SV 10/9/25

PETITION FOR VARIANCE
BEFORE THE HEARING BOARD OF THE
SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

PETITIONER: CITY OF RIVERSIDE – TEQUESQUITE LANDFILL

CASE NO: 6157-3

FACILITY ID: 57769

FACILITY ADDRESS: 5900 TEQUESQUITE LANDFILL
[location of equipment/site of violation; specify business/corporate address, if different, under Item 2, below]

City, State, Zip: RIVERSIDE, CA 92503

1. TYPE OF VARIANCE REQUESTED (more than one box may be checked; see Attachment A, Item 1, before selecting)

☐ INTERIM ☒ SHORT ☐ REGULAR ☐ EMERGENCY ☐ EX PARTE EMERGENCY

2. CONTACT: Name, title, company (if different than Petitioner), address, and phone number of persons authorized to receive notices regarding this Petition (no more than two authorized persons).

ROBERT ELAND
Public Works – Wastewater, City of Riverside
5960 ACORN ST
RIVERSIDE, CA Zip 92504
☎ (909) 351-6095 Ext.
Fax ( )
E-mail reland@riversideca.gov

ANTHONY BEAUMON
Office of the City Attorney, City of Riverside
3750 University Ave.
Riverside, CA Zip 92521
☎ (951) 826-5319 Ext.
Fax ( )
E-mail abeaumon@riversideca.gov

3. RECLAIM Permit ☐ Yes ☒ No Title V Permit ☐ Yes ☒ No

Persons with disabilities may request this document in an alternative format by contacting the Clerk of the Board at 909-396-2500 or by e-mail at clerkofboard@aqmd.gov.

If you require disability-related accommodations to facilitate participating in the hearing, contact the Clerk of the Board at least five (5) calendar days prior to the hearing.

[ALL DOCUMENTS FILED WITH CLERK'S OFFICE BECOME PUBLIC RECORD]

4. **GOOD CAUSE:** Explain why your petition was not filed in sufficient time to issue the required public notice. (Required only for Emergency and Interim Variances; see Attachment A, Item 4)

N/A

5. Briefly describe the type of business and processes at your facility.

The Tequesquite Landfill is a Class III 120-acre closed landfill located in Riverside, CA, consisting of a gas collection system (R-F72428) and flare (G34507). The City of Riverside complies with all sampling, monitoring, and reporting requirements as outlined in the landfill's Closure/Post Closure Maintenance Plan (CPMP).

This is not a business, but a local government operation to mitigate methane impacts from a historic landfill.

[YOU MAY ATTACH ADDITIONAL PAGES IF NECESSARY]

6. List the equipment and/or activity(s) that are the subject of this petition (see Attachment A, Item 6, Example #1). **Attach copies of the Permit(s) to Construct and/or Permit(s) to Operate for the subject equipment. For RECLAIM or Title V facilities, attach *only* the relevant sections of the Facility Permit showing the equipment or process and conditions that are subject to this petition. You must bring the entire Facility Permit to the hearing.**

Equipment/Activity	Application/ Permit No.	RECLAIM Device No.	Date Application/Plan Denied, (if relevant)*
Flare	A/N 566087 P/N G34507	NA	NA

*Attach copy of denial letter

7. Briefly describe the activity or equipment, and why it is necessary to the operation of your business. A schematic or diagram may be attached, in addition to the descriptive text.

Flare is an enclosed model CEB 350 landfill gas fired flare, manufactured by Flare Industries with a 3.67' diameter and a height of 17.83' and a capacity of 12 MMBtu/hr. It consists of an electric igniter, automatic shutdown and alarm system, automatic combustion air regulating system, and temperature controller.

Methane gas generated within the landfill is captured within the landfill's gas collection and treatment system. The system is comprised of 96 collection wells, 4" and 6" in diameter, two (2) compressors, and one (1) flare.

The operation is not necessary to a "business," but a local government responsibility to reduce methane emission from a historic landfill.

8. Is there a regular maintenance and/or inspection schedule for this equipment? Yes ☒ No ☐

If yes, how often: Monthly Date of last maintenance and/or inspection 08/25/2025

Describe the maintenance and/or inspection that was performed.

City Maintenance staff conduct routine maintenance activities and inspections, including oil changes, general repairs, compressor maintenance and belt adjustments, filter changes, flare blower cleaning and lubrication, site and perimeter inspections, and draining of condensate traps.

There was no indication prior that the element would fail.

[YOU MAY ATTACH ADDITIONAL PAGES IF NECESSARY]

9. List all District rules, and/or permit conditions [indicating the specific section(s) and subsection(s)] from which you are seeking variance relief (if requesting variance from Rule 401 or permit condition, see Attachment A). Briefly explain how you are or will be in violation of each rule or condition (see Attachment A, Item 9, Example #2).

Rule	Explanation
Condition 14 of P/N G34507	Source test cannot be conducted as required until burner on flare is replaced.
1150.1 (d)(1)(C)(i)	Source test will not comply with Rule language "The annual source test shall be conducted no later than 45 days after the anniversary date of the initial source test."

10. Are the equipment or activities subject to this request currently under variance coverage? Yes ☐ No ☒

Case No.	Date of Action	Final Compliance Date	Explanation

11. Are any other equipment or activities at this location currently (or within the last six months) under variance coverage? Yes ☐ No ☒

Case No.	Date of Action	Final Compliance Date	Explanation

12. Were you issued any Notice(s) of Violation or Notice(s) to Comply concerning this equipment or activity within the past year? Yes ☐ No ☒

If yes, you must attach a copy of each notice.

13. Have you received any complaints from the public regarding the operation of the subject equipment or activity within the last six months? Yes ☐ No ☒

If yes, you should be prepared to present details at the hearing.

14. Explain why it is beyond your reasonable control to comply with the rule(s) and/or permit condition(s). Provide specific event(s) and date(s) of occurrence(s), if applicable.

An initial source test was scheduled for the flare on August 29, 2025. The source test was started the morning of August 29, 2025, but subsequently stopped part way through following issues with the flare's burner, which destabilized the flare and rendered the source test impossible to complete. The flare burner must be stable in order to conduct the test. Maintenance confirmed that an in-kind burner assembly was in stock in the warehouse and scheduled the burner replacement for Wednesday, September 10, 2025. Upon repair a new source test will be rescheduled.

The flare (P/N G34507) was initially source tested on August 28, 2018. Per Rule 1150.1 (d)(1)(C)(i), all subsequent annual source tests shall be completed within "45 days after the anniversary date of the initial source test." The city anticipates completing the source test within the 45-day period, however potential issues during repair and source test coordination could delay rescheduling, extending the source test completion date beyond the city's required 45-day period.

The City located a replacement burner assembly and purchased it as soon as possible, but is concerned that the delivery, installation, or technical problems could delay the new burner operational date.

15. When and how did you first become aware that you would not be in compliance with the rule(s) and/or permit condition(s)? Provide specific event(s) and date(s) of occurrence(s).

On August 29, 2025, the city's Maintenance and Regulatory staff determined the flare's burner had destabilized routine flare operations and rendered the scheduled source test impossible to complete. While Maintenance staff anticipates completing a new burner installation by mid-September, potential issues during installation and source test coordination could extend source test completion beyond the city's 45-day period deadline.

[YOU MAY ATTACH ADDITIONAL PAGES IF NECESSARY]

16. List date(s) and action(s) you have taken since that time to achieve compliance. That the Petition Form HB-V, and any related instructions, include requirement that the Petitioner include a timeline in suitable, chronological format to address the events, dates, and actions called for by Questions 15 and 16, including the dates of communication with the South Coast AQMD to notify them of the occurrence(s) giving rise to the requested variance.

Beginning the week of September 2, 2025, the city's Maintenance and Regulatory staff assessed the flare and determined the burner as the issue, and decided prompt replacement was necessary to address the issue.

17. What would be the harm to your business during **and/or after** the period of the variance if the variance were not granted?

Economic losses: $_____N/A_____

Number of employees laid off (if any):___N/A_____

Provide detailed information regarding economic losses, if any, (anticipated business closure, breach of contracts, hardship on customers, layoffs, and/or similar impacts).

N/A

18. Can you curtail or terminate operations in lieu of, or in addition to, obtaining a variance? Please explain.

No, this is a closed landfill that is continually producing landfill gas that must be directed to a combustion source.

19. Estimate excess emissions, if any, on a caily basis, including, if applicable, excess opacity (the percentage of total opacity above 20% during the variance period). If the variance will result in no excess emissions, insert "N/A" here and skip to No. 20.

Pollutant	(A) Total Estimated Excess Emissions (lbs/day)	(B) Reduction Due to Mitigation (lbs/day)	(C)* Net Emissions After Mitigation (lbs/day)

* Column A minus Column B = Column C

Excess Opacity:_____%

[YOU MAY ATTACH ADDITIONAL PAGES IF NECESSARY]

20. Show calculations used to estimate quantities in No. 19, **or** explain why there will be no excess emissions.

N/A

21. Explain how you plan to reduce (mitigate) excess emissions during the variance period to the maximum extent feasible, or why reductions are not feasible.

The flare operates continuously at an average of 140 scfm of methane gas which must be directed to a combustion source. This will not increase or decrease during the variance period and no excess emissions are anticipated to occur.

22. How do you plan to monitor or quantify emission levels from the equipment or activity(s) during the variance period, and to make such records available to the District? **Any proposed monitoring does not relieve RECLAIM facilities from applicable missing data requirements.**

The flare will continue to operate during the variance period and a source test will be coordinated as soon as feasible once a new burner is installed.

23. How do you intend to achieve compliance with the rule(s) and/or permit condition(s)? Include a detailed description of any equipment to be installed, modifications or process changes to be made, permit conditions to be amended, etc., dates by which the actions will be completed, and an estimate of total costs.

City Maintenance staff will install and ca' brate the flare's in-kind burner beginning the week of September 8, 2025 and anticipate installation completion by mid- September. Upon completion of installation, the city's Regulatory staff will coordinate a source test date.

24. State the date you are requesting the variance to begin: 10/12/2025; and the date by which you expect to achieve final compliance: 11/15/2025.

If the regular variance is to extend beyond one year, you **must** include a **Schedule of Increments of Progress**, specifying dates or time increments for steps needed to achieve compliance. See District Rule 102 for definition of Increments of Progress (see Attachment A, Item 24, Example #3).

List Increments of Progress here:
The variance request is not expected to extend beyond one (1) year.

25. List the names of any District personnel with whom facility representatives have had contact concerning this variance petition or any related Notice of Violation or Notice to Comply.

_____ Ext._____

_____ Ext._____

If the petition was completed by someone other than the petitioner, please provide their name and title below.

_____

Name Company Title

The undersigned, under penalty of perjury, states that the above petition, including attachments and the items therein set forth, is true and correct.

Executed on 9/9/2025, at Riverside, California

_____ Robert Eland

Signature Print Name

Title: Technical & Compliance Manager

26. SMALL BUSINESS and TABLE III SCHEDULE A FEES: To be eligible for reduced fees for small businesses, individuals, or entities meeting small business gross receipts criterion [see District Rule 303(h)], you must complete the following:

Declaration Re Reduced Fee Eligibility

1. The petitioner is
   a) ☐ an individual, or
   b) ☐ an officer, partner or owner of the petitioner herein, or a duly authorized agent of the petitioner authorized to make the representations set forth herein.

If you selected 1a, above, skip item 2.

2. The petitioner is
   a) ☐ a business that meets the following definition of Small Business as set forth in District Rule 102:

[YOU MAY ATTACH ADDITIONAL PAGES IF NECESSARY]

SMALL BUSINESS means a business which is independently owned and operated and meets the following criteria, or if affiliated with another concern, the combined activities of both concerns shall meet these criteria:

(a) the number of employees is 10 or less; **AND**

(b) the total gross annual receipts are $500,000 or less **or**

(iii) the facility is a not-for-profit training center.

-OR-

b) ☐ an entity with total gross annual receipts of $500,000 or less.

3. Therefore, I believe the petitioner qualifies for reduced fees for purpose of filing fees and excess emission fee calculations, in accordance with Rule 303(h).

I declare under penalty of perjury that the foregoing is true and correct.

Executed on _____, at _____, California

_____ _____

Signature Print Name

Title _____

ATTACHMENT A

ITEM 1

Type of Variance Requested:

(a) **SHORT:** If compliance with District rule(s) can be achieved in **90 days or less**, request a short variance. *(Hearing will be held approximately 21 days from date of filing--10-day posted notice required.)*

(b) **REGULAR:** If compliance with District rule(s) will take **more than 90 days**, request a regular variance. If the variance request will extend beyond one year, you **must** include a specific detailed schedule of increments of progress [see Page 8, No. 24] under which you will achieve final compliance. *(Hearing will be held approximately 45 days from date of filing--30-day published notice required.)*

(c) **EMERGENCY:** If non-compliance is the result of an unforeseen emergency, such as a sudden equipment breakdown, power failure, or accidental fire, you may request an emergency variance. You may request an *ex parte* emergency variance in addition to an emergency variance. **An emergency variance cannot be granted for more than 30 days.** *(Hearing will be held within 2 working days from the date of filing, whenever possible, excluding Mondays, weekends, and holidays.)* **If you request an emergency variance, you must answer No. 4 on page 1.**

(d) ***EX PARTE* EMERGENCY:** If variance coverage is required on a weekend or when the Board is not in session, and you cannot wait until an emergency variance hearing can be held, you may request an *ex parte* emergency variance. An *ex parte* emergency variance will be granted or denied solely on the information contained in the petition and the District's response to the petition. Under most circumstances, an *ex parte* emergency variance will remain in effect only until a hearing can be held. **If you request an *ex parte* variance, you must answer No. 4 on page 1.**

(e) **INTERIM:** If you require immediate relief (other than for emergencies) to cover the time until a short or regular variance hearing can be held, request an interim variance. If you request an interim variance, you must also request a short or a regular variance on the same petition. *(Hearing will be held approximately 2 working days from date of filing. whenever possible, excluding Mondays, weekends and holidays.)* **If you request an interim variance, you must answer No. 4 on page 1.**

ITEM 4

GOOD CAUSE: The Hearing Board is required to provide public notice of variance hearings, as the public has a right to attend and testify at such hearings. In order for the Hearing Board to hold an Interim, *Ex Parte* Emergency or Emergency Variance hearing without the required public notice, a petitioner must present facts which will support a determination by the Board that "good cause" exists to hear a variance without notifying the public about the variance and providing the public with an opportunity to present evidence concerning the variance.

ITEM 6

Example #1:

Equipment/Activity	Application/ Permit No.	RECLAIM Device No.	Date Application/Plan Denied (if relevant)
Tenter frame		D32	
Chrome-plating tank	M99999		
Bake oven	123456		
Create special effects (fog)	N/A	N/A	N/A
Mfg., sale, distribution, use of non-compliant coating	N/A	N/A	12/10/95

ITEM 9

a) If you are requesting relief from Rule 401 and the *excess* opacity during the variance period will reach or exceed 40%, you should also request relief from California Health and Safety Code Section 41701.

b) If you are requesting relief from a permit condition(s), you should also request relief from the rule requiring compliance with conditions of the permit: 202(a), (b) or (c) - Temporary Permit to Operate; 203(b) - Permit to Operate; 2004(f)(1) – RECLAIM Permit; 3002(c) – Title V Permit.

Example #2:

Rule	Explanation
404(a)	tenter frame is vented to damaged air pollution control equipment
2004 (f)(1) [Condition No. 28-2 of Facility P/O No. 099999]	source test cannot be conducted as required until new ESP is installed
1113(c)(2)	petitioner manufactures and sells clear wood finishes with VOCs in excess of 350 grams per liter
401(a) & California H&S Code Section 41701	Opacity will exceed 45%.

ITEM 24

Example #3:

Sample Schedule of Increments of Progress

- Permit application(s) will be submitted to the District by [date].
- Contracts for the purchase of emission control systems will be awarded by [date].
- On-site construction will be completed by [date].

[YOU MAY ATTACH ADDITIONAL PAGES IF NECESSARY]

South Coast Air Quality Management District
21865 Copley Drive, Diamond Bar, CA 91765-4178

PERMIT TO CONSTRUCT/OPERATE

Permit No.
G34507
A/N 566087

This initial permit must be renewed ANNUALLY unless the equipment is moved, or changes ownership.
If the billing for the annual renewal fee (Rule 301.f) is not received by the expiration date, contact the District.

Legal Owner or Operator:

ID 57769

CITY OF RIVERSIDE (TEQUESQUITE LANDFILL)
5950 ACORN ST
RIVERSIDE, CA 92504

Equipment Location: 5900 TEQUESQUITE AVE, RIVERSIDE, CA 92503

Equipment Description :

Flare, Flare Industries, Model no.: CEB 350, 3.67' Dia. X 17.83' H., 12 MMBtu/hr, enclosed, landfill gas fired, electric igniter, automatic shutdown and alarm system, automatic combustion air regulating system and temperature controller.

Conditions :

1. Operation of this equipment shall be conducted in accordance with all data and specifications submitted with the application under which this permit is issued unless otherwise noted below.
2. This equipment shall be properly maintained and kept in good operating condition at all times.
3. This equipment shall be operated and maintained by personnel properly trained in its operation.
4. This system shall be in full operation whenever the equipment vented to it is in operation.
5. A sufficient number of sampling ports shall be maintained in the flare stack, located at least three feet above the flame zone and at least three feet below the top of the flare stack/shroud. Each port shall be installed at 90 degrees apart and shall consist of four inch couplings. Adequate and safe access to all test ports shall be provided by the applicant within 24 hours of a request by the South Coast Air Quality Management District (SCAQMD) to conduct a test.
6. At least one sampling port shall be maintained at the combined inlet gas line to the flare to allow landfill gas sampling and flow measurement.
7. The flare shall be equipped at least one thermocouple and with a temperature indicating and recording which measures and records gas temperature (in degrees F) in the flare stack. The temperature indicator and recorder shall operate whenever the flare is in operation. The temperature shall be measured at a location at least 0.6 seconds downstream the flame zone, unless otherwise approved by the SCAQMD.
8. Whenever the flare is in operation, a temperature of not less than 1400 degrees F, 15 minute average, as measured by the temperature indicator and recorder shall be maintained in the flare stack, except during periods of startup. Startup is defined as the period from flare ignition to the time when 1400 degrees Fahrenheit is achieved, not to exceed 30 minutes.

ORIGINAL

9. The flare shall be equipped with a sufficient number of view ports to allow visual inspection of the flame and thermocouple location within the flare at all times. The flare shall be operated so that the flame in the flare remains below the height of the flare's operating thermocouple at all times. Adequate and safe access shall be provided for all ports upon request by SCAQMD personnel.

10. A flow indicating and recording system shall be installed and maintained in the combined landfill gas supply line to the flare to measure and record the gas flow rate (in scfm) to the flare and shall operate whenever the flare is in operation.

11. The total volume of landfill gas burned in the flare shall not exceed 395 scfm at 506 BTU/scf.

12. Emissions from the flare shall not exceed the following limits:

Pollutant	Limit (lbs/hr)
ROG	0.14
NOX	0.72
SOX	0.30
CO	2.4
PM10	0.51

13. The initial source testing shall be conducted no later than 180 days after start-up. The testing shall be performed in accordance with SCAQMD approved test procedures and written test results shall be furnished to the SCAQMD within 45 days after the date of testing. Written notice of the source tests shall be provided to the SCAQMD 30 days prior to the tests so that an observer may be present. Testing shall include, but may not be limited to, a test of the flare for:

    a. Landfill gas composition and heating value (inlet)
    b. Landfill gas flow rate, scfm (inlet)
    c. Total sulfur compounds as H2S, ppmv (inlet)
    d. Temperature, degrees F (exhaust)
    e. Flow rate, dscm (exhaust)
    f. NOx, lbs/hr, lbs/mm btu (exhaust)
    g. SOx, lbs/hr (exhaust)
    h. CO, lbs/hr (exhaust)
    i. PM10, lbs/hr (exhaust)
    j. Oxygen content (exhaust)
    k. Moisture (exhaust)

    The source test shall be conducted at the maximum flow rate achievable at the time of the test.

14. After the initial testing, the flare shall be tested for the compounds and at the frequencies listed below. All testing shall be performed in accordance with SCAQMD approved test procedures and written test results shall be furnished to the SCAQMD within 45 days after the anniversary date of the initial source test date. Written notice of the source tests shall be provided to the SCAQMD 30 days prior to the tests so that an observer may be present. Testing shall include, but may not be limited to, a test of the flares for:

1. Annually
a. Landfill gas composition and heating value (inlet)
b. Landfill gas flow rate, scfm (inlet)
c. Total sulfur compounds as H2S, ppmv (inlet)
d. Temperature, degrees F (exhaust)
e. Flow rate, dscm (exhaust)
f. TNMOC
g. Methane
h. Oxygen content (exhaust)
i. Moisture (exhaust)
2. Every Three Years
a. NOx, lbs/hr, lbs/mm btu (exhaust)
b. SOx, lbs/hr (exhaust)
c. CO, lbs/hr (exhaust)
d. PM10, lbs/hr (exhaust)

The source test shall be conducted at the maximum flow rate achievable at the time of the test.

15. The landfill owner/operator shall install and maintain one or more flare failure alarms which shall include an automatic notification system, an automatic blower and a landfill gas supply valve shut-off system. It shall be tested at least annually for proper operation and the results recorded.

16. A non-resettable timer shall be maintained to indicate the flares' operating hours.

17. The flare shall be equipped with a continuous flow indicating and recording device in the landfill gas supply line to the flare to measure and record the quantity of landfill gas being burned.

18. The flares shall be operated continuously to reduce the methane by at least 99% by weight and reduce emissions of total gaseous non-methane organic compounds by at least 98% by weight or to less than 20 ppmv, measured as hexane on a dry basis at 3% oxygen.

19. Weekly readings of the methane content (in percent) of the gas at the inlet to the flare station shall be taken using an instrument approved by the SCAQMD. The BTU Content shall be calculated by the following equation and results recorded: Btu Content = (Percent Methane) x (1,012 Btu/scf)

20. The flares shall be equipped with an automatic damper, an automatic shutdown device, a flare arrestor, and a continuous recording temperature sensor.

21. The total energy content of landfill gas burned in this flare shall not exceed 12 million Btu per hour.

22. The equipment shall not have leaks that exceed 500 ppmv TOC measured as methane at any component under positive pressure. Any leek exceeding 500 ppmv must be tagged and repaired within 10 calendar days from the time of the first exceedance.

23. Landfill gases entering the flares shall be analyzed at least weekly for heating value and methane concentration. Results shall be recorded and provided to the SCAQMD upon request.

24. All recording devices shall be synchronized with respect to the time of day.

25. NOx emissions from the flare shall not exceed 0.06 lbs per million Btu of heat input.

26. This equipment shall comply with SCAQMD's Rule 1150.1.

27. Any breakdown or malfunction of the landfill gas flare system resulting in the emission of raw landfill gas shall be reported to the SCAQMD within one hour after occurrence, and immediate remedial measures shall be undertaken to correct the problem and prevent further emissions into the atmosphere.

28. Records shall be maintained to verify compliance with the conditions of this permit for at least five years and made available to SCAQMD personnel upon request.

29. This permit to construct shall expire if construction of this equipment is not completed within one year from the date of issuance unless an extension is granted by the executive officer.

NOTICE

In accordance with Rule 206, this Permit to Operate or copy shall be posted on or within 8 meters of the equipment.

This permit does not authorize the emission of air contaminants in excess of those allowed by Division 26 of the Health and Safety Code of the State of California or the applicable Rules and Regulations of the South Coast Air Quality Management District (SCAQMD). This permit cannot be considered as permission to violate existing laws, ordinances, regulations or statutes of other government agencies.

Executive Officer

Dorris M Bailey

By Dorris M.Bailey/DT01
2/11/2015

ORIGINAL

(Adopted April 5, 1985)(Amended April 10, 1998)
(Amended March 17, 2000)(Amended April 1, 2011)

RULE 1150.1. CONTROL OF GASEOUS EMISSIONS FROM MUNICIPAL SOLID WASTE LANDFILLS

(a) Purpose

The purpose of this rule is to reduce non-methane organic compounds (NMOC), volatile organic compound (VOC) and toxic air contaminant (TAC) emissions from Municipal Solid Waste (MSW) landfills to prevent public nuisance and possible detriment to public health caused by exposure to such emissions. This rule also reduces methane emissions, a greenhouse gas.

(b) Applicability

This rule is applicable to any owner or operator of an active or inactive MSW landfill.

(c) Definitions

For the purpose of this rule, the following definitions shall apply:

(1) ACTIVE COLLECTION SYSTEM as defined by 40 CFR 60.751 means a gas collection system that uses gas mover equipment.

(2) ACTIVE MSW LANDFILL means a Municipal Solid Waste landfill that has received solid waste on or after November 8, 1987.

(3) BACKGROUND means the local ambient concentration of total organic compounds (TOC) measured as methane determined by holding the instrument probe approximately 5 to 6 feet above the landfill surface.

(4) CLOSED MSW LANDFILL means a Municipal Solid Waste landfill that has ceased accepting solid waste for disposal and was conducted in accordance with all applicable federal, state and local statutes, regulations, and ordinances in effect at the time of closure.

(5) COMPONENT LEAK means the concentration of methane measured one half an inch or less from a component source that exceeds 500 parts per million by volume (ppmv), other than non-repeatable, momentary readings.

(6) COMPONENT means any equipment that is part of the gas collection system or gas control system and that contains landfill gas including, but

not limited to, wells, pipes, flanges, fittings, valves, flame arresters, knock-out drums, sampling pots, blowers, compressors, or connectors.

(7) CONSTRUCTION AND DEMOLITION WASTE means waste building materials, packing and rubble resulting from construction, remodeling, repair and demolition operations on pavements, houses, commercial building and other structures.

(8) CONTINUOUS OPERATION means that the gas collection and gas control systems are operated continuously, the existing gas collection wells are operating under vacuum while maintaining landfill gas flow, and the collected landfill gas is processed by a gas control system 24 hours per day.

(9) DESTRUCTION EFFICIENCY means a measure of the ability of a gas control device to combust, transform, or otherwise prevent emissions of methane from entering the atmosphere.

(10) ENCLOSED COMBUSTOR means an enclosed flare, steam generating boiler, internal combustion engine or gas turbine.

(11) ENERGY RECOVERY DEVICE means any combustion device that uses landfill gas to recover energy in the form of steam or electricity including, but not limited to gas turbines, internal combustion engines, boilers, and boiler-to-steam turbine systems.

(12) EXECUTIVE OFFICER means the Executive Officer or designee of the South Coast Air Quality Management District

(13) GAS COLLECTION SYSTEM means any system that employs various gas collection wells and connected piping and mechanical blowers, fans, pumps or compressors to create a pressure gradient and actively extract landfill gases.

(14) GAS CONTROL DEVICE means any device used to dispose of or treat collected landfill gas including, but not limited to, enclosed flares, open flares, internal combustion engines, boilers and boiler-to-steam systems, process heaters, fuel cells, and gas turbines.

(15) GAS CONTROL SYSTEM means any system that disposes of or treats collected landfill gas by one or more of the following means: combustion, gas treatment for subsequent sale, or sale for processing offsite, including for transportation fuel and injection into natural gas pipelines.

(16) INACTIVE MSW LANDFILL means a Municipal Solid Waste landfill that has not accepted solid waste after November 8, 1987 and

subsequently no further solid waste disposal activity has been conducted within the disposal facility.

(17) LANDFILL GAS means any untreated, raw gas derived through a natural process from the decomposition of organic waste deposited in a MSW landfill from the evolution of volatile species in the waste, or from chemical reactions of substances in the waste.

(18) LANDFILL SURFACE means the area of the landfill under which decomposable solid waste has been placed, excluding the working face.

(19) MUNICIPAL SOLID WASTE or MSW LANDFILL means an entire disposal facility in a contiguous geographical space where solid waste is placed in or on land. An MSW landfill may be active, inactive or closed.

(20) NON-DECOMPOSABLE SOLID WASTE means materials that do not degrade biologically to form landfill gases. Examples include, but are not limited to, earth, rock, concrete, asphalt, paving fragments, clay products, inert slag, asbestos-containing waste, and demolition material containing minor amounts (less than 10 percent by volume) of wood and metals. Materials that do not meet this definition are considered decomposable solid waste.

(21) NON-REPEATABLE MOMENTARY READINGS means indications of the presence of methane, total organic compounds, or toxic air contaminants, which persist for less than five seconds and do not recur when the sampling probe of a portable gas detector is placed in the same location.

(22) OPERATOR means the person:

(A) Operating the MSW landfill, or

(B) Operating the MSW landfill gas collection or gas control system.

(23) OWNER means the person holding title to the property.

(24) PASSIVE COLLECTION SYSTEM means a gas collection system that solely uses positive pressure within the landfill to move the gas rather than using gas mover equipment, or uses the natural pressure gradient established between the encapsulated waste and the atmosphere to move the gas through the collection system.

(25) PERIMETER means the outer boundary of the entire waste disposal property.

(26) PROFESSIONAL ENGINEER means an engineer holding a valid certificate issued by the State of California Board of Registration for

Professional Engineers and Land Surveyors or a state offering reciprocity with California.

(27) SOLID WASTE means all decomposable and non-decomposable solid, semisolid and liquid wastes including garbage, trash, refuse, paper, rubbish, ashes, industrial waste, manure, vegetable or animal solid and semisolid waste. Solid waste also includes any material meeting the definition of solid waste in 40 CFR 60.751 (as last amended by 64 Fed. Reg. 9262, Feb. 24, 1999), as incorporated by reference herein.

(28) SUBSURFACE GAS MIGRATION means underground landfill gases that are detected at any point on the perimeter, pursuant to California Code of Regulation Title 27, section 20921.

(29) TOXIC AIR CONTAMINANT (TAC) means an air contaminant which has been identified as a hazardous air pollutant pursuant to Section 7412 of Title 42 of the United States Code; or has been identified as a TAC by the Air Resources Board pursuant to Health and Safety Code Section 39655 through 39662, or which may cause or contribute to an increase in mortality or an increase in serious illness, or potential hazard to human health.

(30) WASTE IN PLACE means the total amount of solid waste placed in an MSW landfill, estimated in tons. The refuse density is assumed to be 1,300 pounds per cubic yard and the decomposable fraction is assumed to be 70 percent by weight.

(31) WELL RAISING means a MSW landfill activity where an existing gas collection well is temporarily disconnected from a vacuum source; and the non-perforated pipe attached to the well is extended vertically to allow the addition of a new layer of solid waste or the final cover or is extended horizontally to allow extension of an existing layer of solid waste or cover material. The extended pipe is then reconnected to vacuum source in order to continue collecting gases from that well.

(32) WORKING FACE means that open area where solid waste is deposited daily and compacted with landfill equipment.

(d) Active Landfill Design and Operation Requirements

The MSW landfill owner or operator shall comply with the provisions of paragraphs (d)(1) through (d)(20):

(1) If a valid Permit to Construct or Permit to Operate for the gas collection and gas control systems that meets the requirements of subparagraphs (d)(1)(A) through (d)(1)(C) has not been issued by the District, the owner or operator shall submit a site-specific gas collection and gas control systems design plan. The design plan shall be prepared by a Professional Engineer and submitted to the Executive Officer with applications for Permits to Construct or Permits to Operate for the gas collection and gas control systems. The Executive Officer shall review the gas collection and gas control systems design and either approve it, disapprove it, or request that additional information be submitted. An approved design plan may be revised and submitted for review and approval by the Executive Officer. Revisions shall be prepared by a Professional Engineer.

(A) The gas collection and gas control systems shall be designed to handle the maximum expected gas flow rate from the entire area of the MSW landfill that requires control, to minimize migration of subsurface gas to comply with paragraph (d)(10), and to collect gas at an extraction rate to comply with paragraphs (d)(11) and (d)(12). For the purposes of calculating the maximum expected gas generation flow rate from the landfill, the 2006 Intergovernmental Panel on Climate Change Guidelines for National Greenhouse Gas Inventories, Chapter 3 (IPCC Model), using landfill gas capture factor of 75 percent shall be used. Any other method used to determine the maximum gas generation flow rate, must be submitted in writing and approved by the Executive Officer, prior to use.

(B) If a valid Permit to Construct or Permit to Operate has not been issued by the District for the gas collection and gas control systems, the gas collection and gas control systems design plan shall either conform with specifications for active collection systems in 40 CFR, Part 60, Section 60.759 or include a demonstration to the Executive Officer's satisfaction of the sufficiency of the alternative provisions describing the design and operation of the gas collection and gas control systems, the operating parameters that would indicate proper performance, and appropriate monitoring procedures. Alternatives to this rule shall be submitted as specified in subdivision (i).

(C) The design plan shall provide for the control of collected MSW landfill emissions through the use of gas collection and gas control systems meeting the applicable requirements in clauses (d)(1)(C)(i), (d)(1)(C)(ii), (d)(1)(C)(iii), and (d)(1)(C)(iv), or provide for the collection and subsequent sale of collected MSW landfill emissions as specified in clause (d)(1)(C)(v).

(i) Route all collected landfill gas to a gas control system designed to be operated continuously to reduce methane by at least 99 percent by weight and reduce NMOC by at least 98 percent by weight or reduce the outlet NMOC concentration to less than 20 parts per million by volume (ppmv), dry basis as hexane at 3 percent oxygen. The required reduction efficiency or ppmv shall be established by an initial source test, required under 40 CFR, Part 60, Section 60.8 and annually thereafter using the test methods specified in paragraph (j)(1). The annual source test shall be conducted no later than 45 days after the anniversary date of the initial source test.

(ii) If an enclosed flare is used as the gas control device, the following requirements shall be met:

(I) The enclosed flare shall achieve a methane destruction efficiency of at least 99 percent by weight.

(II) The enclosed flare shall be equipped with an automatic damper, an automatic shutdown device, a flame arrestor, and a continuous recording temperature sensor.

(III) During restart or startup, an enclosed flare shall have sufficient flow of propane or commercial natural gas to the burners to prevent unburned collected methane from being emitted to the atmosphere.

(IV) The enclosed flare shall be operated within the parameter ranges established during the initial or the most recent source test. The operating