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**BEFORE THE HEARING BOARD OF THE
SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT**

In the Matter of

SOUTH COAST AIR QUALITY
MANAGEMENT DISTRICT,

Petitioner,

v.

ORGANIC ENERGY SOLUTIONS
[Facility ID No. 184672], R3
SUSTAINABILITY,

Respondents.

Case No. 6292-1

**FINDINGS AND DECISION FOR A
STIPULATED ORDER FOR
ABATEMENT [PROPOSED]**

South Coast AQMD Rules 201 and 203(a)

Hearing Date: August 19, 2026
Time: 9:30 a.m.
Place: Hearing Board
South Coast AQMD
21865 Copley Drive
Diamond Bar, CA 91765

This Petition for an Order for Abatement was heard on August 19, 2026, pursuant to notice and in accordance with the provisions of California Health and Safety Code §40823 and District Rule 812. The following members of the Hearing Board were present: Micah Ali, Chair; Robert Pearman, Vice Chair; Dr. Jerry P. Abraham, MD, MPH, CMQ; Mohan Balagopalan; and Cynthia Verdugo-Peralta. Petitioner South Coast Air Quality Management District, Executive Officer, (“Petitioner”) was represented by Erika Chavez, Principal Deputy District Counsel, who did not appear. Respondents Organic Energy Solutions and R3 Sustainability (“Respondents”) were represented by Bruce Armbruster, EHS Practice Director, ALL4 Inc., who did not appear. The parties

1 have stipulated to issuance of this order and have filed with the Hearing Board a Joint Stipulation
2 to Have This Matter Place on the Consent Calendar of the Hearing Board. The parties filed with the
3 Hearing Board the Declarations of Adebola John (District Inspector), Melissa Mendoza (District
4 Engineer), and Kyle Granowski and stipulated that they can be submitted into evidence. The
5 parties also submitted proposed Findings and Decision of the Hearing Board. The public was given
6 an opportunity to testify. Evidence was received and the matter was submitted. The Hearing
7 Board finds and decides as follows:

8 The Hearing Board finds that GOOD CAUSE exists to issue the Stipulated Order for
9 Abatement. This finding of good cause is based on the following:

10 1. The District has established a prima facie case that Respondents are violating South
11 Coast AQMD Rules 201 and 203(a). The District's prima facie case is based on the following
12 allegations and evidence set forth in Paragraphs 2 through 10, below.

13 2. Petitioner is a body corporate and politic established and existing pursuant to Health
14 and Safety Code §§ 40000, *et seq.* and §§ 40400, *et seq.*, and is the sole and exclusive local agency
15 with the responsibility for comprehensive air pollution control in the South Coast Air Basin.

16 3. Respondent Organic Energy Solutions operates a facility that uses a food waste
17 anaerobic digester system to produce digester gas. The facility is located at 2586 Shenandoah
18 Way, San Bernardino, CA 92407 ("Facility"), within South Coast AQMD's jurisdiction and
19 subject to South Coast AQMD rules.

20 4. Respondent R3 Sustainability is currently a co-operator of the Facility. R3
21 Sustainability is located at 7032 S. Revere Parkway, Suite 320-H20, Centennial, CO 80112.

22 5. Respondent OES was originally issued Permits to Construct Application Numbers
23 (A/N) 594048-9, 594052, and 610611-4 for the following equipment at the facility.

- 24 a. Food Waste Anaerobic Digestion Operations (A/N 594048);
- 25 b. Digester Gas (Biogas) Handling and Treatment System (A/N 594049);
- 26 c. Ground Flare-Zink, digester gas fired (A/N 594052);
- 27 d. Air Pollution Control System (Selective Catalytic Reduction Unit No. 1)(A/N
- 28 610611);

- 1 e. Air Pollution Control System (Selective Catalytic Reduction Unit No. 2) (A/N
2 610612);
- 3 f. Cogeneration System (Internal Combustion Engine, No. 1)(A/N 610613);
- 4 g. Cogeneration System (Internal Combustion Engine, No. 2)(A/N 610614);
- 5 6. On January 30, 2025, Respondent's A/Ns 594048-9, 594052, 610611-4 were denied
6 Permits to Operate, for failure to conduct source testing, failure to provide operational records, and
7 failure to provide procedural information.
- 8 7. On February 12, 2026, District inspectors visited OES and observed the following
9 equipment installed and operating:
- 10 a. Food Waste Anaerobic Digestion Operations;
- 11 b. Digester Gas (Biogas) Handling and Treatment System;
- 12 c. Ground Flare-Zink, digester gas fired;
- 13 d. Air Pollution Control System (Selective Catalytic Reduction Unit No. 1);
- 14 e. Air Pollution Control System (Selective Catalytic Reduction Unit No. 2);
- 15 f. Cogeneration System (Internal Combustion Engine, No. 1);
- 16 g. Cogeneration System (Internal Combustion Engine, No. 2);
- 17 8. **District Rule 201** requires that a person shall not build, erect or install any
18 equipment which causes or controls the issuance of air contaminants into the atmosphere without
19 first obtaining written authorization for such construction from the Executive Officer.
- 20 9. **District Rule 203(a)**, in relevant part, prohibits the operation of any equipment the
21 use of which may cause or control the issuance of air contaminants into the atmosphere without
22 first obtaining a written permit to operate from the District's Executive Officer.
- 23 10. Petitioner alleges that Respondents are in violation of District Rules 201 and 203(a)
24 in that Respondents have installed and are operating the Food Waste Anaerobic Digestion
25 Operations, Digester Gas (Biogas) Handling and Treatment System, Ground Flare-Zink (digester
26 gas fired), two Air Pollution Control Systems (Selective Catalytic Reduction Units Nos. 1 and 2),
27 and two Internal Combustion Engines (Nos. 1 and 2) without first obtaining a Permit to Operate.
28 The District issued Notice of Violation P79731 on February 19, 2026.

11. Respondents have agreed to stipulate to issuance of this Order for Abatement pursuant to California Health & Safety Code §42451(b). Respondent further states that it can comply with the conditions set forth below.

CONCLUSIONS

1. The parties have stipulated to issuance of this Order for Abatement pursuant to California Health & Safety Code § 42451(b).

2. The issuance of this stipulated Order for Abatement following a fully noticed hearing will not constitute a taking of property without due process of law. If the issuance of this stipulated Order for Abatement results in the closing or elimination of an otherwise lawful business, such closing would not be without a corresponding benefit in reducing air contaminants.

3. This stipulated Order for Abatement is not intended to be, nor does it act as a variance, and Respondents remain subject to all rules and regulations of the District, and with all applicable provisions of California law.

ORDER

THEREFORE, based on the foregoing and good cause appearing, the Hearing Board hereby orders Respondents to immediately cease and desist from violating Rules 201 and 203(a), or in the alternative, comply with the following conditions:

1. Respondent shall, no later than 7 calendar days from the issuance of this Order, submit to South Coast AQMD (Attention: Air Quality Inspector, Adebola John, ajohn@aqmd.gov; Air Quality Engineer, Melissa Mendoza, mmendoza2@aqmd.gov; & District Counsel, Erika Chavez, echavez@aqmd.gov), a complete description of the facility, including but not limited to:

- a. A detailed description of the process.
- b. A process flow diagram indicating the flow of materials from the inlet to the facility to the outlet of the facility and all points in the process where there may be a discharge of emissions to the atmosphere including any pressure relief valves.
- c. A facility plot plan identifying all equipment and its location.

- d. A list of all equipment currently physically on site indicating the operational status (e.g., operational, out of service, under construction, under repair/maintenance, decommissioned).
- e. A description of each piece of equipment and or emission control device, including at minimum the make, model, dimensions, and maximum capacities.
- f. A summary identifying any equipment that has been modified or removed from the site since the issuance of the former Permits to Construct on December 31, 2019.

2. Respondent shall, no later than 14 calendar days from the issuance of this Order, submit to South Coast AQMD (Attention: Air Quality Inspector, Adebola John, ajohn@aqmd.gov; Air Quality Engineer, Melissa Mendoza, mmendoza2@aqmd.gov; & District Counsel, Erika Chavez, echavez@aqmd.gov), all operational and monitoring records pertaining to the facility's operation from the last twelve (12) months, including:

- a. Anaerobic Digestion Process (formerly permitted under Permit to Construct A/N 594048)
 - Records of the total volume in gallons of food waste slurry accepted and processed by the facility on a daily, monthly, and annual basis.
 - Records of the analyses of the digester gas produced, including BTU content High Heating Value (HHV) (BTU/scf), and total sulfur compounds as H₂S (ppmv), on a monthly basis, and volatile organic compounds and speciated organics (ppmv or equivalent), only the initial analysis. The analyses should include a detailed description of the instrument(s), method(s), and calculations used to determine the results.
- b. Digester Gas Treatment System (formerly permitted under Permit to Construct A/N 594049)
 - Records of the total quantity (in standard cubic feet, scf) of treated digester gas on a monthly basis.
 - Records of total sulfur compounds as H₂S (ppmv and lb/day) at the inlet and

outlet of the Digester Gas Treatment System on a weekly basis.

- Records of pH of the solution in the biological scrubber and the media in the iron sponge scrubber on a weekly basis.
- Records of the temperature of the solution in the biological scrubber on a weekly basis.
- Records of %O₂ in the biological scrubber on a weekly basis.
- Records of differential pressure of biological scrubber, iron sponge scrubber and activated carbon on a monthly basis.

c. Digester Gas Flare (formerly permitted under Permit to Construct A/N 594052)

- Records of the gas temperature (°F) in the flare stack.
- Log records of cumulative operating hours per calendar month.
- Records of total sulfur compounds as H₂S (lb/day) of the digester gas on a weekly basis for each week in which the flare operated more than 4 continuous hours.
- Records of BTU content (HHV) (BTU/scf) of the digester gas at the inlet to the flare on a weekly basis for each week in which the flare operates more than 4 continuous hours.
- Records of quantity of digester gas (standard cubic feet per minute, scfm) being combusted in the flare on a weekly basis.
- Logs of the total heat input (MMBtu/hr) of digester gas burned in the flare on a weekly basis based on the recorded flow rate (scfm) and the BTU content (HHV) (BTU/scf) of the corresponding week.

d. Selective Catalytic Reduction (SCR) Unit No. 1 and 2 (formerly permitted under Permits to Construct A/Ns 610611 & 610612)

- Records of inspections and maintenance of the SCR Units.
- Records of temperature (°F) at the inlet and outlet of the SCR Units.
- Records of the differential pressure (in w.c. or mbar) of the SCR catalyst and oxidation catalyst.

- Records of the following:
 - Total hours of operation per month.
 - NO_x concentration (ppmv) @ 15% O₂, dry, 15 min average at the outlet of the SCR catalyst.
 - Temperature (°F) of the exhaust gas at the inlet and outlet of the SCR.
 - Total time (hours) from cold start-up to reach a SCR inlet temperature of 525 °F.
 - Urea injection rate (lb/hr and gal/hr)
 - Records of the annual ammonia slip tests.
- e. Internal Combustion Engines (ICE) No. 1 and 2 (formerly permitted under Permits to Construct A/Ns 610613 & 610614)
- Records of fuel consumption (scf) for digester gas and natural gas on a weekly basis.
 - Records of total sulfur compounds as H₂S (lb/day) emitted from the burning of the digester gas on a weekly basis for each week the engine(s) operates including the reference laboratory analysis report to verify calculations of the emission rates.
 - Records pertaining to the Continuous Emission Monitoring System (CEMS) certification including the CEMS certification test plan, CEMS certification test report, quality assurance calibration and linearity checks in accordance with Rule 218.1, and CEMS final approval.
 - CEMS records of NO_x and O₂ exhaust gas concentrations (ppmv), uncorrected and corrected to @15% O₂, dry basis.
 - Operating engine logs including for each calendar month:
 - Total hours of operation
 - Type of gaseous fuel used (digester gas and natural gas)
 - Total daily fuel consumption (scf) for each type of fuel used
 - Percent of digester gas usage

1 For all records required to be submitted above, Respondent shall include clear identification of the
2 methodology/monitoring device(s), copies of any laboratory analyses in original and complete
3 format, manufacturer specifications and/or operational manuals of any analyzers or monitoring
4 equipment, calibration records, operator logs and original records and all other records required to
5 have been maintained pursuant to Permits to Construct Nos. 594048, 594049, 594052, 610611,
6 610612, 610613, and 610614 from the last twelve (12) months. Respondent shall include a written
7 statement for any historical records required to be submitted above for which Respondent is not
8 able to produce records, indicating the specific records that are unavailable and the reason the
9 records cannot be produced.

10 3. Beginning on August 19, 2026, the Respondent shall determine and record the
11 HHV of the digester gas combusted in equipment subject to this Order, using instrument(s) and/or
12 methods approved in writing by South Coast AQMD. The Respondent shall perform such analysis
13 at least once per week and maintain all records in accordance with this Order.

14 4. Beginning on August 19, 2026, the Respondent shall determine and record the
15 sulfur content of the digester gas at the inlet of each combustion equipment subject to this Order,
16 using South Coast AQMD Method 307-91 or another method approved in writing by South Coast
17 AQMD. The Respondent shall perform such analysis at least once per week and maintain all
18 records in accordance with this Order. The facility shall not emit more than 5 lb/day of total sulfur
19 compounds, calculated as H₂S, from burning of gaseous fuels other than natural gas.

20 5. Respondent shall submit a monthly progress report on the implementation of the
21 conditions of this order to South Coast AQMD by email (Attention: Air Quality Inspector,
22 Adebola John, ajohn@aqmd.gov; Air Quality Engineer, Melissa Mendoza,
23 mmendoza2@aqmd.gov; & District Counsel, Erika Chavez, echavez@aqmd.gov), by 11:59 p.m.
24 on the first Tuesday of each month.

25 The monthly progress report shall include at minimum:

- 26 a. Detailed description of the work completed and estimated completion of the
27 remaining work as required in the conditions of this Order.
- 28 b. Records of the total volume in gallons of food waste slurry accepted and

processed by the facility on a daily and monthly basis.

- c. Records of the total quantity (in standard cubic feet, scf) of treated digester gas on a monthly basis.
- d. Records of cumulative operating hours of the flare on a monthly basis.
- e. Records of quantity of digester gas (standard cubic feet per minute, scfm) being combusted in the flare on a weekly basis.
- f. Records of BTU content (HHV) (BTU/scf) of the digester gas at the inlet to the flare for each weekly reading taken pursuant to Condition 3.
- g. Records of the calculated total sulfur compounds as H₂S (lb/day) from the burning of the digester gas for each weekly reading taken pursuant to Condition 4.
- h. Logs of the total heat input (MMBtu/hr) of digester gas burned in the flare based on weekly basis based on the recorded flow rate (scfm) and the BTU content (HHV) (BTU/scf) of the corresponding week.
- i. Records (CEMs) of the NO_x concentration (ppmv) @ 15% O₂, dry, 15 min average at the outlet of the SCR catalyst.
- j. Records of fuel consumption (scf) for digester gas and natural gas for the internal combustion engine(s) on a weekly basis.
- k. Records of total hours of operation for the internal combustion engine(s) on a monthly basis.

Each monthly progress report shall be submitted in editable spreadsheet format. The report shall be cumulative and include all information submitted in previous monthly reports, updated to include the current reporting period, so that each monthly submittal contains the complete compliance activities to date.

6. The Respondent shall conduct a comprehensive evaluation of all equipment and operations at the facility to determine which equipment and processes require permits under South Coast AQMD rules and regulations. No later than thirty calendar (30) days after issuance of this Order for Abatement, the Respondent shall submit to South Coast AQMD (Attention: Permit

Services, permitservicesonline@aqmd.gov, Air Quality Inspector, Adebola John, ajohn@aqmd.gov; Air Quality Engineer, Melissa Mendoza, mmendoza2@aqmd.gov; & District Counsel, Erika Chavez, echavez@aqmd.gov) complete permit applications for all equipment determined by the Respondent to require permits.

- a. If, during its review of the information submitted pursuant to this Order, South Coast AQMD determines that additional equipment or operations requiring permits were not identified by the Respondent, the Respondent shall submit complete permit applications for such equipment (unless otherwise approved in writing by South Coast AQMD) within thirty (30) calendar days of receipt of written notification.

7. The Respondent shall respond to any request by South Coast AQMD for additional information or documentation necessary to evaluate permit applications within seven (7) calendar days, unless otherwise approved in writing.

8. Within thirty (30) days of the issuance of this Order, the Respondent shall submit to South Coast AQMD (Attention: South Coast AQMD Source Test Engineering, sourcetesting@aqmd.gov; Air Quality Inspector, Adebola John, ajohn@aqmd.gov; Air Quality Engineer, Melissa Mendoza, mmendoza2@aqmd.gov; & District Counsel, Erika Chavez, echavez@aqmd.gov) the source test protocols for all identified equipment requiring source testing pursuant to former Permits to Construct Nos. 594048 (Anaerobic Digester), 594052 (Flare), 610611 (SCR Unit No. 1), 610612 (SCR Unit No. 2), 610613 (ICE No. 1), and 610614 (ICE No. 2). All protocols shall be subject to South Coast AQMD approval prior to testing. The Respondent shall submit all required forms and applicable fees necessary to request expedited review of the Protocols by the South Coast AQMD Source Testing Engineering Team.

9. The Respondent shall notify South Coast AQMD Source Testing Engineering team and the assigned inspector at least fourteen (14) calendar days before conducting any source test required by this Order (Attention: South Coast AQMD Source Test Engineering, sourcetesting@aqmd.gov; Air Quality Inspector, Adebola John, ajohn@aqmd.gov; Air Quality Engineer, Melissa Mendoza, mmendoza2@aqmd.gov; & District Counsel, Erika Chavez,

1 echavez@aqmd.gov).

2 10. The Respondent shall complete all source tests required by this Order within sixty
3 (60) calendar days following South Coast AQMD approval of the applicable source test protocol,
4 unless otherwise approved in writing.

5 11. The Respondent shall submit complete source test reports to South Coast AQMD
6 (Attention: South Coast AQMD Source Test Engineering, sourcetesting@aqmd.gov; Air Quality
7 Inspector, Adebola John, ajohn@aqmd.gov; Air Quality Engineer, Melissa Mendoza,
8 mmendoza2@aqmd.gov; & District Counsel, Erika Chavez, echavez@aqmd.gov) within sixty (60)
9 calendar days following completion of each source test unless otherwise approved in writing. The
10 Respondent shall submit all required forms and applicable fees necessary to request expedited
11 review of the Reports by the South Coast AQMD Source Testing Engineering Team.

12 12. A Continuous Emissions Monitoring System (CEMS) capable of measuring and
13 monitoring NOx emissions shall be installed, maintained and operated on ICE No. 1 and ICE No. 2
14 as required by South Coast AQMD rules and former PTC Nos. 610613 and 610614. This CEMS
15 shall comply with all applicable specifications, certification, operation, recordkeeping, quality
16 assurance, reporting, performance and testing requirements of South Coast AQMD Rules 218 and
17 218.1, including:

- 18 a. Continuously measure and record NOx and oxygen exhaust gas concentrations,
19 uncorrected and corrected to 15 percent oxygen on a dry basis.
- 20 b. Have data gathering and retrieval capability that has been approved by the
21 South Coast AQMD. Data shall be recorded on a strip chart or stored
22 electronically. If data is electronically stored, the operator shall provide for data
23 storage redundancy of at least 15 days and shall demonstrate to the Executive
24 Officer that the stored electronic data is equivalent to the strip chart data.
- 25 c. Be tested for relative accuracy in accordance with the guidelines and
26 requirements of Rule 218.1.

27 If the CEMS has not been installed as of the date of the issuance of this Order, the system shall be
28 installed within 60 calendar days of the issuance of this Order. Respondent shall complete all

1 outstanding certification requirements, unless otherwise approved in writing by South Coast

2 AQMD included but not limited:

- 3 a. Prepare and submit a CEMS certification test plan within 30 days of the
4 issuance of this Order (unless previously approved test plan remains valid). The
5 test plan shall be submitted to Supervising Source Test Engineer, Colin Eckerle,
6 CEckerle@aqmd.gov; with carbon copy to Air Quality Inspector, Adebola John,
7 ajohn@aqmd.gov; Air Quality Engineer, Melissa Mendoza,
8 mmendoza2@aqmd.gov; & District Counsel, Erika Chavez,
9 echavez@aqmd.gov.
- 10 b. Complete certification testing within 90 days of the issuance of this Order, or
11 within 90 days of the installation of the CEMS, whichever is later. Respondent
12 shall notify South Coast AQMD in writing (Attention: Supervising Source Test
13 Engineer, Colin Eckerle, CEckerle@aqmd.gov; with carbon copy to Air Quality
14 Inspector, Adebola John, ajohn@aqmd.gov; Air Quality Engineer, Melissa
15 Mendoza, mmendoza2@aqmd.gov; & District Counsel, Erika Chavez,
16 echavez@aqmd.gov.) upon completion of certification testing.
- 17 c. Submit the certification test report within 45 days of certification testing
18 (Attention: Supervising Source Test Engineer, Colin Eckerle,
19 CEckerle@aqmd.gov; with carbon copy to Air Quality Inspector, Adebola John,
20 ajohn@aqmd.gov; Air Quality Engineer, Melissa Mendoza,
21 mmendoza2@aqmd.gov; & District Counsel, Erika Chavez,
22 echavez@aqmd.gov.)
- 23 d. Perform all required quality assurance activities pursuant Rule 218.1.

24 13. The Respondent shall operate all equipment in a manner that minimizes emissions
25 and shall comply with all applicable requirements of South Coast AQMD rules.

26 14. Any breakdown of this equipment resulting in the emission of raw or treated
27 digester gas shall be reported to the South Coast AQMD in accordance with Rule 430, and
28 immediate remedial measures shall be undertaken to correct the problem and prevent further such

1 emissions into the atmosphere.

2 15. Any malfunction of this equipment resulting in the emission of raw or treated
3 digester gas shall be reported to South Coast AQMD (1-800-CUT-SMOG) within one hour of
4 occurrence, or within one hour of discovery of occurrence, and immediate remedial measures shall
5 be undertaken to correct the problem and prevent further such emissions into the atmosphere.

6 16. If a distinct odor resulting from the operation of this equipment is detected at or
7 beyond the property line of the facility, of which the operator is made aware through complaint,
8 notification, or its own investigation, the operator shall determine the odor source(s) as soon as
9 possible. Additionally, the operator shall undertake immediate remedial measures to correct the
10 problem if the odor is confirmed to be a result of the operation of the Facility. Mitigation measures
11 which are deemed appropriate by South Coast AQMD personnel as necessary to protect the
12 comfort, repose, health, or safety of the public shall be implemented upon request.

13 17. The operation of the food waste anaerobic digestion shall comply with the
14 following:

- 15 a. Food waste slurry feedstock from off-site sources that are to be accepted and
16 processed at this facility shall be received and transported onsite in closed
17 tanker trailers vented to an air pollution control device and/or equipped with a
18 vapor recovery system to prevent any fugitive odor emissions during transport,
19 loading, or delivery onsite. The operator shall inspect the offload pumping
20 equipment and appurtenances for leaks, and shall repair all detected leaks prior
21 to commencing pumping operations.
- 22 b. Food waste slurry feedstock from the on-site sources shall be pumped directly
23 into a process tank(s). The operator shall inspect the pumping equipment and
24 appurtenances for leaks, and shall repair all detected leaks prior to commencing
25 pumping operations.
- 26 c. Prior to pumping out digestate slurry from a process tank to a receiving tanker
27 truck, the operator shall inspect the pumping equipment and appurtenances for
28 leaks, and shall repair all detected leaks prior to commencing pumping

operations.

- d. This digestion facility shall not accept or process greater than 130,000 gallons per day of food waste slurry feedstock from combined on-site and off-site sources.
- e. The total volume in gallons of food waste slurry accepted by this facility shall be determined through incoming waste manifests, in house weigh scales, and/or flow meters, and recorded on a daily and monthly basis. Records shall be provided in accordance with this Order.
- f. All of the process tanks, such as any receiving tank, hydrolysis vessel(s), anaerobic digester vessel(s), and digestate storage tank(s), shall be covered and/or sealed at all times except during specific activities which require covers to be open including loading, periodic inspections, and cleaning.

18. The operation of the digester gas (biogas) handling and treatment system shall comply with the following:

- a. Spent iron sponge media, and activated carbon adsorber media removed from the system shall be stored in closed containers prior to disposal or cleaning.
- b. A non-resettable totalizing flow meter shall be installed and maintained to measure and record the total quantity of digester gas treated in the Digester Gas Treatment System. In lieu of installing a dedicated flow meter to measure the total quantity of treated digester gas, the operator shall install and maintain non-resettable totalizing flow meters at the inlet gas supply lines to the internal combustion engines and the flare. The operator shall maintain a monthly record of the total quantity (in standard cubic feet) of treated digester gas combusted in the internal combustion engines and the flare and records shall be provided in accordance with this Order. Sampling ports shall be installed and maintained at the inlet gas line to the Digester Gas Treatment System and at the outlet of the biogas drying system to allow the collection of digester gas samples.
- c. The pH level of the media in the iron sponge scrubber vessel shall be

maintained between 6.5 and 10.0. Records of pH level measurements shall be maintained on file on a weekly basis.

- d. The pressure differential across the packing or media beds of the iron sponge scrubber vessels, and activated carbon vessels shall be measured and monitored monthly. The optimum pressure differential shall be set in accordance with the equipment manufacturer specifications. The operator shall clean or replace the packing, iron sponge media, or carbon adsorbent media whenever the set pressure differential is exceeded.

19. The operation of the flare shall comply with the following:

- a. Prior to burning digester gas in this equipment, the digester gas shall first be treated through the knockout vessel/gas-liquid separator with a demister, or equivalent equipment, for the control of PM10 emissions.
- b. The flare shall be equipped with at least one temperature indicator and a recording device which measures and records the gas temperature in the flare stack. 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. Temperature records shall be provided in accordance with this Order.
- c. Whenever the flare is in operation, a temperature of not less than 1400 degrees Fahrenheit as measured by an approved temperature indicator shall be maintained in the flare stack, except for 30 minutes during start up and during shut down. Startup is defined as the period from flare ignition to the time when 1,400 degrees Fahrenheit is achieved, not to exceed 30 minutes. Shutdown is the period from when the gas valve begins to be shut and completely shuts off, not to exceed 30 minutes.
- d. 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.
- e. The flare shall be equipped with a UV burner sensor or equivalent flame

1 detection device. The flame detection device shall continuously monitor the
2 flame in the flare whenever the flare is in operation, and shall automatically
3 send a signal to an operator whenever a flame-out situation is detected.

- 4 f. This equipment shall be operated in compliance with all applicable provisions
5 of Rule 1118.1. whether or not explicitly stated in this Order. The flare shall be
6 shrouded, equipped with an automatic shut-down system with a failure alarm,
7 which has been approved by the South Coast AQMD, to automatically isolate
8 the flare from the digester gas supply line, shut off the blower and immediately
9 notify a responsible party of the shut-down.
- 10 g. A non-resettable operational totalizing time meter shall be installed and
11 maintained to indicate the number of cumulative hours the flare has been
12 operated. Operating hours shall be recorded at least once every month in which
13 this equipment is operated and records shall be provided in accordance with this
14 Order.
- 15 h. A non-resettable, totalizing flow indicating and recording device shall be
16 installed in the digester gas supply line to the flare to measure and record the
17 quantity of digester gas (in scfm) being combusted in the flare.
- 18 i. The total volume of digester gas burned in the flare shall not exceed 900
19 standard cubic feet per minute at 546 BTU/scf higher heating value (HHV).
- 20 j. The total heat input of digester gas burned in the flare shall not exceed 29.5
21 MMBTU per hour (HHV). A log shall be kept indicating the total heating value
22 of digester gas burned in the flare based on the recorded flow rate (scfm) and
23 the latest weekly High Heating Value (HHV) (or BTU content) (BTU/scf) and
24 records shall be provided in accordance with this Order.
- 25 k. Emissions resulting from the operation of this equipment shall not exceed:

Pollutant	lb/MMBTU	lb/month
CO	0.06	1,249

NOx	n/a	375
ROG	n/a	27
PM10 (as PM)	n/a	70
SOx	n/a	77

20. The operation of the SCR units Nos. 1 and 2 shall comply with the following:
- The NOx analyzer/monitor and urea dosing system shall be in full operation whenever the Selective Catalytic Reduction (SCR) system is in operation.
 - This system shall be in operation whenever the internal combustion engine it is venting is in operation, unless otherwise approved in writing by South Coast AQMD.
 - This equipment shall be inspected and maintained per manufacturer's specifications.
 - Sampling ports shall be installed at the inlet and outlet of the selective catalytic reduction system.
 - The operator shall install and maintain temperature gauges to accurately indicate the temperature in degrees Fahrenheit at the inlet and outlet of the SCR. The measuring gauge shall be accurate to within plus or minus 5 percent and shall be calibrated once every twelve months. The operator shall also install and maintain a device to continuously record the parameter being measured.
 - The minimum temperature of the engine exhaust at the inlet of the SCR unit shall be at least 525 degrees Fahrenheit. The period during which the temperature of exhaust gases entering the SCR unit is less than 525 degrees Fahrenheit shall not exceed 30 minutes for each cold start-up and shutdown.
 - The maximum temperature of the exhaust gases entering the SCR unit shall not exceed 900 degrees Fahrenheit.
 - The operator shall install and maintain pressure differential gauges to accurately indicate the pressure drop in inches of water column or millibar across the SCR

1 catalyst and oxidation catalyst. The measuring gauge shall be accurate to within
2 plus or minus 5 percent and shall be calibrated once every twelve months. The
3 operator shall install and maintain a device to continuously record the parameter
4 being measured.

- 5 i. The pressure drop across the SCR catalyst shall not exceed 6.5 inches of water
6 column.
- 7 j. The urea dosing system shall be operated only when the SCR inlet temperature
8 is above 525 degrees Fahrenheit.
- 9 k. The hourly average ammonia concentration at the outlet of the SCR unit shall
10 not exceed 10 ppmvd corrected to 15% oxygen when the SCR inlet temperature
11 is above 525 degrees Fahrenheit.
- 12 l. The fifteen-minute average NOx concentration at the outlet of the SCR unit
13 shall not exceed 11 ppmvd corrected to 15 percent oxygen when the SCR inlet
14 temperature is above 525 degrees Fahrenheit.

15 21. The operation of the ICEs Nos. 1 and 2 shall comply with the following:

- 16 a. This equipment shall be operated in compliance with all applicable provisions
17 of Rule 1110.2, 40 CFR Part 63 Subpart ZZZZ, and 40 CFR Part 60 Subpart
18 JJJJ, whether or not explicitly stated in this Order.
- 19 b. The engines shall not be operated unless their exhaust is vented to an air
20 pollution control system which is in full use, except during engine cold start-ups
21 and shut-downs.
- 22 c. The engines shall be fired with digester gas only, except when the quantity
23 and/or quality of digester gas produced is not sufficient to sustain a properly
24 operating equipment, then natural gas, solely or blended with digester gas, shall
25 be permitted to be used as fuel.
- 26 d. The operator shall install and maintain a totalizing fuel flow meter for each fuel
27 used in the engines to independently measure the quantities in standard cubic
28 feet (or multiples thereof) of digester gas and natural gas burned in the engines.

The operator shall keep daily records of fuel usages.

- e. Emissions from each engine shall not exceed the following limits (except during start-up and shutdown which shall not exceed 30 minutes, unless otherwise approved by the South Coast AQMD):

Pollutant	Rule 1110.2	Reg. XIII	
	ppmvd @15% O ₂	lb/day	lb/month
VOC	30	9.57	291
NO _x	11	4.78	146
CO	250	28.7	873

For Rule 1110.2 compliance, NO_x shall be averaged over a fixed interval of 1 hour, and CO shall be averaged over 15 minutes. VOC shall be averaged over the sampling time required by the test method.

- f. The total amount of digester gas burned in each engine shall not exceed 0.491 mmscf per day and 14.936 mmscf per month, at 546 BTU/scf HHV.
- g. Two sampling ports shall be installed and maintained in each engine exhaust 8 to 10 duct diameters downstream and two duct diameters upstream of any flow disturbance, at 90 degrees apart, and shall consist of two 2-1/2 inch welded nipples with caps. An equivalent method for emissions sampling may be used upon approval of the South Coast AQMD. Adequate and safe access to the test ports shall be provided.

22. Respondents shall notify the Clerk of the Board in writing when final compliance has been achieved.

23. The Hearing Board shall retain jurisdiction over this matter until August 19, 2027 or until Respondents have achieved compliance by obtaining Permits to Operate, whichever occurs earlier, unless this Order is amended and modified.

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FOR THE BOARD:

DATE SIGNED:

Reviewed by Bruce Armbruster, Representative for Respondents

Prepared by Erika Chavez, Attorney for Petitioner