



San Joaquin Valley

AIR POLLUTION CONTROL DISTRICT



JUN 02 2014

Mr. Wm. Douglas Shaffer
Vintage Production California LLC
9600 Ming Ave, Suite 300
Bakersfield, CA 93311

Re: Proposed ATC / Certificate of Conformity (Significant Mod)
District Facility # S-8282
Project # S-1141816

Dear Mr. Shaffer:

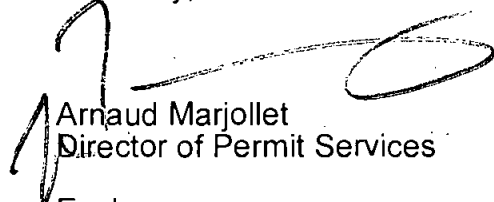
Enclosed for your review is the District's analysis of an application for Authorities to Construct for the facility identified above. You requested that Certificates of Conformity with the procedural requirements of 40 CFR Part 70 be issued with this project. These permits authorize the use of two transportable micro turbines to be operated at various unspecified locations within Vintage Production California's Light Oil Western Stationary Source in Kern County.

After addressing all comments made during the 30-day public notice and the 45-day EPA comment periods, the District intends to issue the Authorities to Construct with Certificates of Conformity. Please submit your comments within the 30-day public comment period, as specified in the enclosed public notice. Prior to operating with modifications authorized by the Authorities to Construct, the facility must submit an application to modify the Title V permit as an administrative amendment, in accordance with District Rule 2520, Section 11.5.

If you have any questions, please contact Mr. Jim Swaney, Permit Services Manager, at (559) 230-5900.

Thank you for your cooperation in this matter.

Sincerely,



Arnaud Marjollet
Director of Permit Services

Enclosures

cc: Mike Tollstrup, CARB (w/enclosure) via email
cc: Gerardo C. Rios, EPA (w/enclosure) via email

Sayed Sadredin
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San Joaquin Valley Air Pollution Control District
Authority to Construct Application Review
Transportable Non-PUC Gas-Fired Micro Turbines

Facility Name:	Vintage Production California, LLC	Date:	May 28, 2014
Mailing Address:	9600 Ming Avenue, Suite 300 Bakersfield, CA 93311	Engineer:	Stanley Tom
		Lead Engineer:	Joven Refuerzo
Contact Person:	Doug Shaffer		
Telephone:	661-869-8075		
E-Mail:	William_shaffer@oxy.com		
Application #(s):	S-8282-124-1 and '-125-1		
Project #:	S-1141816		
Deemed Complete:	April 24, 2014		

I. Proposal

Vintage Production California, LLC (VPC) has requested Authority to Construct (ATC) permits to increase the CO emission limit for two transportable 200 kW (2.28 MMBtu/hr) natural gas and field gas fired Capstone model C200 micro turbines from 10 ppmv @ 15% O₂ to 19 ppmv @ 15% O₂. However, since the micro turbines could not meet the CO emission limit listed on the previously issued ATC permits, ATC permits S-8282-124-0 and '-125-0 (see Appendix H) cannot be implemented and the ATC permits issued in this project will cancel and replace ATC permits S-8282-124-0 and '-125-0. The following sample condition will be listed on the permits in this project to ensure compliance:

- This Authority to Construct (ATC) cancels and supersedes ATC permit S-8282-124-0. [District Rule 2201]

A notice of violation (#45220) was issued for operation of the micro turbines that could not meet the permit limit of 10 ppmv-CO @ 15% O₂.

These units will be used in a portable early production facility to generate electricity where access to grid power is not available. The micro turbines will be operated in conjunction with equipment being approved by District projects S-1123430 (nine storage tanks with vapor control and a separator) and S-1130506 (well test vapor control system and two thermal oxidizers).

Pursuant to District Rule 2020 section 6.1.3, gas turbine engines with a maximum heat input rating of 3 MMBtu/hr or less are exempt from permit. However, the California Code of Regulations (CCR) Title 17 sections 94200 – 94214 requires that units used in distributed generation either be certified CARB, or be subject to District permit requirements regardless of their rating (§94201).

Executive order DG-035 was issued for this micro turbine and certified emissions while firing on "natural gas", which CCR Title 17 § 94202(u) defines as: California Public Utility Commission quality natural gas.

Since VPC is proposing to fire this unit on non PUC quality gas, the executive order is no longer valid and the micro turbines will require a District Permit to Operate.

VPC received their Title V Permit on January 21, 2012. This modification can be classified as a Title V significant modification pursuant to Rule 2520, and can be processed with a Certificate of Conformity (COC). Since the facility has specifically requested that this project be processed in that manner, the 45-day EPA comment period will be satisfied prior to the issuance of the Authority to Construct. VPC must apply to administratively amend their Title V permit.

II. Applicable Rules

Rule 2020	Exemptions (8/18/11)
Rule 2201	New and Modified Stationary Source Review Rule (4/21/11)
Rule 2520	Federally Mandated Operating Permits (6/21/01)
Rule 4001	New Source Performance Standards (4/14/99)
Rule 4002	National Emissions Standards for Hazardous Air Pollutants (5/20/04)
Rule 4101	Visible Emissions (2/17/05)
Rule 4102	Nuisance (12/17/92)
Rule 4201	Particulate Matter Concentration (12/17/92)
Rule 4301	Fuel Burning Equipment (12/17/92)
Rule 4703	Stationary Gas Turbines (9/20/07)
Rule 4801	Sulfur Compounds (12/17/92)
CH&SC 41700	Health Risk Assessment
CH&SC 42301.6	School Notice

Public Resources Code 21000-21177: California Environmental Quality Act (CEQA)
California Code of Regulations, Title 14, Division 6, Chapter 3, Sections 15000-15387: CEQA Guidelines

III. Project Location

The equipment will be operated at various unspecified locations within VPC's Light Oil Western Stationary Source in Kern County. The equipment will be restricted from operating within 1,000 feet of the outer boundary of a K-12 school. Therefore, the public notification requirement of California Health and Safety Code 42301.6 is not applicable to this project.

IV. Process Description

VPC operates various equipment throughout their Light Oil Western Stationary Source in remote areas where it is not feasible to connect to grid power. The proposed micro turbine generators are portable units that can be fired on PUC quality gas or field gas as needed.

Initially, this equipment will be used to operate a portable early production facility in conjunction with tanks (S-8282-118 through -121) and a well test vapor control system and two thermal oxidizers (S-8282-123), see Process Flow Diagram in Appendix B.

V. Equipment Listing

S-8282-124-1: 2.28 MMBTU/HR NATURAL GAS/FIELD GAS FIRED CAPSTONE MODEL C200 MICRO TURBINE POWERING A 200 KW ELECTRICAL GENERATOR AT VARIOUS UNSPECIFIED LOCATIONS WITHIN THE LIGHT OIL WESTERN STATIONARY SOURCE

S-8282-125-1: 2.28 MMBTU/HR NATURAL GAS/FIELD GAS FIRED CAPSTONE MODEL C200 MICRO TURBINE POWERING A 200 KW ELECTRICAL GENERATOR AT VARIOUS UNSPECIFIED LOCATIONS WITHIN THE LIGHT OIL WESTERN STATIONARY SOURCE

VI. Emission Control Technology Evaluation

Emissions from gas-fired micro turbines include NO_x, CO, VOC, PM₁₀, and SO_x.

NO_x is the major pollutant of concern when burning natural gas. NO_x formation is either due to thermal fixation of atmospheric nitrogen in the combustion air (thermal NO_x) or due to conversion of chemically bound nitrogen in the fuel (fuel NO_x). Due to the low fuel nitrogen content of natural gas, nearly all NO_x emissions are thermal NO_x.

These micro turbines emit NO_x at 9.0 ppmvd @ 15% O₂ (meeting BACT and Rule 4703 Tier 3 NO_x emissions limit for units less than 3 MW fired on gaseous fuel, though the unit is exempt from this rule as discussed in the Rule 4703 compliance section).

VII. General Calculations

A. Assumptions

- Natural gas F factor is 8,578 dscf/MMBtu (EPA 40 CFR 60 Appendix B Method 19)
- Higher heating value of natural gas is 1,000 Btu/scf (APR 1720)
- Facility operates 24 hours per day (per applicant)
- Fugitive VOCs emitted from components in gas service are considered negligible when compared to the products of combustion (District practice)
- Thermal efficiency of the engine is ≈ 35% (District practice)

B. Emission Factors

For the new turbine engines, the emissions factors for NO_x, CO, and VOC are limited by BACT or are guaranteed by the manufacturer to meet or exceed these limits. The SO_x emission factor is calculated using the maximum sulfur content in the fuel (0.75 gr-S/100 dscf).

Emission Factors				
Pollutant	ppmvd @ 15% O ₂	g/hp-hr	lb/MMBtu	Source
NO _x	9	0.11 ¹	-	BACT Limit
SO _x	-	-	0.00214 ²	Mass Balance
PM ₁₀	-	-	0.0066	AP-42 Table 3.1-2a
CO	19	0.07 ³	-	Proposed
VOC	5	0.02 ⁴	-	Proposed

$$\begin{aligned}
 1) & \frac{9 \text{ parts} \cdot \text{NO}_x}{10^6 \text{ parts}} \left(\frac{8,578 \text{ dscf}}{\text{MMBtu}} \right) \frac{46 \text{ lb}}{\text{lb} \cdot \text{mol}} \left(\frac{20.9}{20.9 - 15} \right) \frac{1 \text{ lb} \cdot \text{mol}}{379.5 \text{ dscf}} \left(\frac{\text{MMBtu}}{393.24 \text{ bhp} \cdot \text{hr}} \right) \frac{453.59 \text{ g}}{\text{lb}} \left(\frac{1}{0.35} \right) = 0.108 \left(\frac{\text{g} \cdot \text{NO}_x}{\text{hp} \cdot \text{hr}} \right) \\
 2) & \frac{0.75 \text{ gr} \cdot \text{S}}{100 \text{ dscf}} \left(\frac{\text{dscf}}{1,000 \text{ Btu}} \right) \frac{10^6 \text{ Btu}}{\text{MMBtu}} \left(\frac{1 \text{ lb}}{7,000 \text{ gr}} \right) \frac{64 \text{ lb} \cdot \text{SO}_2}{32 \text{ lb} \cdot \text{S}} = 0.00214 \frac{\text{lb} \cdot \text{SO}_2}{\text{MMBtu}} \\
 3) & \frac{19 \text{ parts} \cdot \text{CO}}{10^6 \text{ parts}} \left(\frac{8,578 \text{ dscf}}{\text{MMBtu}} \right) \frac{28 \text{ lb}}{\text{lb} \cdot \text{mol}} \left(\frac{20.9}{20.9 - 15} \right) \frac{1 \text{ lb} \cdot \text{mol}}{379.5 \text{ dscf}} \left(\frac{\text{MMBtu}}{393.24 \text{ bhp} \cdot \text{hr}} \right) \frac{453.59 \text{ g}}{\text{lb}} \left(\frac{1}{0.35} \right) = 0.14 \left(\frac{\text{g} \cdot \text{CO}}{\text{hp} \cdot \text{hr}} \right) \\
 4) & \frac{5 \text{ parts} \cdot \text{VOC}}{10^6 \text{ parts}} \left(\frac{8,578 \text{ dscf}}{\text{MMBtu}} \right) \frac{16 \text{ lb}}{\text{lb} \cdot \text{mol}} \left(\frac{20.9}{20.9 - 15} \right) \frac{1 \text{ lb} \cdot \text{mol}}{379.5 \text{ dscf}} \left(\frac{\text{MMBtu}}{393.24 \text{ bhp} \cdot \text{hr}} \right) \frac{453.59 \text{ g}}{\text{lb}} \left(\frac{1}{0.35} \right) = 0.021 \left(\frac{\text{g} \cdot \text{VOC}}{\text{hp} \cdot \text{hr}} \right)
 \end{aligned}$$

C. Calculations

1. Pre-Project Potential to Emit (PE1)

Since these are new emissions units, PE1 = 0 for all pollutants.

2. Post Project Potential to Emit (PE2)

The micro turbine power output is converted from 200 kW (given by the manufacturer) to horsepower using a factor of 1.341 hp/kW resulting in each turbine having a maximum rating of 268 hp.

The potential to emit for each turbine is calculated as follows, and summarized in the table below:

$$\begin{aligned}
 \text{PE2} &= \text{EF (lb/MMBtu)} * 2.28 \text{ (MMBtu/hr)} * 24 \text{ (hr/day)} \text{ or } 8,760 \text{ (hr/year)}; \text{ or,} \\
 &= \text{EF (g/hp-hr)} * 268 \text{ (hp)} * (1 \text{ lb}/453.59 \text{ g}) * 24 \text{ (hr/day)} \text{ or } 8,760 \text{ (hr/year)}
 \end{aligned}$$

Post-Project Potential to Emit (PE2) (Each turbine)		
Pollutant	Daily Emissions (lb/day)	Annual Emissions (lb/year)
NO _x	1.6	569
SO _x	0.1	43
PM ₁₀	0.4	132
CO	2.0	727
VOC	0.3	104

3. Pre-Project Stationary Source Potential to Emit (SSPE1)

Pursuant to District Rule 2201, the SSPE1 is the Potential to Emit (PE) from all units with valid Authorities to Construct (ATC) or Permits to Operate (PTO) at the Stationary Source and the quantity of Emission Reduction Credits (ERC) which have been banked since September 19, 1991 for Actual Emissions Reductions (AER) that have occurred at the source, and which have not been used on-site.

Since Vintage is a subsidiary of Occidental Petroleum, all Light Oil Western Stationary Sources from these operators are considered part of the same source, which includes S-382, S-1216, S-1738, and S-8282.

Facility emissions are already above the Offset and Major Source Thresholds for all criteria pollutants; therefore, SSPE1 calculations are not necessary.

4. Post Project Stationary Source Potential to Emit (SSPE2)

Pursuant to District Rule 2201, the SSPE2 is the PE from all units with valid ATCs or PTOs at the Stationary Source and the quantity of ERCs which have been banked since September 19, 1991 for AER that have occurred at the source, and which have not been used on-site.

Facility emissions are already above the Offset and Major Source Thresholds for all criteria pollutants; therefore, SSPE2 calculations are not necessary.

5. Major Source Determination

Rule 2201 Major Source Determination

Pursuant to District Rule 2201, a Major Source is a stationary source with a SSPE2 equal to or exceeding one or more of the following threshold values. For the purposes of determining major source status the following shall not be included:

- any ERCs associated with the stationary source
- Emissions from non-road IC engines (i.e. IC engines at a particular site at the facility for less than 12 months)
- Fugitive emissions, except for the specific source categories specified in 40 CFR 51.165

This source is an existing Major Source for all criteria pollutants and will remain a Major Source for criteria pollutants. No change in other pollutants are proposed or expected as a result of this project.

Rule 2410 Major Source Determination

The facility or the equipment evaluated under this project is not listed as one of the categories specified in 40 CFR 52.21 (b)(1)(i). Therefore the following PSD Major Source thresholds are applicable. Based on the SSPE table in Appendix G, this source is at least a major source for NO_x (NO₂):

PSD Major Source Determination (tons/year)	
	NO ₂
Estimated Facility PE before Project Increase	336
PSD Major Source Thresholds	250
PSD Major Source ? (Y/N)	Y

As shown above, the facility is an existing major source for PSD for at least one pollutant. Therefore the facility is an existing major source for PSD.

6. Baseline Emissions (BE)

The BE calculation (in lbs/year) is performed pollutant-by-pollutant for each unit within the project to calculate the QNEC, and if applicable, to determine the amount of offsets required.

Pursuant to District Rule 2201, BE = PE1 for:

- Any unit located at a non-Major Source,
- Any Highly-Utilized Emissions Unit, located at a Major Source,
- Any Fully-Offset Emissions Unit, located at a Major Source, or
- Any Clean Emissions Unit, located at a Major Source.

otherwise,

BE = Historic Actual Emissions (HAE), calculated pursuant to District Rule 2201.

Since these are new emission units, BE = PE1 = 0 for all pollutants.

7. SB 288 Major Modification

SB 288 Major Modification is defined in 40 CFR Part 51.165 as "any physical change in or change in the method of operation of a major stationary source that would result in a significant net emissions increase of any pollutant subject to regulation under the Act."

Increases in emission less than 0.5 lb/day per permit unit round to zero for New Source Review purposes. Since the increase in SO_x, PM₁₀, and VOC for each turbine is less than 0.5 lb/day (per APR 1130), the annual increases of these pollutants for the turbines are not quantified for this determination.

Initially, this equipment will be used to operate a portable early production facility in conjunction with tanks (S-8282-118 through -121) and a well test vapor control system including two thermal oxidizers (S-8282-123), see Process Flow Diagram in Appendix B. All of this equipment except the thermal oxidizers results in increases of fugitive emissions only. Since this source is not included in the 28 specific source categories specified in 40 CFR 51.165, the increases in fugitive emissions are not included in the following determination. Therefore, only combustion emissions from the thermal oxidizers and the proposed turbines are considered part of this determination.

Combustion emissions from the thermal oxidizers listed on ATC S-8282-123 are summarized in the following table (see project S-1130506):

S-8282-123 PE2	
	Annual Emissions (lb/year)
NO _x	16,118
SO _x	981
PM ₁₀	5,606
VOC	2,803

Since this facility is a major source for NO_x, SO_x, PM₁₀, and VOC, the project's PE2 is compared to the SB 288 Major Modification Thresholds in the following table in order to determine if the SB 288 Major Modification calculation is required.

SB 288 Major Modification Thresholds			
Pollutant	Project PE2 (lb/year)	Threshold (lb/year)	SB 288 Major Modification Calculation Required?
NO _x	569 + 569 + 16,118 = 17,256	50,000	No
SO _x	981	80,000	No
PM ₁₀	5,606	30,000	No
VOC	2,803	50,000	No

Since none of the SB 288 Major Modification Thresholds are surpassed with this project, this project does not constitute an SB 288 Major Modification.

8. Federal Major Modification

District Rule 2201 states that a Federal Major Modification is the same as a "Major Modification" as defined in 40 CFR 51.165 and part D of Title I of the CAA.

The determination of Federal Major Modification is based on a two-step test. For the first step, only the emission *increases* are counted. Emission decreases may not cancel out the increases for this determination.

Step 1

For new emissions units, the increase in emissions is equal to the PE2 for each new unit included in this project.

Increases in emission less than 0.5 lb/day per permit unit round to zero for New Source Review purposes. Since the increase in SO_x, PM₁₀, and VOC for each turbine is less than 0.5 lb/day (per APR 1130), the annual increases of these pollutants for the turbines are not quantified for this determination.

As discussed previously, emissions from the oxidizers listed on ATC S-8282-123 are part of this larger project and summarized in the following table:

S-8282-123 PE2	
	Annual Emissions (lb/year)
NO _x	16,118
SO _x	981
PM ₁₀	5,606
VOC	2,803

The project's combined total emission increases were calculated in Section VII.C.2 and compared to the Federal Major Modification Thresholds in the following table.

Federal Major Modification Thresholds for Emission Increases			
Pollutant	Total Emissions Increases (lb/year)	Thresholds (lb/year)	Federal Major Modification?
NO _x *	569 + 569 + 16,118 = 17,256	0	Yes
VOC*	2,803	0	Yes
PM ₁₀	5,606	30,000	No
PM _{2.5} **	5,606	20,000	No
SO _x	981	80,000	No

*If there is any emission increases in NO_x or VOC, this project is a Federal Major Modification and no further analysis is required.

** According to AP 42 (Table 1.4-2, footnote c), all PM emissions from natural gas combustion are less than 1 μm in diameter.

Since there is an increase in NO_x and VOC emissions, this project constitutes a Federal Major Modification, and no further analysis is required.

9. Rule 2410 – Prevention of Significant Deterioration (PSD) Applicability Determination

Rule 2410 applies to any pollutant regulated under the Clean Air Act, except those for which the District has been classified nonattainment. The pollutants which must be addressed in the PSD applicability determination for sources located in the SJV and which are emitted in this project are (See 52.21 (b)(23) definition of significant):

- NO₂ (as a primary pollutant)
- SO₂ (as a primary pollutant)
- CO
- PM
- PM₁₀
- Hydrogen sulfide (H₂S)
- Greenhouse gases (GHG): CO₂ and CH₄

The first step of this PSD evaluation consists of determining whether the facility is an existing PSD Major Source or not (See Section VII.C.5 of this document).

In the case the facility is an existing PSD Major Source, the second step of the PSD evaluation is to determine if the project results in a PSD significant increase.

In the case the facility is NOT an existing PSD Major Source but is an existing source, the second step of the PSD evaluation is to determine if the project, by itself, would be a PSD major source.

In the case the facility is a new source, the second step of the PSD evaluation is to determine if this new facility will become a new PSD major Source as a result of the project and if so, to determine which pollutant will result in a PSD significant increase.

I. Project Location Relative to Class 1 Area

As demonstrated in the "PSD Major Source Determination" Section above, the facility was determined to be a existing major source for PSD. Because the project is not located within 10 km of a Class 1 area – modeling of the emission increase is not required to determine if the project is subject to the requirements of Rule 2410.

II. Significance of Project Emission Increase Determination

a. Potential to Emit of attainment/unclassified pollutant for New or Modified Emission Units vs PSD Significant Emission Increase Thresholds

As a screening tool, the potential to emit from all new and modified units is compared to the PSD significant emission increase thresholds, and if total potential to emit from all new and modified units is below this threshold, no further analysis will be needed.

Increases in emission less than 0.5 lb/day per permit unit round to zero for New Source Review purposes. Since the increase in SO_x and PM₁₀ for each turbine is less than 0.5 lb/day (per APR 1130), the annual increases of these pollutants for the turbines are not quantified for this determination.

As discussed previously, emissions from the oxidizers listed on ATC S-8282-123 is part of this larger project and summarized in the following table:

S-8282-123 PE2	
	Annual Emissions (lb/year)
NO _x	16,118
SO _x	981
PM ₁₀	5,606
CO	5,606
CO _{2e}	64,058,000

CO₂e emitted from the microturbines is calculated using the ARB GHG emission factor for natural gas (116.67 lb-CO₂e/MMBtu) as follows:

$$(2.28 \text{ MMBtu/hr}) \times (2 \text{ turbines}) \times (116.67 \text{ lb-CO}_2\text{e/MMBtu}) \times (8,760 \text{ hrs/year}) \\ = 4,660,453 \text{ lb-CO}_2\text{e/year}$$

PSD Significant Emission Increase Determination: Potential to Emit (tons/year)						
	NO ₂	SO ₂	CO	PM	PM ₁₀	CO ₂ e
Total PE from New and Modified Units	8.6	0.5	3.2	2.9 ¹	2.9	34,359
PSD Significant Emission Increase Thresholds	40	40	100	25	15	75,000
PSD Significant Emission Increase?	N	N	N	N	N	N

1) According to AP 42 (Table 1.4-2, footnote c), all PM emissions from natural gas combustion are less than 1 µm in diameter.

As demonstrated above, because the project has a total potential to emit from all new and modified emission units below the PSD significant emission increase thresholds, this project is not subject to the requirements of Rule 2410 due to a significant emission increase and no further discussion is required.

VIII. Compliance

Rule 2020 Exemptions

Pursuant to District Rule 2020 section 6.1.3 gas turbine engines with a maximum heat input rating of 3 MMBtu/hr or less are exempt from permit. However, the California Code of Regulations (CCR) Title 17 sections 94200 – 94214 requires that units used in distributed generation either be certified CARB, or be subject to District permit requirements regardless of their rating (§94201).

Executive order DG-035 was issued for this micro turbine and certified emissions while firing on “natural gas”, which CCR Title 17 § 94202(u) defines as: California Public Utility Commission quality natural gas.

Since VPC is proposing to fire this unit on non PUC quality gas, the executive order is no longer valid and the micro turbines will require a District Permit to Operate.

Rule 2201 New and Modified Stationary Source Review Rule

A. Best Available Control Technology (BACT)

1. BACT Applicability

BACT requirements are triggered on a pollutant-by-pollutant basis and on an emissions unit-by-emissions unit basis. Unless specifically exempted by Rule 2201, BACT shall be required for the following actions*:

- a. Any new emissions unit with a potential to emit exceeding two pounds per day,
- b. The relocation from one Stationary Source to another of an existing emissions unit with a potential to emit exceeding two pounds per day,
- c. Modifications to an existing emissions unit with a valid Permit to Operate resulting in an AIPE exceeding two pounds per day, and/or
- d. Any new or modified emissions unit, in a stationary source project, which results in an SB 288 Major Modification or a Federal Major Modification, as defined by the rule.

*Except for CO emissions from a new or modified emissions unit at a Stationary Source with an SSPE2 of less than 200,000 pounds per year of CO.

a. New emissions units – PE > 2 lb/day

As seen in Section VII.C.2 above, the applicant is proposing to install two new micro turbines with a PE less than 2 lb/day for NO_x, SO_x, PM₁₀, CO, and VOC. Therefore, BACT is not triggered.

b. Relocation of emissions units – PE > 2 lb/day

As discussed in Section I above, there are no emissions units being relocated from one stationary source to another; therefore BACT is not triggered.

c. Modification of emissions units – AIPE > 2 lb/day

As discussed in Section I above, there are no modified emissions units associated with this project. Therefore BACT is not triggered.

d. SB 288/Federal Major Modification

As discussed in Sections VII.C.7 and VII.C.8 above, this project does constitute a Federal Major Modification for NO_x and VOC emissions. BACT is not required for emissions increases less than 0.5 lb/day. The increase in VOC emissions in this project are less than 0.5 lb/day for the emission units in this project. Therefore, BACT is required for NO_x only for the emission units in this project.

2. BACT Guideline

BACT Guideline 3.4.9, applies to gas turbines <3 MW, uniform load, with or without heat recovery (See Appendix C).

3. Top-Down BACT Analysis

Per Permit Services Policies and Procedures for BACT, a Top-Down BACT analysis shall be performed as a part of the application review for each application subject to the BACT requirements pursuant to the District's NSR Rule.

Pursuant to the attached Top-Down BACT Analysis (see Appendix D), BACT has been satisfied with the following:

NO_x: 9.0 ppmvd @ 15% O₂ based on a three-hour average

B. Offsets

1. Offset Applicability

Offset requirements shall be triggered on a pollutant by pollutant basis and shall be required if the SSPE2 equals to or exceeds the offset threshold levels in Table 4-1 of Rule 2201.

The SSPE2 is compared to the offset thresholds in the following table.

Offset Determination (lb/year)					
	NO _x	SO _x	PM ₁₀	CO	VOC
SSPE2	>20,000	>54,750	>29,200	>200,000	>20,000
Offset Thresholds	20,000	54,750	29,200	200,000	20,000
Offsets triggered?	Yes	Yes	Yes	Yes	Yes

2. Quantity of Offsets Required

As seen above, the SSPE2 is greater than the offset thresholds for all criteria pollutants. Therefore offset calculations will be required for this project.

The quantity of offsets in pounds per year is calculated as follows for sources with an SSPE1 greater than the offset threshold levels before implementing the project being evaluated.

Offsets Required (lb/year) = $(\Sigma[PE2 - BE] + ICCE) \times DOR$, for all new or modified emissions units in the project,

Where,

PE2 = Post Project Potential to Emit, (lb/year)

BE = Baseline Emissions, (lb/year)

ICCE = Increase in Cargo Carrier Emissions, (lb/year)

DOR = Distance Offset Ratio, determined pursuant to Section 4.8

BE = PE1 for:

- Any unit located at a non-Major Source,
- Any Highly-Utilized Emissions Unit, located at a Major Source,
- Any Fully-Offset Emissions Unit, located at a Major Source, or
- Any Clean Emissions Unit, Located at a Major Source.

otherwise, BE = HAE

The facility is proposing to install two new emissions units; therefore BE = 0. Also, there are no increases in cargo carrier emissions; therefore offsets can be determined as follows:

Emissions to be offset Required (lb/year) = $([PE2 - BE] + ICCE) \times DOR$

Post Project Potential to Emit [PE2] (lb/year)					
Permit No.	NO _x	SO _x	PM ₁₀	CO	VOC
S-8282-124	569	43	132	727	104
S-8282-125	569	43	132	727	104

Baseline Emissions [BE] (lb/year)				
NO _x	SO _x	PM ₁₀	CO	VOC
0	0	0	0	0
0	0	0	0	0

Offsets Required [PE2 – BE] (lb/year)					
Permit No.	NO _x	SO _x	PM ₁₀	CO	VOC
S-8282-124	569	43	132	727	104
S-8282-125	569	43	132	727	104
Sum =	1,138	0*	0*	0**	0*

*Increases in emissions rounding to 0.5 lbs/day or less round to zero for offset purposes (APR 1130).

**Section 4.6.1 of Rule 2201 states that emissions offsets are not required for increases in carbon monoxide in attainment areas provided the applicant demonstrates to the satisfaction of the APCO that the Ambient Air Quality (AAQ) Standards are not violated in the areas to be affected, such emissions will be consistent with Reasonable Further Progress, and will not cause or contribute to a violation of AAQ Standards. The District performed an AAQ Analysis and determined that this project will not result in or contribute to a violation of an AAQ Standard for CO (see Appendix E). Therefore, CO offsets are not required for this project.

The project is a Federal Major Modification for NO_x and VOC and therefore the correct offset ratio for NO_x only (since the VOC increase rounds to zero) is 1.5:1.

Assuming an offset ratio of 1.5:1, the amount of NO_x ERCs that need to be withdrawn for each unit is:

$$\begin{aligned}\text{Offsets Required (lb/year)} &= ([569 - 0] + 0) \times 1.5 \\ &= 569 \times 1.5 \\ &= 854 \text{ lb NO}_x\text{/year}\end{aligned}$$

Calculating the appropriate quarterly emissions to be offset for each micro turbine is as follows:

<u>1st Quarter</u>	<u>2nd Quarter</u>	<u>3rd Quarter</u>	<u>4th Quarter</u>
214	214	214	214

The applicant has stated that the facility plans to use ERC certificates C-1190-2, S-3585-2, and S-3592-2 to offset the increases in NO_x emissions associated with this project. These certificates have available quarterly NO_x credits as follows:

	<u>1st Quarter</u>	<u>2nd Quarter</u>	<u>3rd Quarter</u>	<u>4th Quarter</u>
ERC #C-1231-2	186	186	186	186

With the following reservations:

	<u>1st Quarter</u>	<u>2nd Quarter</u>	<u>3rd Quarter</u>	<u>4th Quarter</u>
S-1124099	186	186	186	186
Remainder =	0	0	0	0

	<u>1st Quarter</u>	<u>2nd Quarter</u>	<u>3rd Quarter</u>	<u>4th Quarter</u>
ERC #S-4084-2	0	5,678	2,832	9,177

With the following reservations:

	<u>1st Quarter</u>	<u>2nd Quarter</u>	<u>3rd Quarter</u>	<u>4th Quarter</u>
S-1133220	0	269	0	666
S-1133800	0	0	0	757
Remainder =	0	5,678	2,832	7,754

	<u>1st Quarter</u>	<u>2nd Quarter</u>	<u>3rd Quarter</u>	<u>4th Quarter</u>
ERC #S-4093-2	159	0	0	0
Remainder =	159	0	0	0

Offsets Reserved in PAS (at discussed offset ratios)

	<u>1st Quarter</u>	<u>2nd Quarter</u>	<u>3rd Quarter</u>	<u>4th Quarter</u>
ERC #C-1231-2	0	0	0	0
ERC #S-4084-2	0	697*	428	428
ERC #S-4093-2	159	0	0	0
Total	159	697	428	428

*269 lbs of NO_x from the 2nd quarter will be used to supplement the 1st quarter deficiency (allowed per Rule 2201, Section 4.13.8).

As seen above, the facility has sufficient credits to fully offset the quarterly NO_x emissions increases associated with this project.

Proposed Rule 2201 (offset) Conditions

- Prior to operating equipment under this Authority to Construct, permittee shall surrender NO_x emission reduction credits for the following quantity of emissions: 1st quarter - 214 lb, 2nd quarter - 214 lb, 3rd quarter - 214 lb, and fourth quarter - 214 lb. These amounts include the applicable offset ratio specified in Rule 2201 Section 4.8 (as amended 4/21/11) for the ERC specified below. [District Rule 2201]
- ERC Certificate Numbers C-1231-2, S-4084-2, and S-4093-2 (or certificates split from these certificates) shall be used to supply the required offsets, unless a revised offsetting proposal is received and approved by the District, upon which this Authority to Construct shall be reissued, administratively specifying the new offsetting proposal. Original public noticing requirements, if any, shall be duplicated prior to reissuance of this Authority to Construct. [District Rule 2201]

C. Public Notification

1. Applicability

Public noticing is required for:

- a. New Major Sources, Federal Major Modifications, and SB 288 Major Modifications,
- b. Any new emissions unit with a Potential to Emit greater than 100 pounds during any one day for any one pollutant,
- c. Any project which results in the offset thresholds being surpassed, and/or
- d. Any project with an SSIPE of greater than 20,000 lb/year for any pollutant.

a. New Major Sources, Federal Major Modifications, and SB 288 Major Modifications

New Major Sources are new facilities, which are also Major Sources. Since this is not a new facility, public noticing is not required for this project for New Major Source purposes.

As demonstrated in Sections VII.C.7 and VII.C.8, this project is a Federal Major Modification. Therefore, public noticing for Federal Major Modification purposes is required.

b. PE > 100 lb/day

Applications which include a new emissions unit with a PE greater than 100 pounds during any one day for any pollutant will trigger public noticing requirements. As seen in Section VII.C.2 above, this project does not include a new emissions unit which has daily emissions greater than 100 lb/day for any pollutant; therefore public noticing for PE > 100 lb/day purposes is not required.

c. Offset Threshold

The SSPE1 and SSPE2 are compared to the offset thresholds in the following table.

Offset Thresholds				
Pollutant	SSPE1 (lb/year)	SSPE2 (lb/year)	Offset Threshold	Public Notice Required?
NO _x	>20,000	>20,000	20,000 lb/year	No
SO _x	>54,750	>54,750	54,750 lb/year	No
PM ₁₀	>29,200	>29,200	29,200 lb/year	No
CO	>200,000	>200,000	200,000 lb/year	No
VOC	>20,000	>20,000	20,000 lb/year	No

As detailed above, there were no thresholds surpassed with this project; therefore public noticing is not required for offset purposes.

d. SSIPE > 20,000 lb/year

Public notification is required for any permitting action that results in a SSIPE of more than 20,000 lb/year of any affected pollutant. According to District policy, the SSIPE = SSPE2 – SSPE1. The SSIPE is compared to the SSIPE Public Notice thresholds in the following table.

SSIPE Public Notice Thresholds					
Pollutant	Project PE2 (lb/year)	Project PE1 (lb/year)	SSIPE (lb/year)	SSIPE Public Notice Threshold	Public Notice Required?
NO _x	569 x 2 = 1,138	0	1,138	20,000 lb/year	No
SO _x	43 x 2 = 86	0	86	20,000 lb/year	No
PM ₁₀	132 x 2 = 264	0	264	20,000 lb/year	No
CO	727 x 2 = 1,454	0	1,454	20,000 lb/year	No
VOC	104 x 2 = 208	0	208	20,000 lb/year	No

As demonstrated above, the SSIPEs for all pollutants were less than 20,000 lb/year; therefore public noticing for SSIPE purposes is not required.

2. Public Notice Action

As discussed above, public noticing is required for this project for Federal Major Modification purposes. Therefore, public notice documents will be submitted to the California Air Resources Board (CARB), US Environmental Protection Agency (US EPA), and a public notice will be published in a local newspaper of general circulation prior to the issuance of the ATC permit for this equipment.

D. Daily Emission Limits (DELs)

DELs and other enforceable conditions are required by Rule 2201 to restrict a unit's maximum daily emissions, to a level at or below the emissions associated with the maximum design capacity. The DEL must be contained in the latest ATC permit and contained in or enforced by the latest PTO and enforceable, in a practicable manner, on a daily basis. DELs are also required to enforce the applicability of BACT.

Proposed Rule 2201 (DEL) Conditions

- Emission rates from this unit shall not exceed any of the following limits: NO_x (as NO₂) - 9.0 ppmvd @ 15% O₂; VOC - 5 ppmvd @ 15% O₂; CO - 19 ppmvd @ 15% O₂; or PM₁₀ - 0.0066 lb/MMBtu. [District Rules 2201 and 4201]
- The turbine shall only burn produced gas and/or PUC quality gas with a fuel sulfur concentration not exceeding 0.75 gr/100 dscf. [District Rules 2201 and 4801]

E. Compliance Assurance

1. Source Testing

Per APR 1705, since the margin of compliance for these turbines is low (manufacturer guarantee for NO_x is the same as what BACT Guideline 3.4.9 requires) initial and annual testing of NO_x, CO, and O₂ concentrations using a portable emission monitor will be required.

The following conditions will be listed on the permits to ensure compliance:

- The permittee shall monitor and record the stack concentration of NO_x, CO, and O₂ within 60 days of initial start-up at each location and at least once every 12 months thereafter, using a portable emission monitor that meets District specifications. Monitoring shall not be required if the unit is not in operation, i.e. the unit need not be started solely to perform monitoring. [District Rule 2201]
- If either the NO_x or CO concentrations corrected to 15% O₂, as measured by the portable analyzer, exceed the allowable emissions concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 1 hour of operation after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 1 hour of operation after detection, the permittee shall notify the District within the following 1 hour and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rule 2201]

Additionally, the non-PUC fuel source will be tested to maintain compliance with the fuel sulfur limit:

- Permittee shall measure and record fuel gas sulfur content (H₂S) within 60 days of initial start-up, upon any change in the gas fuel source, and at least once every 12 months thereafter. [District Rule 2201]

2. Monitoring

The applicant will be required to perform annual monitoring of NO_x, CO, and O₂ Emissions Concentrations as discussed in the source testing section previously.

3. Recordkeeping

Recordkeeping is required to demonstrate compliance with the offset, public notification and daily emission limit requirements of Rule 2201.

The following conditions are listed on the permits to ensure compliance:

- The permittee shall maintain records of: (1) the date and time of O₂ and NO_x measurements, (2) the O₂ concentration in percent and the measured NO_x concentration corrected to 15% O₂, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rule 2201]
- Permittee shall maintain an accurate record of each location where this turbine is operated and the sulfur content (H₂S) of the gas from each fuel source. [District Rules 1070 and 2201]

4. Reporting

No reporting is required to demonstrate compliance with Rule 2201.

F. Ambient Air Quality Analysis (AAQA)

An AAQA shall be conducted for the purpose of determining whether a new or modified Stationary Source will cause or make worse a violation of an air quality standard. The District's Technical Services Division conducted the required analysis. Refer to Appendix E of this document for the AAQA summary sheet.

The proposed location is in an attainment area for NO_x, CO, and SO_x. As shown by the AAQA summary sheet the proposed equipment will not cause a violation of an air quality standard for NO_x, CO, or SO_x.

The proposed location is in a non-attainment area for the state's PM₁₀ as well as federal and state PM_{2.5} thresholds. As shown by the AAQA summary sheet the proposed equipment will not cause a violation of an air quality standard for PM₁₀ and PM_{2.5}.

G. Compliance Certification

Section 4.15.2 of this Rule requires the owner of a new Major Source or a source undergoing a Title I Modification to demonstrate to the satisfaction of the District that all other Major Sources owned by such person and operating in California are in compliance or are on a schedule for compliance with all applicable emission limitations and standards. As discussed in Section VIII above, this facility is a new major source and this project does constitute a Title I modification, therefore this requirement is applicable. VPC's compliance certification is included in Appendix F.

H. Alternate Siting Analysis

The micro turbines will be operated at various unspecified sites where electrical power is needed but not available for exploration activities.

Since the project will provide electricity to be used at the same location, the existing sites will result in the least possible impact from the project. Alternative sites would involve the relocation and/or construction of various support structures on a much greater scale, and would therefore result in a much greater impact.

Rule 2520 Federally Mandated Operating Permits

This facility is subject to this Rule, and has received their Title V Operating Permit. A significant permit modification is defined as a "permit amendment that does not qualify as a minor permit modification or administrative amendment."

Minor permit modifications are not Title I modifications as defined in District Rule 2520. As discussed, the operation of these micro turbines will result in a Federal Major Modification (Title I modification); as a result, the proposed project constitutes a Significant Modification to the Title V Permit.

Rule 4001 New Source Performance Standards (NSPS)

This rule incorporates NSPS from Part 60, Chapter 1, Title 40, Code of Federal Regulations (CFR); and applies to all new sources of air pollution and modifications of existing sources of air pollution listed in 40 CFR Part 60.

40 CFR Part 60, Subpart GG applies to stationary gas turbines with a heat input (LHV) at peak load equal to or greater than 10 MMBtu/hr (§ 60.330(a)). These turbines have a maximum heat input of 2.28 MMBtu/hr; therefore the requirements of Subpart GG are not applicable to these turbines.

40 CFR Part 60, Subpart KKKK applies to stationary gas turbines with a heat input (HHV) at peak load equal to or greater than 10 MMBtu/hr (§ 60.4305(a)). These turbines have a maximum heat input of 2.28 MMBtu/hr; therefore the requirements of Subpart KKKK are not applicable to these turbines.

Rule 4002 National Emission Standards for Hazardous Air Pollutants (NESHAPs)

This rule incorporates NESHAPs from Part 61, Chapter I, Subchapter C, Title 40, CFR and the NESHAPs from Part 63, Chapter I, Subchapter C, Title 40, CFR; and applies to all sources of hazardous air pollution listed in 40 CFR Part 61 or 40 CFR Part 63.

40 CFR Part 63, Subpart YYYY applies to stationary gas turbines at major HAP sources with a rated peak power greater than 1.0 MW (§ 63.6090(b)(3)). These turbines have a maximum peak power rating of 0.200 MW; therefore the requirements of Subpart YYYY are not applicable to these turbines.

Rule 4101 Visible Emissions

Rule 4101 states that no person shall discharge into the atmosphere emissions of any air contaminant aggregating more than 3 minutes in any hour which is as dark as or darker than Ringelmann 1 (or 20% opacity). As the turbines are fired solely on natural gas, visible emissions are not expected to exceed Ringelmann 1 or 20% opacity.

Rule 4102 Nuisance

Rule 4102 prohibits discharge of air contaminants which could cause injury, detriment, nuisance or annoyance to the public. Public nuisance conditions are not expected as a result of these operations, provided the equipment is well maintained. Therefore, compliance with this rule is expected.

California Health & Safety Code 41700 (Health Risk Assessment)

District Policy APR 1905 – *Risk Management Policy for Permitting New and Modified Sources* specifies that for an increase in emissions associated with a proposed new source or modification, the District perform an analysis to determine the possible impact to the nearest resident or worksite.

An HRA is not required for a project with a total facility prioritization score of less than one. According to the Technical Services Memo for this project (Appendix E), the total facility prioritization score including this project was greater than one. Therefore, an HRA was required to determine the short-term acute and long-term chronic exposure from this project.

The cancer risk for this project is shown below:

HRA Summary		
Unit	Cancer Risk	T-BACT Required
S-8282-124-1	0.0 per million	No
S-8282-125-1	0.0 per million	No

Discussion of T-BACT

BACT for toxic emission control (T-BACT) is required if the cancer risk exceeds one in one million. As demonstrated above, T-BACT is not required for this project because the HRA indicates that the risk is not above the District's thresholds for triggering T-BACT requirements; therefore, compliance with the District's Risk Management Policy is expected.

District policy APR 1905 also specifies that the increase in emissions associated with a proposed new source or modification not have acute or chronic indices, or a cancer risk greater than the District's significance levels (i.e. acute and/or chronic indices greater than 1 and a cancer risk greater than 10 in a million). As outlined by the HRA Summary in Appendix E of this report, the emissions increases for this project was determined to be less than significant.

- The exhaust stack shall vent vertically upward. The vertical exhaust flow shall not be impeded by a rain cap (flapper ok), roof overhang, or any other obstruction. [District Rule 4102]
- Turbine must be at least 197 feet from the property boundary. [District Rule 4102]

Rule 4201 Particulate Matter Concentration

Section 3.1 prohibits discharge of dust, fumes, or total particulate matter into the atmosphere from any single source operation in excess of 0.1 grain per dry standard cubic foot.

$$0.0066 \frac{lb}{10^6 Btu} \times \frac{453.6 g}{1 lb} \times \frac{10^6 Btu}{8,578 dscf} \times \frac{0.35 Btu_{out}}{1 Btu_{in}} \times \frac{15.43 grain}{g} = 0.0019 \frac{grain}{dscf}$$

Since 0.0019 grain/dscf is less than 0.1 grain/dscf, compliance with this rule is expected.

The following condition will be listed on the permits to ensure compliance:

- Emission rates from this unit shall not exceed any of the following limits: NO_x (as NO₂) – 9.0 ppmvd @ 15% O₂; VOC - 5 ppmvd @ 15% O₂; CO - 19 ppmvd @ 15% O₂; or PM₁₀ - 0.0066 lb/MMBtu. [District Rules 2201 and 4201]

Rule 4301 Fuel Burning Equipment

Rule 4301 limits air contaminant emissions from fuel burning equipment as defined in the rule. Section 3.1 defines fuel burning equipment as “any furnace, boiler, apparatus, stack, and all appurtenances thereto, used in the process of burning fuel for the primary purpose of producing heat or power by indirect heat transfer”.

Turbines do not meet the definition of Fuel Burning Equipment as a turbine produces power due to mechanical means via expanding products of combustion exhausting through the turbine blades.

Therefore, the requirements of this rule do not apply to this project.

Rule 4703 Stationary Gas Turbines

This rule applies to all stationary gas turbine systems, which are subject to District permitting requirements, and with ratings equal to or greater than 0.3 megawatt (MW) and/or a maximum heat input rating of more than 3,000,000 Btu per hour, except as provided in Section 4.0.

The turbines in this project are rated at 0.200 MW and have a maximum heat input rating of 2,228,000 Btu/hr. Therefore, this rule does not apply.

Rule 4801 Sulfur Compounds

This rule contains a limit on sulfur compounds. The limit at the point of discharge is 0.2 percent by volume, 2000 ppmv, calculated as sulfur dioxide (SO₂), on a dry basis averaged over 15 consecutive minutes.

Volume SO₂ = nRT/P

n = moles SO₂

T (standard temperature) = 60 °F or 520 °R

R (universal gas constant) = $\frac{10.73 \text{ psi} \cdot \text{ft}^3}{\text{lb} \cdot \text{mol} \cdot ^\circ\text{R}}$

$$0.00214 \times \frac{\text{lb} \cdot \text{SO}_2}{\text{MMBtu}} \times \frac{1 \text{ MMBtu}}{8,710 \text{ scf}_{\text{exhaust}}} \times \frac{1 \text{ lb} \cdot \text{mol}}{64 \text{ lb} \cdot \text{SO}_2} \times \frac{10.73 \text{ psi} \cdot \text{ft}^3}{\text{lb} \cdot \text{mol} \cdot ^\circ\text{R}} \times \frac{520^\circ\text{R}}{14.7 \text{ psi}} \times 1,000,000 \text{ ppm} = 1.5 \text{ ppmv}$$

Since 1.5 ppmv is ≤ 2000 ppmv, the turbines are expected to comply with Rule 4801.

The following condition will ensure compliance:

- The turbine shall only burn produced gas and/or PUC quality gas with a fuel sulfur concentration not exceeding 0.75 gr/100 dscf. [District Rules 2201 and 4801]

California Health & Safety Code 42301.6 (School Notice)

The District has verified that this site is not located within 1,000 feet of a school. Therefore, pursuant to California Health and Safety Code 42301.6, a school notice is not required.

California Environmental Quality Act (CEQA)

CEQA requires each public agency to adopt objectives, criteria, and specific procedures consistent with CEQA Statutes and the CEQA Guidelines for administering its responsibilities under CEQA, including the orderly evaluation of projects and preparation of environmental documents. The District adopted its *Environmental Review Guidelines* (ERG) in 2001. The basic purposes of CEQA are to:

- Inform governmental decision-makers and the public about the potential, significant environmental effects of proposed activities;
- Identify the ways that environmental damage can be avoided or significantly reduced;
- Prevent significant, avoidable damage to the environment by requiring changes in projects through the use of alternatives or mitigation measures when the governmental agency finds the changes to be feasible; and
- Disclose to the public the reasons why a governmental agency approved the project in the manner the agency chose if significant environmental effects are involved.

Greenhouse Gas (GHG) Significance Determination

It is determined that no other agency has or will prepare an environmental review document for the project. Thus the District is the Lead Agency for this project.

On December 17, 2009, the District's Governing Board adopted the District's policy for addressing GHG emission impacts when the District is Lead Agency under CEQA and approved the District's guidance document for use by other agencies when addressing GHG impacts as lead agencies under CEQA. Under this policy, the District's determination of significance of project-specific GHG emissions is founded on the principal that projects with GHG emission reductions consistent with AB 32 emission reduction targets are considered to have a less than significant impact on global climate change.

The California Air Resources Board (ARB) adopted a Cap and Trade regulation as part one of the strategies identified for AB 32. This Cap and Trade regulation is a statewide plan for reducing or mitigating GHG emissions from targeted industries. Facilities subject to the Cap and Trade regulation are subject to an industry-wide cap on overall GHG emissions. Any growth in emissions must be accounted for under that cap such that a corresponding and equivalent reduction in emissions must occur to allow any increase. The District finds that compliance with ARB's Cap and Trade regulation would avoid or substantially lessen the impact of project-specific GHG emissions on global climate change.

Facility S-8282 is subject to the Cap and Trade regulation. The District therefore concludes that the project would have a less than significant individual and cumulative impact on global climate change.

District CEQA Findings

The District is the Lead Agency for this project because there is no other agency with broader statutory authority over this project. The District performed an Engineering Evaluation (this document) for the proposed project and determined that the activity will occur at an existing facility and the project involves negligible expansion of the existing use. Furthermore, the District determined that the activity will not have a significant effect on the environment. The District finds that the activity is categorically exempt from the provisions of CEQA pursuant to CEQA Guideline § 15031 (Existing Facilities),

and finds that the project is exempt per the general rule that CEQA applies only to projects which have the potential for causing a significant effect on the environment (CEQA Guidelines §15061(b)(3)).

IX. Recommendation

Compliance with all applicable rules and regulations is expected. Pending a successful NSR and COC Public Noticing period, issue ATC permits S-8282-124-1 and '125-1 subject to the permit conditions on the attached draft ATC permits in Appendix A.

X. Billing Information

Annual Permit Fees			
Permit Number	Fee Schedule	Fee Description	Annual Fee
S-8282-124-1	3020-08A-A	200 kW	\$259
S-8282-125-1	3020-08A-A	200 kW	\$259

Appendices

- A: Draft ATC Permits
- B: Process Flow Diagram
- C: BACT Guideline
- D: BACT Analysis
- E: HRA/AAQA Summary
- F: Compliance Certifications
- G: SSPE1 Tabulation
- H: Authority to Construct Permits S-8282-124-0 and '125-0

Appendix A

Draft ATC Permits

San Joaquin Valley
Air Pollution Control District

AUTHORITY TO CONSTRUCT

PERMIT NO: S-8282-124-1

ISSUANCE DATE: DRAFT

LEGAL OWNER OR OPERATOR: VINTAGE PRODUCTION CALIFORNIA LLC

MAILING ADDRESS: 9600 MING AVE, SUITE 300
BAKERSFIELD, CA 93311

LOCATION: LIGHT OIL WESTERN STATIONARY SOURCE
KERN COUNTY, CA

EQUIPMENT DESCRIPTION:

2.28 MMBTU/HR NATURAL GAS/FIELD GAS FIRED CAPSTONE MODEL C200 MICRO TURBINE POWERING A 200 KW ELECTRICAL GENERATOR AT VARIOUS UNSPECIFIED LOCATIONS WITHIN THE LIGHT OIL WESTERN STATIONARY SOURCE

CONDITIONS

1. {1830} This Authority to Construct serves as a written certificate of conformity with the procedural requirements of 40 CFR 70.7 and 70.8 and with the compliance requirements of 40 CFR 70.6(c). [District Rule 2201] Federally Enforceable Through Title V Permit
2. {1831} Prior to operating with modifications authorized by this Authority to Construct, the facility shall submit an application to modify the Title V permit with an administrative amendment in accordance with District Rule 2520 Section 5.3.4. [District Rule 2520, 5.3.4] Federally Enforceable Through Title V Permit
3. This Authority to Construct (ATC) cancels and supersedes ATC permit S-8282-124-0. [District Rule 2201] Federally Enforceable Through Title V Permit
4. Prior to operating equipment under this Authority to Construct, permittee shall surrender NOX emission reduction credits for the following quantity of emissions: 1st quarter - 214 lb, 2nd quarter - 214 lb, 3rd quarter - 214 lb, and fourth quarter - 214 lb. These amounts include the applicable offset ratio specified in Rule 2201 Section 4.8 (as amended 4/21/11) for the ERC specified below. [District Rule 2201] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

YOU MUST NOTIFY THE DISTRICT COMPLIANCE DIVISION AT (661) 392-5500 WHEN CONSTRUCTION IS COMPLETED AND PRIOR TO OPERATING THE EQUIPMENT OR MODIFICATIONS AUTHORIZED BY THIS AUTHORITY TO CONSTRUCT. This is NOT a PERMIT TO OPERATE. Approval or denial of a PERMIT TO OPERATE will be made after an inspection to verify that the equipment has been constructed in accordance with the approved plans, specifications and conditions of this Authority to Construct, and to determine if the equipment can be operated in compliance with all Rules and Regulations of the San Joaquin Valley Unified Air Pollution Control District. Unless construction has commenced pursuant to Rule 2050, this Authority to Construct shall expire and application shall be cancelled two years from the date of issuance. The applicant is responsible for complying with all laws, ordinances and regulations of all other governmental agencies which may pertain to the above equipment.

Seyed Sadredin, Executive Director APCO

Arnaud Marjollet, Director of Permit Services

S-8282-124-1; Apr 28 2014 9:45AM - TOMS : Joint Inspection Required with TOMS

5. ERC Certificate Numbers C-1231-2, S-4084-2, and S-4093-2 (or certificates split from these certificates) shall be used to supply the required offsets, unless a revised offsetting proposal is received and approved by the District, upon which this Authority to Construct shall be reissued, administratively specifying the new offsetting proposal. Original public noticing requirements, if any, shall be duplicated prior to reissuance of this Authority to Construct. [District Rule 2201] Federally Enforceable Through Title V Permit
6. {98} No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
7. {1898} The exhaust stack shall vent vertically upward. The vertical exhaust flow shall not be impeded by a rain cap (flapper ok), roof overhang, or any other obstruction. [District Rule 4102]
8. The permittee shall notify the District Compliance Division of each location at which the operation is located at which the operation is located in excess of 24 hours. Such notification shall be made no later than 48 hours after starting operation at the location. [District Rule 1070] Federally Enforceable Through Title V Permit
9. Turbine must be at least 197 feet from the property boundary. [District Rule 4102] Federally Enforceable Through Title V Permit
10. This unit shall not be operated within 1,000 feet of any K-12 school. [District Rule 4102] Federally Enforceable Through Title V Permit
11. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
12. No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101] Federally Enforceable Through Title V Permit
13. Emission rates from this unit shall not exceed any of the following limits: NO_x (as NO₂) - 9.0 ppmvd @ 15% O₂; VOC - 5 ppmvd @ 15% O₂; CO - 19 ppmvd @ 15% O₂; or PM₁₀ - 0.0066 lb/MMBtu. [District Rules 2201 and 4201] Federally Enforceable Through Title V Permit
14. The turbine shall only burn produced gas and/or PUC quality gas with a fuel sulfur concentration not exceeding 0.75 gr/100 dscf. [District Rules 2201 and 4801] Federally Enforceable Through Title V Permit
15. Permittee shall measure and record fuel gas sulfur content (H₂S) within 60 days of initial start-up, upon any change in the gas fuel source, and at least once every 12 months thereafter. [District Rule 2201] Federally Enforceable Through Title V Permit
16. Permittee shall determine sulfur content of gas consumed by the turbine using ASTM method D3246 or double GC for H₂S and mercaptans. [District Rule 2201] Federally Enforceable Through Title V Permit
17. The permittee shall monitor and record the stack concentration of NO_x, CO, and O₂ within 60 days of initial start-up at each location and at least once every 12 months thereafter, using a portable emission monitor that meets District specifications. Monitoring shall not be required if the unit is not in operation, i.e. the unit need not be started solely to perform monitoring. [District Rule 2201] Federally Enforceable Through Title V Permit
18. If either the NO_x or CO concentrations corrected to 15% O₂, as measured by the portable analyzer, exceed the allowable emissions concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 1 hour of operation after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 1 hour of operation after detection, the permittee shall notify the District within the following 1 hour and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rule 2201] Federally Enforceable Through Title V Permit

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CONDITIONS CONTINUE ON NEXT PAGE

19. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rule 2201] Federally Enforceable Through Title V Permit
20. The permittee shall maintain records of: (1) the date and time of O₂ and NO_x measurements, (2) the O₂ concentration in percent and the measured NO_x concentration corrected to 15% O₂, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rule 2201] Federally Enforceable Through Title V Permit
21. Permittee shall maintain an accurate record of each location where this turbine is operated and the sulfur content (H₂S) of the gas from each fuel source. [District Rules 1070 and 2201] Federally Enforceable Through Title V Permit
22. All records shall be maintained and retained on-site for a period of at least 5 years and shall be made available for District inspection upon request. [District Rule 1070] Federally Enforceable Through Title V Permit

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San Joaquin Valley
Air Pollution Control District

AUTHORITY TO CONSTRUCT

ISSUANCE DATE: DRAFT

PERMIT NO: S-8282-125-1

LEGAL OWNER OR OPERATOR: VINTAGE PRODUCTION CALIFORNIA LLC

MAILING ADDRESS: 9600 MING AVE, SUITE 300
BAKERSFIELD, CA 93311

LOCATION: LIGHT OIL WESTERN STATIONARY SOURCE
KERN COUNTY, CA

EQUIPMENT DESCRIPTION:

2.28 MMBTU/HR NATURAL GAS/FIELD GAS FIRED CAPSTONE MODEL C200 MICRO TURBINE POWERING A 200 KW ELECTRICAL GENERATOR AT VARIOUS UNSPECIFIED LOCATIONS WITHIN THE LIGHT OIL WESTERN STATIONARY SOURCE

CONDITIONS

1. {1830} This Authority to Construct serves as a written certificate of conformity with the procedural requirements of 40 CFR 70.7 and 70.8 and with the compliance requirements of 40 CFR 70.6(c). [District Rule 2201] Federally Enforceable Through Title V Permit
2. {1831} Prior to operating with modifications authorized by this Authority to Construct, the facility shall submit an application to modify the Title V permit with an administrative amendment in accordance with District Rule 2520 Section 5.3.4. [District Rule 2520, 5.3.4] Federally Enforceable Through Title V Permit
3. This Authority to Construct (ATC) cancels and supersedes ATC permit S-8282-125-0. [District Rule 2201] Federally Enforceable Through Title V Permit
4. Prior to operating equipment under this Authority to Construct, permittee shall surrender NOX emission reduction credits for the following quantity of emissions: 1st quarter - 214 lb, 2nd quarter - 214 lb, 3rd quarter - 214 lb, and fourth quarter - 214 lb. These amounts include the applicable offset ratio specified in Rule 2201 Section 4.8 (as amended 4/21/11) for the ERC specified below. [District Rule 2201] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

YOU MUST NOTIFY THE DISTRICT COMPLIANCE DIVISION AT (661) 392-5500 WHEN CONSTRUCTION IS COMPLETED AND PRIOR TO OPERATING THE EQUIPMENT OR MODIFICATIONS AUTHORIZED BY THIS AUTHORITY TO CONSTRUCT. This is NOT a PERMIT TO OPERATE. Approval or denial of a PERMIT TO OPERATE will be made after an inspection to verify that the equipment has been constructed in accordance with the approved plans, specifications and conditions of this Authority to Construct, and to determine if the equipment can be operated in compliance with all Rules and Regulations of the San Joaquin Valley Unified Air Pollution Control District. Unless construction has commenced pursuant to Rule 2050, this Authority to Construct shall expire and application shall be cancelled two years from the date of issuance. The applicant is responsible for complying with all laws, ordinances and regulations of all other governmental agencies which may pertain to the above equipment.

Seyed Sadredin, Executive Director APCO

Arnaud Marjollet, Director of Permit Services

S-8282-125-1: Apr 28 2014 8:45AM - TOMS : Joint Inspection Required with TOMS

5. ERC Certificate Numbers C-1231-2, S-4084-2, and S-4093-2 (or certificates split from these certificates) shall be used to supply the required offsets, unless a revised offsetting proposal is received and approved by the District, upon which this Authority to Construct shall be reissued, administratively specifying the new offsetting proposal. Original public noticing requirements, if any, shall be duplicated prior to reissuance of this Authority to Construct. [District Rule 2201] Federally Enforceable Through Title V Permit
6. {98} No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
7. {1898} The exhaust stack shall vent vertically upward. The vertical exhaust flow shall not be impeded by a rain cap (flapper ok), roof overhang, or any other obstruction. [District Rule 4102]
8. The permittee shall notify the District Compliance Division of each location at which the operation is located at which the operation is located in excess of 24 hours. Such notification shall be made no later than 48 hours after starting operation at the location. [District Rule 1070] Federally Enforceable Through Title V Permit
9. Turbine must be at least 197 feet from the property boundary. [District Rule 4102] Federally Enforceable Through Title V Permit
10. This unit shall not be operated within 1,000 feet of any K-12 school. [District Rule 4102] Federally Enforceable Through Title V Permit
11. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
12. No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101] Federally Enforceable Through Title V Permit
13. Emission rates from this unit shall not exceed any of the following limits: NO_x (as NO₂) - 9.0 ppmvd @ 15% O₂; VOC - 5 ppmvd @ 15% O₂; CO - 19 ppmvd @ 15% O₂; or PM₁₀ - 0.0066 lb/MMBtu. [District Rules 2201 and 4201] Federally Enforceable Through Title V Permit
14. The turbine shall only burn produced gas and/or PUC quality gas with a fuel sulfur concentration not exceeding 0.75 gr/100 dscf. [District Rules 2201 and 4801] Federally Enforceable Through Title V Permit
15. Permittee shall measure and record fuel gas sulfur content (H₂S) within 60 days of initial start-up, upon any change in the gas fuel source, and at least once every 12 months thereafter. [District Rule 2201] Federally Enforceable Through Title V Permit
16. Permittee shall determine sulfur content of gas consumed by the turbine using ASTM method D3246 or double GC for H₂S and mercaptans. [District Rule 2201] Federally Enforceable Through Title V Permit
17. The permittee shall monitor and record the stack concentration of NO_x, CO, and O₂ within 60 days of initial start-up at each location and at least once every 12 months thereafter, using a portable emission monitor that meets District specifications. Monitoring shall not be required if the unit is not in operation, i.e. the unit need not be started solely to perform monitoring. [District Rule 2201] Federally Enforceable Through Title V Permit
18. If either the NO_x or CO concentrations corrected to 15% O₂, as measured by the portable analyzer, exceed the allowable emissions concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 1 hour of operation after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 1 hour of operation after detection, the permittee shall notify the District within the following 1 hour and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rule 2201] Federally Enforceable Through Title V Permit

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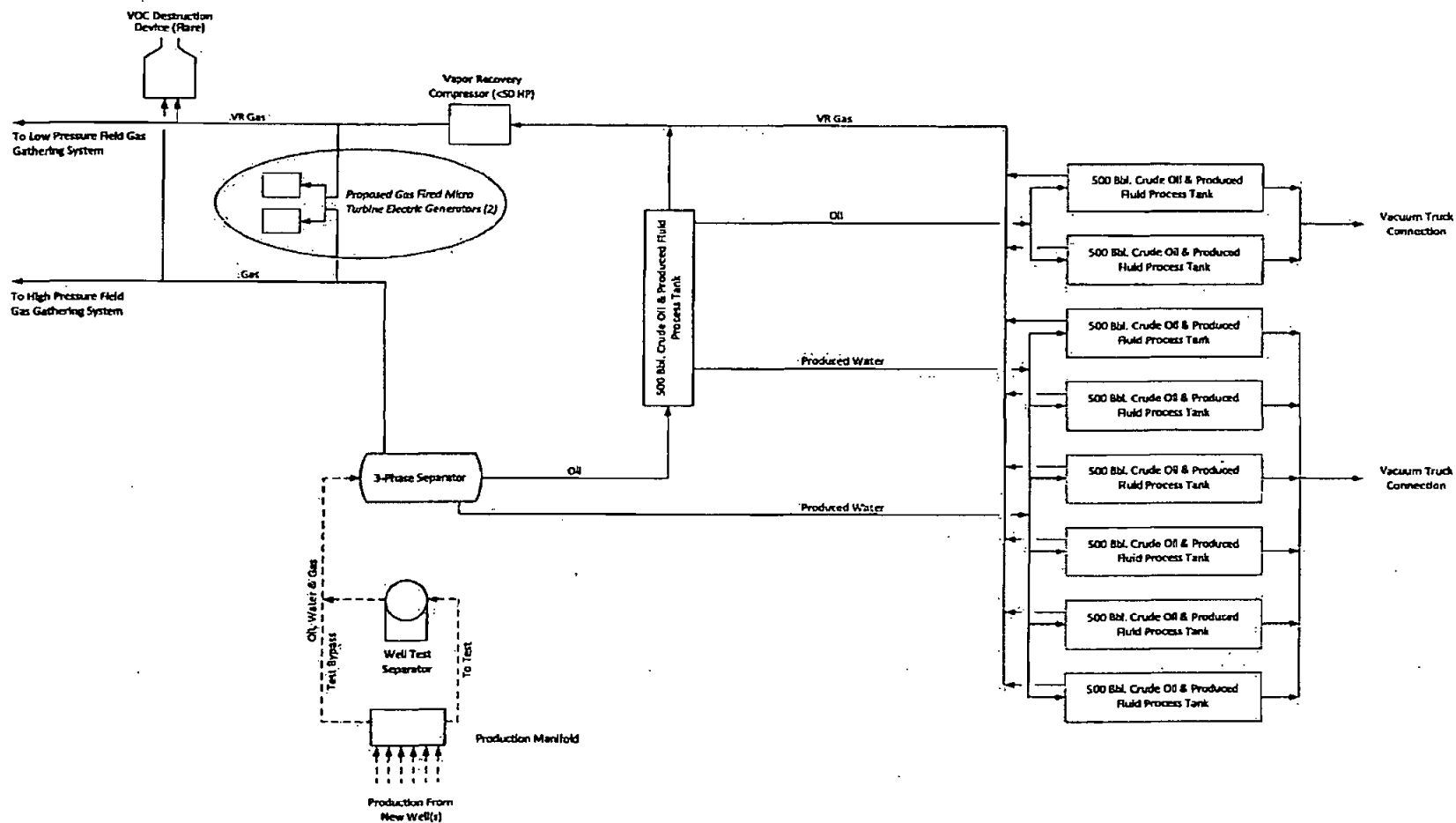
CONDITIONS CONTINUE ON NEXT PAGE

19. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rule 2201] Federally Enforceable Through Title V Permit
20. The permittee shall maintain records of: (1) the date and time of O₂ and NO_x measurements, (2) the O₂ concentration in percent and the measured NO_x concentration corrected to 15% O₂, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rule 2201] Federally Enforceable Through Title V Permit
21. Permittee shall maintain an accurate record of each location where this turbine is operated and the sulfur content (H₂S) of the gas from each fuel source. [District Rules 1070 and 2201] Federally Enforceable Through Title V Permit
22. All records shall be maintained and retained on-site for a period of at least 5 years and shall be made available for District inspection upon request. [District Rule 1070] Federally Enforceable Through Title V Permit

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Appendix B

Process Flow Diagram



Vintage Production California, LLC
**PROCESS FLOW DIAGRAM SHOWING
 TWO PROPOSED 200kW MICRO TURBINE
 ELECTRIC GENERATORS**
 April 2013 Page 1 of 1

Appendix C

BACT Guideline

San Joaquin Valley
Unified Air Pollution Control District

Best Available Control Technology (BACT) Guideline 3.4.9*

Last Update 10/1/2002

Gas Turbine - < 3 MW, Uniform Load, With or Without Heat Recovery

Pollutant	Achieved in Practice or contained in the SIP	Technologically Feasible	Alternate Basic Equipment
CO	10.0 ppmvd** @ 15% O ₂ , based on a three-hour average (Oxidation catalyst, or equal).		
NO _x	9.0 ppmvd** @ 15% O ₂ , based on a three-hour average (high temp SCR, SCR, or equal).		
PM ₁₀	Air inlet cooler/filter, lube oil vent coalescer (or equal) and either PUC-regulated natural gas, LPG, or non-PUC-regulated gas with ≤ 0.75 grams S/100 dscf.		
SO _x	PUC-regulated natural gas, LPG, or Non-PUC-regulated gas with < 0.75 grams S/100 dscf, or equal.		
VOC	5.0 ppmvd** @ 15% O ₂ , based on a three-hour average (Oxidation catalyst, or equal).		

BACT is the most stringent control technique for the emissions unit and class of source. Control techniques that are not achieved in practice or contained in a state implementation plan must be cost effective as well as feasible. Economic analysis to demonstrate cost effectiveness is required for all determinations that are not achieved in practice or contained in an EPA approved State Implementation Plan.

***This is a Summary Page for this Class of Source**

Appendix D

BACT Analysis

1. BACT Analysis for NO_x Emissions:

a. Step 1 - Identify all control technologies

The SJVAPCD BACT Clearinghouse guideline 3.4.9 2nd quarter 2014, identifies for achieved in practice BACT for NO_x emissions from gas turbines <3 MW, uniform load, with or without heat recovery as follows:

- 1) 9.0 ppmvd @ 15% O₂ based on a three-hour average (high temp SCR, SCR, or equivalent)

b. Step 2 - Eliminate technologically infeasible options

There are no technologically infeasible options to eliminate from step 1.

c. Step 3 - Rank remaining options by control effectiveness

- 1) 9.0 ppmvd @ 15% O₂ based on a three-hour average (high temp SCR, SCR, or equivalent)

d. Step 4 - Cost Effectiveness Analysis

A cost effective analysis is required for technologically feasible control options that are not proposed. There are no technologically feasible options to eliminate; therefore, a cost effective analysis is not required.

e. Step 5 - Select BACT

BACT for NO_x emissions from these turbines is a NO_x limit of 9.0 ppmvd @ 15% O₂. The applicant has proposed to install turbines with a NO_x limit of 9.0 ppmvd @ 15% O₂; therefore BACT for NO_x emissions is satisfied.

Appendix E

HRA/AAQA Summary

**San Joaquin Valley Air Pollution Control District
Risk Management Review
Revised**

To: Stephen Leonard, AQE – Permit Services
From: Trevor Joy, AQS – Technical Services
Date: May 13, 2013
Facility Name: Vintage Production CA
Location: LOW
Application #(s): S-8282-124-0, -125-0
Project #: 1131613

A. RMR SUMMARY

Categories	Units 124-0 and 125-0 NG Turbines	Project Totals	Facility Totals
Prioritization Score	0.3	0.3	>1
Acute Hazard Index	0.00	0.00	0.02
Chronic Hazard Index	0.00	0.00	0.00
Maximum Individual Cancer Risk (10^{-6})	0.0	0.0	5.4
T-BACT Required?	No		
Special Permit Conditions?	Yes		

Proposed Permit Conditions

To ensure that human health risks will not exceed District allowable levels; the following permit conditions must be included for:

Units # 124-0 and 125-0

{1898} The exhaust stack shall vent vertically upward. The vertical exhaust flow shall not be impeded by a rain cap (flapper ok), roof overhang, or any other obstruction. [District Rule 4102] N

Turbine must be at least 197 feet from the property boundary. [District Rule 2201] N

B. RMR REPORT

I. Project Description

Technical Services received a revised request on April 24, 2013 to perform an Ambient Air Quality Analysis and a Risk Management Review for the proposed installation of two new NG fired turbines. The project was revised on May 13, 2013, the calculated SOx emissions, for both units, were increased.

II. Analysis

Technical Services performed a prioritization using the District's HEARTs database. Emissions were calculated using "NG Internal Combustion - Turbine w/o Catalyst" emission factors. In accordance with the District's *Risk Management Policy for Permitting New and Modified Sources* (APR 1905, March 2, 2001), risks from the proposed units' toxic emissions were prioritized using the procedure in the 1990 CAPCOA Facility Prioritization Guidelines and incorporated in the District's HEARTs database. The prioritization score for this proposed units was less than 1 but the prioritization score for the facility was greater than 1.0 (see RMR Summary Table). Therefore, a refined analysis was required and performed. AERMOD was used with the parameters outlined below and concatenated meteorological data for Bakersfield 2005 – 2009 to determine the maximum dispersion factors.

The following parameters were used for the review:

Analysis Parameter Units 124-0 and 125-0 (each)			
Closest Receptor - Business (m)	60	Closest Receptor - Resident (m)	60
NG and Waste Gas Usage (MMBtu/hr)	2.28	NG and Waste Gas Usage (MMBtu/yr)	19,973
Release Height (m)	2.6	Gas Exit Temperature (K)	552
Stack Inside Diameter (m)	0.305	Gas Exit Velocity (m/s)	7.58

Technical Services also performed modeling for criteria pollutants CO, NOx, SOx and PM₁₀, as well as a RMR. The emission rates used for criteria pollutant modeling were

	NOx	Sox	CO	PM10	PM2.5
Lbs/hr	0.067	0.005	0.052	0.015	0.015
Lbs/yr	584	43	453	131	131

The results from the Criteria Pollutant Modeling are as follows:

Criteria Pollutant Modeling Results*
Values are in $\mu\text{g}/\text{m}^3$

Steam Generator	1 Hour	3 Hours	8 Hours	24 Hours	Annual
CO	Pass	X	Pass	X	X
NO _x	Pass ¹	X	X	X	Pass
SO _x	Pass ²	Pass	X	Pass	Pass
PM ₁₀	X	X	X	Pass ³	Pass ³
PM2.5	X	X	X	Pass ⁴	Pass ⁴

*Results were taken from the attached PSD spreadsheet.

¹The project was compared to the 1-hour NO₂ National Ambient Air Quality Standard that became effective on April 12, 2010 using the District's approved procedures. The criteria pollutant 1-hour value passed using TIER I NO₂ NAAQS modeling

²The project was compared to the 1-hour SO₂ National Ambient Air Quality Standard that became effective on August 23, 2010 using the District's approved procedures.

³The maximum predicted concentration for emissions of these criteria pollutants from the proposed unit are below EPA's level of significance as found in 40 CFR Part 51.165 (b)(2).

⁴The maximum predicted concentration for emissions of these criteria pollutants from the proposed unit are below EPA's level of significance as found in 40 CFR Part 51.165 (b)(2). The emissions were reviewed using AERMOD View – PM-2.5 NAAQS for PM2.5 24-Hr and PM2.5 Annual.

III. Conclusion

The criteria modeling runs indicate the emissions from the project will not cause or significantly contribute to a violation of a State or National AAQS.

For the RMR: The acute and chronic hazard indices were below 1.0; and the cancer risk is less than or equal to 1.0 in a million. **In accordance with the District's Risk Management Policy, the project is approved without Toxic Best Available Control Technology (T-BACT).**

These conclusions are based on the data provided by the applicant and the project engineer. Therefore, this analysis is valid only as long as the proposed data and parameters do not change.

Attachments:

- A. RMR request from the project engineer
- B. Prioritization score with toxic emissions summary
- C. HEARTS – Facility Summary
- D. AAQA spreadsheet

San Joaquin Valley Air Pollution Control District

Risk Management Review

To: Stanley Tom, AQE – Permit Services
From: Esteban Gutierrez, AQS – Technical Services
Date: May 9, 2014
Facility Name: Vintage Production California LLC
Location: Light oil Western
Application #(s): S-8282-124-1, 125-1
Project #: S-1141816

A. RMR SUMMARY

RMR Summary			
Categories	Two microturbines – AAQA CO MODELING ONLY (Units 124-1, 125-1)	Project Totals	Facility Totals
Prioritization Score	N/A	N/A	N/A
Acute Hazard Index	N/A	N/A	N/A
Chronic Hazard Index	N/A	N/A	N/A
Maximum Individual Cancer Risk (10^{-6})	N/A	N/A	N/A
T-BACT Required?	No		
Special Permit Conditions?	No		

I. Project Description

Technical Services received a request on April 20, 2014, to perform only Ambient Air Quality Analysis for CO on the installation of two identical microturbines.

II. Analysis

Technical Services performed modeling for only the criteria pollutant CO. The microturbines are identical so the emission rates used for CO are 1 lb/day and 345 lbs/yr. The emission rate was calculated and supplied by the processing engineer.

The results from the Criteria Pollutant Modeling are as follows:

Criteria Pollutant Modeling Results*

Values are in $\mu\text{g}/\text{m}^3$

Diesel ICE	1 Hour	3 Hours	8 Hours	24 Hours	Annual
CO	Pass	X	Pass	X	X

*Results were taken from the attached PSD spreadsheet.

III. Conclusion

The criteria modeling runs indicate the emissions from the proposed equipment will not cause or significantly contribute to a violation of a State or National AAQS.

These conclusions are based on the data provided by the applicant and the project engineer. Therefore, this analysis is valid only as long as the proposed data and parameters do not change.

AAQA for 124-1 (S8282(1141816))
All Values are in Micrograms per Cubic Meter

	NOx 1 Hour	NOx Annual	CO 1 Hour	CO 8 Hour	SOx 1 Hour	SOx 3 Hour	SOx 24 Hour	SOx Annual	PM 24 Hour	PM Annual
STCK1	0.0E+00	0.0E+00	8.0E+00	6.4E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.00E+00	0.00E+00
STCK2	0.0E+00	0.0E+00	8.0E+00	6.4E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.00E+00	0.00E+00
Background	1.2E+02	3.3E+01	4.1E+03	2.6E+03	2.4E+01	2.4E+01	5.3E+00	2.4E+01	2.67E+02	8.30E+01
Facility Totals	122.4	32.5	4,093.6	2,575.8	24.0	24.0	5.3	24.0	267.0	83.0
AAQS	188.7	56.0	23,000.0	10,000.0	195.0	1,300.0	105.0	80.0	50.0	30.0
	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Fail	Fail

EPA's Significance Level (ug/m³)

NOx 1 Hour	NOx Annual	CO 1 Hour	CO 8 Hour	SOx 1 Hour	SOx 3 Hour	SOx 24 Hour	SOx Annual	PM 24 Hour	PM Annual
0.0	1.0	2000.0	500.0	0.0	25.0	5.0	1.0	5.0	1.0

*Since 5-years of meteorological data were used, an adjustment factor of 1.75 for Bakersfield was applied to the annual average concentrations for the devices modeled.

AAQA Emission (g/sec)

<i>Device</i>	NOx 1 Hour	NOx Annual	CO 1 Hour	CO 8 Hour	SOx 1 Hour	SOx 3 Hour	SOx 24 Hour	SOx Annual	PM 24 Hour	PM Annual
STCK1	0.00E+00	0.00E+00	5.25E-03	5.25E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
STCK2	0.00E+00	0.00E+00	5.25E-03	5.25E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

*Since 5-years of meteorological data were used, an adjustment factor of 1.75 for Bakersfield was applied to the annual average concentrations for the devices modeled.

Appendix F

Compliance Certifications

**San Joaquin Valley
Unified Air Pollution Control District**

TITLE V MODIFICATION - COMPLIANCE CERTIFICATION FORM

I. TYPE OF PERMIT ACTION (Check appropriate box)

- ☐ SIGNIFICANT PERMIT MODIFICATION ☐ ADMINISTRATIVE AMENDMENT
☒ MINOR PERMIT MODIFICATION

COMPANY NAME: Vintage Production California, LLC	FACILITY ID: S-8282
1. Type of Organization: <input checked="" type="checkbox"/> Corporation <input type="checkbox"/> Sole Ownership <input type="checkbox"/> Government <input type="checkbox"/> Partnership <input type="checkbox"/> Utility	
2. Owner's Name: Vintage Production California, LLC	
3. Agent to the Owner: Wm. Douglas Shaffer, PE	

II. COMPLIANCE CERTIFICATION (Read each statement carefully and initial all circles for confirmation):

- ☒ Based on information and belief formed after reasonable inquiry, the equipment identified in this application will continue to comply with the applicable federal requirement(s).
- ☒ Based on information and belief formed after reasonable inquiry, the equipment identified in this application will comply with applicable federal requirement(s) that will become effective during the permit term, on a timely basis.
- ☒ Corrected information will be provided to the District when I become aware that incorrect or incomplete information has been submitted.
- ☒ Based on information and belief formed after reasonable inquiry, information and statements in the submitted application package, including all accompanying reports, and required certifications are true accurate and complete.

I declare, under penalty of perjury under the laws of the state of California, that the forgoing is correct and true:

Denny Brown
Signature of Responsible Official

4/29/14
Date

Denny Brown

Name of Responsible Official (please print)

Operations Manager

Title of Responsible Official (please print)

Re: Increase Capstone C200 CO emission limit

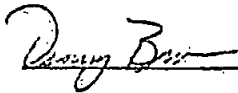
Mailing Address: Central Regional Office * 1990 E. Gettysburg Avenue * Fresno, California 93726-0244 * (559) 230-5900 * FAX (559) 230-6061

CERTIFICATION

OXY USA Inc. hereby certifies as follows:

1. OXY USA Inc. owns or operates certain major stationary sources in the State of California. Such sources are comprised of a vast number of emission points. As used in this certification, the term "major stationary source" shall, with respect to OXY USA Inc. stationary sources in the SJVUAPCD, have the meaning ascribed thereto in SJVUAPCD Rule 2201, Section 3.23, and shall, with respect to all of OXY USA Inc.'s other stationary sources in the State of California, have the meaning ascribed thereto in section 302(J) of the Clean Air Act (42 U.S.C. Section 7602 (J)).
2. Subject to paragraphs 3 and 4 below, all major stationary sources owned or operated by OXY USA Inc. in the State of California are either in compliance, or on an approved schedule of compliance, with all applicable emission limitations and standards under the Clean Air Act and all of the State Implementation Plan approved by the Environmental Protection Agency.
3. This certification is made on information and belief and is based upon a review of OXY USA Inc.'s major stationary sources in the State of California by those employees of OXY USA Inc. who have operational responsibility for compliance. In conducting such reviews, OXY USA Inc. and its employees have acted in good faith and have exercised best efforts to identify any exceedance of the emission limitations and standards referred to in paragraph 2 thereof.
4. This certification shall speak as of the time and date of its execution.

CERTIFICATION

By:  Date: 5-16-13
Title: Operations Lead Time: 9:30 AM

Appendix G

SSPE1 Tabulation

Detailed SSPE Report

Region	Facility	Unit	Mod	NOx	SOx	PM10	CO	VOC	Number of Outstanding ATCs
S	382	0	3						0
S	382	7	9						0
S	382	29	4	0	0	0	0	2220	0
S	382	32	11	127460	11826	8497	386228	231790	1
S	382	62	11	127460	11826	8497	386228	231790	1
S	382	63	11	127460	11826	8497	386228	231790	1
S	382	68	9	0	0	0	0	6468	0
S	382	69	5						0
S	382	70	11	0	0	0	0	723	0
S	382	71	7						0
S	382	74	3						0
S	382	77	10	0	0	0	0	234	0
S	382	80	11	0	0	0	0	190	0
S	382	81	11	0	0	0	0	116	0
S	382	82	11	0	0	0	0	138	0
S	382	83	7						0
S	382	84	10	0	0	0	0		0
S	382	87	12	0	0	0	0	280	0
S	382	89	11	0	0	0	0	190	0
S	382	90	10	0	0	0	0	157	0
S	382	91	9	0	0	0	0	33	0
S	382	93	11	0	0	0	0	262	0
S	382	94	9	0	0	0	0	116	0
S	382	95	7	0	0	0	0	177	0
S	382	96	12	0	0	0	0	116	0
S	382	97	7	0	0	0	0	219	0

Monday, May 20, 2013

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S	382	100	10	0	0	0	0	277	0
S	382	101	7						1
S	382	103	12	0	0	0	0	365	0
S	382	110	14	0	0	0	0	223	0
S	382	111	9	0	0	0	0	36	0
S	382	112	7	0	0	0	0	116	0
S	382	113	9	0	0	0	0	355	0
S	382	116	11	0	0	0	0	234	0
S	382	123	13	0	0	0	0	116	0
S	382	124	25	0	0	0	0	876	1
S	382	131	13	0	0	0	0	131	1
S	382	132	15	0	0	0	0	116	0
S	382	134	12	0	0	0	0	116	0
S	382	136	20	0	0	0	0	949	1
S	382	138	7	0	0	0	0	277	0
S	382	139	11	0	0	0	0	628	0
S	382	140	11	0	0	0	0	365	0
S	382	156	5						0
S	382	157	5						0
S	382	158	13	0	0	0	0	4234	2
S	382	159	9	0	0	0	0	444	0
S	382	161	15	0	0	0	0	836	0
S	382	162	13	0	0	0	0	51	0
S	382	163	11	0	0	0	0	69	1
S	382	168	8	0	0	0	0	37	0
S	382	169	8	0	0	0	0	37	0
S	382	176	7	0	0	0	0	66	0
S	382	177	7	0	0	0	0	66	0
S	382	178	7	0	0	0	0	66	0

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S	382	179	7	0	0	0	0	56	0
S	382	180	6						0
S	382	181	6						0
S	382	182	6						0
S	382	183	8	0	0	0	0	51	0
S	382	187	8	0	0	0	0	37	0
S	382	189	7	0	0	0	0	56	0
S	382	190	8	0	0	0	0	73	0
S	382	191	7	0	0	0	0	66	0
S	382	197	7	0	0	0	0	66	0
S	382	198	7	0	0	0	0	66	0
S	382	199	6	0	0	0	0	0	0
S	382	200	9	0	0	0	0	66	0
S	382	204	8	0	0	0	0	73	0
S	382	205	8	0	0	0	0	37	0
S	382	207	7	0	0	0	0	66	0
S	382	210	7	0	0	0	0	66	0
S	382	261	8	0	0	0	0	37	0
S	382	262	8	0	0	0	0	37	0
S	382	263	8	0	0	0	0	44	0
S	382	265	9	0	0	0	0	38	0
S	382	266	7	0	0	0	0	66	0
S	382	267	7	0	0	0	0	66	0
S	382	271	8	0	0	0	0	37	0
S	382	283	7	0	0	0	0	66	0
S	382	284	7	0	0	0	0	66	0
S	382	285	7	0	0	0	0	66	0
S	382	286	8	0	0	0	0	69	0
S	382	287	8	0	0	0	0	69	0

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S	382	288	8	0	0	0	0	69	0
S	382	289	8	0	0	0	0	69	0
S	382	290	8	0	0	0	0	69	0
S	382	291	8	0	0	0	0	69	0
S	382	292	8	0	0	0	0	69	0
S	382	293	8	0	0	0	0	69	0
S	382	294	8	0	0	0	0	69	0
S	382	295	8	0	0	0	0	69	0
S	382	296	8	0	0	0	0	69	0
S	382	297	8	0	0	0	0	69	0
S	382	298	8	0	0	0	0	69	0
S	382	299	8	0	0	0	0	69	0
S	382	300	8	0	0	0	0	69	0
S	382	301	8	0	0	0	0	69	0
S	382	302	8	0	0	0	0	69	0
S	382	304	9	0	0	0	0	66	0
S	382	307	7	0	0	0	0	66	0
S	382	308	7	0	0	0	0	66	0
S	382	309	7	0	0	0	0	66	0
S	382	310	7	0	0	0	0	66	0
S	382	311	7	0	0	0	0	66	0
S	382	312	10	0	0	0	0	66	0
S	382	313	7	0	0	0	0	66	0
S	382	314	7	0	0	0	0	66	0
S	382	320	9	0	0	0	0	176	0
S	382	321	9	0	0	0	0	160	0
S	382	325	4						0
S	382	326	4	0	0	0	0	36	0
S	382	330	4						0

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Region	Facility	Unit	Mod	NOx	SOx	PM10	CO	VOC	Number of Outstanding ATCs
S	382	399	9	0	0	0	0	22	0
S	382	400	9	0	0	0	0	66	0
S	382	412	3						0
S	382	421	7	1275	8	69	2096	17	1
S	382	422	10	1488	0	22	205	59	1
S	382	594	3						0
S	382	597	8	0	0	0	0	73	0
S	382	669	3						0
S	382	670	9	28996	18	1314	77263	28996	1
S	382	671	9	28996	18	1314	77263	28996	1
S	382	672	10	28996	18	1314	77263	28996	1
S	382	673	23	0	0	0	0	803	0
S	382	674	3						0
S	382	675	8	1080	64	228	1092	165	1
S	382	676	9	1080	64	228	1092	165	0
S	382	677	8	1080	86	228	1092	165	0
S	382	678	7	1080	86	228	1092	165	1
S	382	679	8	1080	86	228	1092	165	0
S	382	680	10	1080	86	228	1092	165	0
S	382	681	10	1080	86	228	1092	165	0
S	382	682	3						0
S	382	683	3						0
S	382	684	3					5548	0
S	382	685	3					2883	0
S	382	701	8	0	0	0	0	183	0
S	382	702	8	0	0	0	0	183	0
S	382	703	3	0	0	0	0	0	0
S	382	705	2	0	0	0	0	0	0
S	382	706	2	0	0	0	0	0	0

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<i>Region</i>	<i>Facility</i>	<i>Unit</i>	<i>Mod</i>	<i>NOx</i>	<i>SOx</i>	<i>PM10</i>	<i>CO</i>	<i>VOC</i>	<i>Number of Outstanding ATCs</i>
S	382	707	2	0	0	0	0	0	0
S	382	708	2	0	0	0	0	0	0
S	382	711	3	0	0	0	0	0	0
S	382	712	3	0	0	0	0	0	0
S	382	713	3	0	0	0	0	0	0
S	382	722	3	0	0	0	0	73	0
S	382	724	3	0	0	0	0	164	0
S	382	725	3	0	0	0	0	47	0
S	382	726	9	0	0	0	0	352	0
S	382	727	5	0	0	0	0	74	0
S	382	736	3	0	0	0	0	0	0
S	382	737	6	0	0	0	0	344	0
S	382	738	3	0	0	0	0	73	0
S	382	741	6	0	0	0	0	365	0
S	382	742	6	0	0	0	0	365	0
S	382	743	6	0	0	0	0	365	0
S	382	744	6	0	0	0	0	365	0
S	382	745	6	0	0	0	0	365	0
S	382	746	6	0	0	0	0	365	0
S	382	751	4	0	0	0	0	672	0
S	382	757	5	1314	37	110	1095	1278	1
S	382	758	5	0	0	0	0	1314	0
S	382	759	5	0	0	0	0	99	0
S	382	760	4	0	0	0	0	99	0
S	382	806	5	0	0	40	0	0	1
S	382	808	5	0	0	0	0	73	1
S	382	809	2	0	0	0	0	73	0
S	382	810	1	36	0	1	7	1	0
S	382	814	1	0	0	0	0	37	0

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Region	Facility	Unit	Mod	NOx	SOx	PM10	CO	VOC	Number of Outstanding ATCs
S	382	815	0	86	0	3	24	41	1
S	1216	0	1						0
S	1216	55	1	0	0	0	0	1521	0
S	1216	64	5	0	0	0	0	110	0
S	1216	66	1	0	0	0	0	33	0
S	1216	67	1	1537	41	193	29958	643	0
S	1216	70	1	439	68	238	2981	758	0
S	1216	71	1	1898	314	571	13700	3498	1
S	1216	72	1	0	0	0	0	37	0
S	1216	73	1	0	0	0	0	37	0
S	1216	75	1	0	0	0	0	37	0
S	1216	78	1	0	0	0	0	37	0
S	1216	85	2	2609	153	920	2836	460	0
S	1216	158	1	0	0	0	0	77	0
S	1216	159	1	0	0	0	0	77	0
S	1738	0	3						0
S	1738	2	6						1
S	1738	7	15						0
S	1738	9	5						0
S	1738	10	5						0
S	1738	11	5						0
S	1738	12	5						0
S	1738	13	5						0
S	1738	14	5						0
S	1738	15	5						0
S	1738	16	5						0
S	1738	17	5						0
S	1738	22	4						1
S	1738	23	4						0

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Region	Facility	Unit	Mod	NOx	SOx	PM10	CO	VOC	Number of Outstanding ATCs
S	1738	24	4						0
S	1738	26	4						0
S	1738	30	4						0
S	1738	31	4						0
S	1738	36	4	0	0	0	0	0	0
S	1738	37	7	0	0	0	0	0	0
S	1738	38	4						1
S	1738	44	5						0
S	1738	45	6	0	0	0	0	0	0
S	1738	47	6						0
S	1738	48	4						0
S	1738	49	5						1
S	1738	50	5						0
S	1738	51	7						0
S	1738	52	7						0
S	1738	53	5						0
S	1738	57	10	1318			64020	2900	0
S	1738	58	11	1205			59370	1366	1
S	1738	59	9	1424	37	256	68292	1570	0
S	1738	60	10	1406			68288	1567	0
S	1738	62	11	1406			68288	1567	0
S	1738	77	7	0	0	0	0	0	0
S	1738	78	6	29200	0	0	14600	7300	1
S	1738	87	11	1406			68288	1567	1
S	1738	88	8	1095			53186	2409	0
S	1738	92	11	1095			53186	2409	1
S	1738	93	8	1314	37	256	64021	2884	1
S	1738	94	8	1095			53186	2409	0
S	1738	97	10	1095			53186	2409	1

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Region	Facility	Unit	Mod	NOx	SOx	PM10	CO	VOC	Number of Outstanding ATCs
S	1738	111	7	7556			119830	25550	1
S	1738	118	15	2628	183	256	64021	4526	0
S	1738	122	11	1318	207	282	64020	2900	1
S	1738	124	8	1318			64020	2900	0
S	1738	130	6	2671	0	0	649334	0	1
S	1738	131	9	1318			64020	2900	1
S	1738	133	10	1318			64020	2900	0
S	1738	134	11	1318			64020	2900	0
S	1738	135	15	1971	146	183	48253	3395	2
S	1738	136	10	1318			64020	2900	0
S	1738	178	5	0	0	0	0	1038	0
S	1738	188	4						0
S	1738	190	3						0
S	1738	201	7	0	0	0	0	0	0
S	1738	211	4	0	0	0	0	666	0
S	1738	212	4	0	0	0	0	1560	0
S	1738	215	7	0	0	0	0	157	0
S	1738	218	4	0	0	0	0	0	0
S	1738	219	4	0	0	0	0	0	0
S	1738	220	4	0	0	0	0	1026	0
S	1738	225	3						0
S	1738	226	5						0
S	1738	232	7	0	0	0	0	51	0
S	1738	239	4	0	0	0	0	686	0
S	1738	240	5						2
S	1738	241	5						0
S	1738	242	5						0
S	1738	243	5						0
S	1738	244	5						0

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Region	Facility	Unit	Mod	NOx	SOx	PM10	CO	VOC	Number of Outstanding ATCs
S	1738	245	5						0
S	1738	246	5						0
S	1738	257	4	0	0	0	0	684	0
S	1738	258	5	0	0	0	0	0	0
S	1738	267	6						1
S	1738	279	4	2323	0	260	12642	957	0
S	1738	280	3						0
S	1738	281	3						0
S	1738	282	4	0	0	0	0	0	0
S	1738	288	5						1
S	1738	289	6						0
S	1738	290	6						0
S	1738	291	4	0	0	0	0	438	0
S	1738	292	6	0	0	0	0	0	0
S	1738	293	4	0	0	0	0	0	0
S	1738	294	6	0	0	0	0	888	0
S	1738	295	6	0	0	0	0	888	0
S	1738	296	6	0	0	0	0	888	0
S	1738	297	3						0
S	1738	335	2	0	0	0	0	512	0
S	1738	338	3						0
S	1738	339	3						0
S	1738	340	2	0	0	0	0	0	0
S	1738	341	2	0	0	0	0	0	0
S	1738	342	2	0	0	0	0	800	0
S	1738	345	4	4175			201909	7245	0
S	1738	346	3						1
S	1738	347	0	956	7	113	5203	923	0
S	1738	349	1	7665	0	897	41180	7002	0

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Region	Facility	Unit	Mod	NOx	SOx	PM10	CO	VOC	Number of Outstanding ATCs
S	1738	350	1	0	0	0	0		0
S	1738	351	1						0
S	1738	352	1						0
S	1738	353	1						0
S	1738	354	1	0	0	0	0	0	2
S	1738	355	1						0
S	1738	356	1						0
S	1738	357	1						0
S	1738	358	1						0
S	1738	359	1	1406	44	301	68288	1848	1
S	1738	360	1	1405	44	301	68288	763	1
S	1738	361	1	1406	44	301	68288	1848	1
S	1738	362	1	2136	67	458	103745	1526	1
S	1738	363	3	2136	67	458	103745	1526	1
S	1738	364	3	2136	67	458	103745	1526	1
S	1738	365	3	2136	67	458	103745	1526	1
S	1738	366	1	2136	67	458	103745	1526	1
S	1738	367	1	1095	34	235	53186	782	0
S	1738	368	1	1241	37	256	58510	4198	1
S	1738	369	1	1095	34	235	53186	782	0
S	1738	370	1						0
S	1738	371	1	1406	44	301	68288	1848	1
S	1738	372	1	903	3	31	3076	502	0
S	1738	373	1	903	3	31	3076	502	0
S	1738	374	1	903	3	31	3076	502	0
S	1738	375	3	903	3	31	3076	502	0
S	1738	376	1	903	3	31	3076	502	0
S	1738	377	1	903	3	31	3076	502	0
S	1738	378	1	913	0	37	3066	511	0

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<i>Region</i>	<i>Facility</i>	<i>Unit</i>	<i>Mod</i>	<i>NOx</i>	<i>SOx</i>	<i>PM10</i>	<i>CO</i>	<i>VOC</i>	<i>Number of Outstanding ATCs</i>
S	1738	379	2	903	3	31	3076	502	0
S	1738	380	1	903	3	31	3076	502	0
S	1738	381	1	903	3	31	3076	502	0
S	1738	382	1	903	3	31	3076	502	0
S	1738	383	1	935	3	31	3188	519	0
S	1738	384	1	903	3	31	3076	502	0
S	1738	385	1	1095	3	31	3723	594	0
S	1738	386	1	903	3	31	3076	502	0
S	1738	387	1	913	0	37	3066	511	0
S	1738	388	1	903	3	31	3076	502	0
S	1738	389	1	903	3	31	3076	502	0
S	1738	390	1	903	3	31	3076	502	0
S	1738	391	1	1095	3	31	3723	594	0
S	1738	392	1	903	3	31	3076	502	0
S	1738	393	1	903	3	31	3076	502	0
S	1738	394	1	903	3	31	3076	502	1
S	1738	395	1	903	3	31	3076	502	0
S	1738	396	3	903	3	31	3076	502	0
S	1738	397	1	1095	3	31	3723	594	0
S	1738	398	1	913	0	37	3066	511	0
S	1738	399	1	913	0	37	3066	511	0
S	1738	400	1	903	3	31	3076	502	0
S	1738	401	1	903	3	31	3076	502	0
S	1738	402	3	903	3	31	3076	502	0
S	1738	403	1	903	3	31	3076	502	0
S	1738	404	1	1095	3	31	3723	594	0
S	1738	405	1	903	3	31	3076	502	0
S	1738	406	1	935	3	31	3188	519	0
S	1738	407	3	903	3	31	3076	502	0

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Notes:

Blank values for a particular permit unit do not necessarily reflect zero emissions. For units with blank values, the PE must still be determined based on physical PE or as limited by permit condition.

For permits that show outstanding ATCs, consult PAS ATC Emission Profile records to determine what the highest PE is for each pollutant.

ATCs for new units (e.g. S-XXXX-X-0) must be added in separately.

ERC's for onsite reductions must be added in separately per Rule 2201 as well.

<i>Region</i>	<i>Facility</i>	<i>Unit</i>	<i>Mod</i>	<i>NOx</i>	<i>SOx</i>	<i>PM10</i>	<i>CO</i>	<i>VOC</i>	<i>Number of Outstanding ATCs</i>
S	1738	408	1	825	0	13	101	31	0
S	1738	409	1	2149	57	50	354	93	0
S	1738	410	1	903	3	31	3076	502	1
S	1738	411	1	0	0	0	0	694	0
S	1738	414	2						0
S	1738	415	2						0
S	1738	416	2						0
S	1738	417	1	0	0	0	0	7191	1
S	1738	418	1	0	0	0	0	3686	0
S	1738	419	1						0
S	1738	420	1						0
S	1738	421	1						0
S	1738	427	1	5950	40990	657	32412	292	0
S	1738	428	1						0
S	1738	429	1						0
S	1738	430	1						0
S	1738	432	4	0	0	0	0	4380	0
S	1738	433	4	0	0	0	0	840	0
S	1738	434	4	0	0	0	0	1452	0
S	1738	435	1	0	0	0	0	0	0
S	1738	436	1	0	0	0	0	0	0
S	1738	437	1	0	0	0	0	1342	0
S	1738	438	1	0	0	0	0	1342	0
S	1738	439	1					897	0
S	1738	440	1					18704	0
S	1738	441	4	0	0	0	0	4563	0
S	1738	442	4	0	0	0	0	4563	0
S	1738	443	4	0	0	0	0	6680	1
S	1738	444	1						0

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Notes:

Blank values for a particular permit unit do not necessarily reflect zero emissions. For units with blank values, the PE must still be determined based on physical PE or as limited by permit condition.

For permits that show outstanding ATCs, consult PAS ATC Emission Profile records to determine what the highest PE is for each pollutant.

ATCs for new units (e.g. S-XXXX-X-0) must be added in separately.

ERC's for onsite reductions must be added in separately per Rule 2201 as well.

Region	Facility	Unit	Mod	NOx	SOx	PM10	CO	VOC	Number of Outstanding ATCs
S	1738	445	1						0
S	1738	446	1						0
S	1738	447	1						0
S	1738	448	1	1217	35	556	59095	2329	1
S	1738	449	2	17870	426	2102	97236	16556	0
S	1738	450	1	1284	20	294	31152	2220	1
S	1738	455	0	5609	703	660	30516	8383	0
S	1738	456	0	0	0	0	0	683	0
S	1738	457	0	0	0	0	0	661	0
S	1738	458	0	0	0	0	0	661	0
S	1738	459	0	0	0	0	0	661	0
S	1738	460	0	0	0	0	0	45	0
S	1738	461	0	724	27	63	4722	283	0
S	1738	462	0	7	0	0	35	3	0
S	1738	463	0	8	1	1	54	3	0
S	8282	0	0						0
S	8282	1	0	0	0	0	0	215	0
S	8282	2	0	0	0	0	0	2830	0
S	8282	3	0	0	0	0	0	0	0
S	8282	4	0	0	0	0	0	281	0
S	8282	5	0	0	0	0	0	0	0
S	8282	6	0	0	0	0	0	659	0
S	8282	7	0	0	0	0	0	0	0
S	8282	8	0	0	0	0	0	0	0
S	8282	9	0	0	0	0	0	88	2
S	8282	10	0	0	0	0	0	567	0
S	8282	11	0	0	0	0	0	88	0
S	8282	12	0	0	0	0	0	584	0
S	8282	13	0	0	0	0	0	190	0

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Notes:

Blank values for a particular permit unit do not necessarily reflect zero emissions. For units with blank values, the PE must still be determined based on physical PE or as limited by permit condition.

For permits that show outstanding ATCs, consult PAS ATC Emission Profile records to determine what the highest PE is for each pollutant.

ATCs for new units (e.g. S-XXXX-X-0) must be added in separately.

ERC's for onsite reductions must be added in separately per Rule 2201 as well.

Region	Facility	Unit	Mod	NOx	SOx	PM10	CO	VOC	Number of Outstanding ATCs
S	8282	14	0						0
S	8282	15	0						0
S	8282	16	0	0	0	0	0	0	0
S	8282	17	0	0	0	0	0	0	0
S	8282	18	0						0
S	8282	19	0	0	0	0	0	1466	0
S	8282	20	0	0	0	0	0	0	0
S	8282	21	0	0	0	0	0	0	0
S	8282	22	0						0
S	8282	23	0						1
S	8282	24	0						1
S	8282	25	0						1
S	8282	26	0						0
S	8282	27	0	0	0	0	0	51	0
S	8282	28	0	0	0	0	0	73	0
S	8282	29	0						0
S	8282	30	0	0	0	0	0	23	3
S	8282	31	0						1
S	8282	32	0	0	0	0	0	9	1
S	8282	33	0	0	0	0	0	9	1
S	8282	34	0						0
S	8282	35	0						0
S	8282	36	0						0
S	8282	37	0						0
S	8282	38	0						0
S	8282	39	0						0
S	8282	40	0						0
S	8282	41	0	0	0	0	0		0
S	8282	42	0	0	0	0	0		0

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Notes:

Blank values for a particular permit unit do not necessarily reflect zero emissions. For units with blank values, the PE must still be determined based on physical PE or as limited by permit condition.

For permits that show outstanding ATCs, consult PAS ATC Emission Profile records to determine what the highest PE is for each pollutant.

ATCs for new units (e.g. S-XXXX-X-0) must be added in separately.

ERC's for onsite reductions must be added in separately per Rule 2201 as well.

Region	Facility	Unit	Mod	NOx	SOx	PM10	CO	VOC	Number of Outstanding ATCs
S	8282	43	0	0	0	0	0	37	0
S	8282	44	0	0	0	0	0	29	0
S	8282	45	0						0
S	8282	46	0						0
S	8282	47	0						0
S	8282	48	0						0
S	8282	49	0						0
S	8282	50	0	0	0	0	0		0
S	8282	51	0						0
S	8282	52	0						0
S	8282	53	0						0
S	8282	54	0						0
S	8282	55	0	0	0	0	0	110	1
S	8282	56	0	0	0	0	0	3	1
S	8282	57	0	0	0	0	0	3	1
S	8282	58	0	0	0	0	0	3	1
S	8282	59	0	0	0	0	0	3	1
S	8282	60	0	0	0	0	0	28	1
S	8282	61	0	2253	172	228	54750	3911	0
S	8282	62	0	1825	110	183	44311	3139	0
S	8282	63	0	2628	183	256	64021	4526	0
S	8282	64	0	0	0	0	0	37	0
S	8282	65	0						0
S	8282	66	0						0
S	8282	67	0						0
S	8282	68	0						0
S	8282	69	0	1971	146	183	48253	3395	0
S	8282	70	0	1971	146	183	48253	3395	0
S	8282	71	0	1971	146	183	48253	3395	0

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Notes:

Blank values for a particular permit unit do not necessarily reflect zero emissions. For units with blank values, the PE must still be determined based on physical PE or as limited by permit condition.

For permits that show outstanding ATCs, consult PAS ATC Emission Profile records to determine what the highest PE is for each pollutant.

ATCs for new units (e.g. S-XXXX-X-0) must be added in separately.

ERC's for onsite reductions must be added in separately per Rule 2201 as well.

Region	Facility	Unit	Mod	NOx	SOx	PM10	CO	VOC	Number of Outstanding ATCs
S	8282	72	0	1825	123	164	44321	3139	0
S	8282	73	0						0
S	8282	74	0						0
S	8282	75	0	0	0	0	0	73	0
S	8282	76	0	0	0	0	0	37	0
S	8282	87	2	0	0	0	0	146	0
S	8282	88	2	0	0	0	0	146	0
*SSPE (lbs)				672736	81329	46867	5346605	1102118	

* Blank values, potential emissions for unconverted ATCs,
 & ERCs for onsite reductions have not been
 factored in (Facility is assumed a major source
 for SO_x & PM₁₀ due to this).

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Notes:

Blank values for a particular permit unit do not necessarily reflect zero emissions. For units with blank values, the PE must still be determined based on physical PE or as limited by permit condition.

For permits that show outstanding ATCs, consult PAS ATC Emission Profile records to determine what the highest PE is for each pollutant.

ATCs for new units (e.g. S-XXXX-X-0) must be added in separately.

ERC's for onsite reductions must be added in separately per Rule 2201 as well.

Appendix H

Authority to Construct Permits S-8282-124-0 and '125-0



San Joaquin Valley
AIR POLLUTION CONTROL DISTRICT



AUTHORITY TO CONSTRUCT

PERMIT NO: S-8282-124-0

ISSUANCE DATE: 07/17/2013

LEGAL OWNER OR OPERATOR: VINTAGE PRODUCTION CALIFORNIA LLC

MAILING ADDRESS: 9600 MING AVE, SUITE 300
BAKERSFIELD, CA 93311

LOCATION: LIGHT OIL WESTERN STATIONARY SOURCE
KERN COUNTY, CA

EQUIPMENT DESCRIPTION:

2.28 MMBTU/HR NATURAL GAS/FIELD GAS FIRED CAPSTONE MODEL C200 MICRO TURBINE POWERING A 200 KW ELECTRICAL GENERATOR AT VARIOUS UNSPECIFIED LOCATIONS WITHIN THE LIGHT OIL WESTERN STATIONARY SOURCE

CONDITIONS

1. This Authority to Construct serves as a written certificate of conformity with the procedural requirements of 40 CFR 70.7 and 70.8 and with the compliance requirements of 40 CFR 70.6(c). [District Rule 2201] Federally Enforceable Through Title V Permit
2. Prior to operating with modifications authorized by this Authority to Construct, the facility shall submit an application to modify the Title V permit with an administrative amendment in accordance with District Rule 2520 Section 5.3.4. [District Rule 2520, 5.3.4] Federally Enforceable Through Title V Permit
3. Prior to operating equipment under this Authority to Construct, permittee shall surrender NOX emission reduction credits for the following quantity of emissions: 1st quarter - 214 lb, 2nd quarter - 214 lb, 3rd quarter - 214 lb, and fourth quarter - 214 lb. These amounts include the applicable offset ratio specified in Rule 2201 Section 4.8 (as amended 4/21/11) for the ERC specified below. [District Rule 2201] Federally Enforceable Through Title V Permit
4. ERC Certificate Numbers C-1190-2, S-3585-2, and S-3592-2 (or certificates split from these certificates) shall be used to supply the required offsets, unless a revised offsetting proposal is received and approved by the District, upon which this Authority to Construct shall be reissued, administratively specifying the new offsetting proposal. Original public noticing requirements, if any, shall be duplicated prior to reissuance of this Authority to Construct. [District Rule 2201] Federally Enforceable Through Title V Permit
5. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]

CONDITIONS CONTINUE ON NEXT PAGE

YOU MUST NOTIFY THE DISTRICT COMPLIANCE DIVISION AT (661) 392-5500 WHEN CONSTRUCTION IS COMPLETED AND PRIOR TO OPERATING THE EQUIPMENT OR MODIFICATIONS AUTHORIZED BY THIS AUTHORITY TO CONSTRUCT. This is NOT a PERMIT TO OPERATE. Approval or denial of a PERMIT TO OPERATE will be made after an inspection to verify that the equipment has been constructed in accordance with the approved plans, specifications and conditions of this Authority to Construct, and to determine if the equipment can be operated in compliance with all Rules and Regulations of the San Joaquin Valley Unified Air Pollution Control District. Unless construction has commenced pursuant to Rule 2050, this Authority to Construct shall expire and application shall be cancelled two years from the date of issuance. The applicant is responsible for complying with all laws, ordinances and regulations of all other governmental agencies which may pertain to the above equipment.

Seyed Sadredin, Executive Director / APCO

DAVID WARNER, Director of Permit Services

S-8282-124-0; Jul 17 2013 8:15AM - RICKARDK : Joint Inspection Required with RICKARDK

6. The exhaust stack shall vent vertically upward. The vertical exhaust flow shall not be impeded by a rain cap (flapper ok), roof overhang, or any other obstruction. [District Rule 4102]
7. The permittee shall notify the District Compliance Division of each location at which the operation is located at which the operation is located in excess of 24 hours. Such notification shall be made no later than 48 hours after starting operation at the location. [District Rule 1070]
8. Turbine must be at least 197 feet from the property boundary. [District Rule 4102]
9. This unit shall not be operated within 1,000 feet of any K-12 school. [District Rule 4102]
10. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
11. No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101] Federally Enforceable Through Title V Permit
12. Emission rates from this unit shall not exceed any of the following limits: NO_x (as NO₂) - 9.0 ppmvd @ 15% O₂; VOC - 5 ppmvd @ 15% O₂; CO - 10 ppmvd @ 15% O₂; or PM₁₀ - 0.0066 lb/MMBtu. [District Rules 2201 and 4201] Federally Enforceable Through Title V Permit
13. The turbine shall only burn produced gas and/or PUC quality gas with a fuel sulfur concentration not exceeding 0.75 gr/100 dscf. [District Rules 2201 and 4801] Federally Enforceable Through Title V Permit
14. Permittee shall measure and record fuel gas sulfur content (H₂S) within 60 days of initial start-up, upon any change in the gas fuel source, and at least once every 12 months thereafter. [District Rule 2201] Federally Enforceable Through Title V Permit
15. Permittee shall determine sulfur content of gas consumed by the turbine using ASTM method D3246 or double GC for H₂S and mercaptans. [District Rule 2201] Federally Enforceable Through Title V Permit
16. The permittee shall monitor and record the stack concentration of NO_x, CO, and O₂ within 60 days of initial start-up at each location and at least once every 12 months thereafter, using a portable emission monitor that meets District specifications. Monitoring shall not be required if the unit is not in operation, i.e. the unit need not be started solely to perform monitoring. [District Rule 2201] Federally Enforceable Through Title V Permit
17. If either the NO_x or CO concentrations corrected to 15% O₂, as measured by the portable analyzer, exceed the allowable emissions concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 1 hour of operation after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 1 hour of operation after detection, the permittee shall notify the District within the following 1 hour and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rule 2201] Federally Enforceable Through Title V Permit
18. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rule 2201] Federally Enforceable Through Title V Permit
19. The permittee shall maintain records of: (1) the date and time of O₂ and NO_x measurements, (2) the O₂ concentration in percent and the measured NO_x concentration corrected to 15% O₂, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rule 2201] Federally Enforceable Through Title V Permit
20. Permittee shall maintain an accurate record of each location where this turbine is operated and the sulfur content (H₂S) of the gas from each fuel source. [District Rules 1070 and 2201] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

21. All records shall be maintained and retained on-site for a period of at least 5 years and shall be made available for District inspection upon request. [District Rule 1070]



San Joaquin Valley
AIR POLLUTION CONTROL DISTRICT



AUTHORITY TO CONSTRUCT

PERMIT NO: S-8282-125-0

ISSUANCE DATE: 07/17/2013

LEGAL OWNER OR OPERATOR: VINTAGE PRODUCTION CALIFORNIA LLC

MAILING ADDRESS: 9600 MING AVE, SUITE 300
BAKERSFIELD, CA 93311

LOCATION: LIGHT OIL WESTERN STATIONARY SOURCE
KERN COUNTY, CA

EQUIPMENT DESCRIPTION:

2.28 MMBTU/HR NATURAL GAS/FIELD GAS FIRED CAPSTONE MODEL C200 MICRO TURBINE POWERING A 200 KW ELECTRICAL GENERATOR AT VARIOUS UNSPECIFIED LOCATIONS WITHIN THE LIGHT OIL WESTERN STATIONARY SOURCE

CONDITIONS

1. This Authority to Construct serves as a written certificate of conformity with the procedural requirements of 40 CFR 70.7 and 70.8 and with the compliance requirements of 40 CFR 70.6(c). [District Rule 2201] Federally Enforceable Through Title V Permit
2. Prior to operating with modifications authorized by this Authority to Construct, the facility shall submit an application to modify the Title V permit with an administrative amendment in accordance with District Rule 2520 Section 5.3.4. [District Rule 2520, 5.3.4] Federally Enforceable Through Title V Permit
3. Prior to operating equipment under this Authority to Construct, permittee shall surrender NOX emission reduction credits for the following quantity of emissions: 1st quarter - 214 lb, 2nd quarter - 214 lb, 3rd quarter - 214 lb, and fourth quarter - 214 lb. These amounts include the applicable offset ratio specified in Rule 2201 Section 4.8 (as amended 4/21/11) for the ERC specified below. [District Rule 2201] Federally Enforceable Through Title V Permit
4. ERC Certificate Numbers C-1190-2, S-3585-2, and S-3592-2 (or certificates split from these certificates) shall be used to supply the required offsets, unless a revised offsetting proposal is received and approved by the District, upon which this Authority to Construct shall be reissued, administratively specifying the new offsetting proposal. Original public noticing requirements, if any, shall be duplicated prior to reissuance of this Authority to Construct. [District Rule 2201] Federally Enforceable Through Title V Permit
5. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]

CONDITIONS CONTINUE ON NEXT PAGE

YOU MUST NOTIFY THE DISTRICT COMPLIANCE DIVISION AT (661) 392-5500 WHEN CONSTRUCTION IS COMPLETED AND PRIOR TO OPERATING THE EQUIPMENT OR MODIFICATIONS AUTHORIZED BY THIS AUTHORITY TO CONSTRUCT. This is NOT a PERMIT TO OPERATE. Approval or denial of a PERMIT TO OPERATE will be made after an inspection to verify that the equipment has been constructed in accordance with the approved plans, specifications and conditions of this Authority to Construct, and to determine if the equipment can be operated in compliance with all Rules and Regulations of the San Joaquin Valley Unified Air Pollution Control District. Unless construction has commenced pursuant to Rule 2050, this Authority to Construct shall expire and application shall be cancelled two years from the date of issuance. The applicant is responsible for complying with all laws, ordinances and regulations of all other governmental agencies which may pertain to the above equipment.

Sayed Sadredin, Executive Director / APCO

DAVID WARNER, Director of Permit Services

S-8282-125-0, Jul 17 2013 8:16AM - RICKARDK : Joint Inspection Required with RICKARDK

6. The exhaust stack shall vent vertically upward. The vertical exhaust flow shall not be impeded by a rain cap (flapper ok), roof overhang, or any other obstruction. [District Rule 4102]
7. The permittee shall notify the District Compliance Division of each location at which the operation is located at which the operation is located in excess of 24 hours. Such notification shall be made no later than 48 hours after starting operation at the location. [District Rule 1070]
8. Turbine must be at least 197 feet from the property boundary [District Rule 4102]
9. This unit shall not be operated within 1,000 feet of any K-12 school. [District Rule 4102]
10. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
11. No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101] Federally Enforceable Through Title V Permit
12. Emission rates from this unit shall not exceed any of the following limits: NO_x (as NO₂) - 9.0 ppmvd @ 15% O₂; VOC - 5 ppmvd @ 15% O₂; CO - 10 ppmvd @ 15% O₂; or PM₁₀ - 0.0066 lb/MMBtu. [District Rules 2201 and 4201] Federally Enforceable Through Title V Permit
13. The turbine shall only burn produced gas and/or PUC quality gas with a fuel sulfur concentration not exceeding 0.75 gr/100 dscf. [District Rules 2201 and 4801] Federally Enforceable Through Title V Permit
14. Permittee shall measure and record fuel gas sulfur content (H₂S) within 60 days of initial start-up, upon any change in the gas fuel source, and at least once every 12 months thereafter. [District Rule 2201] Federally Enforceable Through Title V Permit
15. Permittee shall determine sulfur content of gas consumed by the turbine using ASTM method D3246 or double GC for H₂S and mercaptans. [District Rule 2201] Federally Enforceable Through Title V Permit
16. The permittee shall monitor and record the stack concentration of NO_x, CO, and O₂ within 60 days of initial start-up at each location and at least once every 12 months thereafter, using a portable emission monitor that meets District specifications. Monitoring shall not be required if the unit is not in operation, i.e. the unit need not be started solely to perform monitoring. [District Rule 2201] Federally Enforceable Through Title V Permit
17. If either the NO_x or CO concentrations corrected to 15% O₂, as measured by the portable analyzer, exceed the allowable emissions concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 1 hour of operation after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 1 hour of operation after detection, the permittee shall notify the District within the following 1 hour and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rule 2201] Federally Enforceable Through Title V Permit
18. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rule 2201] Federally Enforceable Through Title V Permit
19. The permittee shall maintain records of: (1) the date and time of O₂ and NO_x measurements, (2) the O₂ concentration in percent and the measured NO_x concentration corrected to 15% O₂, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rule 2201] Federally Enforceable Through Title V Permit
20. Permittee shall maintain an accurate record of each location where this turbine is operated and the sulfur content (H₂S) of the gas from each fuel source. [District Rules 1070 and 2201] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

21. All records shall be maintained and retained on-site for a period of at least 5 years and shall be made available for District inspection upon request. [District Rule 1070]