AMENDED

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

PETIT	IONER: <u>CANYON POWER PLANT (CITY OF ANA</u>	HEIM) CASE NO:Case 6264-2					
		FACILITY ID: 153992					
FACIL <i>[locati</i>	FACILITY ADDRESS: 3071 E. Miraloma Avenue [location of equipment/site of violation; specify business/corporate address, if different, under Item 2, below]						
City, S	tate, Zip <u>: Anaheim, CA 92806</u>						
1.	TYPE OF VARIANCE REQUESTED (more than o	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 authorized to receive notices regarding this Petitic	than Petitioner), address, and phone number of persons on (no more than two authorized persons).					
	Ron Hoffard – Generation Plant Manager	Cesar Santana – Project Engineer					
	Canyon Power Plant	Montrose Environmental Solutions, Inc.					
	3071 E. Miraloma Avenue	1631 E. St. Andrew Place					
	Anaheim Zip 92806	Santa Ana, CA Zip 92705					
	(714) 765-4536 Ext.	(949) 988-4279 Ext.					
	Fax_()	Fax_()					
	E-mail_rhoffard@anaheim.net	E-mail_cesarsantana@montrose-env.com					
3.	RECLAIM Permit Yes No	Title V Permit Yes No					
Į t.	he Clerk of the Board at 909-396-2500 or	ations to facilitate participating in the hearing,					

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

E	Briefly describe the type of business and processes at your facility.						
	The Canyon Power Plant located at 3071 E. Miralom independent System Operator (CAISO) for The City The facility has four (4) LM6000 gas turbines that dri are fueled by natural gas with CO and VOC emission controlled by ammonia injected SCR catalysts. Gas Turbine No. 1 is the subject of this petition.	of Anaheim to mi ve four (4) 50 Me	eet a portion of the	eir electrical needs.			
F	ist the equipment and/or activity(s) that are the subject tach copies of the Permit(s) to Construct and/or FECLAIM or Title V facilities, attach only the releval quipment or process and conditions that are subject to the hearing.	Permit(s) to Ope nt sections of th	rate for the subje e Facility Permit	ect equipment. For			
	35000 and 000	V450V44: - 20.5	1000/00 	CO TRANSPORTUSIONACIONAS OPEN ANAMONAS ANAMONAS			
	Equipment/Activity	Application/ Permit No.	RECLAIM Device No.	Date Application/Plan Denied			
į	Equipment/Activity Gas Turbine No. 1			Application/Plan			
			Device No.	Application/Plan Denied (if relevant)*			
Atta	Gas Turbine No. 1		Device No.	Application/Plan Denied (if relevant)			

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)

4.

8.	Is there a regular maintenance and/or inspection schedule for this equipment? Yes	No 🗌
	If yes, how often: Semi-Annual: Date of last maintenance and/or inspection January 8, 2024	
	Describe the maintenance and/or inspection that was performed.	···-

- The last inspection following a repair was performed at the General Electric (GE) Turbine repair facility in Houston, Texas.
- Routine Semi-Annual Inspections and Maintenance consist of a borescope inspections, oil and air filter changes, and instrumentation calibrations.
- Another maintenance requirement is a GE Service Bulletin requiring replacement of turbine compressor, blades rows (stages) 3 through 5. Replacements for blades in rows 3-5 are required when a turbine reaches 1,500 starts. By June 21, 2024, the date of the incident necessitating this petition, the turbine had 1,087 starts and 49.4 hours of operation since the turbine was returned to service, from a previous repair, on May 14, 2024.
- In addition to the regular maintenance and inspections, a borescope inspection was conducted following a triggered alarm and audible boom (compressor stall) caused by a broken stage 3 blade.
 The damage caused by the compressor stall far exceeded the replacement of only the compressor 3-5 blades.
- 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
Permit Condition D29.3	SOx, VOC, and PM testing must be conducted once every three years. This testing is used to demonstrate compliance with BACT requirements. The facility is unable to meet testing requirements while the turbine is out for repair, and therefore cannot meet Permit Condition D29.3.
Rule 203(b)	Equipment cannot be operated contrary to permit conditions. The facility is unable to meet testing requirements while the turbine is out for repair, and therefore cannot be fully in compliance with Rule 203.
Rule 2001(j)	Facilities in the RECLAIM program must comply with all provisions of District rules and regulations. The facility is unable to meet testing requirements while the turbine is out for repair, and therefore cannot be fully in compliance with Rule 2001.
Rule 3002(c)(1)	All equipment at a Title V facility must be in compliance with all terms, requirements, and conditions of the Title V permit. The facility is unable to meet testing requirements while the turbine is out for repair, and therefore cannot be fully in compliance with Rule 3002.
Rule 218 (c)(1)(B)(i)	Operations and maintenance of the certified CEMS must be in accordance with the requirements of Rule 218.1 Sections b and d. The facility is unable to meet testing requirements in Rule 218.1 Section b with the turbine is out for repair, and therefore cannot be fully in compliance with Rule 218.

	Rule 218.1 (b)(4)(B	unable	ties must complete a System Bias Test every 12 months. The facility is to meet testing requirements while the turbine is out for repair, and fore cannot be fully in compliance with Rule 218.1.				
	Rule 218.1 (b)(4)(C	months	Facilities must complete a Relative Accuracy Test Audit (RATA) every 12 months. The facility is unable to meet testing requirements for CO while the turbine is out for repair, and therefore cannot be fully in compliance with Rule 218.1.				
10.		activities subject to t	his request currently un	der variance coverage? Yes 🗵 No 🗌			
	Case No.	Date of Action	Final Compliance Date	Explanation			
	6264-1		August 31, 2025	The variance is to allow operations until the source testing can be conducted. Due to an extended period coordinating with the repair depot, the turbine will not be reinstalled until later this year, past the compliance date. A second variance is required to have coverage until the turbine is reinstalled and source testing is conducted.			
11.	Are any other equipme coverage? Yes Case No.	ent or activities at thi No Date of Action	s location currently (or w Final Compliance Date	vithin the last six months) under variance Explanation			
12.	past year? Yes	⊠ No ∐		concerning this equipment or activity within the			
40	If yes, you must attach						
13.	within the last six month	complaints from the	e public regarding the op No 🔀	eration of the subject equipment or activity			
I VOLUME	If yes, you should be pr		etails at the hearing.				
LYOU MA	AY ATTACH ADDITIONAL PAG	GES IF NECESSARY]		Page 4 of 10			

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.

The Gas Turbine No. 1 is physically absent from the facility and source testing cannot be done until the turbine is repaired, returned, and reinstalled. The turbine is currently in Canada and is not expected to be reinstalled until the end of the year. The relevant chronology is provided below.

- July 2020 Triennial testing was last conducted July 2020. The next test would have been due July 2023.
- April 11, 2023 Due to damage in the high-pressure turbine (the hot section), Gas Turbine No. 1 was removed from service.
- April 21, 2023 Gas Turbine No. 1 was transported to the GE repair depot in Houston, Texas for repair.
- July 2023 Triennial testing was not possible in the absence of Gas Turbine No. 1, which was sent to Texas for repair.
- February 14, 2024 Gas Turbine No. 1 was transported back to Canyon Power Plant, reinstalled
 and, started for test. Gas Turbine No. 1 was unable to operate due to generator high vibrations and a
 failed automatic voltage regulator.
- May 14, 2024 After the issues discovered on February 14, 2024 were resolved, Gas Turbine No. 1 was successfully started and placed in operation. Triennial testing was scheduled for August 2024.
- May 15, 2024 through and including May 20, 2024 Gas Turbine No. 1 was <u>not</u> operated.
- May 21, 2024 Linearity testing was completed.
- May 23, 2024 RATA and ammonia slip testing were completed.
- May 27, May 28, May 31, June 3, June 4, June 6, June 12, and June 21,2024 Gas Turbine No. 1 operated for only 49.4 hours.
- June 21, 2024, at 10:25 PM One of the blades from Gas Turbine No. 1 broke off from the rotor shaft and traveled through the compressor, combustor, and the hot section, damaging components along the way. The liberated blade caused air flow turbulence that resulted in extreme high-pressure air travelling in opposing directions, triggering a compressor fault alarm and a compressor stall event which caused an emergency turbine trip (shutdown). It was estimated that 50% of all compressor blades and vanes would have to be replaced, and that damage to the combustor, fuel nozzles, and hot section blades would need to be repaired.
- July 12, 2024 A request for bids for the repair of these components was sent out. At the time of the submittal of the petition for Case 6264-1, it was not known when repairs would be completed. At the time, Canyon Power Plant estimated the turbine could be returned to service by May 2025.
- August 20, 2024 Physical copies of the variance petition for Case 6264-1 were delivered to South Coast AQMD offices.
- October 3, 2024 A Public Hearing was held by South Coast Air Quality Management District for Case 6264-1. A regular variance was granted, with a final Compliance Date of August 31, 2025.
- October 9, 2024 The repair contract was awarded to a contractor with qualified depot facilities for the necessary repairs.
- October 2024 April 2025 Contract negotiations were unusually extensive due to the holidays, unpredictable tariffs and import/export regulations and costs applicable to a Canadian contractor, and

supply chain issues that impacted the materials and services in the initially proposed scope of work/services.

- April 9, 2025 Contract finalized for repair to Gas Turbine No. 1.
- April 21, 2025 Gas Turbine No. 1 arrived at the contractor's repair depot in Alberta, Canada.
- May 16, 2025 The contractor began turbine disassembly/induction.
- June 30, 2025 The CO RATA for Gas Turbine No. 1 could not be completed. SCAQMD indicated on August 12, 2025 that an additional NOV will be issued for the missed testing.
- July 11, 2025 The contractor issued a Depot Findings Report detailing the as-found conditions of the engine modules and engine parts needing to be replaced, repaired, or overhauled. The contractor provided an initial cost estimate of the repairs, totaling \$3,465,441.02. Costs include transportation and assembly costs, the high-pressure compressor, combustor repair and overhaul of fuel nozzles, the high pressure turbine, the low pressure turbine, low pressure compressor, compressor front frame, and compressor rear frame. Canyon Power Plant estimated the turbine could be returned to service by March 2026.
- 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).

In mid-July, when Petition received the contractor's Depot Findings Report dated July 11, 2025, Petitioner became aware that Gas Turbine No. 1 would not be returned, reinstalled, and tested prior to the end of the existing variance, which was scheduled to end on August 31, 2025. The relevant chronology is below.

- July 2023 Turbine No. 1 Triennial testing due. The Triennial test date was missed due to the duration of Gas Turbine No. 1 repairs while at GE, Houston Texas.
- April 12, 2023 Turbine No. 1 transported to GE, Houston Texas to repair/replace fractured and damaged turbine blades, nozzles, and shrouds
- February 12, 2024 Turbine No. 1 returned and reinstalled. Turbine No. 1 was out of service up to May 14, 2024, due to automatic voltage regulator and generator high vibration issues.
- May 14, 2024 Turbine No. 1 was returned to service.
- May 2024 Canyon Power Plant conducted various required testing in May, including the annual RATA and ammonia slip testing on May 23, 2024, and linearity testing on May 21, 2024.
- June 21, 2024 The turbine incident occurred on the evening of June 21, 2024, before the August 2024 triennial compliance testing could be conducted. The turbine had operated for 49.4 hours since the annual RATA was conducted in early May 2024.
- August 2024 A Triennial compliance test had been scheduled for August 2024, which was the
 earliest available testing date on the testing company's schedule.
- October 3, 2024 Variance Petition, Case 6264-1, was granted, with a final compliance date of August 31, 2025.
- April 17, 2025 Turbine No. 1 transported to the contractor in Alberta, Canada.
- July 11, 2025 The contractor issued an initial cost estimate and findings report for the turbine repairs.

- July 2025 In discussions with Canyon Power Plant staff, the contractor indicated that the turbine
 would not be returned until Fall of 2025. In more recent discussions with the contractor, the
 contractor indicated that repairs may require shipment of parts to and from other locations, and the
 most recent estimate as of the submittal of this Petition is that the turbine will be returned at the end
 of the year.
- 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.
 - Triennial testing was originally scheduled to be completed by July 2023 but did not occur because
 the turbine was out of state for repairs.
 - Once the turbine was in service in May 2024, testing was scheduled for August 2024.
 - A borescope inspection was conducted on June 22nd-June 26th, 2024, to confirm the damage to the
 unit and determine the extent of repairs needed. The findings of the inspection were documented in
 an internal report completed on June 26, 2024.
 - The South Coast AQMD inspector Thomas Lee was notified of the incident on June 26th, 2024.
 - A request for Bids was sent out on July 12th, 2024, for Turbine No. 1 repairs. The South Coast AQMD attorney Karin Manwaring was notified of the incident by phone of July 19th, 2024.
 - A variance petition, Case 6264-1 was submitted to the SCAQMD Hearing Board on August 20, 2024.
 - The regular variance was granted on October 3, 2024, with a final compliance date of August 31, 2024.
 - October 9, 2024 The repair contract was awarded to a contractor with qualified depot facilities for the necessary repairs.
 - October 2024 April 2025 Contract negotiations were unusually extensive due to the holidays, unpredictable tariffs and import/export regulations and costs, and supply chain issues that impacted the materials and services in the contractor's initially proposed scope of work/services.
 - April 9, 2025 Contract finalized for repair to Gas Turbine No. 1.
 - The turbine was transported to the contractor's repair depot on April 17, 2025, in Alberta, Canada and arrived on April 21, 2025, with an induction date of May 16, 2025.
- 17. What would be the harm to your business during **and/or after** the period of the variance if the variance were not granted?

Economic losses: N/A

Number of employees laid off (if any): N/A

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

The turbine will not be operational during the variance period, so there will be no economic losses resulting
from the variance not being granted other than the potential penalties that may arise from any Notice of
Violation issued for the same reasons that required the last variance (triennial testing schedule being missed
due to the non-operational turbine or physical absence of the turbine).

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

Yes. Gas Turbine No. 1 is not in operation and will not be in operation until it is returned, reinstalled, and source testing is completed.

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

^{*} Column A minus Column B = Column C

Excess Opacity: N/A%

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

During the time the turbine is absent, there will be no excess emissions. When the turbine is returned and reinstalled, the turbine will be tested prior to placing it in service. The turbine will not operate until testing is done, so there will be no excess emissions.

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 need to mitigate excess emissions since there will be no excess emissions during the variance period. When the turbine is returned and reinstalled, the turbine will be tested prior to placing it in service. The turbine will not operate until testing is done, so 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.
	There will be no need to quantify emission levels since there will be no emissions from Turbine No. 1 during the variance period.
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.
	A Request for Bids to repair Turbine No. 1 was sent on July 12 th , 2024. The turbine is not expected to be back in operation until March 2026, due to supply constraints. The triennial compliance testing will be completed shortly after it is returned to service as directed by scheduling. The total repair costs are estimated to be about \$3,465,441.02 and total losses are estimated at \$1,700,000.
24.	State the date you are requesting the variance to begin: September 4, 2025 and the date by which you expect to achieve final compliance: March 31, 2026 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 padded to achieve the specifying dates or time increments for steps padded to achieve the specific part of the specific
	specifying dates or time increments for steps needed to achieve compliance. See District Rule 102 for definition of Increments of Progress (see Attachment A, Item 24, Example #3). List Increments of Progress here: N/A
25.	List the names of any District personnel with whom facility representations have
	notice to Comply.
	Karin Manwaring Ext. 2236
della	Thomas Lee Ext. 2412
	If the petition was completed by someone other than the petitioner, please provide their name and title below. Cesar Santana Montrose Environmental Solutions, Inc. Project Engineer 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 AUGUST 27, 2025, at CITY OF ANAITEIM, California
	Signature Ron Hoffard Print Name
MANAGEMENT AND ADDRESS OF THE PARTY OF THE P	Title: Generation Plant Manager
[YOU MA	AY ATTACH ADDITIONAL PAGES IF NECESSARY] PAGE 9 OF 10

26. SM individuals, following:	MALL BUSINESS and TABLE III SCHEDULE or entities meeting small business gross re	E A FEES: To be eligible for reduced fees for small businesses, ceipts criterion [see District Rule 303(h)], you must complete the
ū	Declaration Re	e Reduced Fee Eligibility
; !	The petitioner is a) □ an individual, or b) □ an officer, partner or owner of the pet authorized to make the representatio you selected 1a, above, skip item 2.	tioner herein, or a duly authorized agent of the petitioner ns set forth herein.
	SMALL BUSINESS means a business following criteria, or if affiliated with anothese criteria: (a) the number of employees (b) the total gross annual receive (iii) the facility is a not-for-prof	eipts are \$500,000 or less or it training centerOR-
	b) \square an entity with total gross annual recei	pts of \$500,000 or less.
3. 7	Therefore, I believe the petitioner qualifies for fee calculations, in accordance with Rule 30	or reduced fees for purpose of filing fees and excess emission 03(h).
i de	clare under penalty of perjury that the foreg	oing is true and correct.
Executed on	n, at	, California
Signature		
		Print Name
Title		
Title		



South Coast Air Quality Management District 21865 COPLEY DRIVE, DIAMOND BAR, CA 91765-4178

P 79467

NOTICE OF VIOLATION

DAT	E OF VIOLA	TIC	ON
Ö7	23	11	2023

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CAN	10 k	1 bonev	PLANT		153992	_	OE
t (viation Address		Mr		(8)		(0)	
3071	E	MIRALOMA	AVE.	ANAHEIM		958	•
Maday Address		A		ANAHEIM		42	80E
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YOU ARE HEREBY NOTIFIED THAT YOU HAVE BEEN CITED FOR ONE OR MORE VIOLATIONS OF THE SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT (SCAQMD) RULES, STATE LAW OR FEDERAL LAW. IF PROVEN, SUCH VIOLATION(S) MAY RESULT IN THE IMPOSITION OF CIVIL OR CRIMINAL PENALTIES.

EACH DAY A VIOLATION OCCURS MAY BE HANDLED AS A SEPARATE OFFENSE REGARDLESS OF WHETHER OR NOT ADDITIONAL NOTICES OF VIOLATION ARE ISSUED.

D	DESCRIPTION OF VIOLATIONS							
8	Authority*	Code Section or Rule No	SCAOMD Permit to Operate or CARB Registration No	Condition No (II Applicable)		Desc	ription of Violation	
1	EFSCAOMD □ CHASC □ CCR □ CFR	(4)(1)	,	D29.3	500 S0	ILURE TO COM INCE TESTING DX PH AND	POUCT TRIE FOR POI VOC EM	27447UJL 2401221
2	ESCAOMD ☐ CH&SC ☐ CCR ☐ CFR	3002 (c)(1)		An anguaga kangana yang da kangana kan	IN	LURE TO OPER COMPLIANCE QUIMEMENTS I CUFIED IN TH	WITH ALL	ILON2
3	SCAQMD CH&SC CCR CFR				Art			
4	☑ SCAOMD ☐ CH&SC ☐ CCR ☐ CFR	2004 (f)(1)		<u> </u>	FAILURE TO CONDUCT ANNUAL AMMONIA SLIP TEST FOR DEVICE ID D1 IN THE 2023 COMPLIANCE YEAR			D1 1N
5 CAOMD								
	erty A	4月12と4	~DEZ 7	· (714)	_ ,	Ecred By AVELINO	REVILLA	09/26/2024
	PECIM		Emsi HCT BHENE	TM . NOT	} €	Flora No 1 909-396- 2577 1 310-233-	arevilla	@ aqmd.gov
Κo	y to Authority Abbrev		th Coast Au Quality Manag	ement Distort	CHASE - Ca	Mornia Health and Safety Code	Method of Service	
			Code of Regulations			of Federal Regulations	In Person	Certified Mail

ORIGINAL



South Coast Air Quality Management District 21865 COPLEY DRIVE, DIAMOND BAR, CA 91765-4178

P 79687

NOTICE OF VIOLATION

DATE OF VIOLATION

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25

A COMMISSION OF THE PROPERTY O		1=2
Conyon Power Plant	153992	OE
3071 E Miraloma Ave A	raheim 9	2806
201 S Anaheim Blud, MS 802 Ay	naheim 9	2805
YOU ARE HEREBY NOTIFIED THAT YOU HAVE BEEN CITED FOR ONE OR MORE VIOLAT DISTRICT (SCAQMD) RULES. STATE LAW OR FEDERAL LAW. IF PROVEN, SUCH VIOL CRIMINAL PENALTIES.	FIONS OF THE SOUTH COAST AIR QUALITY MAN ATION(S) MAY RESULT IN THE IMPOSITION OF	NAGEMENT CIVIL OR
EACH DAY A VIOLATION OCCURS MAY BE HANDLED AS A SEPARATE OFFENSE REGAL	PRIESS OF WHETHER OR NOT ADDITIONAL M	בורני מר

EACH DAY A VIOLATION OCCURS MAY BE HANDLED AS A SEPARATE OFFENSE REGARDLESS OF WHETHER OR NOT ADDITIONAL NOTICES OF VIOLATION ARE ISSUED.								
DESCRIPTION OF VIOLATIONS								
	Authority*	Code Section or Rule No	SCAOMD Permit to Operate or CARB Registration No	Condition No (If Applicable)	and an angle of the second	Desc	cription of Violation	and the second s
1	SCAQMD □ CH&SC □ CCR □ CFR	(P)(A) (P)(A) 5181		No. The second s	_Cd	ilure to zerfo exise D1) C adline outlined:	0_RATA	before the
2	☐ SCAGMD ☐ CH&SC ☐ CCR ☐ CFR							
3	SCAQMD CHASC CCR CCR		2		-4 - L. MANA.			
4	□ SCAQMD □ CH&SC □ CCR □ CFR			And Address and Annual Control of the Control of th	Hitteria a Marii Sigari Mahamaya 			
5	SCAQMD CH&SC CCR CFR	and the state of t			damente rapor i			
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7	ny. Ser	lices Speci	alist bhernan	de 2 @ annhe	nut	N 909-396-235€ □ 310-233-		und ⊚ agmd gov
	VANDO - AMERICA STA	SCAOMD 300	C. Court Ar Good & Missing Code of Berg outcome	-अनुष्यक्तित्व CE CI	H&SC ()	Mate (Health and Batter Cod) (Frederic Regionales	In Person	S Cerbled Mad

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Section D Page: Facility ID: Revision #: August 19, 2021 Date:

FACILITY PERMIT TO OPERATE CANYON POWER PLANT

SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

The operator shall comply with the terms and conditions set forth below:

Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions* And Requirements	Conditions
Process 1: POWER GENE	and a particular state of the s	ON			
System 1: GAS TURBINI	3	3.46			
GAS TURBINE, NO. 1, NATURAL GAS, GENERAL ELECTRIC, MODEL LM6000PC SPRINT, SIMPLE CYCLE, 479 MMBTU/HR AT 46 DEG F, WITH INLET CHILLING, WITH WATER INJECTION WITH A/N: 555828	D1	СЗ		CO: 4 PPMV NATURAL GAS (4) [RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(a)(1) -BACT, 12-6-2002]; CO: 2000 PPMV NATURAL GAS (5) [RULE 407, 4-2-1982]; NOX: 2.5 PPMV NATURAL GAS (4) [RULE 2005, 12-4-2015]; NOX: 25 PPMV NATURAL GAS (8) [40CFR 60 Subpart KKKK, 3-20-2009]; PM10: 0.01 GRAINS/SCF NATURAL GAS (5A) [RULE 475, 10-8-1976; RULE 475, 8-7-1978]; PM10: 0.1 GRAINS/SCF NATURAL GAS (5) [RULE 409, 8-7-1981]; PM10: 1.67 LBS/HR NATURAL GAS (5C) [RULE 1303(b)(2)-Offset, 5-10-1996; RULE 1303(b)(2)-Offset, 5-10-1996; RULE 1303(b)(2) -Offset, 12-6-2002]; PM10: 11 LBS/HR NATURAL GAS (5B) [RULE 475, 10-8-1976; RULE 475, 8-7-1978]; SO2: (9) [40CFR 72 - Acid Rain Provisions, 11-24-1997]; SO2: 0.06 LBS/MMBTU NATURAL GAS (8) [40CFR 60 Subpart KKKK, 3-20-2009]; VOC: 2 PPMV NATURAL GAS (4) [RULE 1303(a)(1)-BACT, 12-6-2002]	A63.1, A99.1, A99.2, A99.3, A195.1, A195.2, A195.3, A327.1, B61.1, D12.1, D29.2, D29.3, D82.1, D82.2, E193.1, H23.1, 1298.1, K40.1
GENERATOR, 50.95 MW	ļ				

ŧ	(1)	(1A)	(1B)	Denotes	RECL.	AМ	emission	factor

Denotes RECLAIM concentration limit (4)

(5) (5A) (5B) Denotes command and control emission limit (6)

Denotes NSR applicability limit

See App B for Emission Limits

(2) (2A) (2B) Denotes RECLAIM emission rate

Denotes BACT emission limit Denotes air toxic control rule limit

(8) (8A) (8B) Denotes 40 CFR limit (e.g. NSPS, NESHAPS, etc.)

See section J for NESHAP/MACT requirements ** Refer to section F and G of this permit to determine the monitoring, recordkeeping and reporting requirements for this device.



Section D Page: 2
Facility ID: 153992
Revision #: 4
Date: August 19, 2021

FACILITY PERMIT TO OPERATE CANYON POWER PLANT

SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

The operator shall comply with the terms and conditions set forth below:

Equipment	ID No.	Connected To	RECLAIM Source Type/	Emissions* And Requirements	Conditions
Process 1: POWER GENE	RATI	ON .	Monitoring Unit		
CO OXIDATION CATALYST, NO. 1, BASF, 110 CUBIC FEET OF TOTAL CATALYST VOLUME A/N: 476654	C3	DI C4			
SELECTIVE CATALYTIC REDUCTION, NO. 1, CORMETECH CMHT-21, 1012 CU.FT.; WIDTH: 2 FT 6 IN; HEIGHT: 25 FT 9 IN; LENGTH: 18 FT WITH A/N: 476654	C4	C3 S6		NH3: 5 PPMV NATURAL GAS (4) [RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(a)(1) -BACT, 12-6-2002]	A195.4, D12.2, D12.3, D12.4, E179.1, E179.2, E193.1
AMMONIA INJECTION STACK, TURBINE NO. 1, HEIGHT: 86 FT; DIAMETER: 11 FT 8 IN A/N: 555828	S6	C4			

(1) (1A) (1B) Denotes RECLAIM emission factor

) Denotes RECLAIM concentration limit

t (4)

(2) (2A) (2B) Denotes RECLAIM emission rate

(5) (5A) (5B) Denotes command and control emission limit (6)

Denotes BACT emission limit

(7) Denotes NSR applicability limit

Denotes air toxic control rule limit

(9) See App B for Emission Limits

(8) (8A) (8B) Denotes 40 CFR limit (e.g. NSPS, NESHAPS, etc.)

(10) See section J for NESHAP/MACT requirements

** Refer to section F and G of this permit to determine the monitoring, recordkeeping and reporting requirements for this device.



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FACILITY PERMIT TO OPERATE CANYON POWER PLANT

SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

The operator shall comply with the terms and conditions set forth below:

The test(s) shall be conducted quarterly during the first twelve months of operation of the catalytic control device and annually thereafter when four consecutive quarterly source tests demonstrate compliance with the ammonia emission limit. If an annual test is failed, four consecutive quarterly source tests must demonstrate compliance with the ammonia emissions limits prior to resuming annual source tests.

The South Coast AQMD shall be notified of the date and time of the test at least 10 days prior to the test.

If the turbine is not in operation during one calendar year, then no testing is required during that calendar year.

The NOx concentration, as determined by the CEMS, shall be simultaneously recorded during the ammonia slip test. If the CEMS is inoperable, a test shall be conducted to determine the NOx emissions using South Coast AQMD Method 100.1 measured over a 60 minute averaging time period.

The test shall be conducted and the results submitted to the South Coast AQMD within 60 days after the test date.

The test shall be conducted to demonstrate compliance with the Rule 1303 concentration limit.

[RULE 1135, 11-2-2018; **RULE 1303(a)(1)-BACT, 5-10-1996**; RULE 1303(a)(1)-BACT, 12-6-2002]

[Devices subject to this condition: D1, D7, D13, D19]

D29.3 The operator shall conduct source test(s) for the pollutant(s) identified below.

Pollutant(s) to be tested	Required Test Method(s)	Sampling Time	Test Location	
SOX emissions	AQMD Labcratory Method 307-91	District-approved Fuel sample		
	Memod 307-91	averaging time		



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FACILITY PERMIT TO OPERATE CANYON POWER PLANT

SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

The operator shall comply with the terms and conditions set forth below:

VOC emissions District Method 25.3 | 1 hour Outlet of the SCR Serving this equipment Outlet of the SCR Serving this equipment Outlet of the SCR Serving this equipment



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FACILITY PERMIT TO OPERATE CANYON POWER PLANT

SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

The operator shall comply with the terms and conditions set forth below:

The PM emissions testing shall be conducted using South Coast AQMD Method 5.1 as described in Section 3.3 of the Delta Air Quality Services, Inc. protocol, dated September 27, 2013 and approved by the South Coast AQMD on October 10, 2013. The testing shall consist of one run with a sampling time of four hours minimum for the run. The PM emissions results will be considered to be a surrogate for the PM10 emissions.

As source testing methods and techniques evolve, a new protocol may be submitted and evaluated by the South Coast AQMD for approval in accordance with the procedure described below.

For PM (surrogate for PM10), the tests shall be conducted at least once every 18 months in order to verify compliance with the emission rate of 1.67 lb/hr PM10 at maximum load during normal operations. If all tests conducted over a three-year period comply with the 1.67 lb/hr limit for PM10, the facility shall have the option of reducing the source test frequency to once every three years.

For SOx and VOC, the test shall be conducted at least once every three years. The South Coast AQMD shall be notified of the date and time of the test at least 10 days prior to the test.

The test shall be conducted to determine the oxygen levels in the exhaust. In addition, the tests shall measure the fuel flow rate (CFH), the flue gas flow rate, and the turbine generating output in MW.

The test shall be conducted in accordance with South Coast AQMD approved test protocol. The protocol shall be submitted to the South Coast AQMD engineer no later than 45 days before the proposed test date and shall be approved by the South Coast AQMD before the test commences..

The test protocol shall include the proposed operating conditions of the turbine during the tests, the identity of the testing lab, a statement from the testing lab certifying that it meets the criteria of Rule 304, and a description of all sampling and analytical procedures.

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FACILITY PERMIT TO OPERATE CANYON POWER PLANT

SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

The operator shall comply with the terms and conditions set forth below:

The test shall be conducted when this equipment is operating at loads of 100, 75, and 50 percent, with the exception of PM testing (surrogate for PM10). For PM, the test shall be conducted when this equipment is operating at a load of 100 percent.

For natural gas fired turbines only, for the purpose of demonstrating compliance with VOC BACT limits as determined by South Coast AQMD, the operator shall use South Coast AQMD Method 25.3 modified as follows:

- a) Triplicate stack gas samples extracted directly into Summa canisters, maintaining a final canister pressure between 400-500 mm Hg absolute,
- b) Pressurization of the Summa canisters with zero gas analyzed/certified to less than 0.05 ppmv total hydrocarbons as carbon, and
- c) Analysis of Summa canisters per the canister analysis portion of South Coast AQMD Method 25.3 with a minimum detection limit of 0.3 ppmv or less and reported to two significant figures. The temperature of the Summa canisters when extracting the samples for analysis shall not be below 70 F.

The use of this modified method for VOC compliance determination does not mean that it is more accurate than unmodified South Coast AQMD Method 25.3, nor does it mean that it may be used in lieu of South Coast AQMD Method 25.3 without prior approval, except for the determination of compliance with the BACT level of 2.0 ppmv VOC calculated as carbon for natural gas fired turbines.

For purposes of this condition, an alternative test method may be allowed for any of the above pollutants upon concurrence by South Coast AQMD, EPA, and CARB.

[RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002; RULE 1303(b)(2)-Offset, 5-10-1996; RULE 1303(b)(2)-Offset, 12-6-2002]

[Devices subject to this condition: D1, D7, D13, D19]

D82.1 The operator shall install and maintain a CEMS to measure the following parameters:

RULE 203. PERMIT TO OPERATE

- (a) A person shall not operate or use any equipment or agricultural permit unit, the use of which may cause the issuance of air contaminants, or the use of which may reduce or control the issuance of air contaminants, without first obtaining a written permit to operate from the Executive Officer or except as provided in Rule 202.
- (b) The equipment or agricultural permit unit shall not be operated contrary to the conditions specified in the permit to operate.

- (F) public transit;
- (G) restaurants;
- (H) potable water delivery operations;
- (I) facilities located in the Riverside County portions of the Salton Sea and Mojave Desert Air Basins, except for a facility that has elected to enter the RECLAIM program pursuant to subparagraph (i)(2)(M); and
- (J) facilities that have permanently ceased operations of all sources before January 1, 1994.

(j) Rule Applicability

Facilities operating under the provisions of the RECLAIM program shall be required to comply concurrently with all provisions of District rules and regulations, except those provisions applicable to NOx emissions under the rules listed in Table 1 adopted or amended prior to October 5, 2018, and those provisions applicable respectively to SOx emissions of the listed District rules in Table 2 which have initial implementation dates in 1994. In addition, NOx RECLAIM facilities are required to comply with all NOx provisions in rules contained in Table 1 that are adopted or amended on or after October 5, 2018. The Facility Permit holder shall comply with all other provisions of the rules listed in Tables 1 and 2 relating to any other pollutant.

(b) Application Shield

Notwithstanding subdivision (a) of this rule, it is not a violation of this rule to operate a Title V facility or equipment located at a Title V facility without a Title V permit, provided that:

- (1) A timely and complete application for initial Title V permit issuance or Title V permit renewal for such facility or equipment has been filed with the Executive Officer; and,
- (2) The Executive Officer has not taken final action on the application. For the purpose of an application shield, a timely and complete application is one that has been submitted in accordance with subdivisions (a) and (c) of Rule 3003. The application shield shall not apply if the permit applicant has failed to submit information required pursuant to subdivision (d) of this rule.

(c) Duty to Comply

- (1) A person shall construct and operate a Title V facility and all equipment located at a Title V facility in compliance with all terms, requirements, and conditions specified in the Title V permit at all times.
- (2) Any non-compliance with a Title V facility permit term, requirement, or condition is a violation of Regulation XXX and is a violation of the federal Clean Air Act if the permit term, requirement or condition is federally enforceable. Each day during any portion of which a violation occurs is a separate offense. Any non-compliance shall be grounds for:
 - (A) enforcement action (under the California Health & Safety Code and the federal Clean Air Act);
 - (B) permit termination;
 - (C) permit revocation and reissuance;
 - (D) permit revision; and
 - (E) denial of a permit renewal or revision application.
- (3) It shall not be a defense for a person in any of the actions listed in paragraph (c)(2) of this rule that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of the permit, except as provided for in subdivision (g) of Rule 3002.
- (4) A permit may be revised, revoked, reopened and reissued, or terminated for cause as provided in Rule 3004 - Permit Types and Content, and Rule 3005 - Permit Revisions. The filing of a request by the holder of a Title V

completion. If satisfactory performance is demonstrated, final approval of the CEMS shall be granted. Subsequent operation and maintenance of the certified CEMS shall be in accordance with the provisions of Rule 218, Section (c)(1)(B). After final approval, modifications made to the CEMS shall be reviewed and approved by the Executive Officer according to the specifications stipulated in Rule 218, Section (c)(1)(B), and may require all or a portion of performance tests to be conducted.

- (B) Upon submission of an "Application for CEMS" or "Application for CEMS Modification" as prescribed in Rule 218 Section (c)(1)(A), the applicant shall indicate either one of the following conditions:
 - the provisions of Rule 218.1, "Continuous Emission Monitoring Performance Specifications", Section (b), and the subsequent operation and maintenance of the certified CEMS shall be in accordance with the provisions of Rule 218, Sections (b), (e), (f) and (g) and of the requirements of Rule 218.1(b) and (d), or,
 - (ii) That the CEMS shall be reviewed and certified according to the applicable provisions of the Code of Federal Regulations, Title 40 "Protection of Environment", Part 60 "Standards of Performance for New Stationary Sources" (40CFR60), Appendix B "Performance Specifications" (Appendix B), and the subsequent operation and maintenance of the certified CEMS shall be in accordance with the provisions of Rule 218, Sections (b), (e), (f) and (g), and the requirements of 40CFR60, Appendix F "Quality Assurance Procedures" (Appendix F).

Notwithstanding the requirements of Section (c)(1)(B)(ii), any alternative test methods for 40CFR60, Appendices B and F shall be those that are listed in Rule 218.1, Table 1 - Reference Methods.

(C) A "Notification of Pre-Approved Modification" and report of results of prescribed quality assurance checks may be submitted in-lieu of the "Application for CEMS Modification" when the modification

(E) Interference

The owner or operator shall perform tests to verify the absence of sampling, analytical and flow interference, as applicable.

(F) Linearity Error

LE tests shall be performed at the low, middle and high ranges of concentration, namely 20 to 30, 50 to 60, and 80 to 100 percent. Each calibration gas shall be introduced into the CEMS three times. The same gas shall not be used twice in succession. LE shall be less than or equal to 5.0 percent of the calibration gas concentration.

- (G) Multiple -Span-Range
 For CEMS that have multiple- span range, all certification tests shall be performed at the lowest range. Except for RA and interference tests, all other certification tests shall be performed on other ranges.
- (4) Operational Requirements and Performance Specifications for New or Modified CEMS

After final approval, the CEMS shall be subsequently operated and maintained according to the following requirements and specifications:

(A) 24-Hour CE

CE tests shall be performed once each day as close to 24 hour intervals as practicable at the low (0 to 20 percent) and high (80 to 100 percent) ranges of concentration. However, CE tests are not required on any day when the underlying equipment is not operated. CE test results which are greater than the limits specified in Sections (b)(2)(A)(i) and (ii), but less than or equal to 5.0 percent of the full span range shall be addressed by QA/QC Plan remediation. The CEMS shall be deemed out-of-control during such period when any CE test result is greater than the specified limits and greater than 5.0 percent of the full span range, until the CE test meets the specifications. All data generated by the CEMS during an out-of-control period shall be deemed invalid but shall not be deleted or excluded from the records or database.

(B) System Bias Test

A system bias shall be conducted every 12 months in conjunction with relative accuracy audit required under Rule 218.1 Section

(b)(4)(C). The CEMS system bias shall not exceed \pm 5.0 percent of the full span range for contaminant analyzers. In addition, the owner or operator shall include in the facility QA/QC Plan, criteria for excessive drift (e.g. control limits on cumulative drift) and appropriate diagnostic techniques to identify sources of analyzer drift and system bias when control limits are exceeded.

- (C) Relative Accuracy Testing
 - RATA and RAA, as applicable, shall be performed at least once every 12 months. The test shall be completed annually no later than the end of the calendar quarter in which the date of the original certification test was performed. During any relative accuracy tests after CEMS certification, the owner or operator may request a waiver from stratification, cyclonic flow, and/or interference requirements in Sections (b)(3)(C), (D) and (E), respectively, by submitting to the Executive Officer, for approval, any applicable documentation or previous test or historical data that meets the stratification, cyclonic flow, and/or interference requirements.
- (D) Cylinder Gas Audit (CGA)

 A CGA shall be performed every calendar quarter but in no more than three quarters in succession. The CGA shall be conducted according to the provisions of 40 CFR 60, Appendix F. The audit gases shall be according to the certification requirements of Rule 218.1.
- (E) The Executive Officer may require recertification of the CEMS if the annual availability percentage is below 95 percent. Annual CEMS availability percentage calculations will be based on the year ending on the last day of the calendar quarter in which the CEMS was originally certified.
- (F) The owner or operator of a CEMS that requires moisture correction in reporting flow and concentration shall measure and monitor moisture in the stack gas used for emission data calculations in accordance with the written technical guidance document set forth by the Executive Officer. Alternatively, with Executive Officer approval, for equipment whose moisture source is only from fuel combustion, the operator may calculate the moisture content using