



DEC 3 1 2013

Mr. Joey Barulich
Vintage Production California, LLC
9600 Ming Avenue, Suite 300
Bakersfield, CA 93311

**Re: Proposed ATC / Certificate of Conformity (Significant Mod)
District Facility # S-1738
Project # S-1134513**

Dear Mr. Barulich:

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. This project involves operating five transportable micro turbines at various unspecified locations within Vintage Production California's Light Oil Western Stationary Source within Kern County, California.

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. Leonard Scandura, Permit Services Manager, at (661) 392-5500.

Thank you for your cooperation in this matter.

Sincerely,



David Warner
Director of Permit Services

Enclosures

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

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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

Initially this equipment will be operated in the SW/4 of Section 25, T11N, R21W. VPC has requested that the equipment be operated at various unspecified locations within their 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.

V. Equipment Listing

All Units: 0.871 MMBTU/HR NATURAL GAS/FIELD GAS FIRED CAPSTONE MODEL C65 MICRO TURBINE POWERING A 65 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 8710 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				
	ppmvd @ 15% O ₂	g/hp-hr	lb/MMBtu	Source
NO _x	9	0.16	-	Manufacturer Data
SO _x	-	-	0.00214 ¹	Mass Balance
PM ₁₀	-	-	0.0066	AP-42 Table 3.1-2a
CO	40	0.42	-	Manufacturer Data
VOC	7	0.034	-	Manufacturer Data

$$1) \frac{0.75 \text{ gr} \cdot \text{S}}{100 \text{ dscf}} \left(\frac{\text{dscf}}{1,000 \text{ Btu}} \right) \frac{10^6 \text{ Btu}}{\text{MMBtu}} \left(\frac{1 \text{ lb}}{7,000 \text{ gr}} \right) \frac{64 \text{ lb} \cdot \text{SO}_2}{32 \text{ lb} \cdot \text{S}} = 0.00214 \frac{\text{lb} \cdot \text{SO}_2}{\text{MMBtu}}$$

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 65 kW (given by the manufacturer) to horsepower using a factor of 1.341 hp/kW resulting in each turbine having a maximum rating of 87 hp.

The potential to emit for each turbine is calculated as follows, based on the emission factor units listed previously, and summarized in the following table:

$$\begin{aligned} \text{PE2} &= \text{EF (lb/MMBtu)} * 0.871 \text{ (MMBtu/hr)} * 24 \text{ (hr/day)} \text{ or } 8,760 \text{ (hr/year); or,} \\ &= \text{EF (g/hp-hr)} * 87 \text{ (hp)} * (1 \text{ lb}/453.59 \text{ g}) * 24 \text{ (hr/day)} \text{ or } 8,760 \text{ (hr/year)} \end{aligned}$$

PE2		
	Daily Emissions (lb/day)	Annual Emissions (lb/year)
NO _x	0.7	269
SO _x	0.0	16
PM ₁₀	0.1	50
CO	1.9	706
VOC	0.2	57

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	VOC	SO ₂	CO	PM	PM ₁₀	CO _{2e}
Estimated Facility PE before Project Increase	*	*	*	*	*	*	>100,000**
PSD Major Source Thresholds	250	250	250	250	250	250	100,000
PSD Major Source ? (Y/N)	-	-	-	-	-	-	Y

*Emissions not quantified since the source is a major PSD source for other pollutants

**Due to the large number of combustion equipment operated by Occidental Petroleum and Subsidiary, Vintage Production California (comprised of stationary sources S-382, S-1216, S-1738, and S-8282) it is assumed that this source is at least major for CO_{2e}

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 emissions 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.

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	1,345	50,000	No
SO _x	NA*	80,000	No
PM ₁₀	NA*	30,000	No
VOC	NA*	50,000	No

*Any emissions increases of 0.54 lb/day for a single pollutant calculated on an emissions unit by emissions unit basis rounds to zero for NSR purposes (APR 1130).

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.

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/yr)	Thresholds (lb/yr)	Federal Major Modification?
NO _x *	1,345	0	Yes
VOC*	0***	0	No
PM ₁₀	0***	30,000	No
PM _{2.5} **	0***	20,000	No
SO _x	0***	80,000	No

*If there are 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.

***Any emissions increases of 0.54 lb/day for a single pollutant calculated on an emissions unit by emissions unit basis rounds to zero for NSR purposes (APR 1130).

Since there is an increase in NO_x 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 futher 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.

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

$$(0.871 \text{ MMBtu/hr}) \times (5 \text{ turbines}) \times (116.67 \text{ lb-CO}_2\text{e/MMBtu}) \times (8,760 \text{ hrs/yr}) \\ = 4,450,937 \text{ lb-CO}_2\text{e/yr}$$

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	0.7	0.0	1.8	0.0 ¹	0.0	2,225
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-018 was issued for these micro turbines 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 these units 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 five 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 emissions. Therefore BACT is triggered for NO_x for all emissions units in the project for which there is an emission increase.

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.

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

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:

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

Permit No.	Post Project Potential to Emit [PE2] (lb/ yr)				
	NO _x	SO _x	PM ₁₀	CO	VOC
S-1738-487	269	16	50	706	57
S-1738-488	269	16	50	706	57
S-1738-489	269	16	50	706	57
S-1738-490	269	16	50	706	57
S-1738-491	269	16	50	706	57

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

Permit No.	Offsets Required [PE2 - BE] (lb/yr)				
	NO _x	SO _x	PM ₁₀	CO	VOC
S-1738-487	269	16	50	706	57
S-1738-488	269	16	50	706	57
S-1738-489	269	16	50	706	57
S-1738-490	269	16	50	706	57
S-1738-491	269	16	50	706	57
Sum =	1,345	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 (since the VOC increase rounds to zero it will not be required to be offset) is 1.5:1.

The amount of NO_x ERCs that need to be withdrawn for each unit is:

$$\begin{aligned} \text{Offsets Required (lb/year)} &= ([269 - 0] + 0) \times 1.5 \\ &= 269 \times 1.5 \\ &= 404 \text{ lb NO}_x\text{/year} \end{aligned}$$

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>
101	101	101	101

The applicant has stated that the facility plans to use ERC certificates S-4073-2, N-1127, and N-1148-2 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 #S-4073-2	550	550	550	308
With the following reservations:				
	<u>1st Quarter</u>	<u>2nd Quarter</u>	<u>3rd Quarter</u>	<u>4th Quarter</u>
S-1131067	542	542	542	308
Remainder =	8	8	8	0

	<u>1st Quarter</u>	<u>2nd Quarter</u>	<u>3rd Quarter</u>	<u>4th Quarter</u>
ERC #N-1127-2	277	277	277	277
No prior reservations				

	<u>1st Quarter</u>	<u>2nd Quarter</u>	<u>3rd Quarter</u>	<u>4th Quarter</u>
ERC #N-1148-2	63,927	60,771	63,015	64,150
With the following reservations:				
	<u>1st Quarter</u>	<u>2nd Quarter</u>	<u>3rd Quarter</u>	<u>4th Quarter</u>
S-1134181	1,545	1,545	1,545	1,545
S-1134319	542	542	542	542
Remainder =	61,840	58,684	60,928	62,063

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 #S-4073-2	8	8	8	0
ERC #N-1127-2	277	277	277	277
ERC #N-1148-2	220	220	220	228
Total:	505	505	505	505

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:

- {GC# 4447 - edited} 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 - 101 lb, 2nd quarter - 101 lb, 3rd quarter - 101 lb, and fourth quarter - 101 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 S-4073-2, N-1127-2, and N-1148-2 (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. As shown previously the SSIPE is less than 20,000 lb/year for all pollutants; 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) and a public notice will be published in a local newspaper of general circulation prior to the issuance of the ATC 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 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 - 7 ppmvd @ 15% O₂; CO - 40 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:

- 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 condition(s) are listed on the permit to operate:

- 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 0.871 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 0.871 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 0.065 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		
	Cancer Risk	T-BACT Required
Each Unit (identical)	0.038 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.

- {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]
- Turbine shall always operate at least 165 feet from any receptor. [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.

$$0.0066 \frac{lb}{10^6 Btu} \times \frac{453.6 g}{1 lb} \times \frac{10^6 Btu}{9,051 dscf} \times \frac{0.35 Btu_{out}}{1 Btu_{in}} \times \frac{15.43 grain}{g} = 0.0018 \frac{grain}{dscf}$$

Since 0.0018 grain/dscf is less than 0.1 grain/dscf, compliance with this rule is expected.

The following condition will ensure compliance:

- Emission rates from this unit shall not exceed any of the following limits: NOx (as NO2) - 9.0 ppmvd @ 15% O2; VOC - 7 ppmvd @ 15% O2; CO - 40 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 0.065 MW and have a maximum heat input rating of 871,000 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.

$$\text{Volume SO}_2 = nRT/P$$

$$n = \text{moles SO}_2$$

$$T (\text{standard temperature}) = 60^\circ \text{F or } 520^\circ \text{R}$$

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

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

Since 1.5 ppmv is \leq 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.

District CEQA Findings

The District performed an Engineering Evaluation (this document) for the proposed project and determined that the activity consists of issuing a permit for a piece of transportable equipment to be used at various locations within the District. The District makes the following findings regarding this activity: 1) Issuance of the permit does not have a significant environmental impact. 2) Assessment of potential environmental effects resulting from the use of the transportable equipment on a development project is the responsibility of the Lead Agency approving the specific project, and will be determined on a project specific basis. The District has determined that no additional findings are required.

IX. Recommendation

Compliance with all applicable rules and regulations is expected. Pending a successful NSR and COC Public Noticing period, issue ATCs S-1738-487-0 through '491-0 subject to the permit conditions on the attached draft ATCs in **Appendix A**.

X. Billing Information

Annual Permit Fees			
Permit Number	Fee Schedule	Fee Description	Annual Fee
S-1738-487-0	3020-08-A	65 kW	\$259.00
S-1738-488-0	3020-08-A	65 kW	\$259.00
S-1738-489-0	3020-08-A	65 kW	\$259.00
S-1738-490-0	3020-08-A	65 kW	\$259.00
S-1738-491-0	3020-08-A	65 kW	\$259.00

Appendices

- A: Draft ATCs
- B: Process Flow Diagram
- C: BACT Guideline
- D: BACT Analysis
- E: HRA/AAQA Summary
- F: Compliance Certifications
- G: SSPE1 Tabulation

Appendix A

Draft ATCs

San Joaquin Valley
Air Pollution Control District

AUTHORITY TO CONSTRUCT

ISSUANCE DATE: DRAFT

PERMIT NO: S-1738-487-0 *All permits are identical*

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:

0.871 MMBTU/HR NATURAL GAS/FIELD GAS FIRED CAPSTONE MODEL C65 MICRO TURBINE POWERING A 65 KW ELECTRICAL GENERATOR AT VARIOUS UNSPECIFIED LOCATIONS WITHIN THE LIGHT OIL WESTERN STATIONARY SOURCE

CONDITIONS

- {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
- {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
- Prior to operating equipment under this Authority to Construct, permittee shall surrender NOX emission reduction credits for the following quantity of emissions: 1st quarter - 101 lb, 2nd quarter - 101 lb, 3rd quarter - 101 lb, and fourth quarter - 101 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
- ERC Certificate Numbers S-4073-2, N-1127-2, and N-1148-2 (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
- {98} 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-1738-487-0 : Dec 20 2013 8:57AM - RICHARDSON : Joint Inspection NOT Required

6. {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]
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 shall always operate at least 165 feet from any receptor. [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 - 7 ppmvd @ 15% O₂; CO - 40 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

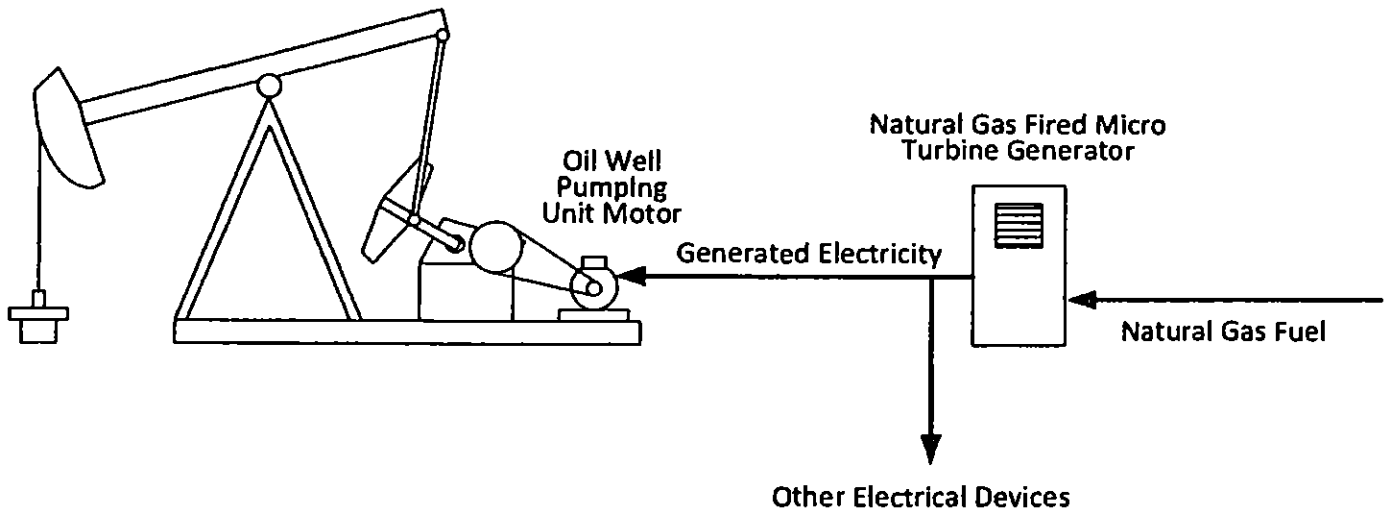
CONDITIONS CONTINUE ON NEXT PAGE

21. {3246} 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]

DRAFT

Appendix B

Process Flow Diagram



Vintage Production California, LLC
Application For Authority To Construct For Five 65kW Micro Turbine Electric Generators
MICRO TURBINE GENERATOR PROCESS FLOW DIAGRAM

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 - Permit Specific BACT Determinations on Next Page(s)**

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 4th quarter 2002, 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

To: Kris Rickards – Permit Services
 From: Ester Davila – Technical Services
 Date: December 12, 2013
 Facility Name: Vintage Production California, LLC
 Location: Various Unspecified Locations within LOW (S1738)
 Application #(s): S-1738-487-0 thru 491-0
 Project #: S-1134513

A. RMR SUMMARY

RMR Summary			
Categories	5 Field Gas Micro Turbines (Units 487-0 thru 491-0)	Project Totals	Facility Totals
Prioritization Score	0.003 (each)	0.013	>1
Acute Hazard Index	0.00 (each)	0.00	0.48
Chronic Hazard Index	0.00 (each)	0.00	0.08
Maximum Individual Cancer Risk	3.8E-8 (each)	1.92E-07 ¹	9.23E-06 ²
T-BACT Required?	No		
Special Permit Conditions?	Yes		

¹The project cancer score is based on a minimum receptor distance of 165 feet.

²The facility has almost reached its maximum allowed Cancer Risk of 10 in a million. This score reflects remodeling of Project # S-1120872 with site specific location, changing the project cancer risk from 1.54E-6 to 4.97E-8. No further projects will be allowed without first re-examining all previous projects.

Proposed Permit Conditions

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

Units 487-0 thru 491-0:

1. {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
2. The micro turbines shall always operate at least 165 feet away from any receptor.

I. Project Description

Technical Services received a request on December 4, 2013, to perform a Risk Management Review for five identical, field gas-fired micro turbines to be authorized to operate at various unspecified locations within facility S-1738 (LOW).

II. Analysis

Toxic emissions for the project were calculated using District approved emissions factors for field gas-fired internal combustion for turbines. In accordance with the District's *Risk Management Policy for Permitting New and Modified Sources* (APR 1905-1, March 2, 2001), risks from the project were prioritized using the procedures in the 1990 CAPCOA Facility Prioritization Guidelines and incorporated in the District's HEART's database. The prioritization score for the project was less than 1.0 (see RMR Summary Table), however, the total facility prioritization score was greater than one, consequently further analysis was required. A refined Health Risk Assessment was performed for the project. AERMOD was used with point source parameters outlined below and the 5-year concatenated meteorological data from 2004 to 2008 for Fellows to determine maximum dispersion factors at the nearest residential and business receptors. The dispersion factors were input into the HARP model to calculate the Chronic and Acute Hazard Indices and the Carcinogenic Risk.

The following parameters were used for the review:

Analysis Parameters (Units 487-0 to 491-0 - each)			
Source Type	Point	Closest Receptor (ft)	165*
Stack Height (m)	2.74	Type of Receptor	Residence & Business
Stack Diameter (m)	0.254	Location Type	Rural
Stack Gas Temperature (K)	584.26	Stack Gas Velocity (m/sec)	17.23

*The receptor distance will be placed as conditions on all five units.

Technical Services also performed modeling for criteria pollutants CO, NO_x, SO_x, and PM₁₀; as well as the RMR. The emission rates used for criteria pollutant modeling were 0.08 lb/hr CO, 0.03 lb/hr NO_x, 0.00 lb/hr SO_x, and 0.01 lb/hr PM₁₀, per each micro turbine.

The results from the Criteria Pollutant Modeling are as follows:

Criteria Pollutant Modeling Results*
 Values are in µg/m³

5 Micro Turbines	1 Hour	3 Hours	8 Hours	24 Hours	Annual
CO	Pass ¹	X	Pass ¹	X	X
NO _x	Pass ¹	X	X	X	Pass ¹
SO _x	Pass ¹	Pass ¹	X	Pass ²	Pass ²
PM ₁₀	X	X	X	Pass ²	Pass ²
PM _{2.5}	X	X	X	Pass ²	Pass ²

*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.

²The criteria pollutants are below EPA's level of significance as found in 40 CFR Part 51.165 (b)(2).

III. Conclusions

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.

The acute and chronic indices are below 1.0; and the maximum individual cancer risk associated with each unit is below the 1 in a million threshold. In accordance with the District's Risk Management Policy, the project is approved **without** Toxic Best Available Control Technology (T-BACT).

To ensure that human health risks will not exceed District allowable levels; the permit conditions listed on Page 1 of this report must be included for each proposed unit.

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

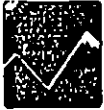
RMR Request Form & Attachments
Project Related Emails
Prioritization
Risk Result Pages
Facility Summary

Appendix F

Compliance Certifications

NOV 26 2013

SJVAPCD
Southern Region



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



TITLE V MODIFICATION - COMPLIANCE CERTIFICATION FORM

I. TYPE OF PERMIT ACTION (Check appropriate box)

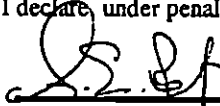
- SIGNIFICANT PERMIT MODIFICATION ADMINISTRATIVE
 MINOR PERMIT MODIFICATION AMENDMENT

COMPANY NAME: Vintage Production California LLC	FACILITY ID: S - 1738
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: Joey Barulich	

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:


 Signature of Responsible Official

11/25/13
 Date

Stephen E. Bartz

 Name of Responsible Official (please print)

Operations Team Lead

 Title of Responsible Official (please print)

CERTIFICATION

Vintage Production California LLC (VPC) hereby certifies as follows:

1. VPC 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 VPC stationary sources in the SJVUAPCD, have the meaning ascribed thereto in SJVUAPCD Rule 2201, Section 3.23, and shall, with respect to all of Vintage 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 VPC 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 VPC's major stationary sources in the State of California by those employees of VPC who have operational responsibility for compliance. In conducting such reviews, VPC 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: *Danny B...* Date: 12-4-2013
Title: *Operations Lead* Time: 4:00 PM

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	14	89615	3650	8497	386228	231790	1
S	382	62	14	89815	3850	8497	386228	231790	1
S	382	63	14	89615	3650	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	80	11	0	0	0	0	190	0
S	382	81	11	0	0	0	0	118	0
S	382	82	11	0	0	0	0	138	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	118	0
S	382	95	7	0	0	0	0	177	0
S	382	96	12	0	0	0	0	118	0
S	382	97	7	0	0	0	0	219	0
S	382	100	10	0	0	0	0	277	0
S	382	110	14	0	0	0	0	223	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 Facility</i>	<i>Unit 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	111	9	0	0	0	36	0
S	382	112	7	0	0	0	116	0
S	382	113	9	0	0	0	355	0
S	382	116	11	0	0	0	234	0
S	382	124	25	0	0	0	876	1
S	382	131	13	0	0	0	131	0
S	382	132	15	0	0	0	116	0
S	382	138	20	0	0	0	949	1
S	382	138	7	0	0	0	277	0
S	382	139	11	0	0	0	628	0
S	382	140	11	0	0	0	365	0
S	382	156	5					0
S	382	157	5					0
S	382	158	13	0	0	0	4234	2
S	382	159	9	0	0	0	444	0
S	382	161	15	0	0	0	838	0
S	382	162	13	0	0	0	51	0
S	382	163	11	0	0	0	69	1
S	382	177	7	0	0	0	68	0
S	382	178	7	0	0	0	66	0
S	382	179	7	0	0	0	66	0
S	382	181	6					0
S	382	183	8	0	0	0	51	0
S	382	187	8	0	0	0	37	0
S	382	189	7	0	0	0	66	0
S	382	190	8	0	0	0	73	0
S	382	191	7	0	0	0	66	0
S	382	197	7	0	0	0	68	0
S	382	198	7	0	0	0	66	0

Friday, December 20, 2013

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Notes:

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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.

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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	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	210	7	0	0	0	0	66	1
S	382	261	8	0	0	0	0	37	0
S	382	262	8	0	0	0	0	37	0
S	382	263	9	0	0	0	0	44	0
S	382	265	9	0	0	0	0	36	0
S	382	266	7	0	0	0	0	66	0
S	382	267	7	0	0	0	0	66	0
S	382	283	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
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	298	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	89	0
S	382	304	9	0	0	0	0	66	0

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Notes:

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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	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
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	9	1275	8	69	2096	17	0
S	382	422	11	1486	0	22	205	59	0
S	382	594	3						0
S	382	597	8	0	0	0	0	73	0
S	382	669	3						0
S	382	670	12	20236	18	1314	77263	29996	1
S	382	671	12	20236	18	1314	77263	29996	1
S	382	672	13	20236	18	1314	77263	29996	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

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Notes:

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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	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	882	3						0
S	382	883	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
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	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	8	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	8	0	0	0	0	365	0

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Notes:

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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	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	0
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	811	1	0	0	0	0	73	0
S	382	814	1	0	0	0	0	37	0
S	382	815	2	96	0	3	24	41	0
S	1216	0	1						0
S	1218	84	5	0	0	0	0	110	0
S	1216	68	1	0	0	0	0	33	0
S	1216	67	1	1537	41	193	29959	643	0
S	1216	70	1	439	69	239	2981	759	0
S	1216	71	1	1998	314	571	13700	3498	1
S	1216	72	1	0	0	0	0	37	0
S	1218	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	1218	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

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Notes:

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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	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						2
S	1738	23	4						0
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	1
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

Friday, December 20, 2013

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Notes:

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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 Facility</i>	<i>Unit 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	58 13	635	221	635	59370	1366	0
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 8	2249	0	0	14600	7300	0
S 1738	87 13	635	221	635	68288	1567	0
S 1738	88 8	1095			53186	2409	0
S 1738	92 13	596	207	282	53186	2409	0
S 1738	93 10	596	37	256	64021	2884	0
S 1738	94 8	1095			53186	2409	0
S 1738	97 12	495	9	197	53186	2409	0
S 1738	111 9	6498	229	438	119830	25550	0
S 1738	118 15	2628	183	256	64021	4526	0
S 1738	122 14	596	207	282	64020	2900	0
S 1738	124 8	1318			64020	2900	0
S 1738	130 8	2671	0	0	849334	0	0
S 1738	131 11	596	125	237	64020	2900	0
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

Friday, December 20, 2013

Notes:

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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.

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<i>Region Facility</i>	<i>Unit 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	218	4	0	0	0	0	0
S 1738	219	4	0	0	0	0	0
S 1738	220	4	0	0	0	1026	0
S 1738	225	3					0
S 1738	226	5					0
S 1738	232	7	0	0	0	51	0
S 1738	239	4	0	0	0	668	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
S 1738	245	5					0
S 1738	246	5					0
S 1738	257	4	0	0	0	684	0
S 1738	258	5	0	0	0	0	0
S 1738	267	6					1
S 1738	279	4	2323	0	260	12642	957
S 1738	280	3					0
S 1738	281	3					0
S 1738	282	4	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	438	0
S 1738	292	6	0	0	0	0	0
S 1738	293	4	0	0	0	0	0
S 1738	294	6	0	0	0	888	0
S 1738	295	6	0	0	0	888	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	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	348	3						1
S	1738	347	0	956	7	113	5203	923	0
S	1738	349	1	7665	0	897	41180	7002	0
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	3	635	221	635	68288	1648	0
S	1738	360	3	635	221	635	68288	763	0
S	1738	361	3	635	221	635	68288	1848	0
S	1738	362	3	835	221	635	103745	1526	0
S	1738	363	5	965	67	458	103745	1526	0
S	1738	364	3	2136	67	458	103745	1526	1
S	1738	365	5	635	221	635	103745	1526	0
S	1738	366	3	635	221	635	103745	1526	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	367	1	1095	34	235	53186	782	0
S	1738	368	3	635	221	635	58510	4198	0
S	1738	369	1	1095	34	235	53188	782	0
S	1738	370	1						0
S	1738	371	3	635	221	635	68288	1848	0
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	1
S	1738	377	1	903	3	31	3076	502	0
S	1738	378	1	913	0	37	3066	511	1
S	1738	379	2	903	3	31	3076	502	1
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	1
S	1738	383	1	935	3	31	3188	519	0
S	1738	384	1	903	3	31	3078	502	1
S	1738	385	1	1095	3	31	3723	594	1
S	1738	388	1	903	3	31	3078	502	0
S	1738	387	1	913	0	37	3066	511	0
S	1738	388	1	903	3	31	3076	502	1
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	3078	502	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	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	1
S	1738	405	1	903	3	31	3076	502	0
S	1738	406	1	935	3	31	3188	518	0
S	1738	407	3	903	3	31	3076	502	0
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

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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	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
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	7	0	0	0	0	0	0	0

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

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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	8282	8	0	0	0	0	0	0	0
S	8282	9	3	0	0	0	0	88	1
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	17	0	0	0	0	0	0	1
S	8282	18	0						0
S	8282	19	0	0	0	0	0	1466	0
S	8282	23	2	0	0	0	0	376	0
S	8282	24	2	0	0	0	0	37	0
S	8282	25	2	0	0	0	0	37	0
S	8282	28	0	0	0	0	0	73	0
S	8282	29	0	0	0	0	0	37	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	0
S	8282	33	0	0	0	0	0	9	1
S	8282	42	0	0	0	0	0		1
S	8282	43	0	0	0	0	0	37	0
S	8282	44	0	0	0	0	0	29	0
S	8282	46	0						0
S	8282	47	0						1
S	8282	48	0	0	0	0	0	37	0
S	8282	49	0	0	0	0	0	37	0
S	8282	50	0	0	0	0	0		0
S	8282	51	0						0
S	8282	53	0						0
S	8282	54	0						1
S	8282	55	0	0	0	0	0	110	1

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Region	Facility	Unit	Mod	NOx	SOx	PM10	CO	VOC	Number of Outstanding ATCs
S	8282	56	0	0	0	0	0	3	0
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	81	0	2253	172	228	54750	3911	0
S	8282	62	0	1825	110	183	44311	3139	0
S	8282	63	0	2628	183	258	64021	4528	0
S	8282	64	0	0	0	0	0	37	0
S	8282	65	0	0	0	0	0	37	0
S	8282	66	0						0
S	8282	67	0	0	0	0	0	37	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
S	8282	72	0	1825	123	164	44321	3139	0
S	8282	73	0						0
S	8282	74	0						0
S	8282	76	0	0	0	0	0	73	0
S	8282	78	0	0	0	0	0	37	0
S	8282	78	1	0	0	0	0	37	0
S	8282	86	1	0	0	0	0	95	0
S	8282	87	2	0	0	0	0	148	0
S	8282	88	2	0	0	0	0	146	0
S	8282	89	1	0	0	0	0	37	0
S	8282	126	0	0	0	0	0	1521	0

ASSPE (lbs) 490945 59167 51537 5346605 1100453

Blank values, probable emissions for unconverted ATCs, & ERCs for onsite reductions have not been factored in - Facility is considered a major source for SOx & PM10 due to this. Friday, December 20, 2013 Page 15 of 15

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