



H.B. Case No.:	<u>2022-03-R</u>
Petitioner:	<u>California Power Partners</u> Santa Barbara
Permit No.:	<u>PTO 13862-R2</u>
Date Rec'd:	<u>3/17/22</u>
Time Rec'd:	<u>1530 hours</u>
Filing Fee Paid:	<u>\$649.00</u>

## PETITION FOR VARIANCE

### Type of Variance Requested:

Emergency \_\_\_\_\_ Interim<sup>1</sup> / 90-Day \_\_\_\_\_ Regular X  
Length of Variance Requested: Start Date 3/17/22  
End Date \_\_\_\_\_

<sup>1</sup> 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: CALIFORNIA Power PARTNERS SANTA BARBARA  
Address: 13135 DANIELSON ST STE 205  
POWAY, CA 92064  
Phone Number: 558-472-0391

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: JOE SILVA  
Address: SAME  
  
Phone Number: 558-472-0391

C. The Petitioner is (please check one):

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

2. Location of equipment for which the variance is requested if different from response in 1.A.

EL ESTERO WASTE WATER TREATMENT PLANT  
520 E. YANANOLI ROAD ST.  
SANTA BARBARA, CA 93103

3. List any District permits that are applicable to the equipment subject to this variance request.

PERMIT # P 13862 - R1

4. Briefly describe the equipment that is the subject of this Petition.

Cogen equipment generating electricity from Biogas

##### 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.

- 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.

The WWTP cannot give us enough biogas to run our engine @ permit limits on bhp/lb.  
~~Covid~~ COVID HAS Affected biogas production.

- 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.

We have a contract with the City to sell power!  
Shutting off engine would cause a loss of \$30K per mo.

- 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.

None

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

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

Run engine at optimum efficiency.

- 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.

I do ~~emission~~ emission tests monthly.

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: \_\_\_\_\_ Time: \_\_\_\_\_

- B. Breakdown number (as provided by the District):

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

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.

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: 3/16/2022

SIGNATURE: Joseph A. Silva

TITLE: Managing member

PRINT NAME: Joseph A. Silva

**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>



Air Pollution Control District  
Santa Barbara County

Attn: Aimee Long

Aimee,

This document responds to the questions requested on the Variance form. I believe it clarifies the situation we are in regarding the failed Source test.

I have also attached on this email a summary of the compliance test results.

Item 3

- PTO 13862-R2

Item 4

- (APCD Device ID 115220)

Item 5.A

- Please list the following Rules you will be in violation of: District Rule 206, Condition 1.a, 6, 7.a, 7.c.

Item 5.B.

- Due to the pandemic, there has been a decrease in the influent received at the WWTP. This was caused by several factors
- All school were closed UCSB included
- Tourism was nonexistent during the pandemic and Santa Barbara is a tourist destination.

I do believe this to be a temporary situation and "back to normal" situations are starting to occur. Until then the cogen system is still receiving limited fuel because effluent to the WWTP remains at the same level since the Pandemic started.

I would expect these same conditions to occur for another 2 years. Schools are back in session, but tourism will take a while to recover. Source testing will result with the same parameters that the Compliance test submitted to the District on March 2, 2022 shows. The source test failed for limits exceedance on lb/MMBTU for Nox and lb/MMBTU on CO. All other values passed. This is solely caused by our cogen system not running as efficiently as normal due to low fuel supply being provided to our cogen system from the WWTP. The only thing required to getting our engine back to peak efficiency is more fuel to our engine.

Until this happens, I am requested a variance from the Air Board.

Item 5.D

Shutting down the engine would not reduce the air contaminants. The WWTP would still generate methane gas and would have to be flared. The emissions from the flare are greater

California Power Partners, Inc  
13135 Danielson St. Ste 205  
Poway, CA 92064  
[www.calpwr.com](http://www.calpwr.com)

Fax: 858-271-5500

Tel: 858-271-5500



than the emissions from the cogeneration engine. In addition, flaring all the biogas generated at the WWTP would (may) cause the WWTP to exceed their emissions limitations

#### Item 5.E

We have considered shutting the engine down, however, it would cause a contractual agreement to be broken with the City of Santa Barbara. Shutting down the engine would also result in the loss of 30K per month. In addition, we have considered modifying the plant, however, that is not feasible because the influent is expected to return to normal in 2024. Shutting down the engine would also cause California Power Partners Santa Barbara to close a legally active company.

#### Item 5.F

The source test failed for limits exceedance on lb/MMBTU for Nox and lb/MMBTU on CO. All other values passed. The engine will pass all permit levels except these two failed levels until fuel volume returns to normal in 2024.

#### Item 5. G

- I have attached a copy of the Compliance summary report as a separate attachment.
- The threshold for our source testing limits is:
  1. 140 scfm
  2. 425 kw
  3. 61% methane p/cf
  4. 615 BTU (HHV)
- (Biogas content was 55% methane per scf. The plant took down one digester for maintenance during our source test).
- We need to see this data for a period of 5 days to ensure there are no fluctuations and passing results can be achieved
- Minimized emissions will occur once the above parameters are met.
- The cogen is a CEC certified renewable energy project. To comply with the certified project, Calpwr cannot exceed 25% natural gas blending over a calendar month.

## 1.0 SUMMARY OF RESULTS

**Facility:** El Estero WWTP  
**Source:** ICE #1  
**Load:** Normal  
**Start Date:** 1/27/2022  
**End Date:** 1/27/2022

Parameter	Units	Run 1	Run 2	Run 3	Average	Limits	Pass/ Fail
NO <sub>x</sub>	ppmv	131.76	130.15	132.54	131.48		
NO <sub>x</sub> @ 15% O <sub>2</sub>	ppmv	56.59	55.54	57.12	56.42	73	Pass
Emission Rate	lb/hr	1.02	1.03	1.11	1.05	1.398	Pass
Emission Rate	g/bhp-hr	0.76	0.75	0.80	0.77		
Emission Rate	lb/MMbtu	0.222	0.218	0.224	0.221	0.183	Fail
CO	ppmv	623.15	623.26	624.08	623.49		
CO @ 15% O <sub>2</sub>	ppmv	267.66	265.98	268.95	267.53	359	Pass
Emission Rate	lb/hr	2.95	2.99	3.19	3.04	4.19	Pass
Emission Rate	g/bhp-hr	2.19	2.20	2.31	2.23		
Emission Rate	lb/MMbtu	0.640	0.636	0.643	0.639	0.549	Fail
Outlet ROCs							
NMOC, as methane	ppmv	62.57	64.40	58.27	61.75		
NMOC @ 15% O <sub>2</sub>	ppmv	26.88	27.48	25.11	26.49	83.5	Pass
NMOC, as hexane	ppmv	10.43	10.73	9.71	10.29		
NMOC, as hexane @ 3% O <sub>2</sub>	ppmv	13.51	13.82	12.63	13.32	20	Pass
Emission Rate	lb/hr	0.17	0.18	0.17	0.17	0.56	Pass
Emission Rate	g/bhp-hr	0.13	0.13	0.12	0.13		
Emission Rate	lb/MMbtu	0.037	0.038	0.034	0.036	0.073	Pass
Inlet Sulfur, TRS as H <sub>2</sub> S	ppmv	-	-	0.01	-	10.0	Pass
Exhaust Sulfur, as SO <sub>2</sub>	ppmv	-	-	0.003	-		
Exhaust Sulfur, Emission rate	lb/hr	-	-	4.3E-06	-		
Exhaust Sulfur, Emission rate	lb/MMbtu	-	-	9.0E-07	-	0.023	Pass
Exhaust Sulfur, as SO <sub>2</sub>	gr/100cf	-	-	0.0004	-	0.63	Pass
O <sub>2</sub>	%	7.10	7.01	7.14	7.08	-	
CO <sub>2</sub>	%	11.98	12.24	12.16	12.12	-	
Fuel Usage	SCFM	136.8	139.4	147.2	141.14	-	
Heat Input	MMBtu/hr	4.61	4.70	4.96	4.76	7.64	Pass
Engine Output	KW	434	437	445	438	-	
BHP, Actual *	bhp	611.7	615.9	627.2	618	-	
Flow, Calculated	dscfm	1,085	1,099	1,172	1,119	-	1

\* Note: BHP calculated by :  $BHP = (Actual\ KW / 0.746) / 0.95$