

3853 Goose Haven Road Suisun City, CA 94585

November 14, 2018

Director of Compliance and Enforcement Bay Area Air Quality Management District 375 Beale Street, Suite 600 San Francisco, CA 94105

Attn: Title V

Subject: Goose Haven Energy Center, LLC

Title V Semi-Annual Monitoring Report

Facility # B4416

Reporting Period: May 1, 2018 - October 31, 2018

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To Whom It May Concern:

Enclosed is the Title V CEMS Semi-Annual Monitoring Report for the Goose Haven Energy Center ("GHEC") for the reporting period from May 1, 2018 – October 31, 2018.

GHEC is currently in compliance with the District CEMS regulations. CEC maintained compliance with the monitoring requirements listed in the Title V permit for CEC during this reporting period.

By signing this report I am certifying that based on information and belief formed after reasonable inquiry, the statements and information in the attached report are true, accurate, and complete.

If you have any questions or require additional information, please contact me at (707) 399-4393.

Sincerely,

Andrew Gundershaug

Plant Manager and Designated Representative/Responsible Official

Table VII – A **Applicable Limits and Compliance Monitoring Requirements** S-1 – COMBUSTION GAS TURBINE May 1, 2018 through October 31, 2018

Type of	Citation of	FE	Future		Monitoring	Monitoring	Monitoring	Comp	liance
Limit	Limit	Y/N	Effective Date	Limit	Requirement Citation	Frequency (P/C/N)	Туре	Yes	No
NOx	BAAQMD 9-9-301.1.3	N		9 ppmv @ 15% O2, dry	BAAQMD 9-9-501 and BAAQMD condition #20057, part 23c	С	CEM	Х	
NOx	BAAQMD 9-9-301.1.3	N		9 ppmv @ 15% O2, dry	BAAQMD condition #20057, part 24a	P/ Every 8,000 hrs or every 3 yrs, whichever comes first	Source test	Х	
NOx	BAAQMD 9-9-301.2	N		.43 lbs/MW or 9 ppmv @ 15% O2, dry	BAAQMD 9-9-501 and BAAQMD Condition #20057 part 23c	С	CEM	X	
NOx	SIP Regulation 9-9-301.3	Y		9ppmv @ 15% O2, dry	BAAQMD 9-9-501 and BAAQMD condition #20057, part 23c	С	CEM	X	
	SIP Regulation 9-9-301.3	Y		9ppmv @ 15% O2, dry	BAAQMD condition #20057, part 24a	P/ Every 8,000 hrs or every 3 yrs, whichever comes first	Source test	X	
NOx	NSPS, 40 CFR 60.332(a)(1)	Y		75ppmv @ 15% O2, dry	NSPS 40CFR 60.334(c)	С	СЕМ	X	
NOx	None	Y		None	40 CFR 75.10	С	CEM	X	
NOx	BAAQMD condition #20057, part 18.1	Y		2.5 ppm @15% O2, dry 3-hr rolling average except during turbine startup or shutdown	BAAQMD condition #20057, part 18.1	С	СЕМ	Х	

Type of	Citation of	FE	Future	Limit	Monitoring Requirement	Monitoring	Monitoring	Comp	liance
Limit	Limit	Y/N	Effective Date	Limit	Citation	Frequency (P/C/N)	Type	Yes	No
NOX	BAAQMD condition #20057, part 18.1	Y		2.5 ppm @15% O2, dry 3-hr average except during turbine startup or shutdown	BAAQMD condition #20057, part 24a	P/ Every 8,000 hrs or every 3 yrs, whichever comes first	Source test	Х	
NOx	BAAQMD condition #2057, part 21	Y		121 lb/ calendar day (as NO2)	BAAQMD condition #20057, part 23c	C ,	СЕМ	X	
NOx	BAAQMD condition #20057, part 21	Y		16.4 tons per calendar year (as NO2)	BAAQMD condition #20057, part 23c	С	СЕМ	Х	
СО	BAAQMD condition #20057, part 18.3	Y		6 ppmv, @ 15% O2, dry, 3-hr average except during turbine startup or shutdown	BAAQMD condition #20057, parts 18.3 and 23c	С	СЕМ	Х	
СО	BAAQMD condition #20057, part 18.3	Y		6 ppmv, @ 15% O2, dry, 3-hr average except during turbine startup or shutdown	BAAQMD condition #20057, part 24c	P/ Every 8,000 hrs or every 3 yrs, whichever comes first	Source test	Х	
СО	BAAQMD condition #20057, part 21	Y		163 lb/ calendar day	BAAQMD condition #20057, part 23c	С	CEM	Х	
СО	BAAQMD condition #20057, part 21	Y		29.1 tons per calendar year	BAAQMD condition #20057, part 23c	С	CEM	X	
CO2		Y		None	40 CFR 75.10	С	CEM (CO2) or CEM (O2) or fuel flow monitor	X	

Type of	Citation of	FE	Future		Monitoring	Monitoring	Monitoring	Comp	liance
Limit	Limit	Y/N	Effective Date	Limit	Requirement Citation	Frequency (P/C/N)	Туре	Yes	No
SO2	BAAQMD 9-1-301	Y		GLC ¹ of 0.5 ppm for 3 min or 0.25 ppm for 60 min or 0.05 ppm for 24 hours		N		Х	
SO2	BAAQMD 9-1-302	Y		300 ppm (dry)	BAAQMD condition #20057, part 23e	P/Q	Total Sulfur analysis	X	
SO2	NSPS 40 CFR 60.333(a)	Y		0.015% (vol) @ 15% O ₂ (dry)	NSPS 40 CFR 60.334(h)(3)		Fuel Measurements, calculations	X	
SO2	None	Y		None	40 CFR 75.11(d)(2), 40 CFR 75, Appendix D, part 2.3		Fuel measurements, calculations	X	
SO2	BAAQMD condition #20057, part 18.6	Y		1.39 lb/hr excluding startup and shutdown of turbines	BAAQMD condition #20057, part 23e	P/Q	Total sulfur analysis	X	
SO2	BAAQMD condition #20057, part 18.6	Y		1.39 lb/hr excluding startup and shutdown of the turbines	BAAQMD condition #20057, part 24f	P/ Every 8,000 hrs or every 3 yrs, whichever comes first	Source test	X	
SO2	BAAQMD condition #20057, part 21	Y		33 lb/ calendar day	BAAQMD condition #20057, part 23e	P/Q	Total sulfur analysis	X	
SO2	BAAQMD condition #20057, part 21	Y		6.0 tons/ calendar year	BAAQMD condition #20057, part 23e	P/Q	Total sulfur analysis	X	
Opacity	BAAQMD 6-1-301	N		>Ringelmann No.1 for no more than 3 minutes in any hour		N		Х	
Opacity	SIP 6-301	Y		>Ringelmann No.1 for no more than 3 minutes in any hour		N		Х	

Type of	Citation of	FE	Future		Monitoring	Monitoring	Monitoring	Comp	liance
Limit	Limit	Y/N	Effective Date	Limit	Requirement Citation	Frequency (P/C/N)	Туре	Yes	No
Opacity	BAAQMD condition #20057, part 17	Y		> Ringelmann No.1 for no more than 3 minutes in any hour or equivalent 20% opacity		N		Х	
Filterable Particulate	BAAQMD 6-1-310	N		0.15 grains/dscf		N		X	
Filterable Particulate	SIP 6-310	Y		0.15 grains/dscf		N		X	
PM10	BAAQMD condition #20057, part 18.5	Y		3 lb/hr for S-1	BAAQMD condition #20057, part 24e	P/ Every 8,000 hrs or every 3 yrs, whichever comes first	Source test	X	
PM10	BAAQMD condition #20057, part 21	Y		72 lb/ calendar day	BAAQMD condition #20057, parts 24e	P/ Every 8,000 hrs or every 3 yrs, whichever comes first	Source test	X	
PM10	BAAQMD condition #20057, part 21	Y		13.1 tons/ calendar year	BAAQMD condition #20057, part 24e	P/ Every 8,000 hrs or every 3 yrs, whichever comes first	Source test	X	
POC	BAAQMD condition #20057, part 18.4	Y		2 ppmv @ 15% O2, dry, except during turbine startup or shutdown	BAAQMD condition #20057, part 24d	P/ Every 8,000 hrs or every 3 yrs, whichever comes first	Source test	Х	
POC	BAAQMD condition #20057, part 21	Y		30.0 lb/calendar day	BAAQMD condition #20057, part 24d	P/ Every 8,000 hrs or every 3 yrs, whichever comes first	Source test	X	
POC	BAAQMD condition #20057, part 21	Y		4.9 ton/ calendar year	BAAQMD condition #20057, part 24d	P/ Every 8,000 hrs or every 3 yrs, whichever comes first	Source test	Х	

Type of	Citation of	FE	Future Effective	Limit	Monitoring	Monitoring	Monitoring	Comp	liance
Limit	Limit	Y/N	Date		Requirement Citation	Frequency (P/C/N)	Туре	Yes	No
NH3	BAAQMD condition #20057, part 18.2	N		10ppmv @15% O2, dry, except during turbine startup or shutdown	BAAQMD condition #20057, parts 18.2 and 23b	C	Ammonia flowmeter and a District- approved corrected ammonia slip calculation.	X	
NH3	BAAQMD condition #20057, part 18.2	N		10ppmv @15% O2, dry, except during turbine startup or shutdown	BAAQMD condition #20057, part 24b	P/ Every 8,000 hrs or every 3 yrs, whichever comes first	Source test	X	
Heat input limit	BAAQMD condition #20057, part 22	Y		500 MMBTU/hr (HHV),	BAAQMD condition #20057, part 23d	С	Fuel meter,	X	
Heat input limit	BAAQMD condition #20057, part 22	Y		500 MMBTU/hr (HHV),	BAAQMD condition #20057, part 23d	P/Q	Fuel composition analysis	X	
Heat input limit	BAAQMD condition #20057, part 22	Y		500 MMBTU/hr (HHV)	BAAQMD condition #20057, part 24g	P/ Every 8,000 hrs or every 3 yrs, whichever comes first	Source test	X	
Heat input limit	BAAQMD condition #20057, part 22	Y		12,000 MMBTU/day (HHV)	BAAQMD condition #20057, part 23d	С	Fuel meter, calculations	X	
Heat input limit	BAAQMD condition #20057, part 22	Y		12,000 MMBTU/day (HHV)	BAAQMD condition #20057, part 31g	P/Q	Fuel composition analysis	X	
Heat input limit	BAAQMD condition #20057, part 22	Y		4,380,000 MMBTU/yr	BAAQMD condition #20057, part 23d	С	Fuel meter, calculations	Х	
Heat input limit	BAAQMD condition #20057, part 22	Y		4,380,000 MMBTU/yr	BAAQMD condition #20057, part 31g	P/Q	Fuel composition analysis	Х	

Type of	Citation of	FE	Future		Monitoring	Monitoring	Monitoring	Comp	liance
Limit	Limit	Y/N	Effective Date	Limit Requirement Citation	Frequency (P/C/N)	Туре	Yes N X X X	No	
MW	N/A			None	BAAQMD condition #20057, part 24h	P/ Every 8,000 hrs or every 3 yrs, whichever comes first	Source test	Х	
Exhaust Gas temperature	N/A			None	BAAQMD condition #20057, part 24j	P/ Every 8,000 hrs or every 3 yrs, whichever comes first	Source test	Х	
Stack gas flow	N/A			None	BAAQMD condition #20057, part 24i	P/ Every 8,000 hrs or every 3 yrs, whichever comes first	Source test	X	
NH3 injection rate	N/A			None	BAAQMD condition #20057, part 24k, 18.2	P/ Every 8,000 hrs or every 3 yrs, whichever comes first	Source test and a District approved corrected ammonia slip calculation	X	
Start-up Period	BAAQMD Condition #20057 part			60 minutes per start-up	BAAQMD condition #2057, part 31(b)	P/E	Records	Х	
Shutdown Period	BAAQMD Condition #20057 part 20			30 minutes per shutdown	BAAQMD condition #2057, part 31(b)	P/E	Records	Х	
Fuel Sulfur Content	40 CFR 60.333(b)			0.8 percent by weight (8000ppmw) sulfur	40CRFR 60.334(h)(1)	Р	Fuel Sulfur Content Testing	X	

Table VII - B Applicable Limits and Compliance Monitoring Requirements S-2 – DIESEL FIREWATER PUMP

Type of	Citation of	FE	Future Effective	Limit	Monitoring	Monitoring	Monitoring	Comp	liance
Limit	Limit	Y/N	Date	Elillit	Requirement Citation	Frequency (P/C/N)	Туре	Yes	No
SO2	BAAQMD	N		GLC ¹ of 0.5		P/E	Fuel	X	
	9-1-301			ppm for 3 min			certification		
	BAAQMD			or 0.25 ppm for			by vendor		
				60 min or 0.05					
				ppm for 24					
				hours					
	BAAQMD	Y		Sulfur content		P/E	Fuel	X	
	9-1-304			of fuel <0.5%			certification		
				by weight			by vendor		
Opacity	SIP	Y		<ringelmann< td=""><td></td><td>N</td><td></td><td>X</td><td></td></ringelmann<>		N		X	
	Regulation			No. 2 for more					
	6-302			than 3 min/hr					
Opacity	BAAQMD	N		<ringelmann< td=""><td></td><td>N</td><td></td><td>X</td><td></td></ringelmann<>		N		X	
	Regulation			No. 2 for more					
	6-1-302			than 3 min/hr					
FP	SIP	Y		0.15 grain/dscf		N		X	
	Regulation								
	6-310								
FP	BAAQMD	N		0.15 grain/dscf		N		X	
	Regulation								
	6-1-310								
Hours of	BAAQMD	Y		Emergency use	BAAQMD 9-8-530	С	Hour meter,	X	
operation	9-8-330.1			for an	BAAQMD	P/E	recordkeeping		
	BAAQMD			unlimited	Condition #22850	*			
	Condition			number of	Part 3				
	#22850			hours					
	Part 1								
Hours of	BAAQMD	Y		Reliability-	BAAQMD	С	Hour meter,	X	
operation	9-8-330.2			related activities	Regulation 9-8-530	P/E	recordkeeping		
	BAAQMD			not to exceed 50	BAAQMD				
	Condition			hours in any	Condition #22850	×			
	#22850			consecutive 12-	Part 3				
	Part 1			month period					

Table VII - C Applicable Limits and Compliance Monitoring Requirements $S\text{--}3-COOLING\ TOWER$

Type of Limit	Citation of	FE	Future	Limit	Monitoring	Monitoring	Monitoring Type	Comp	liance
	Limit	Y/N	Effective Date		Requirement Citation	Frequency (P/C/N)		Yes	No
Opacity	BAAQMD	N		>=Ringelmann		N		X	
	Regulation			1 for no more					
	6-1-301			than 3 min/hr					
Opacity	SIP	Y		>=Ringelmann		N		X	
	Regulation			1 for no more					
	6-301			than 3 min/hr					
Particulate	BAAQMD	N		0.15 grains per		N		X	
Weight	Regulation			dscf					
	6-1-310								
Particulate	SIP	Y		0.15 grains per		N		X	
Weight	Regulation			dscf					
	6-310								
Particulate	BAAQMD	Y		40 lb/hr	N	N		X	
Weight	Regulation								
	6-1-311								
Particulate	SIP	Y		40 lb/hr	N	N		X	
Weight	Regulation								
	6-311								