

ORIGINAL

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

IV-12/4/24  
SV-1/16/24

SOUTH COAST AQMD  
CLERK OF THE BOARD  
2021 NOV 22 PM 1:58

PETITIONER: INLAND EMPIRE UTILITIES AGENCY

CASE NO: 5209-6

FACILITY ID: 009163

FACILITY ADDRESS: 2662 East Walnut Street

[location of equipment/site of violation; specify business/corporate address, if different, under Item 2, below]

City, State, Zip: Ontario, CA 91761

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).

Pietro Cambiaso

Curtis L. Coleman

Inland Empire Utilities Agency

Law Office of Curtis L. Coleman

6075 Kimball Avenue

P.O Box 5655

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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](mailto: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)

Petitioner contracted W. M. Lyles Co. (Lyles) to construct three new enclosed flares at its Ontario wastewater treatment facility (Regional Plant No. 1 or RP-1). Two of those flares have been constructed. The contract with Lyles also required Lyles to arrange for the flares to be source tested in compliance with the flare permit conditions. Lyles contracted with Alliance Technical Group (Alliance) to conduct the source testing on the flares. Alliance is a SCAQMD approved source testing company. Alliance planned to conduct the source testing during the week of November 12-15, 2024. Testing began on November 12. On November 13 Alliance personnel began testing for particulate emissions, but aborted the testing citing safety concerns due to heat from the flare. Testing personnel were attempting to test for particulates in a manner that required them to be within five feet of the flare shroud and near the top of the flare. Lyles consulted with Petitioner and advised Petitioner that they thought the source testing might still be able to be conducted by November 25, 2024. This could be done either by getting another source testing company with equipment that would not require the testers to be so close to the flare, or by fabricating a flare shroud extension that would shield the testers from the flare exhaust heat. Lyles explored these alternatives, but on Monday, November 18, Lyles advised Petitioner that neither of these options could be implemented prior to November 25.

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

Regional Water Recycling Plant No. 1 (RP-1) is in the city of Ontario and has been in operation since 1948. The plant serves areas of Chino, Fontana, Montclair, Ontario, Rancho Cucamonga, Upland, and solids removed from Regional Water Recycling Plant No. 4 (RP-4), located in Rancho Cucamonga. RP-1 treats an average influent wastewater flow of approximately 28 million gallons per day but is sized to treat up to 44 million gallons per day. It provides primary, secondary and tertiary water treatment. It operates 24 hours, 7 days per week, and 52 weeks per year.

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)*
Enclosed Flare, digester gas fired, 12MM Btu/hour maximum heat input (Exhibit 1)	A/N 610654 Permit No. G61265		
Enclosed Flare, digester gas fired, 27MM Btu/hour maximum heat input (Exhibit 2)	A/N 610657 Permit No. G61266		

\*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.

The wastewater treatment process generates "digester gas" which is composed of methane and significant levels of odorous materials including hydrogen sulfide. In order to comply with permit requirements that digester gas must be burned at high temperature. Petitioner is in the process of upgrading its flaring system. When completed, the flaring system will include two 27 MM Btu/hour enclosed flares and one 12 MM Btu/hour enclosed flare. Petitioner has completed construction of one 27 MM Btu/hour flare and the 12 MM Btu/hour flare. These two flares are currently used to combust the digester gas.

The permits for those flares require source testing of the flares to be conducted within a certain time frame specified in the permits. Pursuant to those conditions, source testing must be completed by November 25, 2024.

8. Is there a regular maintenance and/or inspection schedule for this equipment? Yes  No   
 If yes, how often: \_\_\_\_\_ Date of last maintenance and/or inspection \_\_\_\_\_  
 Describe the maintenance and/or inspection that was performed.

The units are new and maintenance will be completed on a quarterly basis based on manufacturers' recommendations. The inspection will include air filter cleaning, thermocouple checks, start up and shutdown checks, leak checks and equipment cycling.

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
203(b) 3002(c)	Condition No. 18 in Permit Nos. Permit No. G61265 and G61266 require source testing to be conducted within 180 days of the date that the flare is able to achieve a firing period of at least 60 minutes at the maximum flow rates achievable at that time. The 180 day period expires on November 25, 2024.

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.

Petitioner retained a contractor to construct the new flares. Part of the contract required the contractor to arrange for source testing to be conducted in accordance with the permit conditions. The contractor (W. M. Lyles Co.) contracted with Alliance Technical Group ("Alliance") to conduct the source testing of the flares. Alliance is a SCAQMD approved source testing company. Petitioner was advised that Alliance would conduct the source testing during the week of November 12, 2024. On November 12, 2024, Alliance began the testing. On November 13, 2024, Alliance was unable to complete the testing for particulates citing safety concerns related to heat from the flare stack. The top of the stack is a couple of feet from the sampling port and with heat around 2200 degrees F, Alliance did not feel safe performing the test. Alliance requested a shroud be added to the top of the stack during testing to protect the testing personnel from the heat. The manufacturing of that shroud will take about 2-3 weeks to be completed. The flare manufacturer (Aereon) is providing a drawing to the contractor to submit for fabrication. The need for this shroud resulted in Alliance being unable to complete the source testing before the November 25<sup>th</sup> date. Lyles also looked into retaining a different source testing company to do the testing prior to November 25<sup>th</sup>, but due to the holidays and the limited number of approved source testing companies, it was unable to schedule another source testing company to come on site and perform the testing by November 25, 2024.



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).

As noted above, after discussing the issues regarding the suspension of testing on November 13th Lyles believed that either another source testing company could be brought in to do the testing, or a shroud extension could be fabricated to alleviate the safety concerns of the original source testing company, in time to conduct the testing during the week of November 18. However, on November 18 the Lyles notified Petitioner that neither of those options were possible. As a result, the source testing will not be able to be conducted by November 25, 2024.

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.

Petitioner is currently in compliance with the requirements of its permits but will be in violation of Condition No. 18 on November 25, 2024. Upon learning on November 14 that the source testing company could not complete the testing during the week of November 13, Petitioner contacted attorney Curtis Coleman to discuss options if the November 25 deadline could not be met. Petitioner also notified SCAQMD Source Testing staff (sourcetesting@aqmd.gov) on November 14 of the issues. Petitioner directed Lyles to explore all feasible steps to enable the source testing to be completed by November 25th. On November 18, Petitioner was advised by Lyles that it would not be possible to conduct the source tests due to the need to fabricate a shroud to provide protection from the flare exhaust heat for Alliance source testing personnel and the lack of availability of another source testing company that can safely perform the tests without the shroud prior to November 25, 2024. The Contractor will continue searching for an alternative source testing company to complete the source test as soon as possible, as well as continue work to fabricate a shroud that would allow Alliance to complete the source testing.

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: \$ \_\_\_\_\_ Civil penalties for violating SCAQMD Rules 203(b) and 3002(c)

Number of employees laid off (if any): \_\_\_\_\_ 0 \_\_\_\_\_

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

Petitioner is an essential public service. Failure to grant the variance would result in an unreasonable burden as contemplated by Health and Safety Code Section 42352(a)(2) by exposing it to civil penalties for violation of permit conditions pursuant to SCAQMD Rule 203(b) and 3002(c).

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

Neither curtailment nor termination of operations of the flares would avoid the need for a variance. In any event, the flares need to be operated to combust excess digester gas generated during the wastewater treatment process and Petitioner has no control over the amount of digester gas generated during the process. The third flare (PN G61267 AN 610658) can operate in lieu of the two aforementioned flares once constructed and commissioned.

19. Estimate excess emissions, if any, on a daily 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)	(B)	(C)*
	Total Estimated Excess Emissions (lbs/day)	Reduction Due to Mitigation (lbs/day)	Net Emissions After Mitigation (lbs/day)
N/A			

\* Column A minus Column B = Column C

Excess Opacity: NA %

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

There will be no excess emissions as the variance is being requested from an administrative permit condition only that specifies a time frame within which source tests must be conducted.

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.

There will be no excess emissions.



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.**

Petitioner will monitor the amount of digester gas sent to the flares and the Btu content of the gas as required by the flare permit. This will allow the District to calculate emissions.

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.

Petitioner will conduct the source tests as soon as possible after November 25, 2024.

24. State the date you are requesting the variance to begin: November 25, 2024; and the date by which you expect to achieve final compliance: no later than January 24, 2025. Petitioner will have a firmer timeline by the date of the short variance hearing.

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).

NA

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.

Alemayehu Solomon Ext. 3256  
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 November 22, 2024, at Diamond Bar, California

Pietro Cambiaso  
Signature Print Name

Title: Manager of Compliance and Sustainability

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:  
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





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**FACILITY PERMIT TO OPERATE  
INLAND EMPIRE UTL AGEN, A MUN WATER DIST**

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**PERMIT TO CONSTRUCT/OPERATE**

**Permit No. G61265  
A/N 610654**

**Equipment Description:**

Enclosed Flare, Aereon, Model CEB-350, digester gas fired, 12 MMBtu/hr maximum heat input, maximum combustion air blower capacity of 3,000 scfm, 2'-8" Dia. X 17'-12" H., with natural gas pilot, ground level, shrouded, with automatic combustion blower, automatic combustion air control system, temperature controller, and automatic shutoff gas valve.

**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.  
[Rule 204]
2. This equipment shall be properly maintained and kept in good operating condition at all times.  
[Rule 204]
3. This equipment shall be operated and maintained by personnel properly trained in its operation.  
[Rule 204]
4. This equipment shall be operated in compliance with all applicable provisions of Rules 431.1 and 1118.1.  
[Rule 431.1, Rule 1118.1]
5. Prior to burning digester gas in this equipment, the digester gas shall first be treated through a permitted knockout vessel/gas-liquid separator with a demister or equivalent.  
[Rule 1303(a)(1)-BACT]
6. The flare shall be equipped with a shroud which will ensure complete flame retention within the shroud.  
[Rule 1303(a)(1)-BACT]
7. The flare shall be equipped with a temperature indicator and recorder which measures and records the gas temperature in the flare stack. The temperature indicator and recorder shall operate whenever the flare is in operation. The temperature indicator and recording device shall operate whenever the flare is in operation. The temperature shall be measured at a location that is at least 0.6 seconds downstream of the burner.  
[Rule 1303(a)(1)-BACT]
8. Whenever the flare is in operation, a temperature of not less than 1,800 degrees Fahrenheit, 15 minute average, as measured by the temperature indicator and recorder shall be maintained except during periods of startup and shutdown. Startup is defined as the period from flare ignition to the time when 1,800 degrees Fahrenheit is achieved, not to exceed 30 minutes. Shutdown is the period from when the gas valve begins to be shutoff and completely shuts off, not to exceed 30 minutes.  
[Rule 1303(a)(1)-BACT]
9. The flare shall be designed and operated so that the flame in the flare remains below the height of the flares operating thermocouple at all times.  
[Rule 204]



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**FACILITY PERMIT TO OPERATE**  
**INLAND EMPIRE UTL AGEN, A MUN WATER DIST**

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10. A continuous, non-resettable totalizing flow indicating and recording device shall be maintained in the digester gas supply lines to the flare to measure and record the quantity of digester gas (in scfm) being combusted in the flare. In case a pressure sensor device is used in place of the flow indicator, a conversion chart shall be posted on the equipment to indicate the flow rate (in scfm) corresponding to the pressure reading.  
[Rule 204, Rule 1303(b)(2)-Offset]
11. All recording devices shall be synchronized with respect to the time of day.  
[Rule 1303(b)(2)-Offset]
12. At least two (2) sampling ports shall be provided in the flare stack at least one-half duct diameter upstream of the flare outlet, 90 degrees apart, or as otherwise approved. Each sampling port shall consist of a four-inch coupling with plug. All ports shall be properly centered. An equivalent method of emission sampling may be used upon approval by the Executive Officer. Adequate and safe access to all source test ports shall be provided within 48 hours notice by South Coast AQMD.  
[Rule 204, Rule 217]
13. A sampling port shall be maintained at the inlet gas line to the flare, downstream of the sulfur removal system, to allow the collection of a digester gas sample.  
[Rule 217, Rule 431.1]
14. Weekly readings of Btu content of the gas at the inlet to the flare, downstream of the sulfur removal system, shall be taken using an instrument or method approved by the South Coast AQMD. All results shall be recorded.  
[Rule 1303(b)(1)-Modeling, Rule 1303(b)(2)-Offset]
15. The heat input through the flare shall not exceed 12 MMBtu/hr. A log shall be kept indicating the total heating value of digester gas combusted in the flare based on the recorded flow rate (scfm) and the latest weekly BTU content reading.  
[Rule 1303(b)(1)-Modeling, Rule 1303(b)(2)-Offset]
16. The flare shall be equipped with an automatic shut-down system with a failure alarm, which has been approved by the South Coast AQMD, to automatically isolate the flare from the digester gas supply line, shut off the blower, and immediately notify a responsible part of the shut-down. The automatic shutdown safety system shall be tested annually for proper operation of the flare and the results recorded.  
[Rule 1303(a)(1)-BACT]
17. Operation of this equipment shall not result of any release of raw digester gas into the atmosphere. Any breakdown or malfunction which results in emission of raw digester gas shall be reported to the South Coast AQMD Compliance Manager for waste management facilities within one hour after occurrence or within one hour the owner/operator reasonably should have known of the occurrence, and immediate remedial measure shall be under taken to correct the problem and prevent further emissions into the atmosphere.  
[Rule 430]
18. The operator shall conduct a source test on the flare within 180 days after the flare is able to achieve a firing period of at least 60 minutes, at the maximum flow rates achievable, at that time, in accordance with South Coast AQMD approved source test procedures and furnish the South Coast AQMD written results of such performance tests within sixty (60) days after testing. Thereafter, the operator shall conduct a source test on the flare every five years, in as-found condition.





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## FACILITY PERMIT TO OPERATE INLAND EMPIRE UTL AGEN, A MUN WATER DIST

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Written notification of the scheduled test date shall be provided to South Coast AQMD at least ten (10) days prior to the date so that the testing may be observed by South Coast AQMD personnel. The testing shall be conducted when the equipment is in full operation, and shall include, but not limited to, a test of the inlet to the flare and the flare exhaust for:

- A. Methane
  - B. Total Non-Methane Organic Compounds (TNMOC)
  - C. Toxic Air Contaminants (TAC) including, but not limited to Acrolein, Acetaldehyde, Formaldehyde, Total PAHs, Naphthalene, Benzene, Chlorobenzene, Ethyl Benzene, 1,1,2,2-Tetrachloroethane, Acrylonitrile, 1,2-Dichloroethane, 1,1-Dichloroethene, Dichloromethane, Tetrachloroethylene, Tetrachloromethane, Toluene, 1,1,1-Trichloroethane, Trichloroethylene, Trichloromethane, Vinyl Chloride, and Xylene Isomers (exhaust only).
  - D. NO<sub>x</sub>, as NO<sub>2</sub> (exhaust only)
  - E. SO<sub>x</sub>, as SO<sub>2</sub> (exhaust only)
  - F. CO (exhaust only)
  - G. Total Particulates PM<sub>10</sub> (exhaust only)
  - H. Oxygen and Carbon Dioxide
  - I. Moisture Content
  - J. Temperature (exhaust only)
  - K. Flowrate
  - L. Total Sulfur Compounds as Hydrogen Sulfide (inlet only)
  - M. Btu Value (inlet only)
  - N. Nitrogen (exhaust only)
- [Rule 1118.1, Rule 1303(b)(2)-Offset, Rule 1401]

19. The source test report, for the flare shall include:

- A. Emissions of CO, NO<sub>x</sub>, TNMOCs, methane, PM<sub>10</sub>, and SO<sub>x</sub>, reported in units of lbs/hr and ppmv (except particulates/PM<sub>10</sub> which shall be in lbs/hr and gr/scf), overall TNMOC & methane destruction efficiency (wt%), formaldehyde, toxic air contaminants (lbs/hr and ppmv), oxygen and carbon dioxide (in percentage volume), sulfur compounds as H<sub>2</sub>S (in ppmv), and TNMOC emissions (ppmv), dry basis, as hexane at 3% oxygen.
- B. The test shall be performed by a testing laboratory certified to meet the criteria in South Coast AQMD Rule 304(k) (No Conflict of Interest).
- C. Sampling facilities shall comply with South Coast AQMD "Guidelines for Construction of Sampling and Testing Facilities" pursuant to Rule 217.
- D. If the source test indicates additional toxic air contaminants (TAC) compounds are emitted or the rates are significantly different than used in previously evaluated risk assessment, the owner or operator shall calculate the maximum individual cancer risk (MICR), acute hazard index (HIA) and chronic hazard index (HIC), based on the source test results using South Coast AQMD published risk assessment procedures for Rules 1401 and 212 to determine compliance with Rule 1401. Results shall be submitted to South Coast AQMD within 90 days after initial testing is completed.

[Rule 1303(b)(2)-Offset, Rule 1401]



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**FACILITY PERMIT TO OPERATE  
INLAND EMPIRE UTL AGEN, A MUN WATER DIST**

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20. All digester gas collected shall be directed either to the flare for combustion or to a treatment system or equipment which has a valid Permit to Construct or Operate, as applicable, from the South Coast AQMD.  
[Rule 1303(b)(2)-Offset]
21. This permit shall expire if construction of this equipment is not complete within one year from the date of issuance of this permit unless an extension is granted by the Executive Officer.  
[Rule 205]
22. All records shall be kept for a minimum of five years and shall be made available to South Coast AQMD personnel upon request.  
[Rule 1303(b)(2)-Offset]

**Emissions and Requirements:**

23. This equipment is subject to the applicable requirements of the following rules and regulations:
  - CO: 2000 ppmv, Rule 407
  - CO: 0.06 lb/MMBtu/hr, Rule 1118.1, Rule 1303(a)(1) – LAER/BACT
  - PM: Rule 404, see Appendix B for emission limits
  - PM: 0.1 gr/scf, Rule 409
  - ROG: 0.038 lb/MMBtu/hr, Rule 1118.1, Rule 1303(a)(1) – LAER/BACT
  - NOx 0.025 lb/MMBtu/hr, Rule 1118.1, Rule 1303(a)(1) – LAER/BACT
  - SOx: 500 ppm, Rule 407





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**FACILITY PERMIT TO OPERATE  
INLAND EMPIRE UTL AGEN, A MUN WATER DIST**

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**PERMIT TO CONSTRUCT/OPERATE**

**Permit No. G61266  
A/N 610657**

**Equipment Description:**

Enclosed Flare, Aereon, Model CEB-800, digester gas fired, 27 MMBtu/hr maximum heat input, maximum combustion air blower capacity of 11,000 scfm, 3'-8" Dia. X 24'-2" H., with natural gas pilot, ground level, shrouded, with automatic combustion blower, automatic combustion air control system, temperature controller, and automatic shutoff gas valve.

**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.  
[Rule 204]
2. This equipment shall be properly maintained and kept in good operating condition at all times.  
[Rule 204]
3. This equipment shall be operated and maintained by personnel properly trained in its operation.  
[Rule 204]
4. This equipment shall be operated in compliance with all applicable provisions of Rules 431.1 and 1118.1.  
[Rule 431.1, Rule 1118.1]
5. Prior to burning digester gas in this equipment, the digester gas shall first be treated through a permitted knockout vessel/gas-liquid separator with a demister or equivalent.  
[Rule 1303(a)(1)-BACT]
6. The flare shall be equipped with a shroud which will ensure complete flame retention within the shroud.  
[Rule 1303(a)(1)-BACT]
7. The flare shall be equipped with a temperature indicator and recorder which measures and records the gas temperature in the flare stack. The temperature indicator and recorder shall operate whenever the flare is in operation. The temperature indicator and recording device shall operate whenever the flare is in operation. The temperature shall be measured at a location that is at least 0.6 seconds downstream of the burner.  
[Rule 1303(a)(1)-BACT]
8. Whenever the flare is in operation, a temperature of not less than 1,800 degrees Fahrenheit, 15 minute average, as measured by the temperature indicator and recorder shall be maintained except during periods of startup and shutdown. Startup is defined as the period from flare ignition to the time when 1,800 degrees Fahrenheit is achieved, not to exceed 30 minutes. Shutdown is the period from when the gas valve begins to be shutoff and completely shuts off, not to exceed 30 minutes.  
[Rule 1303(a)(1)-BACT]
9. The flare shall be designed and operated so that the flame in the flare remains below the height of the flares operating thermocouple at all times.  
[Rule 204]



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**FACILITY PERMIT TO OPERATE  
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10. A continuous, non-resettable totalizing flow indicating and recording device shall be maintained in the digester gas supply lines to the flare to measure and record the quantity of digester gas (in scfm) being combusted in the flare. In case a pressure sensor device is used in place of the flow indicator, a conversion chart shall be posted on the equipment to indicate the flow rate (in scfm) corresponding to the pressure reading.  
[Rule 204, Rule 1303(b)(2)-Offset]
11. All recording devices shall be synchronized with respect to the time of day.  
[Rule 1303(b)(2)-Offset]
12. At least two (2) sampling ports shall be provided in the flare stack at least one-half duct diameter upstream of the flare outlet, 90 degrees apart, or as otherwise approved. Each sampling port shall consist of a four-inch coupling with plug. All ports shall be properly centered. An equivalent method of emission sampling may be used upon approval by the Executive Officer. Adequate and safe access to all source test ports shall be provided within 48 hours notice by South Coast AQMD.  
[Rule 204, Rule 217]
13. A sampling port shall be maintained at the inlet gas line to the flare, downstream of the sulfur removal system, to allow the collection of a digester gas sample.  
[Rule 217, Rule 431.1]
14. Weekly readings of Btu content of the gas at the inlet to the flare, downstream of the sulfur removal system, shall be taken using an instrument or method approved by the South Coast AQMD. All results shall be recorded.  
[Rule 1303(b)(1)-Modeling, Rule 1303(b)(2)-Offset]
15. The heat input through the flare shall not exceed 27 MMBtu/hr. A log shall be kept indicating the total heating value of digester gas combusted in the flare based on the recorded flow rate (scfm) and the latest weekly BTU content reading.  
[Rule 1303(b)(1)-Modeling, Rule 1303(b)(2)-Offset]
16. The flare shall be equipped with an automatic shut-down system with a failure alarm, which has been approved by the South Coast AQMD, to automatically isolate the flare from the digester gas supply line, shut off the blower, and immediately notify a responsible part of the shut-down. The automatic shutdown safety system shall be tested annually for proper operation of the flare and the results recorded.  
[Rule 1303(a)(1)-BACT]
17. Operation of this equipment shall not result of any release of raw digester gas into the atmosphere. Any breakdown or malfunction which results in emission of raw digester gas shall be reported to the South Coast AQMD Compliance Manager for waste management facilities within one hour after occurrence or within one hour the owner/operator reasonably should have known of the occurrence, and immediate remedial measure shall be under taken to correct the problem and prevent further emissions into the atmosphere.  
[Rule 430]
18. The operator shall conduct a source test on the flare within 180 days after the flare is able to achieve a firing period of at least 60 minutes, at the maximum flow rates achievable, at that time, in accordance with South Coast AQMD approved source test procedures and furnish the South Coast AQMD written results of such performance tests within sixty (60) days after testing. Thereafter, the operator shall conduct a source test on the flare every five years, in as-found condition.





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## FACILITY PERMIT TO OPERATE INLAND EMPIRE UTL AGEN, A MUN WATER DIST

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Written notification of the scheduled test date shall be provided to South Coast AQMD at least ten (10) days prior to the date so that the testing may be observed by South Coast AQMD personnel. The testing shall be conducted when the equipment is in full operation, and shall include, but not limited to, a test of the inlet to the flare and the flare exhaust for:

- A. Methane
  - B. Total Non-Methane Organic Compounds (TNMOC)
  - C. Toxic Air Contaminants (TAC) including, but not limited to Acrolein, Acetaldehyde, Formaldehyde, Total PAHs, Naphthalene, Benzene, Chlorobenzene, Ethyl Benzene, 1,1,2,2-Tetrachloroethane, Acrylonitrile, 1,2-Dichloroethane, 1,1-Dichloroethene, Dichloromethane, Tetrachloroethylene, Tetrachloromethane, Toluene, 1,1,1-Trichloroethane, Trichloroethylene, Trichloromethane, Vinyl Chloride, and Xylene Isomers (exhaust only).
  - D. NO<sub>x</sub>, as NO<sub>2</sub> (exhaust only)
  - E. SO<sub>x</sub>, as SO<sub>2</sub> (exhaust only)
  - F. CO (exhaust only)
  - G. Total Particulates PM<sub>10</sub> (exhaust only)
  - H. Oxygen and Carbon Dioxide
  - I. Moisture Content
  - J. Temperature (exhaust only)
  - K. Flowrate
  - L. Total Sulfur Compounds as Hydrogen Sulfide (inlet only)
  - M. Btu Value (inlet only)
  - N. Nitrogen (exhaust only)
- [Rule 1118.1, Rule 1303(b)(2)-Offset, Rule 1401]

19. The source test report, for the flare shall include:

- A. Emissions of CO, NO<sub>x</sub>, TNMOCs, methane, PM<sub>10</sub>, and SO<sub>x</sub>, reported in units of lbs/hr and ppmv (except particulates/PM<sub>10</sub> which shall be in lbs/hr and gr/scf), overall TNMOC & methane destruction efficiency (wt%), formaldehyde, toxic air contaminants (lbs/hr and ppmv), oxygen and carbon dioxide (in percentage volume), sulfur compounds as H<sub>2</sub>S (in ppmv), and TNMOC emissions (ppmv), dry basis, as hexane at 3% oxygen.
- B. The test shall be performed by a testing laboratory certified to meet the criteria in South Coast AQMD Rule 304(k) (No Conflict of Interest).
- C. Sampling facilities shall comply with South Coast AQMD "Guidelines for Construction of Sampling and Testing Facilities" pursuant to Rule 217.
- D. If the source test indicates additional toxic air contaminants (TAC) compounds are emitted or the rates are significantly different than used in previously evaluated risk assessment, the owner or operator shall calculate the maximum individual cancer risk (MICR), acute hazard index (HIA) and chronic hazard index (HIC), based on the source test results using South Coast AQMD published risk assessment procedures for Rules 1401 and 212 to determine compliance with Rule 1401. Results shall be submitted to South Coast AQMD within 90 days after initial testing is completed.

[Rule 1303(b)(2)-Offset, Rule 1401]



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**FACILITY PERMIT TO OPERATE  
INLAND EMPIRE UTL AGEN, A MUN WATER DIST**

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20. All digester gas collected shall be directed either to the flare for combustion or to a treatment system or equipment which has a valid Permit to Construct or Operate, as applicable, from the South Coast AQMD.  
[Rule 1303(b)(2)-Offset]
21. This permit shall expire if construction of this equipment is not complete within one year from the date of issuance of this permit unless an extension is granted by the Executive Officer.  
[Rule 205]
22. All records shall be kept for a minimum of five years and shall be made available to South Coast AQMD personnel upon request.  
[Rule 1303(b)(2)-Offset]

**Emissions and Requirements:**

23. This equipment is subject to the applicable requirements of the following rules and regulations:
  - CO: 2000 ppmv, Rule 407
  - CO: 0.06 lb/MMBtu/hr, Rule 1118.1, Rule 1303(a)(1) – LAER/BACT
  - PM: Rule 404, see Appendix B for emission limits
  - PM: 0.1 gr/scf, Rule 409
  - ROG: 0.038 lb/MMBtu/hr, Rule 1118.1, Rule 1303(a)(1) – LAER/BACT
  - NOx 0.025 lb/MMBtu/hr, Rule 1118.1, Rule 1303(a)(1) – LAER/BACT
  - SOx: 500 ppm, Rule 407