(b)(viii) to show recordkeeping requirements.
- In Table VII-A, updated the limits for wellhead temperature to match the Permit condition # 17309, Part 19(b).
- Added a description of these above minor revisions to Section X.

Renewal (Application # 29655) **August 18, 2021**

- Updated regulatory amendment dates in Section I.A.
- Updated standard text in Sections I.B.1.
- Updated the District office address in Section I.F.
- Added the email address for EPA's Enforcement Division in Section I.G.
- In Table II-A, updated the landfill gas collection system description and updated the capacity for S-3.
- In Table II-B, removed "not constructed yet" for A-2.
- In Sections III and IV, updated the website address for SIP provisions and added the website address for CARB LMR.
- In Table III, updated regulatory amendment dates for: Regulation 2, Rule 1, Regulation 2, Rule 5, Regulation 6, Rule 1
- In Table III, added SIP Regulation 4, Table 1, BAAQMD Regulation 6, Rule 6, Regulation 8, Rule 16, Regulation 9, Rule 2, Regulation 11, Rule 18, Regulation 14, Rule 1, and CARB LMR 95460-95476.
- In Table IV-A, updated the amendment date for Regulation 6, Rule 1 and added Regulation 6, Rule 6, 60.756(b)(2)(ii), 63.1945, 63.1945(b) and Part 38 for Condition #17309.
- In Table IV-A, added the sections of CARB LMR.
- In Table IV-B, added BAAQMD Regulations 6-1-311.1 and Regulation 6, Rule 6. Also added SIP Regulation 6-1-311.
- In Section VI, Permit Condition # 17309, Part 3, replaced California Integrated Waste Management Board with CalRecycle.
- In Section VI, revised the current gas collection system description and the allowable gas collection system alterations

X. Revision History

in Condition # 17309, Parts 18a and 18b.
- Added a new permit condition, Part 38, to Condition # 17309 in response to new Regulation 6, Rule 6 prohibiting trackout.
- In Table VII-A, added requirements of Regulation 6, Rule 6 and CARB LMR.
- In Table VII-B, updated the capacity for S-3.
- In Table VIII, added the test methods for the CARB LMR.
- Added a description of these above renewal revisions to Section X.

Administrative Amendment Correction (Application # 29989): September 22, 2021

- On the title page, change the Responsible Official and Facility Contact from Rick King to Matt Ketchem.

Administrative Amendment Correction (Application # 31891): September 22, 2022

- On the title page, change the Responsible Official to Joshua Mills.

XI. GLOSSARY

ACT
Federal Clean Air Act

AP-42
An EPA Document "Compilation of Air Pollution Emission Factors" that is used to estimate emissions from numerous source types. It is available electronically from EPA's web site at: http://www.epa.gov/ttn/chief/ap42/index.html

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

API
American Petroleum Institute

ARB
Air Resources Board (same as CARB)

ASTM
American Society for Testing and Materials

ATC
Authority to Construct

ATCM
Airborne Toxic Control Measure

BAAQMD
Bay Area Air Quality Management District

BACT
Best Available Control Technology

BARCT
Best Available Retrofit Control Technology

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

C1
An organic chemical compound with one carbon atom, for example: methane

XI. Glossary

C3
An organic chemical compound with three carbon atoms, for example: propane

C5
An organic chemical compound with five carbon atoms, for example: pentane

C6
An organic chemical compound with six carbon atoms, for example: hexane

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)

CCR
California Code of Regulations

CEC
California Energy Commission

CEM
A "continuous emission monitor" is a monitoring device that provides a continuous direct measurement of some pollutant (e.g. NOx concentration) in an exhaust stream.

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

XI. Glossary

CI
Compression Ignition

CIWMB
California Integrated Waste Management Board

CO
Carbon Monoxide

CO2 or CO_2
Carbon Dioxide

CO2e
Carbon Dioxide Equivalent. A carbon dioxide equivalent emission rate is the emission rate of a greenhouse gas compound that has been adjusted by multiplying the mass emission rate by the global warming potential of the greenhouse gas compound. These adjusted emission rates for individual compounds are typically summed together, and the total is also referred to as the carbon dioxide equivalent (CO2e) emission rate.

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

E 6, E 9, E 12
Very large or very small number values are commonly expressed in a form called scientific notation, which consists of a decimal part multiplied by 10 raised to some power. For example, 4.53 E 6 equals (4.53) x (10^6) = (4.53) x (10 x 10 x 10 x 10 x 10 x 10) = 4,530,000. Scientific notation is used to express large or small numbers without writing out long strings of zeros.

EG
Emission Guidelines

XI. Glossary

EO
Executive Order

EPA
The federal Environmental Protection Agency.

ETP
Effluent Treatment Plant

Excluded
Not subject to any District Regulations.

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

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

FR
Federal Register

GDF
Gasoline Dispensing Facility

GHG
Greenhouse Gas

GLM
Ground Level Monitor

grains
1/7000 of a pound

GWP
Global Warming Potential. A comparison of the ability of each greenhouse gas to trap heat in the atmosphere relative to that of carbon dioxide over a specific time period.

XI. Glossary

H2S or H_2S
Hydrogen Sulfide

H2SO4 or H_2SO_4
Sulfuric Acid

H&SC
Health and Safety Code

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.

Hg
Mercury

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

KCLC
Keller Canyon Landfill Company

LEA
Local Enforcement Agency

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.

Long ton
2200 pounds

XI. Glossary

Major Facility
A facility with potential emissions of: (1) at least 100 tons per year of any regulated air pollutant, (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.

MSDS
Material Safety Data Sheet

MSW
Municipal solid waste

MTBE
methyl tertiary-butyl ether

MW
Molecular weight

N2 or N_2
Nitrogen

NA
Not Applicable

NAAQS
National Ambient Air Quality Standards

XI. Glossary

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

NMHC
Non-methane Hydrocarbons (same as NMOC).

NMOC
Non-methane Organic Compounds (same as NMHC).

NO2 or NO_2
Nitrogen Dioxide.

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 both 40 CFR Part 60 and District Regulation 10.

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

O2 or O_2
Oxygen

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

PERP
Portable Equipment Registration Program

XI. Glossary

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

POC
Precursor Organic Compounds

PM
Total Particulate Matter

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

PM2.5 or $PM_{2.5}$
Particulate matter with aerodynamic equivalent diameter of less than or equal to 2.5 microns.

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

PV or P/V Valve or PRV
Pressure/Vacuum Relief Valve

Regulated Organic Liquid
"Regulated organic liquids" are those liquids which require permits, or which are subject to some regulation, when processed at a liquid-handling operation. For example, for refinery marine terminals, regulated organic liquids are defined as "organic liquids" in Regulation 8, Rule 44.

RICE
Reciprocating Internal Combustion Engine

RMP
Risk Management Plan

RWQCB
Regional Water Quality Control Board

XI. Glossary

S
Sulfur

SCR
A "selective catalytic reduction" unit is an abatement device that reduces NOx concentrations in the exhaust stream of a combustion device. SCRs utilize a catalyst, which operates at a specific temperature range, and injected ammonia to promote the conversion of NOx compounds to nitrogen gas.

Short ton
2000 pounds

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

SO3 or SO_3
Sulfur trioxide

SSM
Startup, Shutdown, or Malfunction

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

TAC
Toxic Air Contaminant (as identified by CARB)

TBACT
Best Available Control Technology for Toxics

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

therm
100,000 British Thermal Unit

XI. Glossary

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

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

TPH
Total Petroleum Hydrocarbons

TRMP
Toxic Risk Management Policy: In 1987, BAAQMD adopted a "Toxic Risk Management Policy" to implement the District's new source review requirements for new and modified sources of toxic air contaminants. The TRMP was replaced by BAAQMD Regulation 2, Rule 5 on June 15, 2005. The previous TRMP and the subsequent rule are not federally enforceable.

TRS
Total Reduced Sulfur, which is a measure of the amount of sulfur-containing compounds in a gas stream, typically a fuel gas stream, including, but not limited to, hydrogen sulfide. The TRS content of a fuel gas determines the concentration of SO_2 that will be present in the combusted fuel gas, since sulfur compounds are converted to SO_2 by the combustion process.

TSP
Total Suspended Particulate

TVP
True Vapor Pressure

VMT
Vehicle Miles Traveled

VOC
Volatile Organic Compounds

Symbols:

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

XI. Glossary

Units of Measure:

atm	=	atmospheres
bbl	=	barrel of liquid (42 gallons)
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
in	=	inches
kW	=	kilowatts
lb	=	pound
lbmol	=	pound-mole
m^2	=	square meter
m^3	=	cubic meters
Mg	=	mega grams
min	=	minute
mm	=	millimeter
mm Hg	=	millimeters of mercury (pressure)
MM	=	million
MM BTU	=	million BTU
M cf	=	one thousand cubic feet
M scf	=	one thousand standard cubic feet
MM cf	=	one million cubic feet
MM scf	=	one million standard cubic feet
MW	=	megawatts
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