

ATTACHMENT 1

Variance Petition for 2024-06-R and Petition Attachments

July 3, 2024

Santa Barbara County Air Pollution Control District
Hearing Board

260 San Antonio Road, Suite A
Santa Barbara, California 93110

SANTA BARBARA COUNTY

**Resource Recovery &
Waste Management Division**

Innovative Environmental Solutions



Chris Sneddon, P.E.
Public Works Director

Jeanette Gonzales-Knight, P.E.
Technical Deputy Director, Interim

Martin Wilder, P.E.
Operations Deputy Director, Interim

June 3, 2024

Sent via electronic email

Ms. Aimee Long
Air Quality Specialist III
Santa Barbara County Air Pollution Control District
260 N. San Antonio Road, Suite A
Santa Barbara, CA 93110

Permit: ATC Mod 14500-10
FID: 11480
SSID: 03717
Variance: Regular Variance for
2024-05-I, 2024-06-N

Subject: Regular Variance Petition for 2024-05-I and 2024-06-N

Dear Ms. Long,

On March 22, 2024, County of Santa Barbara, Public Works, Resource Recovery and Waste Management Division (RRWMD) submitted a 90 day variance petition to the Santa Barbara County Air Pollution Control District (APCD) for permit conditions associated with the ReSource Center. Attached is the regular variance petition for the same permit conditions and equipment. Extended coverage is needed to receive materials associated with equipment maintenance, complete the maintenance activities, conduct required tuning and calibration activities, and source test.

Please contact me with any questions or concerns.

Sincerely,

A handwritten signature in black ink that reads 'Kevin Brown'.

Kevin Brown, Interim Compliance Manager
Santa Barbara County Public Works
Resource Recovery and Waste Management Division

Attachments: A – Regular Variance Petition Submittal
B – Variance Petition Supporting Documentation

cc: Jeanette Gonzales-Knight, Resource Recovery and Waste Management Division
Carlyle Johnston, Resource Recovery and Waste Management Division
John Hancock, Resource Recovery and Waste Management Division

Attachment A
Regular Variance Petition Submittal



H.B. Case No.:	<u>2024-06-R</u>
Petitioner:	<u>County of Santa Barbara, Public Works Department</u>
Permit No.:	<u>PT 70/PTO 14500-10</u>
Date Rec'd:	<u>6/3/2024</u>
Time Rec'd:	<u>0859 hours</u>
Filing Fee Paid:	<u>\$739.00</u>

PETITION FOR VARIANCE

Type of Variance Requested:			
Emergency	<u> </u>	Interim ¹	<u> </u>
		90-Day	<u> </u>
		Regular	<u> X </u>
Length of Variance Requested:	Start Date	<u>March 22, 2024</u>	
	End Date	<u>March 21, 2025</u>	
¹ A 90-Day or Regular Variance must be filed concurrently with an Interim Variance			

1. PETITIONER INFORMATION

A. Please provide the name, address and phone number of the Petitioner.

Name: County of Santa Barbara, Public Works
 Address: 130 E. Victoria Street, Suite 100
Santa Barbara, CA 93060
 Phone Number: 805-882-3600

B. Please provide the name, address and phone number of the person authorized to receive correspondence regarding this Petition if different from response in 1.A.

Name: John Hancock
 Address: 130 E. Victoria Street, Suite 100
Santa Barbara, CA 93060
 Phone Number: 805-448-7098

C. The Petitioner is (please check one):

- 1) An Individual ()
- 2) Partnership ()
- 3) Corporation ()
- 4) Public Agency (x)
- 5) Other Entity (please describe)

2. Location of equipment for which the variance is requested if different from response in 1.A.
ReSource Center, 14470 Calle Real, Goleta, CA 93117

3. List any District permits that are applicable to the equipment subject to this variance request.
Authority to Construct Modification 14500 -10

4. Briefly describe the equipment that is the subject of this Petition.
Materials Recovery Facility (MRF) and Anaerobic Digestion Facility (ADF) combined heat and power (CHP) engines (Device IDs: 388360, 389006, 393170, 393171); MRF and ADF Selective Catalytic Reduction and Oxidation Catalysts (Device IDs: 388361, 389007, 393172, 393173), ADF Enclosed Flare (Device ID: 388364), and CHP engine Continuous Emissions Monitoring Systems (CEMS)

5. **FINDINGS REQUIRED FOR THE GRANTING OF A VARIANCE**

In order for the Hearing Board to grant a variance to a Petitioner authorizing the operation of a source in violation of any rule, regulation or order of the District, the Hearing Board is required to make “findings” in accordance with the requirements specified in California Health and Safety Code §42352, et. seq. and District rules and regulations. The Hearing Board’s variance decision will take into consideration information you provide in this Petition. Please ensure your responses are complete and thorough. Please use additional pages as necessary.

A. Please state 1) what District rule, regulation or order you either are or will be in violation of, and 2) the date said violation will or did occur. Include as appropriate the applicable permit conditions for which variance relief is being sought.
See Attachment B.

B. Please describe how compliance with the District rule, regulation or order listed in Section A above is beyond your reasonable control. In addition to any other relevant factors, please include in your discussion 1) what actions you have taken to comply or seek a variance, which were timely and reasonable under the circumstances.
See Attachment B.

C. Please describe how you would be impacted if you were required to immediately comply with the District rule, regulation or order the subject of this variance request. In addition to any other relevant factors, please discuss why such impacts would result in 1) an arbitrary or unreasonable taking of property, or 2) the practical closing and elimination of a lawful business.
See Attachment B.

D. If you were required to immediately comply with the District rule, regulation or order the subject of this variance request, please describe what impact, if any, that would have on air contaminants.
See Attachment B.

E. Please describe what consideration you have given to curtailing operations in lieu of obtaining a variance.
See Attachment B.

F. Please describe what steps and measures you will take to reduce excess pollutant emissions the maximum extent feasible during the requested variance period.
See Attachment B.

G. If requested to do so by the District, please describe how you will monitor or otherwise quantify and report to the District any pollutant emissions associated with the granting of your variance.
See Attachment B.

6. **SUPPLEMENTAL FINDINGS IF APPLYING FOR AN EMERGENCY VARIANCE PURSUANT TO RULE 506 (EMERGENCY VARIANCE FOR BREAKDOWNS)**

A. Please provide the date and time the breakdown was reported to the District

Date: N/A Time: N/A

B. Breakdown number (as provided by the District): N/A

C. Please provide a description of the “breakdown condition”, including equipment involved and the cause to the extent it is known.

N/A

D. Please describe why the continued operation of your facility in a “breakdown condition” is not likely to cause an immediate threat or hazard to public health or safety and will not interfere with the attainment or maintenance of any primary national ambient air quality standard.

N/A

7. Will the operation of the equipment subject to this variance result in violation of District Rule 303, Nuisance?

No.

8. Please state whether or not any civil or criminal case involving the equipment subject to this variance is pending any court.

No.

The undersigned is authorized to submit the above Petition on behalf of the Petitioner and further states under penalty of perjury that the above Petition, including any attachments and the items therein set forth, are true and correct.

DATE: June 3, 2024

SIGNATURE:

Kevin Brown

TITLE:

Interim Compliance Manager

PRINT NAME:

Kevin Brown

Variance Filing Fees: All variance Petitions must be accompanied by the requisite filing fee at the time of filing or include a letter from the Petitioner on company letterhead authorizing the District to debit the filing fee from the company’s reimbursable account. You may also pay your filing fees by credit card using the attached form. Current variance filing fees may be found under Rule 210, schedule F, Sections 12a and 12b at <http://www.sbcapcd.org/fees.htm>

Credit Card Payment: The Variance Filing Fee may be paid with a credit card. Please use APCD Form -01C to pay via credit card. The form may be downloaded at: <http://www.sbcapcd.org/eng/dl/dl01.htm>

Attachment B

Variance Petition Supporting Documentation

1. Section 5.A, Findings Required for the Granting of a Variance, Variance Relief Conditions

ATC Mod 14500-10 Conditions Requested for Variance Relief

- 9.B.12 - Continuous Emissions Monitoring (Rule 328, Sections C.2, C.4, G and I.1)
- 9.C.9.a.i – Combined Heat and Power Engines – BACT Emission Limits
- 9.C.9.a.v – Combined Heat and Power Engines – CEMS Emissions Excursions
- 9.C.9.b.ii – Combined Heat and Power Engines – Emission Controls
- 9.C.9.b.xvii – Combined Heat and Power Engines – Urea Injection System
- 9.C.9.b.xviii – Combined Heat and Power Engines – SCR/Oxidation Catalyst Maintenance
- 9.C.9.c.xiii – Combined Heat and Power Engines – Source Testing (ADF Engines Only)
- 9.C.9.d.xix – Combined Heat and Power Engines – Source Testing (ADF Engines Only)
- 9.C.19.a – Source Testing (ADF CHP Engines Only)
- 9.C.21 - Best Available Control Technology (ADF and MRF CHP Engines Only)
- 9.C.22 - Continuous Emission Monitoring System
- 9.C.23 – Data Telemetry

2. Section 5.B, Findings Required for the Granting of a Variance, Reasonable Control and Actions

Appendix A is the 2016 contract between RRWMD and MSB for the development and operation of the Resource Center.

Until recently, RRWMD was not the operator of the facility. In 2016, the County contracted with MSB Investors, and the facility was under the control of MSB Investors as shown by the various contract provisions included below. RRWMD full took over operations of the Resource Center starting in January 2024.

The prior contractor and operator, MSB Investors, was solely responsible for the operation of the facility, and made operational and design choices which RRMWD is trying to address through employing technical experts, which has taken time as noted below and in the attached correspondence.

15.1 Relationship of Parties

The Parties intend that Contractor shall perform the services required by this Contract as an independent contractor engaged by County and not as an officer or employee of the County or as a partner of or joint venture with County. No employee or agent or Contractor shall be or shall be deemed to be an employee 4031 or agent of County. Except as otherwise expressly provided, Contractor has exclusive control over the manner and means of performing Contractor Obligations and all Persons performing them. Contractor shall be solely responsible for the acts and omissions of its officers, employees, affiliates, contractors, Subcontractors and agents. Neither Contractor nor its officers, employees, affiliates, contractors, Subcontractors and agents shall obtain any rights to retirement benefits, workers' compensation benefits, or any other benefits which accrue to County employees by virtue of their employment with County.

5.1 Responsibilities of the Parties

A. General Apportionment of Responsibility

Contractor is solely responsible for all Operation and Maintenance activities conducted at, or with relation to the Project Site in accordance with the requirements of the Contract, using Good Industry Practices and meeting all Performance Guarantees.

County responsibilities are limited to those specifically enumerated in Section 5.1 and further described in Article 5, or as may otherwise be specified in the Material Delivery and Service Agreements. The County will cooperate with and assist Contractor to the extent specifically provided in this Section 5.1.

C. Primary Contractor Responsibilities

Contractor, at its sole expense, shall provide uninterrupted Operations at the Project Site in accordance with the Facility Permits, and receiving Days and hours of Operation specified in Section 5.3. Operations conducted by Contractor pursuant to this Contract shall include, but not be limited to, the furnishing of all management, labor, supervision, equipment, materials, supplies, and all other items necessary to perform the services required. Operations shall at all times adhere to Applicable Law, Good Industry Practice, Good and Accepted Operating Practice, the Operation and Maintenance Manual, the Operations and Maintenance standards, the Performance Guarantees, and all other applicable requirements of this Contract. At no time shall the Contractor use or permit the use of the Project Site for any purpose other than those contemplated by this Contract.

Contractor’s primary Operations responsibilities include but are not limited to the following, as further specified in this Article 5, in Articles 6, 7, 8, and 11, and in other portions of the Contract as referenced below:

- 4. Pay all Operations, Maintenance and Marketing costs....
- 6. Arrange for, manage, and compensate Subcontractors for work performed, as provided in Article 11....
- 9. Perform repairs, replacements, and purchases in accordance with Applicable Law including those for public bidding and prevailing wage of Labor Code Section 1771....
- 12. Comply with all federal, State, City and any other governmental unit Permits, orders, licenses, approvals and CEQA mitigations required by Applicable Law for the Facility....
- 14. Maintain records, provide records upon request, prepare and submit regular reports, and address periodic information requests from County in accordance with Article 12....
- 21. Use Good and Accepted Operating Practices to maintain the Site in good condition, and mitigate any negative environmental impacts (such as hazardous waste and ground water contamination) to the Site and roadways used to access the Site....
- 22. Conduct all other activities as necessary to meet Contractor’s Obligations and Performance Guarantees.

9.5 Additional Performance Guarantees

C. Environmental Performance Guarantee

The Contractor and guarantor shall guarantee that the Facility is Operated and Maintained in compliance with Applicable Laws. It shall include noise, odor and other required Environmental Performance Guarantees. If more stringent limits are proposed and accepted by the County, such limits shall form the basis for the Environmental Performance Guarantee. Contractor will be responsible for all resulting corrective actions for the Facility including, without compensation, the costs of maintaining compliance with all Permit conditions, should that condition occur. If County approves new limits that exceed the requirements of Contractor's Permits, the provisions of Section 2.11 shall apply.

In order to track and discuss facility commissioning, operation, maintenance, safety, environmental compliance, and other issues, the County and MSB had meetings or calls on at least the following dates in the year prior to contract termination: December 16, 2022, January 12, 2023, January 13, 2023, January 17, 2023, January 24, 2023, January 26, 2023, February 8, 2023, February 9, 2023, February 10, 2023, February 21, 2023, March 1, 2023, March 9, 2023, March 10, 2023, April 12, 2023, April 13, 2023, May 5, 2023, May 9, 2023, May 11, 2023, May 18, 2023, May 30, 2023, June 2, 2023, June 8, 2023, June 28, 2023, June 30, 2023, July 12, 2023, July 26, 2023, July 28, 2023, August 8, 2023, August 10, 2023, August 24, 2023, September 7, 2023, September 12, 2023, September 14, 2023, September 20, 2023, October 5, 2023, October 19, 2023, October 26, 2023, and November 1, 2023.

On November 6, 2023, an intent to terminate letter was sent to MSB with formal notification of the County's intent to terminate our contract. Included in this letter is an explanation of why the termination was occurring and supporting documentation (including nonpayment of subcontractors). A copy of this letter can be found in Appendix B.

On December 12, 2023, the County of Santa Barbara Board of Supervisors unanimously voted to terminate the County's Agreement with MSB Investors, LLC for the Resource Center due to failure to meet contractual obligations. Initially, two termination dates were set for the Resource Center. The Material Recovery Facility (MRF) operations were immediately terminated and transferred to County of Santa Barbara, while the Anaerobic Digestion Facility (ADF) and Compost Management Unit (CMU) operations would continue to be operated by MSB for at least 180 days per the terms of our Agreement.

However, MSB requested immediate transfer of all Resource Center permitting, compliance, operational and maintenance obligations to the County, and immediately stopped all performance under the Agreement. Accordingly, the Agreement between the County and MSB was terminated in full on January 3, 2024. Therefore, as of January 3, 2024, the County took over operations and environmental compliance for the entirety of the Resource Center.

Since the contract termination, RRWMD has maintained operations at the ADF and CMU through the use of additional County staff and contracted with over 40 vendors to repair and maintain equipment, and resolve outstanding violations with multiple regulatory agencies. Unfortunately, MSB did not fully communicate the state of the ADF during the transition of operations, and the County experienced delays obtaining contractors to address MSB deferred

maintenance. The primary contractors as it relates to this variance petition are Steuler (SCR bricks), Johnston Matthey (SCR bricks) and CEMTEK. Documentation of the County's efforts to hire these contractors and complete work are provided in Appendix C and D.

Note there were and continue to be significant efforts and difficulties hiring contractors beyond the three listed as part of this variance petition.

3. Section 5.C. Findings Required for the Granting of a Variance, Impacts

Immediate compliance would require a shutdown of the ADF and put the ReSource Center in non-compliance with its Material Delivery Agreements (with cities of Santa Barbara, Goleta, Solvang, and Buellton) other State regulations, such as SB 1383 which requires a 75% reduction of organic waste disposal by 2025.

Based on the current rate of waste being deposited into the landfill, the County of Santa Barbara, Public Works' projects that the capacity of the Tajiguas Landfill will be reached in March 2026. Note that this date fluctuates slightly based on landfilling rates. In order to provide the County and community a long term waste solution, Public Works has been working on a landfill capacity increase project. In March 2024, the Environmental Impact Report for the Tajiguas Landfill Capacity increase project was approved by the Board of Supervisors. Construction for this project is expected to begin in August 2024 with an expected completion date in December 2025. When complete, the life of the landfill is expected to last until 2038.

If the Resource Center is closed, the currently expected capacity date of March 2026 would be accelerated. In this event, the landfill's capacity would be reached prior to the construction completion for the capacity increase. It would cost an additional \$13.4 million per year to haul waste away from the County. Additionally, this increased distance and added truck trips would also result in a large increase in transportation related greenhouse gases. This scenario was summarized the Environmental Impact Report for the Tajiguas Landfill Capacity Increase Project (approved March 2024).

“Under [this scenario], all residual and bypass waste would be transported to the Chiquita Canyon Landfill, a round trip distance between 136 and 210 miles, depending on the origin of the waste. Based on a tipping fee of \$70 per ton, the cost to transport this material on an annual basis is approximately \$4.5 million per year. The cost to dispose of the waste would be approximately \$12.6 million per year for a total transportation and disposal cost of \$17.1 million per year at 2023 pricing. By no longer operating the Tajiguas Landfill for waste disposal, operational costs would be reduced by approximately \$3.7 million per year due to reduced operational supplies, labor and fuel. Accounting for these cost savings results in a net cost to the community of approximately \$13.4 million per year....

The County would have to increase the tipping fee at its facilities from the projected \$192 per ton to \$280 per ton for fiscal year 2025/2026 to offset increased costs of approximately \$13.4 million per year. This increased tipping fee would have to be maintained through the end of the debt payment schedule for the ReSource Center (fiscal year 2038/2039). This projected increase to the per ton tipping fee is so significant as debt financing obligations for the ReSource Center have to be met (\$10.68 million in fiscal year 2025/2026 increasing to \$16.9 million in fiscal year 2038/2039) as well as maintaining a debt service coverage ratio of 1.5 (operating revenue is required to exceed operating expenses by 1.5 excluding the cost of capital).

The County maintains waste delivery agreements with the communities (public participants) it serves. Section 4.3.D of the waste delivery agreements executed between the County and the cities of Goleta, Santa Barbara, Solvang, and MarBorg (for the City of Buellton) contains a protocol to address the scenario that the County has to increase its tipping fee at the ReSource Center greater than 7.5 percent in a single year or 15 percent in the past three consecutive years. Increasing the tipping fee from \$192 to \$280 per ton is an approximate increase of 46 percent and would require an operating committee to be convened and a two-thirds vote (representation based on the quantity of material delivered to the ReSource Center by each public participant) to approve a proposed tipping fee. Therefore, the County's ability to increase the tipping fee by 46 percent is uncertain and its ability to meet the bond financing obligations could be jeopardized. In summary, [this scenario] is considered financially infeasible as the annual cost would be over eight times (\$13.4 million/\$1.6 million) that of the proposed project and increases in tipping fees to offset this cost are unlikely to be approved."

Causes of the currently limited landfill capacity were also discussed in the Environmental Impact Report for the Tajiguas Landfill Capacity Increase Project (approved March 2024):

"The Landfill life has been reduced as compared to earlier projections, as a result of, but not limited to for the following reasons:

1. Delays in initiating construction of the ReSource Center associated with a Coastal Zone Boundary discrepancy and litigation of the Subsequent EIR (about 1.5 years). Assuming the ReSource Center would have diverted 50 percent of incoming solid waste from burial, the amount of waste buried was doubled during this period as compared to projections.
2. Delays including but not limited to, in completing construction of the ReSource Center due to COVID-19 (staffing and supply chain issues) for about one year. Assuming the ReSource Center would have diverted 50 percent of incoming solid waste from burial, the amount of waste buried was doubled during this period as compared to projections.
3. The actual amount of solid waste received at the Landfill was about 30,000 tons greater per year than projected from 2016 through 2019.
4. The Subsequent EIR prepared for the ReSource Center included an assumption that 60 percent of the MSW delivered to the Landfill would be recovered and not buried. While it is still expected that the ReSource Center will recover close to 60 percent of the material it processes, more attention has been paid to the different types of solid waste that is delivered to the transfer stations as well as MarBorg's transfer station. This has resulted in an increase in the amount of solid waste that bypasses the ReSource Center because it is not processable. The bypass waste is greater than originally projected and has reduced the life of the Landfill."

A copy of the Environmental Impact Report for the Tajiguas Landfill Capacity Increase Project can be found in Appendix E.

4. Section 5.D, Findings Required for the Granting of a Variance, Immediate Compliance

Immediate compliance would require a shutdown of the ADF and burial of organic waste. Consequences include increased methane surface emissions, accelerating the reduction of available landfill air space (which is already projected to reach full capacity by March 2026), possible diversion of waste to an off-site facility in Los Angeles County, and non-compliance with Senate Bill 1383 organic waste diversion requirements with CalRecycle. Additionally, the combustion of the methane rich biogas (i.e. ADF option) is more environmentally friendly than letting the biogas vent to the atmosphere (i.e. landfilling option) from a greenhouse gas standpoint. For reference, methane has 28 times more global warming potential compared to carbon dioxide.

5. Section 5.E, Findings Required for the Granting of a Variance, Reasonable Control and Actions Taken

The County evaluated shutting down the ADF engines intermittently while processing biogas through the ADF Flare. However, this requires an alternative means for supplying hot water that is supplied by the ADF engines' water jacket system to heat the ADF and percolate tank. There are safety concerns with bring a portable boiler onsite for this purpose.

For further clarification, heat from the ADF CHP engines is needed to keep the percolate microorganisms alive and metabolizing the organic matter in the ADF digesters. Heat is provided via a water jacket system built into the digesters' walls and floors. The breakdown of the organic matter by the percolate microorganisms creates biogas, which in turn is combusted in the ADF CHP engines.

Removing heat (i.e. shutting down the engines) would kill the percolate microorganisms and lead to a steep reduction in biogas production. If this occurs, "restarting" the microorganisms and biogas production would take several months to get back to standard operating levels. During this reduced biogas production timeframe, other regulatory and contractual violations could occur at the facility.

For example, in order to fulfill So Cal Edison PPA and Tariff contractual obligations, additional supplemental landfill gas might need to be combusted in the ADF CHP engines. However, this could lead to a violation of the APCD operational limit requiring that no more than 8% landfill gas by volume be combusted in the ADF CHP engines. If the County fails to meet the aforementioned PPA and Tariff contractual obligations, penalties on the order of hundred of thousands of dollars could be assessed against the County by So Cal Edison. On the other hand, if the County were not to supplement the ADF CHP engines with landfill gas, the biogas would need to be routed to ADF Flare because the engines would not be able to operate at their minimum load requirements. However, the APCD's flare operational hour limits would likely be violated in this scenario since the time to ramp up biogas production would likely exceed the allowable 876 hours per year limit in the permit.

6. Section 5.F, Steps Taken

RRWMD contracted with United Rentals to change out the ADF carbon media to return to compliance with fuel sulfur requirements. Work was completed March 22, 2024.

The County set up a contract with CEMTEK to get the CEMS system back online and to conduct any needed repairs on May 23, 2024. The contract for next fiscal year is current being worked on. Per CEMTEK's recommendation, the CEMS should not be brought back online for the ADF until the SCR brick replacement is completed to avoid possible damages to the system.

RRWMD has hired Diani to oversee the SCR brick replacement's materials, labor and supporting work (calibrations gases for the CEMS, engine tuning, urea injection system repairs and calibration, etc.). The County has given financial approval for all this work and Diani is in the process of submitting purchase orders and scheduling services.

7. Section 5.G, Monitor and Quantify

RRWMD would rely on the CEMS data, fuel meter data, and hour meter data available to quantify pollutant emissions from the engines.