



DEC 23 2011

Mr. William Fall
Chevron USA Inc
PO Box 1392
Bakersfield, CA 93302

**Re: Proposed ATC / Certificate of Conformity (Significant Mod)
District Facility # S-2010
Project # 1092524**

Dear Mr. Fall:

Enclosed for your review is the District's analysis of an application for Authorities to Construct for the facility identified above. The applicant is requesting that Certificates of Conformity with the procedural requirements of 40 CFR Part 70 be issued with this project. The project authorizes the installation of ten (10) new 85 MMBtu/hr and one (1) new 62.5 MMBtu/hr natural gas- fired steam generators.

After addressing any EPA comments made during the 45-day comment period, the Authorities to Construct will be issued to the facility with Certificates of Conformity. 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

DW: RE/cm

Enclosures

Seyed Sadredin
Executive Director/Air Pollution Control Officer

Northern Region
4800 Enterprise Way
Modesto, CA 95356-8718
Tel: (209) 557-6400 FAX: (209) 557-6475

Central Region (Main Office)
1990 E. Gettysburg Avenue
Fresno, CA 93726-0244
Tel: (559) 230-6000 FAX: (559) 230-6061

Southern Region
34946 Flyover Court
Bakersfield, CA 93308-9725
Tel: 661-392-5500 FAX: 661-392-5585



San Joaquin Valley
AIR POLLUTION CONTROL DISTRICT



HEALTHY AIR LIVING™

DEC 23 2011

Gerardo C. Rios, Chief
Permits Office
Air Division
U.S. EPA - Region IX
75 Hawthorne St.
San Francisco, CA 94105

**Re: Proposed ATC / Certificate of Conformity (Significant Mod)
District Facility # S-2010
Project # 1092524**

Dear Mr. Rios:

Enclosed for your review is the District's engineering evaluation of an application for Authorities to Construct for Chevron USA Inc in the Lost Hills oilfields within the light oil production stationary source in the western Kern County fields, which has been issued a Title V permit. Chevron USA Inc is requesting that Certificates of Conformity, with the procedural requirements of 40 CFR Part 70, be issued with this project. The project authorizes the installation of ten (10) new 85 MMBtu/hr and one (1) new 62.5 MMBtu/hr natural gas- fired steam generators.

Enclosed is the engineering evaluation of this application with a copy of the current Title V permit and proposed Authorities to Construct # S-2010-274-0 through '-285-0 with Certificates of Conformity. After demonstrating compliance with the Authority to Construct, the conditions will be incorporated into the facility's Title V permit through an administrative amendment.

Please submit your written comments on this project within the 45-day comment period that begins on the date you receive this letter. 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

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DEC 23 2011

Mike Tollstrup, Chief
Project Assessment Branch
Air Resources Board
P O Box 2815
Sacramento, CA 95812-2815

**Re: Proposed ATC / Certificate of Conformity (Significant Mod)
District Facility # S-2010
Project # 1092524**

Dear Mr. Tollstrup:

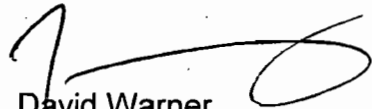
Enclosed for your review is the District's analysis of an application for Authorities to Construct for the facility identified above. The applicant is requesting that Certificates of Conformity with the procedural requirements of 40 CFR Part 70 be issued with this project. The project authorizes the installation of ten (10) new 85 MMBtu/hr and one (1) new 62.5 MMBtu/hr natural gas- fired steam generators.

Enclosed is the engineering evaluation of this application with a copy of the current Title V permit and proposed Authorities to Construct # S-2010-274-0 through -285-0 with Certificates of Conformity. After demonstrating compliance with the Authorities to Construct, the conditions will be incorporated into the facility's Title V permit through an administrative amendment.

Please submit your written comments on this project within the 30-day comment period that begins on the date you receive this letter. 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

DW: RE/cm

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**NOTICE OF PRELIMINARY DECISION
FOR THE ISSUANCE OF AUTHORITY TO CONSTRUCT**

NOTICE IS HEREBY GIVEN that the San Joaquin Valley Air Pollution Control District solicits public comment on the proposed modification of Chevron USA Inc for its steam production operation in the Lost Hills oilfields within the light oil production stationary source in the western Kern County fields, California. The project authorizes the installation of ten (10) new 85 MMBtu/hr and one (1) new 62.5 MMBtu/hr natural gas- fired steam generators.

The District's analysis of the legal and factual basis for this proposed action, project #1092524, is available for public inspection at the District office at the address below. This will be the public's only opportunity to comment on the specific conditions of the modification. If requested by the public, the District will hold a public hearing regarding issuance of this modification. For additional information, please contact Mr. Jim Swaney, Permit Services Manager, at (559) 230-5900. Written comments on the proposed initial permit must be submitted within 30 days of the publication date of this notice to DAVID WARNER, DIRECTOR OF PERMIT SERVICES, SAN JOAQUIN VALLEY AIR POLLUTION CONTROL DISTRICT, 34946 FLYOVER COURT, BAKERSFIELD, CA 93308.

San Joaquin Valley Air Pollution Control District
Authority to Construct Application Review
Ten 85 MMBtu/hr and One 62.5 MMBtu/hr Steam Generators

Facility Name:	Chevron USA Inc	Date:	December 20, 2011
Mailing Address:	PO Box 1392	Engineer:	Richard Edgehill
	Bakersfield, CA 93302	Lead Engineer:	Richard Karrs
Contact Person:	William Fall		
Telephone:	661) 654-7141		
Fax:	FAX (661) 654-7606		
E-Mail:	email.landilr@chevron.com		
Application #(s):	S-2010-274-0 through '-284-0		
Project #:	1092524		
Deemed Complete:	May 29, 2009		

I. Proposal

Chevron U.S.A. Inc. (CUSA) is requesting Authorities to Construct (ATC's) authorizing the installation of one (1) 62.5 MMBtu/hr and ten (10) 85 MMBtu/hr natural gas-fired steam generators. The proposed steam generators will be equipped with North American GLE low-NOx burner assemblies (or equivalent) capable of achieving NOx emissions of 7 ppmvd @ 3% O₂, flue gas recirculation (FGR), and will be authorized to operate at various specified locations within CUSA's light oil western stationary source in the Kern County fields.

Emissions from the installation of the 11 new steam generators will trigger BACT, offsets, and public notice.

CUSA facility S-2010 received their Title V Permit on April 30, 2004. Installation of the 11 new steam generators triggers a federal Major Modification is therefore is classified as a Title V Significant Modification. The facility has specifically requested that this project be processed with a Certificate of Conformity (COC), therefore the 45-day EPA comment period will be satisfied prior to the issuance of the Authorities to Construct. CUSA must apply to administratively amend their Title V Operating Permit to include the requirements of the ATC(s) issued with this project.

II. Applicable Rules

Rule 2010 Permits Required (December 17, 1992)
Rule 2201 New and Modified Stationary Source Review Rule (9/21/06)
Rule 2520 Federally Mandated Operating Permits (6/21/01)
Rule 4001 New Source Performance Standards (4/14/99)
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 4305 Boilers, Steam Generators & Process Heaters – Phase II (8/21/03)
 - Rule 4306 Boilers, Steam Generators & Process Heaters – Phase III (3/17/05)
 - Rule 4320 Advanced Emission Reduction Options for Boilers, Steam Generators, and Process Heaters Greater than 5.0 MMBtu/hr (10/16/08)
 - Rule 4351 Boilers, Steam Generators & Process Heaters – Phase I (8/21/03); **Not applicable**, located West of I-5.
 - Rule 4405 Oxides of Nitrogen Emissions From Existing Steam Generators Used in Thermally Enhanced Oil Recovery – Central and Western Kern County Fields (12/17/92); **Not applicable**, these are not existing steam generators.
 - Rule 4406 Sulfur compounds from Steam Generators – Kern County (12/17/92); **Not applicable** – ATCs issued after 9/12/79.
 - Rule 4801 Sulfur Compounds (12/17/92)
- 40 CFR Part 51 - Appendix S
 CH&SC 41700 Health Risk Assessment
 California Health & Safety Code 42301.6
 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 new steam generators will be authorized to operate at the following locations in source S-2010:

Equipment locations				
ATCs	Section	Township	Range	
S-2010-274-0 through S-2010-284-0	Section 29	26S	21E	MDB&M
	SE and SW Section 32	26S	21E	
	NW and SW Section 33	26S	21E	

The equipment is not located 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. A map of the proposed project area is included in **Attachment I**.

IV. Process Description

The eleven new steam generators will produce steam for thermally enhanced oil recovery (TEOR) operations within the Lost Hills Oilfield within the Western Kern County Light Oil Western Production Stationary Source.

Please note that the steam generators will only be authorized to combust PUC quality natural gas with a sulfur content not exceeding 1.0 grains-S per 100 scf will be used for fuel.

Each steam generator will be equipped with a North American GLE Low-NO_x burner and flue gas recirculation (FGR) capable of achieving 7 ppmvd NO_x (@ 3% O₂) which satisfies the Technologically Feasible requirement of District Rule 2201 Best Available Control Technology (BACT).

Start-up/Shutdown Period Provisions

CUSA has requested that startup and shutdown provisions be added to the ATCs. The following conditions are included on the ATCs to address the startup and shutdown emissions:

- Duration of start-up and shutdown shall not exceed 2 hours each per occurrence. [District Rules 2201, 4305, 4306, and 4320]
- Emission rates during startup and shutdown shall not exceed: NO_x – 116 ppmv @ 3% O₂ or 0.14 lb/MMBtu; CO 400 ppmv @ 3% O₂ or 0.296 lb/MMBtu. [District Rules 4101, 4102, 4301, 4405, 4406 and 4801]

Therefore daily emissions will be based on 116 ppmv NO_x @ 3% O₂ and 400 ppmv CO @ 3% O₂ for 4 hours per day and annual emissions based on 7 ppmv NO_x @ 3% O₂ and 25 ppmv CO @ 3% O₂.

V. Equipment Listing

The new steam generators will incorporate the following equipment and/or features:

- 85.0 MMBtu/hr rated North American model 4231-85-GLE low-NO_x burner assembly, or equivalent low-NO_x burner design, with flue gas recirculation (FGR) to achieve 7 ppmvd @ 3% O₂ for NO_x.
- Blower fan not to exceed 100 hp and equipped with variable speed drive (VSD).
- PUC quality gas fuel train components and controls to provide adequate pressure to the new burner.
- Incorporation of high-efficiency split-flow (dual-pass) radiant and convection sections. The convection section will consist of the lay-down split-flow style design.

A standard diagram of a steam generator equipped with a lay-down split-flow style convection section is provided in **Attachment II**.

S-2010-274-0 through S-283-0: 85 MMBTU/HR NATURAL GAS-FIRED STEAM GENERATOR WITH NORTH AMERICAN MODEL 4231-85-GLE LOW-NOX BURNER ASSEMBLY, OR EQUIVALENT LOW-NOX BURNER, WITH FLUE GAS RECIRCULATION, APPROVED TO OPERATE AT VARIOUS LOCATIONS

S-2010-284-0: 62.5 MMBTU/HR NATURAL GAS-FIRED STEAM GENERATOR WITH NORTH AMERICAN MODEL 4231-85-GLE LOW-NOX BURNER ASSEMBLY, OR EQUIVALENT LOW-NOX BURNER,

WITH FLUE GAS RECIRCULATION, APPROVED TO OPERATE AT VARIOUS LOCATIONS

As per District policy 1035 Flexibility in Equipment Descriptions in ATCs, some flexibility in the final specifications of the equipment will be allowed stated in the following ATC conditions:

The permittee shall obtain written District approval for the use of any equivalent equipment not specifically approved by this Authority to Construct. Approval of the equivalent equipment shall be made only after the District's determination that the submitted design and performance of the proposed alternate equipment is equivalent to the specifically authorized equipment. [District Rule 2201] N

The permittee's request for approval of equivalent equipment shall include the make, model, manufacturer's maximum rating, manufacturer's guaranteed emission rates, equipment drawing(s), and operational characteristics/parameters. [District Rule 2010] N

Alternate equipment shall be of the same class and category of source as the equipment authorized by the Authority to Construct. [District Rule 2201] N

No emission factor and no emission shall be greater for the alternate equipment than for the proposed equipment. No changes in the hours of operation, operating rate, throughput, or firing rate may be authorized for any alternate equipment. [District Rule 2201] N

VI. Emission Control Technology Evaluation

The steam generators will be equipped with ultra-low-NO_x burners and FGR capable of achieving NO_x and CO emissions of 7 ppmvd (@ 3% O₂) and 25 ppmvd (@ 3% O₂), respectively and will be fired exclusively on natural gas containing a sulfur content no greater than 1.0 grain-S/100 dsfc.

Low NO_x Burner Technology

Low-NO_x burners reduce NO_x formation by producing lower flame temperatures (and longer flames) than conventional burners. Low-NO_x burners delay the mixing of fuel and air by introducing the fuel (or sometimes air) in multiple stages. In the first stage, the air-fuel mixture is fuel-rich in which the oxygen is consumed in reactions with the fuel, thereby limiting excess oxygen available to react with nitrogen to produce thermal NO_x.

The combustion zones in the secondary and tertiary stages are maintained in a fuel-lean environment. The excess air in these stages helps to reduce the flame temperature, which in turn minimizes the reaction between excess oxygen and nitrogen. The North American burner incorporates patented internal mixing elements that pre-mix the fuel and air prior to combustion in the reaction zone. By completing a majority of the combustion in the burner reaction chamber, the low emissions of the burner are protected from process influences.

Flue Gas Recirculation Technology

The use of flue gas re-circulation (FGR) can reduce nitrogen oxides (NO_x) emissions by 60% to 70%. In an FGR system, a portion of the flue gas is re-circulated back to the inlet air. As flue gas is composed mainly of nitrogen and the products of combustion, it is much lower in oxygen than the inlet air and contains virtually no combustible hydrocarbons to burn. Thus, flue gas is practically inert. The addition of an inert mass of gas to the combustion reaction serves to

absorb heat without producing heat, thereby lowering the flame temperature. Since thermal NO_x is formed by high flame temperatures, the lower flame temperatures produced by FGR serve to reduce thermal NO_x.

Manufacturer's details on the low NO_x burner are provided in **Attachment III**.

VII. General Calculations

A. Assumptions

- The maximum operating schedule is 24 hours per day, 8,760 hr/year (365 days)
- Maximum heat input rating = 62.5 MMBtu/hr or 85 MMBtu/hr/unit
- Units are fired on PUC quality natural gas with ≤ 1.0 grain-S/100 dscf
- Natural Gas Heating Value: 1,000 Btu/scf
- F-Factor for Natural Gas @ 68°F: 8,710 dscf/MMBtu (40 CFR 60, Appendix B)
- F-Factor for Natural Gas @ 60°F: 8,578 dscf/MMBtu
- Gas Vol 68 °F = [(10.73 psi-ft³/lb-mol-R) x (528 R)]/(14.7 psi) = 385.4 ft³/lb-mol
- Gas Vol 60 °F = [(10.73 psi-ft³/lb-mol-R) x (520 R)]/(14.7 psi) = 379.6 ft³/lb-mol
- Startup and shut down of the units occur infrequently and do not affect annual emissions.
- The DEL for NO_x and CC is based on a worst case day with one startup and one shutdown (total transitional time = 4 hrs).

B. Emission Factors

Emission Factors			
Pollutant	Emission Factors		Source
NO _x	0.0085 lb-NO _x /MMBtu ⁽¹⁾	7 ppmv NO _x (@ 3%O ₂)	Applicant proposed and guaranteed by burner manufacturer (Attachment III); meets Technologically Feasible BACT in Guideline 1.2.1 (Attachment VI)
SO _x	0.00285 lb-SO _x /MMBtu ⁽²⁾	1.0 grain-S/100 scf	Proposed
PM ₁₀	0.0032 lb-PM ₁₀ /MMBtu	3.2 lb/10 ⁶ scf	Applicant proposed; based on representative source test (Attachment IV)
CO	0.0185 lb-CO/MMBtu ⁽²⁾	25 ppmv CO (@ 3%O ₂)	Applicant proposed and guaranteed by burner vendor (Attachment III)
VOC	0.0055 lb-VOC/MMBtu	5.5 lb/10 ⁶ scf	AP-42 Table 1.4-2

⁽¹⁾ $0.0085 \text{ lb-NO}_x/\text{mmbtu} = (7 \text{ ppmvd}/10^6)(8,578 \text{ dscf/MMBtu})(\text{lb-mol}/379.6 \text{ ft}^3)(46 \text{ lb/lb-mol})[20.9/(20.9-3)]$

⁽²⁾ $0.00285 \text{ lb-SO}_x/\text{mmbtu} = (0.01 \text{ gr-S}/\text{scf})(\text{lb}/7000 \text{ gr})(\text{scf}/1000 \text{ btu})(2 \text{ lb-SO}_2/\text{lb-S})(10^6)$

⁽³⁾ $0.0185 \text{ lb-CO}/\text{mmbtu} = (25 \text{ ppmvd}/10^6)(8,578 \text{ dscf/MMBtu})(\text{lb-mol}/379.6 \text{ ft}^3)(28 \text{ lb/lb-mol})[20.9/(20.9-3)]$

Startup/Shutdown (2 hr per occurrence)

Emission Factors			
Pollutant	Emission Factors		Source
NO _x	0.14 lb-NO _x /MMBtu ⁽¹⁾	116 ppmv NO _x (@ 3%O ₂)	Rule 4406 emissions limit
CO	0.296 lb-CO/MMBtu ⁽²⁾	400 ppmv CO (@ 3%O ₂)	Rule 4320 limit

⁽¹⁾ 0.14 lb-NO_x/mmbtu = (116 ppmvd/10⁶)(8,578 dscf/MMBtu)(lb-mol/379.6 ft³)(46 lb/lb-mol)[20.9/(20.9-3)]

⁽²⁾ 0.296 lb-CO/mmmtu = (400 ppmvd/10⁶)(8,578 dscf/MMBtu)(lb-mol/379.6 ft³)(28 lb/lb-mol)[20.9/(20.9-3)]

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)

S-2010-274-0 through '-283-0 (each)

Pollutant	Daily PE2			
	EF2 (lb/MMBtu)	Heat Input (MMBtu/hr)	Operating Schedule (hr/day)	Daily PE2 (lb/day)
NO _x	0.009	85	24	see below
SO _x	0.00285	85	24	5.8
PM ₁₀	0.0032	85	24	6.5
CO	0.019	85	24	see below
VOC	0.0055	85	24	11.2

Pollutant	Annual PE2			
	EF2 (lb/MMBtu)	Heat Input (MMBtu/hr)	Operating Schedule (hr/year)	Annual PE2 (lb/year)
NO _x	0.009	85	8,760	6,329
SO _x	0.00285	85	8,760	2,122
PM ₁₀	0.0032	85	8,760	2,383
CO	0.019	85	8,760	13,775
VOC	0.0055	85	8,760	4,095

Startup/Shutdown

NO_x: 0.14 lb/MMBtu x 85.0 MMBtu/hr x 4 hr/day + 0.0085 x 85.0 MMBtu/hr x 20 hr/day = 62.1 lb/day

CO: $0.296 \text{ lb/MMBtu} \times 85.0 \text{ MMBtu/hr} \times 4 \text{ hr/day} + 0.0185 \text{ lb/MMBtu} \times 85.0 \text{ MMBtu/hr} \times 20 \text{ hr/day} = 132.1 \text{ lb/day}$

S-2010-284-0

Pollutant	Daily PE2			
	EF2 (lb/MMBtu)	Heat Input (MMBtu/hr)	Operating Schedule (hr/day)	Daily PE2 (lb/day)
NO _x	0.009	62.5	24	see below
SO _x	0.00285	62.5	24	4.3
PM ₁₀	0.0032	62.5	24	4.8
CO	0.019	62.5	24	see below
VOC	0.0055	62.5	24	8.3

Pollutant	Annual PE2			
	EF2 (lb/MMBtu)	Heat Input (MMBtu/hr)	Operating Schedule (hr/year)	Annual PE2 (lb/year)
NO _x	0.009	62.5	8,760	4,654
SO _x	0.00285	62.5	8,760	1,560
PM ₁₀	0.0032	62.5	8,760	1,752
CO	0.019	62.5	8,760	10,129
VOC	0.0055	62.5	8,760	3,011

Startup/Shutdown

NO_x: $0.14 \text{ lb/MMBtu} \times 62.5 \text{ MMBtu/hr} \times 4 \text{ hr/day} + 0.0085 \times 62.5 \text{ MMBtu/hr} \times 20 \text{ hr/day} = 45.6 \text{ lb/day}$

CO: $0.296 \text{ lb/MMBtu} \times 62.5 \text{ MMBtu/hr} \times 4 \text{ hr/day} + 0.0185 \times 62.5 \text{ MMBtu/hr} \times 20 \text{ hr/day} = 97.1 \text{ lb/day}$

$(10 \times 85 + 1 \times 62.5) = 912.5 \text{ MMBtu/hr}$

Greenhouse Gas Emissions (District Policy APR 2015)

$(10 \times 85 + 1 \times 62.5) = 912.5 \text{ MMBtu/hr}$

CO₂ 53.06 kg/MMBtu (HHV) natural gas (116.7 lb/MMBtu)

CH₄ 0.005 kg/MMBtu (HHV) natural gas (0.011 lb/MMBtu)

N₂O 0.0001 kg/MMBtu (HHV) natural gas (0.00022 lb/MMBtu)

GWP for CH₄ = 23 lb-CO₂e per lb-CH₄

GWP for N₂O = 296 lb-CO₂e per lb-N₂O

Hourly Emissions

CO2 Emissions = 912.5 Btu/hr x 116.7 lb/Btu = 106,488.75 lb-CO2e/hour

CH4 Emissions = 912.5 Btu/hr x 0.011 lb/Btu x 23 lb-CO2e per lb-CH4 = 230.86 lb-CO2e/hour

N2O Emissions = 912.5 Btu/hr x 0.00022 lb/Btu x 296 lb-CO2e per lb-N2O = 59.42 lb-CO2e/hour

Total = 106,488.75 + 230.86 + 59.42 = 106,779.03 lb-CO2e/hour

106,779.03 lb-CO2e/hour x 8760 hr/year ÷ 2,000 lb/ton = 467,692 tons-CO2e/year

467,692 short tons-CO2e/year x 0.9072 metric tons/short ton = **424,290 metric tons**

Emissions profiles are included in **Attachment V**.

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

Pursuant to Section 4.9 of District Rule 2201, the Pre-Project Stationary Source Potential to Emit (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 that have occurred at the source, and which have not been used on-site.

Pre-Project Stationary Source Potential to Emit [SSPE1] (lb/year)					
Permit Unit/ERC	NO _x	SO _x	PM ₁₀	CO	VOC
SSPE Calculator*	13,513	908	2589	16,042	201,329
ATC S-2010-288	4380	1560	1752	10,129	3011
ATC S-2010-289	4380	1560	4161	9,691	3011
ATC S-2010-290	4380	1560	4161	9,691	3011
Tank and TEOR ATCs	0	0	0	0	>20,000
Pre-Project SSPE (SSPE1 _{total})	26,653	5588	12,663	45,553	> 210,362

*does not include ATCs, calculation done 12-19-11- **Attachment VI**

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

Pursuant to Section 4.10 of District Rule 2201, the Post Project Stationary Source Potential to Emit (SSPE2) 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 that have occurred at the source, and which have not been used on-site.

Post-Project Stationary Source Potential to Emit [SSPE2] (lb/year)					
Permit Unit/ERC	NO _x	SO _x	PM ₁₀	CO	VOC
Pre-Project SSPE (SSPE1 _{total})	26,653	5588	12,663	45,553	> 210,362
S-2010-274 through '283	63,290	21,220	23,830	137,750	40,950
S-2010-284	4654	1560	1752	10,129	3,011
Post-Project SSPE (SSPE2 _{total})	94,597	28,368	38,245	193,432	>254,323

5. Major Source Determination

Pursuant to Section 3.24 of District Rule 2201, a Major Source is a stationary source with post-project emissions or a Post Project Stationary Source Potential to Emit (SSPE2), equal to or exceeding one or more of the following threshold values. However, Section 3.24.2 states, "for the purposes of determining major source status, the SSPE2 shall not include the quantity of emission reduction credits (ERC) which have been banked since September 19, 1991 for Actual Emissions Reductions that have occurred at the source, and which have not been used on-site."

Major Source Determination (lb/year)					
	NO _x	SO _x	PM ₁₀	CO	VOC
Pre-Project SSPE (SSPE1)	26,653	5588	12,663	45,553	> 210,362
Post Project SSPE (SSPE2)	94,597	28,368	38,245	193,432	>254,323
Major Source Threshold	50,000	140,000	140,000	200,000	50,000
Major Source?	Yes	No	No	No	Yes

This source is an existing Major Source for NO_x and VOC emissions and will remain a Major Source for these air contaminants.

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 Section 3.7 of District Rule 2201, BE = Pre-project Potential to Emit 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 Section 3.22 of District Rule 2201.

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

7. Major Modification

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."*

As discussed in Section VII.C.5 above, the facility is an existing Major Source for NO_x, SO_x, PM₁₀, CO, and VOC however, the project by itself would need to be a significant increase in order to trigger a Major Modification. The emissions units within this project have a total potential to emit which is greater than Major Modification thresholds (see table below) for NO_x. Therefore, the project is a Major Modification for NO_x.

Major Modification Thresholds (Existing Major Source)			
Pollutant	Project PE (lb/year)	Threshold (lb/year)	Major Modification?
NO _x	63,290 + 4654 = 67,944	50,000	Yes
SO _x	21,220 + 1560 = 22,780	80,000	No
PM ₁₀	23,830 + 1752 = 25,582	30,000	No
VOC	40,950 + 3011 = 43,961	50,000	No

40 CFR Part 51 - Appendix S requirement for PM2.5

On May 8, 2008 EPA finalized regulations to implement NSR program for PM_{2.5}. The new requirements became effective July 15, 2008. Under the new regulations a major source for PM_{2.5} is defined as 100 tons/year. A non-major source for PM_{2.5} triggers a Major Modification for PM_{2.5} if the increase in PM_{2.5} emissions exceeds 100 tons/yr (200,000 lb/yr). As stated above the SSPE1 including PTO and ATC emissions for PM₁₀ is less than 140,000 lb/yr and therefore the facility cannot be a major source for PM_{2.5}.

Furthermore, the increase in PM₁₀ emissions for the project is less than 200,000 lb/year. Therefore, the Major Modification threshold for PM_{2.5} for non-major sources is not triggered.

8. Federal Major Modification

District Rule 2201, Section 3.17 states that major modifications are also federal major modifications, unless they qualify for either a “Less-Than-Significant Emissions Increase” exclusion or a “Plantwide Applicability Limit” (PAL) exclusion.

40 CFR 51.165 (a)(2)(ii)(F) states that, for projects that involve new emissions units, the method specified in 40 CFR 51.165 (a)(2)(ii)(D) will be used to test for a significant emissions increase triggering a federal major modification. 40 CFR 51.165 (a)(2)(ii)(D) states that “A significant emissions increase of a regulated NSR pollutant is projected to occur if the sum of the difference between the potential to emit (as defined in 40 CFR 51.165 (a)(1)(iii) of this section) from each new emissions unit following completion of the project and the baseline actual emissions (as defined in paragraph 40 CFR 51.165 (a)(1)(xxxv)(C) of these units before the project equals or exceeds the significant amount for that pollutant.”

Emissions increases are significant if they exceed the significance thresholds specified in Table 3-1 of Rule 2201 below.

Significant Threshold (lb/year)	
Pollutant	Threshold (lb/year)
VOC	50,000
NO _x	50,000
PM ₁₀	30,000
SO _x	80,000

Units S-2010-274-0 through '285-0 are new units, and baseline actual emissions are equal to zero, and therefore, pursuant to 40 CFR 51.165 (a)(2)(ii)(D), the emissions increases are equal to the post-project potential to emit.

As shown below, total PE2 from these new emissions units exceed the Federal Major Modification threshold for NO_x; therefore this project is a Federal Major Modification.

Federal Major Modification Significant Threshold			
Pollutant	Project PE (lb/year)	Threshold (lb/year)	Significant increase
NO _x	67,944	50,000	Yes
SO _x	22,780	80,000	No
PM ₁₀	25,582	30,000	No
VOC	43,961	50,000	No

9. Quarterly Net Emissions Change (QNEC)

The QNEC is calculated solely to establish emissions that are used to complete the District's PAS emissions profile screen. The QNEC for the new emissions unit was calculated for each pollutant by dividing annual emissions by 4 quarters/year.

S-2010-274 through '-283

Pollutant	QNEC For each steam generator			
	Annual emissions (lb/year)	divided by	4 quarters/yr =	Quarterly emissions (lb/qtr)
NO_x	6,329	/	4 qtr/year	1,582
SO_x	2,122	/	4	531
PM₁₀	2,383	/	4	596
CO	13,775	/	4	3,444
VOC	4,095	/	4	1,024

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Pollutant	QNEC For each steam generator			
	Annual emissions (lb/year)	divided by	4 quarters/yr =	Quarterly emissions (lb/qtr)
NO_x	4,654	/	4 qtr/year	1,164
SO_x	1,560	/	4	390
PM₁₀	1,752	/	4	438
CO	10,129	/	4	2,532
VOC	3,011	/	4	753

VIII. Compliance

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 for the following*:

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

*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 of this evaluation, the applicant is proposing to install steam generators with a PE greater than 2 lb/day for all air contaminants. BACT is triggered for NO_x, SO_x, PM₁₀, CO and VOC since the PEs are greater than 2 lbs/day.

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

As discussed in Section I above, there are no existing emissions units being relocated from one stationary source to another; therefore BACT is not triggered for relocation of an emissions unit with a PE > 2 lb/day.

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 for modification of an emissions unit with an AIPE > 2 lb/day.

d. Major Modification

As discussed in Section VII.C.7 above, this project constitutes a Major Modification for NO_x; therefore BACT is triggered for NO_x major modification purposes.

2. BACT Guideline

BACT Guideline 1.2.1, applies to oil field steam generators ≥ 5 MMBtu/hr. (See **Attachment VII**.)

3. Top-Down BACT Analysis

Pursuant to the attached Top-Down BACT Analysis (see **Attachment VIII**), BACT has been satisfied with the following:

VOC: Gaseous fuel

NO_x: 7 ppmv @ 3% O₂ (0.0085 lb/MMbtu) Low NO_x burner & FGR

SO_x/PM₁₀: PUC quality natural gas fuel

CO: 25 ppmv @ 3% O₂

B. Offsets

1. Offset Applicability

Pursuant to Section 4.5.3, offset requirements shall be triggered on a pollutant by pollutant basis and shall be required if the Post Project Stationary Source Potential to Emit (SSPE2) equals to or exceeds the offset threshold levels in Table 4-1 of Rule 2201.

The following table compares the post-project facility-wide annual emissions in order to determine if offsets will be required for this project.

Offset Determination (lb/year)					
	NO _x	SO _x	PM ₁₀	CO	VOC
Pre Project SSPE (SSPE1)	26,653	5588	12,663	45,553	> 210,362
Post Project SSPE (SSPE2)	94,597	28,368	38,245	193,432	>254,323
Offset Threshold	20,000	54,750	29,200	200,000	20,000
Offsets calculations required?	Yes	No	Yes	No	Yes

2. Quantity of Offsets Required

As seen above, the SSPE2 is greater than the offset thresholds for NO_x, PM₁₀, and VOC; therefore offset calculations will be required for this project.

Per Sections 4.7.1 and 4.7.3, the quantity of offsets in pounds per year for VOC 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) = $(\sum[PE2 - BE] + ICCE) \times DOR$, 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 = Pre-project Potential to Emit 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)

The facility is proposing to install new emissions units; therefore Baseline Emissions are equal to zero. Also, there are no increases in cargo carrier emissions; therefore offsets can be determined as follows:

Offsets Required (lb/year) = $([PE2 - BE] + ICCE) \times DOR$

NO_x DOR = 1.5. The NO_x reductions (ERCs used for offsets in this project) all occurred at the 17Z Gas Plant, facility S-49, which is located greater than 15 miles from each of the proposed locations.

S-2010-274 through '283 (each)

PE = 6329 lb NO_x/yr

The DOR = 1.5 (Federal Major Modification), the amount of NO_x ERCs that need to be withdrawn is:

Offsets Required (lb/year) = 6329×1.5
= 9494 lb NO_x/year

The quarterly ERC required is as follows:

DOR = 1.5

<u>Pollutant</u>	<u>1st Quarter</u>	<u>2nd Quarter</u>	<u>3rd Quarter</u>	<u>4th Quarter</u>
NO _x	2,374	2,374	2,374	2,374

DOR = 1.5 (all 10 SGs)

<u>Pollutant</u>	<u>1st Quarter</u>	<u>2nd Quarter</u>	<u>3rd Quarter</u>	<u>4th Quarter</u>
NOx	23,740	23,740	23,740	23,740

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PE = 4654 lb NOx/yr

Offsets Required (lb/year) = 4654 x 1.5
= 6981 lb NO_x/year

<u>DOR</u>	<u>1st Quarter</u>	<u>2nd Quarter</u>	<u>3rd Quarter</u>	<u>4th Quarter</u>
1.5:1	1745	1745	1745	1745

Total NOx Offset Requirements

<u>DOR</u>	<u>1st Quarter</u>	<u>2nd Quarter</u>	<u>3rd Quarter</u>	<u>4th Quarter</u>
1.5:1	25,485	25,485	25,485	25,485

The applicant has stated that the facility plans to use ERC certificate S-3629-2 to offset the increases in NO_x emissions associated with this project. The following quantities have been reserved in PAS (and are therefore available for the project):

Reserved in PAS

<u>ERC #</u>	<u>1st Qtr</u>	<u>2nd Qtr</u>	<u>3rd Qtr</u>	<u>4th Qtr</u>
S-3629-2	25,485	25,485	25,485	25,485

PM10 DOR = 1.5. The PM10 reductions (ERCs used for offsets in this project) all occurred at facility S-1141, which is located greater than 15 miles from each of the proposed locations.

Please note that CUSA is proposing to offset the entire amount of PM10 to mitigate the impact of the project on the ambient air quality as reflected by the results of AAQA modeling (**Attachment IX**).

S-2010-274 through '-284 (each)

Offsets Required (lb/year) = [(2383) x 1.5]
= 3575 lb PM10/year

Calculating the appropriate quarterly emissions to be offset is as follows:

<u>DOR</u>	<u>1st Quarter</u>	<u>2nd Quarter</u>	<u>3rd Quarter</u>	<u>4th Quarter</u>
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1.5:1 894 894 894 894

DOR = 1.5 (all 10 SGs)

<u>DOR</u>	<u>1st Quarter</u>	<u>2nd Quarter</u>	<u>3rd Quarter</u>	<u>4th Quarter</u>
1.5:1	8940	8940	8940	8940

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Offsets Required (lb/year) = [(1752) x 1.5]
= 2628 lb PM10/year

<u>DOR</u>	<u>1st Quarter</u>	<u>2nd Quarter</u>	<u>3rd Quarter</u>	<u>4th Quarter</u>
1.5:1	657	657	657	657

Total PM10 Offset Requirements

<u>DOR</u>	<u>1st Quarter</u>	<u>2nd Quarter</u>	<u>3rd Quarter</u>	<u>4th Quarter</u>
1.5:1	9597	9597	9597	9597

The applicant has stated that the facility plans to use ERC certificate S-3598-4 to offset the increases in PM10 emissions associated with this project. The following quantities have been reserved in PAS (and are therefore available for the project):

Reserved in PAS

ERC #	1 st Qtr	2 nd Qtr	3 rd Qtr	4 th Qtr
S-3598-4	9597	9597	9597	9597

VOC DOR = 1.5. The VOC reductions (ERCs used for offsets in this project) all occurred at facility S-1127, which is located greater than 15 miles from each of the proposed locations.

S-2010-274 through '-283 (each)

PE2 (VOC) = 4095 lb/year
BE (VOC) = 0 lb/year
ICCE = 0 lb/year

Assuming an offset ratio of 1.5:1, the amount of VOC ERCs that need to be withdrawn is:

Offsets Required (lb/year) = ([4095 – 0] + 0) x 1.5
= 4095 x 1.5
= 6143 lb VOC/year

Calculating the appropriate quarterly emissions to be offset is as follows:

<u>DOR</u>	<u>1st Quarter</u>	<u>2nd Quarter</u>	<u>3rd Quarter</u>	<u>4th Quarter</u>
1.5	1536	1536	1536	1536

DOR = 1.5 (all 10 SGs)

<u>DOR</u>	<u>1st Quarter</u>	<u>2nd Quarter</u>	<u>3rd Quarter</u>	<u>4th Quarter</u>
1.5:1	15,360	15,360	15,360	15,360

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PE2 (VOC) = 3011 lb/year
BE (VOC) = 0 lb/year
ICCE = 0 lb/year

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

$$\begin{aligned} \text{Offsets Required (lb/year)} &= ([3011 - 0] + 0) \times 1.5 \\ &= 3011 \times 1.5 \\ &= 4,517 \text{ lb VOC/year} \end{aligned}$$

Calculating the appropriate quarterly emissions to be offset is as follows:

<u>DOR</u>	<u>1st Quarter</u>	<u>2nd Quarter</u>	<u>3rd Quarter</u>	<u>4th Quarter</u>
1.5	1129	1129	1129	1129

Total VOC Offset Requirements

<u>DOR</u>	<u>1st Quarter</u>	<u>2nd Quarter</u>	<u>3rd Quarter</u>	<u>4th Quarter</u>
1.5:1	16,489	16,489	16,489	16,489

The applicant has stated that the facility plans to use ERC certificate S-3145-1 to offset the increases in VOC emissions associated with this project. The following quantities have been reserved in PAS (and are therefore available for the project):

Reserved in PAS

<u>ERC #</u>	<u>1st Qtr</u>	<u>2nd Qtr</u>	<u>3rd Qtr</u>	<u>4th Qtr</u>
S-3145-1	16,489	16,489	16,489	16,489

Proposed Rule 2201 (offset) Conditions:

S-2010-274 through '-283

Prior to operating equipment under this Authority to Construct, permittee shall surrender emission reduction credits for the following quantities of emissions: NOx: 2374 lb/quarter; PM10: 894 lb/quarter, and VOC: 1536 lb/qtr. Offsets include the applicable offset ratio specified in Section 4.8 of Rule 2201 (as amended 9/21/06). [District Rule 2201] Y

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Prior to operating under this Authority to Construct, permittee shall surrender emission reduction credits for the following quantities of emissions: NOx, 1,745 lb/quarter; PM10, 657 lb/quarter and VOC, 1129 lb/quarter. Offsets include the applicable offset ratio specified in Section 4.8 of Rule 2201 (as amended 9/21/06). [District Rule 2201] Y

ERC Certificate Numbers S-3629-2 (NOx), S-3145-1 (VOC), and S-3598-4 (PM10) (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] Y

C. Public Notification

1. Applicability

Public noticing is required for:

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

a. New Major Source

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.

b. Major Modification

As demonstrated in VII.C.7, this project constitutes a Major Modification; therefore, public noticing for Major Modification purposes is required.

c. PE > 100 lb/day

Applications which include a new emissions unit with a Potential to Emit 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 any new emissions units which will have daily emissions greater than 100 lb/day for any pollutant. Therefore public noticing for PE > 100 lb/day purposes is not required.

d. Offset Threshold

The following table compares the SSPE1 with the SSPE2 in order to determine if any offset thresholds have been surpassed with this project.

Offset Threshold				
Pollutant	SSPE1 (lb/year)	SSPE2 (lb/year)	Offset Threshold	Public Notice Required?
NO _x	26,653	94,597	20,000 lb/year	No
SO _x	5,588	28,368	54,750 lb/year	No
PM ₁₀	12,663	38,245	29,200 lb/year	Yes
CO	45,553	193,432	200,000 lb/year	No
VOC	210,362	254,323	20,000 lb/year	No

As detailed above, offset thresholds were surpassed for PM10 with this project; therefore public noticing is required for offset purposes.

e. SSIPE > 20,000 lb/year

Public notification is required for any permitting action that results in a Stationary Source Increase in Permitted Emissions (SSIPE) of more than 20,000 lb/year of any affected pollutant. According to District policy, the SSIPE is calculated as the Post Project Stationary Source Potential to Emit (SSPE2) minus the Pre-Project Stationary Source Potential to Emit (SSPE1), i.e. $SSIPE = SSPE2 - SSPE1$. The values for SSPE2 and SSPE1 are calculated according to Rule 2201, Sections 4.9 and 4.10, respectively. The SSIPE is compared to the SSIPE Public Notice thresholds in the following table:

Stationary Source Increase in Permitted Emissions [SSIPE] – Public Notice					
Pollutant	SSPE1 (lb/year)	SSPE2 (lb/year)	SSIPE (lb/year)	SSIPE Public Notice Threshold	Public Notice Required?
NO _x	26,653	94,597	67,944	20,000 lb/year	Yes
SO _x	5,588	28,368	22,780	20,000 lb/year	Yes
PM ₁₀	12,663	38,245	25,582	20,000 lb/year	Yes
CO	45,553	193,432	147,879	20,000 lb/year	Yes
VOC	210,362	254,323	43,961	20,000 lb/year	Yes

As demonstrated above, the SSIPEs for NO_x, PM10, CO and VOC are greater 20,000 lb/year; therefore public noticing for SSIPE purposes is required.

2. Public Notice Action

As discussed above, public notice will be required for this project.

D. Daily Emission Limits (DELs)

The DELs for the units will be stated in the form of emission factors on the requested ATC documents.

Natural gas fuel sulfur content shall not exceed 1.0 grains-S/100 scf. [District Rule 2201] Y

Emission rates, except during startup, shutdown, and the initial shakedown period shall not exceed: NO_x (as NO₂): 7 ppmvd @ 3% O₂ or 0.0085 lb/MMBtu; or CO: 25 ppmvd @ 3% O₂ or 0.0185 lb/MMBtu. [District Rule 2201, 4305, 4306, and 4320] Y

Emission rates shall not exceed any of the following: PM₁₀: 0.0032 lb/MMBtu; or VOC: 0.0055 lb/MMBtu. [District Rule 2201] Y

Duration of start-up and shutdown shall not exceed 2 hours each per occurrence. [District Rule 4305, 4306, and 4320] Y

Emission rates during startup and shutdown shall not exceed: NO_x - 0.14 lb/MMBtu or 116 ppmv @ 3% O₂; CO - 0.296 lb/MMBtu or 400 ppmv @ 3% O₂ [District Rule 2201] Y

Emissions rate of NO_x shall not exceed 62.1 lb/day nor 4380 lb/yr. [District Rule 2201] Y

Emissions rate of CO shall not exceed 132.1 lb/day nor 13,775 lb/yr. [District Rule 2201] Y

E. Compliance Assurance

1. Source Testing

The units are subject to District Rule 4305, *Boilers, Steam Generators and Process Heaters, Phase II*, District Rule 4306, *Boilers, Steam Generators and Process Heaters, Phase III*, and pending new Rule 4320, *Advanced Emission Reduction Options for Boilers, Steam Generators, and Process Heaters Greater than 5.0 MMBtu/hr*. Source testing requirements, in accordance with District Rules 4305, 4306, and 4320 will be discussed in Section VIII, *District Rules 4305, 4306, 4320* of this evaluation.

3. Monitoring

As required by District Rule 4305, *Boilers, Steam Generators and Process Heaters, Phase II*, District Rule 4306, *Boilers, Steam Generators and Process Heaters, Phase III*, and pending new Rule 4320, *Advanced Emission Reduction Options for Boilers, Steam Generators, and Process Heaters Greater than 5.0 MMBtu/hr*, the units are subject to monitoring requirements. Monitoring requirements, in accordance with District Rules 4305, 4306, and 4320 will be discussed in Section VIII, *District Rules 4305, 4306, and 4320* of this evaluation.

4. Record keeping

As required by District Rule 4305, *Boilers, Steam Generators and Process Heaters, Phase II*, District Rule 4306, *Boilers, Steam Generators and Process Heaters, Phase III*, and pending new Rule 4320, *Advanced Emission Reduction Options for Boilers, Steam Generators, and Process Heaters Greater than 5.0 MMBtu/hr*, these units are subject to recordkeeping requirements. Recordkeeping requirements, in accordance

with District Rules 4305, 4306, and 4320 will be discussed in Section VIII, *District Rules 4305, 4306, and 4320*, of this evaluation.

4. Reporting

No reporting is required to demonstrate compliance with Rule 2201.

F. Ambient Air Quality Analysis

Section 4.14.1 of this Rule requires that an ambient air quality analysis (AAQA) 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. Technical Services performed modeling for criteria pollutants CO, NO_x, SO_x and PM₁₀. Refer to **Attachment IX** of this document for the AAQA summary sheet.

The results from the Criteria Pollutant Modeling are as follows:

Criteria Pollutant Modeling Results*

New Steam Generators	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	Pass	X	Pass	Pass
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. The Ozone Limiting Method (OLM) or Plume Volume Molar Ratio Method (PVMRM) was used in accordance with the District's *Assessment of Non-Regulatory Options in AERMOD – Specifically OLM and PVMRM*. A completed AERMOD Non-Regulatory Option checklist is attached.

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

No special conditions are required as the applicant has proposed to fully offset all of the PM10 emissions.

G. Compliance Certification

Section 4.15.2 of this Rule requires the owner of a new Major Source or a source undergoing a Federal Major 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 Sections VIII-Rule 2201-C.1.a and VIII-Rule 2201-C.1.b, this project does constitute a Major Modification, therefore this requirement is applicable. Included in **Attachment X** is a April 30, 2009 certification that the major stationary sources owned or operated by Chevron in the State of California are in compliance or on a schedule for compliance with all applicable emission limitations and standards under the Clean Air Act. This certification was submitted directly to the South Coast Air Quality Management District (SCAQMD) in accordance with SCAQMD Rule 1303(b)(5)(B) which mirrors the Clean Air Act based compliance certification requirements set forth in SJVAPCD Rule 2201, Section 4.15.2.CUSA's compliance certification.

District Rule 2520 Federally Mandated Operating Permits

This facility is subject to this Rule, and has received their Title V Operating Permit. The proposed modification may be considered a significant modification to the Title V Permit. As discussed above, the facility has applied for a Certificate of Conformity (COC); therefore, the facility must apply to modify their Title V permit with an administrative amendment/ minor modification, prior to operating with the proposed modifications. CUSA's Title V compliance certification form was included with the application submittal. Continued compliance with this rule is expected.

District Rule 4001 New Source Performance Standards

40 CFR Part 60, Subpart Dc Small Industrial-Commercial-Industrial Steam Generators between 10 MMBtu/hr and 100 MMBtu/hr (post-6/9/89 construction, modification or, reconstruction).

The subject steam generators have a rating of 85 MMBtu/hr and are fired on natural gas. Subpart Dc has no standards for gas-fired steam generators. Therefore the subject steam generators are not affected facilities and subpart Dc does not apply.

District Rule 4101 Visible Emissions

District Rule 4101, Section 5.0, indicates that 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 dark or darker than Ringlemann 1 or equivalent to 20% opacity.

Natural gas-fired equipment typically operates without visible emissions

Compliance with District Rule 4101 is expected.

Rule 4102 Nuisance

Section 4.0 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.

The project's prioritization was less than the District's significance level of 0.05. No further analysis was required. In accordance with the District's Risk Management Policy, the project is approved without Toxic Best Available Control Technology (T-BACT). The results of the HRA are listed below and in **Attachment IX**.

RMR Summary				
Categories	Steam Gen (274-0 thru 284-0)		Project Totals	Facility Totals
Prioritization Score	0.384 ea. (0.282 for 284-0)		4.12	4.51
Acute Hazard Index	0.0		0.0	0.0
Chronic Hazard Index	0.0		0.0	0.0
Maximum Individual Cancer Risk (10 ⁻⁶)	0.11 ea.		1.18	1.9
T-BACT Required?	No			
Special Permit Conditions?	No			

The project is approvable without TBACT.

District 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.

F-Factor for NG: 8,578 dscf/MMBtu at 60 °F
 PM₁₀ Emission Factor: 0.0032 lb-PM₁₀/MMBtu
 Percentage of PM as PM₁₀ in Exhaust: 100%
 Exhaust Oxygen (O₂) Concentration: 3%

$$\text{Excess Air Correction to F Factor} = \frac{20.9}{(20.9 - 3)} = 1.17$$

$$GL = \left(\frac{0.0032 \text{ lb} - \text{PM}}{\text{MMBtu}} \times \frac{7,000 \text{ grain}}{\text{lb} - \text{PM}} \right) / \left(\frac{8,578 \text{ ft}^3}{\text{MMBtu}} \times 1.17 \right)$$

$$GL = 0.0022 \text{ grain/dscf} < 0.1 \text{ grain/dscf}$$

Therefore, compliance with District Rule 4201 requirements is expected.

District Rule 4301 Fuel Burning Equipment

This rule specifies maximum emission rates in lb/hr for SO₂, NO₂, and combustion contaminants (defined as total PM in Rule 1020). This rule also limits combustion contaminants to ≤ 0.1 gr/scf. According to AP 42 (Table 1.4-2, footnote c), all PM emissions from natural gas combustion are less than 1 μm in diameter.

District Rule 4301 Limits			
Pollutant	NO₂	Total PM	SO₂
S-2010-274 through S-2010-283 (lb/hr)	62.1/24= 2.55	85 x 0.0032 = 0.27	85 x 0.00285 = 0.24
S-2010-284	45.6/24 = 1.90 (startup/shutdown)	62.5 x 0.0032 = 0.20	62.5 x 0.00285 = 0.18
Rule Limit (lb/hr)	140	10	200

The above table indicates compliance with the maximum lb/hr emissions in this rule; therefore, compliance is expected.

District Rule 4305 Boilers, Steam Generators and Process Heaters – Phase 2

The proposed steam generators are natural gas-fired with a maximum heat inputs of 62.5 MMBtu/hr and 85.0 MMBtu/hr. Pursuant to Section 2.0 of District Rule 4305, the units are subject to District Rule 4305, *Boilers, Steam Generators and Process Heaters – Phase 2*.

In addition, the units are also subject to District Rule 4306, *Boilers, Steam Generators and Process Heaters – Phase 3*.

Since emissions limits of District Rule 4306 and all other requirements are equivalent or more stringent than District Rule 4305 requirements, compliance with District Rule 4306 requirements will satisfy requirements of District Rule 4305.

Conclusion

Therefore, compliance with District Rule 4305 requirements is expected and no further discussion is required.

District Rule 4306 Boilers, Steam Generators and Process Heaters – Phase 3

The units are subject to District Rule 4306, *Boilers, Steam Generators and Process Heaters – Phase 3*.

Since emissions limits of District Rule 4320 and all other requirements are equivalent or more stringent than District Rule 4306 requirements, compliance with District Rule 4320 requirements will satisfy requirements of District Rule 4306.

Therefore, compliance with District Rule 4306 requirements is expected and no further discussion is required.

Rule 4320 – Advanced Emission Reduction Options for Boilers, Steam Generators, and Process Heaters Greater than 5.0 MMBtu/hr

Section 5.0 Requirements

Section 5.1 of the rule requires compliance with the NO_x and CO emissions limits listed in Table 1 of Section 5.2 or payment of an annual emissions fee to the District as specified in Section 5.3 and compliance with the control requirements specified in Section 5.4; or as stated in Section 5.1.3, comply with the applicable Low-use Unit requirements of Section 5.5.

Section 5.2 NO_x and CO Emission Limits

C. Oilfield Steam Generators

Rule 4320 Emissions Limits				
Category	Operated on gaseous fuel		Operated on liquid fuel	
	NO_x Limit	CO Limit	NO_x Limit	CO Limit
1. Units with a total rated heat input >20.0 MMBtu/hr	Standard Schedule 7 ppmv or 0.008 lb/MMBtu; or			
	Staged Enhanced Schedule Initial limit: 9 ppmv @ 3% O ₂ , 0.011 lb/MMBtu	400 ppmv @ 3% O ₂	40 ppmv or 0.052 lb/MMBtu	400 ppmv @ 3% O ₂
	Final limit: 5 ppmv @ 3% O ₂ , 0.0062 lb/MMBtu			

the proposed NO_x emission factor is 7 ppmvd @ 3% O₂ (0.008 lb/MMBtu), and the proposed CO emission factor is no greater than 25 ppmvd @ 3% O₂ (0.0185 lb/MMBtu).

Therefore, compliance with Section 5.1 of District Rule 4320 is expected.

A permit condition listing the emissions limits will be listed on permit as shown in the DEL section above.

Section 5.3 Annual Fee Calculation

Applicant has proposed to meet the emissions limits requirements of Section 5.1 and therefore this section is not applicable.

Section 5.4 Particulate Matter Control Requirements

Section 5.4 of the rule requires one of four options for control of particulate matter: 1) combustion of PUC-quality natural gas, commercial propane, butane, or liquefied petroleum gas, or a combination of such gases, 2) limit fuel sulfur content to no more than five (5) grains of total sulfur per one hundred (100) standard cubic, 3) install and properly operate an emission control system that reduces SO₂ emissions by at least 95% by weight; or limit exhaust SO₂ to less than or equal to 9 ppmv corrected to 3.0% O₂ or 4) refinery units, which require modification of refinery equipment to reduce sulfur emissions, shall be in compliance with the applicable requirement in Section 5.4.1 no later than July 1, 2013.

Applicant has proposed combustion of natural gas with a sulfur emission limit of 0.00285 lb SO₂/MMBtu (1.0 gr S/100scf). Compliance with this Section is expected.

Section 5.5 Low Use

The subject steam generator is not low use units and therefore the requirements of Section 5.5 do not apply.

Section 5.6, Startup and Shutdown Provisions

Applicable emissions limits are not required during startup and shutdown provided the duration of each start-up or each shutdown shall not exceed two hours, the emission control system shall be in operation and emissions shall be minimized insofar as technologically feasible during start-up or shutdown or operator has submitted an application for a Permit to Operate condition to allow more than two hours for each start-up or each shutdown provided the operator meets all of the conditions specified in Sections 5.6.3.1 through 5.6.3.3. CUSA has requested that startup and shutdown provisions be added to the ATCs for the new units.

Section 5.7, Monitoring Provisions

Section 5.7 requires either use of a APCO approved Continuous Emissions Monitoring System (CEMS) for NO_x, CO, and oxygen, or implementation of an APCO-approved Alternate Monitoring System consisting of:

- 5.7.1.1 Periodic NO_x and CO exhaust emission concentrations,
- 5.7.1.2 Periodic exhaust oxygen concentration,
- 5.7.1.3 Flow rate of reducing agent added to exhaust,
- 5.7.1.4 Catalyst inlet and exhaust temperature,
- 5.7.1.5 Catalyst inlet and exhaust oxygen concentration,
- 5.7.1.6 Periodic flue gas recirculation rate, or
- 5.7.1.7 Other operational characteristics.

In order to satisfy the requirements of District Rule 4320, the applicant has proposed to use pre-approved alternate monitoring scheme A (pursuant to District Policy SSP-1105), which requires that monitoring of NO_x, CO, and O₂ exhaust concentrations shall be conducted at least once per month (in which a source test is not performed) using a portable analyzer. The

following conditions will be incorporated into the ATCs in order to ensure compliance with the requirements of the proposed alternate monitoring plan:

- {4063} The permittee shall monitor and record the stack concentration of NO_x, CO, and O₂ at least once every month (in which a source test is not performed) using a portable analyzer 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. Monitoring shall be performed within 5 days of restarting the unit unless monitoring has been performed within the last month. [District Rules 4305, 4306, and 4320]
- {4064} If either the NO_x or CO concentrations corrected to 3% 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 Rules 4305, 4306, and 4320]
- {4065} 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 Rules 4305, 4306, and 4320]
- {4066} The permittee shall maintain records of: (1) the date and time of NO_x, CO, and O₂ measurements, (2) the O₂ concentration in percent by volume and the measured NO_x and CO concentrations corrected to 3% 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 Rules 4305, 4306, and 4320]

5.7.6 Monitoring SO_x Emissions

Section 5.7.6.1 Operators complying with Sections 5.4.1.1 or 5.4.1.2 shall provide an annual fuel analysis to the District unless a more frequent sampling and reporting period is included in the Permit To Operate. Sulfur analysis shall be performed in accordance with the test methods in Section 6.2.

Section 5.7.6.2 Operators complying with Section 5.4.1.3 by installing and operating a control device with 95% SO_x reduction shall propose the key system operating parameters and frequency of the monitoring and recording. The monitoring option proposed shall be submitted for approval by the APCO.

Section 5.7.6.3 Operators complying with Section 5.4.1.3 shall perform an annual source test unless a more frequent sampling and reporting period is included in the Permit to Operate. Source tests shall be performed in accordance with the test methods in Section 6.2.

Sulfur Monitoring

The following conditions will be included on the ATCs for the steam generators which are authorized to combust natural (field) gas.

If the unit is fired on noncertified gaseous fuel and compliance with SO_x emission limits is achieved through fuel sulfur content limitations, then the sulfur content of the gaseous fuel being fired in the unit shall be determined using ASTM D 1072, D 3031, D 3246, D 4084, D 4468, D 6667 or grab sample analysis by GC-FPD/TCD performed in the laboratory. [District Rule 1070, 2201, and 4320] Y

When complying with sulfur emission limits by fuel analysis or by a combination of source testing and fuel analysis, each fuel source shall be tested weekly for sulfur content and higher heating value. If compliance with the fuel sulfur content limit and sulfur emission limits has been demonstrated for 8 consecutive weeks for a fuel source, then the fuel testing frequency shall be semi-annually. If a semi-annual fuel content source test fails to show compliance, weekly testing shall resume. [District Rules 1070, 2201, and 4320] Y

If fuel analysis is used to demonstrate compliance with conditions of this permit, the fuel higher heating value for each fuel shall be certified by a third party fuel supplier or determined by ASTM D 1826 or D 1945 in conjunction with ASTM D 3588 for gaseous fuels. [District Rules 1070, 2201, and 4320] Y

Section 5.8, Compliance Determination

Section 5.8.1 requires that the operator of any unit shall have the option of complying with either the applicable heat input (lb/MMBtu) emission limits or the concentration (ppmv) emission limits specified in Section 5.2. The emission limits selected to demonstrate compliance shall be specified in the source test proposal pursuant to Rule 1081 (Source Sampling) as stated in the following ATC condition:

{2976} The source plan shall identify which basis (ppmv or lb/MMBtu) will be used to demonstrate compliance. [District Rules 4305, 4306, and 4320]

Section 5.8.2 requires that all emissions measurements be made with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. Unless otherwise specified in the Permit to Operate, no determination of compliance shall be established within two hours after a continuous period in which fuel flow to the unit is shut off for 30 minutes or longer, or within 30 minutes after a re-ignition as defined in Section 3.0.

{2972} All emissions measurements shall be made with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. No determination of compliance shall be established within two hours after a continuous period in which fuel flow to the unit is shut off for 30 minutes or longer, or within 30 minutes after a re-ignition as defined in Section 3.0 of District Rule 4306. [District Rules 4305, 4306, and 4320]

Section 5.8.3 Continuous Emissions Monitoring System (CEMS) emissions measurements shall be averaged over a period of 15 consecutive minutes to demonstrate compliance with the applicable emission limits. Any 15-consecutive-minute block average CEMS measurement exceeding the applicable emission limits shall constitute a violation. The steam generator is not equipped with CEMs and therefore this section is not applicable.

Section 5.8.4 For emissions monitoring pursuant to Sections 5.7.1, and 6.3.1 using a portable NO_x analyzer as part of an APCO approved Alternate Emissions Monitoring System, emission readings 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 readings evenly spaced out over the 15-consecutive-minute period.

{2937} 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 Rules 4305, 4306, and 4320]

Section 5.8.5 For emissions source testing performed pursuant to Section 6.3.1 for the purpose of determining compliance with an applicable standard or numerical limitation of this rule, the arithmetic average of three 30-consecutive-minute test runs shall apply. If two of three runs are above an applicable limit the test cannot be used to demonstrate compliance with an applicable limit.

{2980} For emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. If two of three runs are above an applicable limit the test cannot be used to demonstrate compliance with an applicable limit. [District Rules 4305, 4306, and 4320]

Section 6.1 Recordkeeping

Section 6.1 requires that the records required by Sections 6.1.1 through 6.1.5 shall be maintained for five calendar years and shall be made available to the APCO and EPA upon request. Failure to maintain records or information contained in the records that demonstrate noncompliance with the applicable requirements of this rule shall constitute a violation of this rule.

A permit condition will be listed on the permit as follows:

{2983} All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rules 1070, 4305, 4306, and 4320]

Section 6.1.1 requires that a unit operated under the exemption of Section 4.2 shall monitor and record, for each unit, the cumulative annual hours of operation. The units are not Section 4.2 exempt and therefore these records are not required.

Section 6.1.2 requires the operator of any unit that is subject to the requirements of Section 5.5 shall record the amount of fuel use at least on a monthly basis for each unit. On and after the applicable compliance schedule specified in Section 7.0, in the event that such unit exceeds the applicable annual heat input limit specified in Section 5.5, the unit shall be brought into full compliance with this rule as specified in Section 5.2 Table 1. The units are not low use and therefore these records are not necessary.

Section 6.1.3 The operator of any unit subject to Section 5.5.1 or Section 6.3.1 shall maintain records to verify that the required tune-up and the required monitoring of the operational characteristics of the unit have been performed.

Section 6.1.4 The operator performing start-up or shutdown of a unit shall keep records of the duration of start-up or shutdown.

Section 6.1.5 The operator of any unit firing on liquid fuel during a PUC-quality natural gas curtailment period pursuant to Section 5.4.2 shall record the sulfur content of the fuel, amount of fuel used, and duration of the natural gas curtailment period. The unit is not authorized to combust liquid fuel. Therefore this section is not applicable.

Section 6.2, Test Methods

Section 6.2 identifies the following test methods as District-approved source testing methods for the pollutants listed:

Pollutant	Units	Test Method Required
NO _x	ppmv	EPA Method 7E or ARB Method 100
NO _x	lb/MMBtu	EPA Method 19
CO	ppmv	EPA Method 10 or ARB Method 100
Stack Gas O ₂	%	EPA Method 3 or 3A, or ARB Method 100
Stack Gas Velocities	ft/min	EPA Method 2
Stack Gas Moisture Content	%	EPA Method 4
Oxides of sulfur		EPA Method 6C, EPA Method 8, or ARB Method 100
Total Sulfur as Hydrogen Sulfide (H ₂ S) Content		EPA Method 11 or EPA Method 15, as appropriate.
Sulfur Content of Liquid Fuel		ASTM D 6920-03 or ASTM D 5453-99

The following test method conditions are included on the ATCs:

{2977} NO_x emissions for source test purposes shall be determined using EPA Method 7E or ARB Method 100 on a ppmv basis, or EPA Method 19 on a heat input basis. [District Rules 4305, 4306, and 4320]

{2978} CO emissions for source test purposes shall be determined using EPA Method 10 or ARB Method 100. [District Rules 4305, 4306, and 4320]

{2979} Stack gas oxygen (O₂) shall be determined using EPA Method 3 or 3A or ARB Method 100. [District Rules 4305, 4306, and 4320]

Section 6.2.8.2. The SO_x emission control system efficiency shall be determined using the following:

$$\% \text{ Control Efficiency} = [(C_{\text{SO}_2, \text{inlet}} - C_{\text{SO}_2, \text{outlet}}) / C_{\text{SO}_2, \text{inlet}}] \times 100$$

where:

C_{SO₂, inlet} = concentration of SO_x (expressed as SO₂) at the inlet side of the SO_x emission control system, in lb/dscf

$C_{\text{SO}_2, \text{outlet}}$ = concentration of SOx (expressed as SO₂) at the outlet side of the SOx emission control system, in lb/dscf

The units are not equipped with a SO2 scrubber. Therefore this section is not applicable.

Section 6.3 Compliance Testing

Section 6.3.1 requires that this unit be tested to determine compliance with the applicable requirements of section 5.2 not less than once every 12 months (no more than 30 days before or after the required annual source test date). Upon demonstrating compliance on two consecutive compliance source tests, the following source test may be deferred for up to thirty-six months.

Section 6.3.1.1 Units that demonstrate compliance on two consecutive 12-month source tests may defer the following 12-month source test for up to 36 months (no more than 30 days before or after the required 36-month source test date). During the 36-month source testing interval, the operator shall tune the unit in accordance with the provisions of Section 5.5.1, and shall monitor, on a monthly basis, the unit's operational characteristics recommended by the manufacturer to ensure compliance with the applicable emission limits specified in Section 5.2.

Section 6.3.1.2 Tune-ups required by Sections 5.5.1 and 6.3.1 do not need to be performed for units that operate and maintain an APCO approved CEMS or an APCO approved Alternate Monitoring System where the applicable emission limits are periodically monitored. Applicant has proposed to monitor the emissions of NOx and CO Alternate Monitoring Scheme "A" and therefore tuning is not required.

Section 6.3.1.3 If the result of the 36-month source test demonstrates that the unit does not meet the applicable emission limits specified in Section 5.2, the source testing frequency shall revert to at least once every 12 months.

The following conditions are included on the ATC:

{109} Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081]

{3467} Source testing to measure NOx and CO emissions from this unit while fired on natural gas shall be conducted within 60 days of initial start-up. [District Rules 2201, 4305, 4306, and 4320]

{3466} Source testing to measure NOx and CO emissions from this unit while fired on natural gas shall be conducted at least once every twelve (12) months. After demonstrating compliance on two (2) consecutive annual source tests, the unit shall be tested not less than once every thirty-six (36) months. If the result of the 36-month source test demonstrates that the unit does not meet the applicable emission limits, the source testing frequency shall revert to at least once every twelve (12) months. [District Rules 4305, 4306, and 4320]

{110} The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081]

Sections 6.3.2.1 through 6.3.2.7 address the requirements of group testing which is not applicable for this project.

Section 6.4, Emission Control Plan (ECP)

Section 6.4.1 requires that the operator of any unit shall submit to the APCO for approval an Emissions Control Plan according to the compliance schedule in Section 7.0 of District Rule 4320.

The proposed unit will be in compliance with the emissions limits listed in Table 1, Section 5.1 of this rule and with periodic monitoring and source testing requirements. Therefore, this current application for the new proposed unit satisfies the requirements of the Emission Control Plan, as listed in Section 6.4 of District Rule 4320. No further discussion is required.

Section 7.0, Compliance Schedule

Section 7.0 indicates that an operator with multiple units at a stationary source shall comply with this rule in accordance with the schedule specified in Table 1, Section 5.2 of District Rule 4320.

The units will be in compliance with the emissions limits listed in Table 1, Section 5.2 of this rule, and periodic monitoring and source testing as required by District Rule 4320. Therefore, requirements of the compliance schedule, as listed in Section 7.1 of District Rule 4306, are satisfied. No further discussion is required.

Conclusion

Conditions are included on the ATCs in order to ensure compliance with each section of this rule, see attached draft permit(s). Therefore, compliance with District Rule 4320 requirements is expected.

District Rule 4801 Sulfur Compounds

A person shall not discharge into the atmosphere sulfur compounds, which would exist as a liquid or gas at standard conditions, exceeding in concentration at the point of discharge: 0.2 % by volume calculated as SO₂, on a dry basis averaged over 15 consecutive minutes.

Using the ideal gas equation and the emission factors presented in Section VII, the sulfur compound emissions are calculated as follows:

$$\text{Volume SO}_2 = \frac{n RT}{P}$$

With:

N = moles SO₂

T (Standard Temperature) = 60°F = 520°R

P (Standard Pressure) = 14.7 psi

R (Universal Gas Constant) = $\frac{10.73 \text{ psi} \cdot \text{ft}^3}{\text{lb} \cdot \text{mol} \cdot \text{°R}}$

$$\frac{0.00285 \text{ lb} - \text{SO}_x}{\text{MMBtu}} \times \frac{\text{MMBtu}}{8,578 \text{ dscf}} \times \frac{1 \text{ lb} \cdot \text{mol}}{64 \text{ lb}} \times \frac{10.73 \text{ psi} \cdot \text{ft}^3}{\text{lb} \cdot \text{mol} \cdot ^\circ\text{R}} \times \frac{520^\circ\text{R}}{14.7 \text{ psi}} \times \frac{1,000,000 \cdot \text{parts}}{\text{million}} = 2.0 \frac{\text{parts}}{\text{million}}$$

$$\text{SulfurConcentration} = 2.0 \frac{\text{parts}}{\text{million}} < 2,000 \text{ ppmv (or 0.2\%)}$$

Therefore, compliance with District Rule 4801 requirements is expected.

California Health & Safety Code 42301.6 (School Notice)

The District has verified that these sites are 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)

The California Environmental Quality Act (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 San Joaquin Valley Unified Air Pollution Control District (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.
- 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.

The District determined that no other agency has broader discretionary approval power over the project and that the District is the first agency to act on the project, therefore establishing the District as the Lead Agency for the project (CEQA Guidelines §15051(b)). The District's engineering evaluation of the project (this document) determined that compliance with District rules and permit conditions would reduce and mitigate the project's potential air quality impacts to less than significant.

The District prepared an Initial Study which demonstrates that through a combination of project design elements, permit conditions, and mitigation measures, project specific environmental impacts will be less than significant. A Mitigated Negative declaration and Notice of intent to Adopt will be prepared and circulated for public review and comment pursuant to CCR §15072 et seq. The issuance of the Authority to Construct (ATC) constitutes the final decision to approve the project and will not be issued until the District has approved the final environmental document. Pursuant to CEQA Guidelines §15075 a Notice of Determination will be filed within five (5) days of the issuance of the ATC.

Mitigation Measures to be included as Permit Conditions

Chevron will surrender ERCs sufficient to offset operational emissions as required by District NSR requirements. *[Public Resources Code 21000-21177: California Environmental Quality Act]*

A qualified registered biologist will conduct a focused pre-construction survey to determine the presence/absence of potential impacts on sensitive species prior to the onset of ground disturbance. The survey shall be conducted in accordance with the standard protocol of the USFWS and CDFG. If more than 30 days pass before the onset of ground disturbance, an additional survey shall be conducted by a Certified Biological Representative within 30 days prior to the onset of ground disturbance. *[Public Resources Code 21000-21177: California Environmental Quality Act]*

If sensitive species or their nests/dens are detected in the pre-construction survey, the appropriate standardized avoidance measures will be implemented to preclude take of the species. If standardized avoidance measures cannot be achieved Chevron will consult with the CDFG and USFWS to develop alternative compliance measures. If standardized avoidance measures fail and there is a take of a threatened or endangered species Chevron will notify USFWS and CDFG immediately. *[Public Resources Code 21000-21177: California Environmental Quality Act]*

A qualified registered biologist will conduct a focused pre-construction survey to determine the presence/absence of potential impacts on riparian habitats, sensitive natural communities and wetlands prior to the onset of ground disturbance. The survey shall be conducted in accordance with the standard protocol of the USFWS and CDFG. If more than 30 days pass before the onset of ground disturbance, an additional survey shall be conducted by a Certified Biological Representative within 30 days prior to the onset of ground disturbance. *[Public Resources Code 21000-21177: California Environmental Quality Act]*

A qualified registered biologist will conduct a focused pre-construction survey to determine the presence/absence of potential impacts on migratory corridors prior to the onset of ground disturbance. The survey shall be conducted in accordance with the standard protocol of the USFWS and CDFG. If more than 30 days pass before the onset of ground disturbance, an additional survey shall be conducted by a Certified Biological Representative within 30 days prior to the onset of ground disturbance. *[Public Resources Code 21000-21177: California Environmental Quality Act]*

In the event that archaeological/paleontological resources are discovered during ground-disturbing activities associated with construction of the proposed Project, all work within 100 feet of the find shall cease. Chevron will notify and retain a qualified archaeologist/paleontologist to assess and provide an evaluation of the significance of the find. Chevron shall determine whether avoidance is necessary and feasible in light of the factors such as the nature of the find, project design, costs, and other considerations, and, if necessary, develop appropriate mitigation measures in consultation with Kern County and other appropriate agencies and individuals. Work may resume on the Project site once the evaluation of the find is complete by the qualified archaeologist/paleontologist. *[Public Resources Code 21000-21177: California Environmental Quality Act]*

In the event that human remains are discovered during construction of the Project, all work within 100 feet shall be ceased and the discovery will immediately be reported to the County Coroner. If the remains are determined to be Native American in origin, the County Coroner shall notify the Native American Heritage Commission (NAHC) within 24 hours of the determination. The NAHC will solicit those persons it believe to be the nearest descendants of the remains for recommendations. Chevron shall, in consultation with the identified descendants of the remains and/or NAHC, will identify the appropriate measures for the treatment or disposition of the remains. *[Public Resources Code 21000-21177: California Environmental Quality Act]*

Prior to the start of construction activities, Chevron shall provide the District with documentation demonstrating that maps identifying all wells in the vicinity of the sites have been submitted to DOGGR for compliance with DOGGR's "Well Review Program". *[Public Resources Code 21000-21177: California Environmental Quality Act]*

During construction activities, if unknown, unrecorded or abandoned wells are discovered or if any wells are damaged, Chevron shall immediately notify DOGGR. *[Public Resources Code 21000-21177: California Environmental Quality Act]*

Any wells discovered or exposed during construction activities will be tested for flammable vapors. *[Public Resources Code 21000-21177: California Environmental Quality Act]*

IX. Recommendation

Compliance with all applicable rules and regulations is expected. Make preliminary decision to issue the requested Authorities to Construct subject to the proposed conditions presented in **Attachment XI**.

X. Billing Information

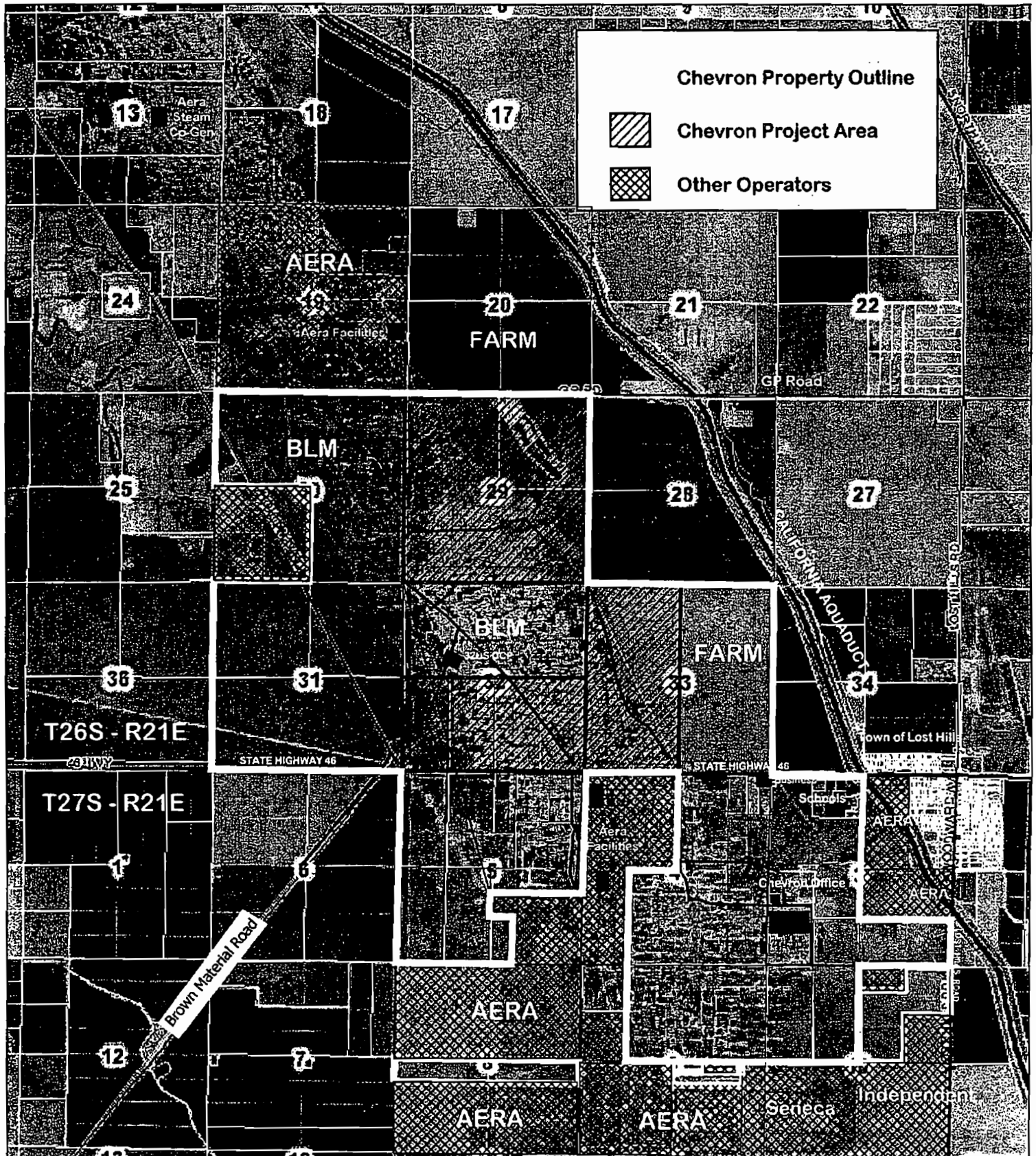
Annual Permit Fees			
Permit Number	Fee Schedule	Fee Description	Annual Fee
S-2010-274 through '-284	3020-02-H	> 15,000 kBtu/hr	\$882.00

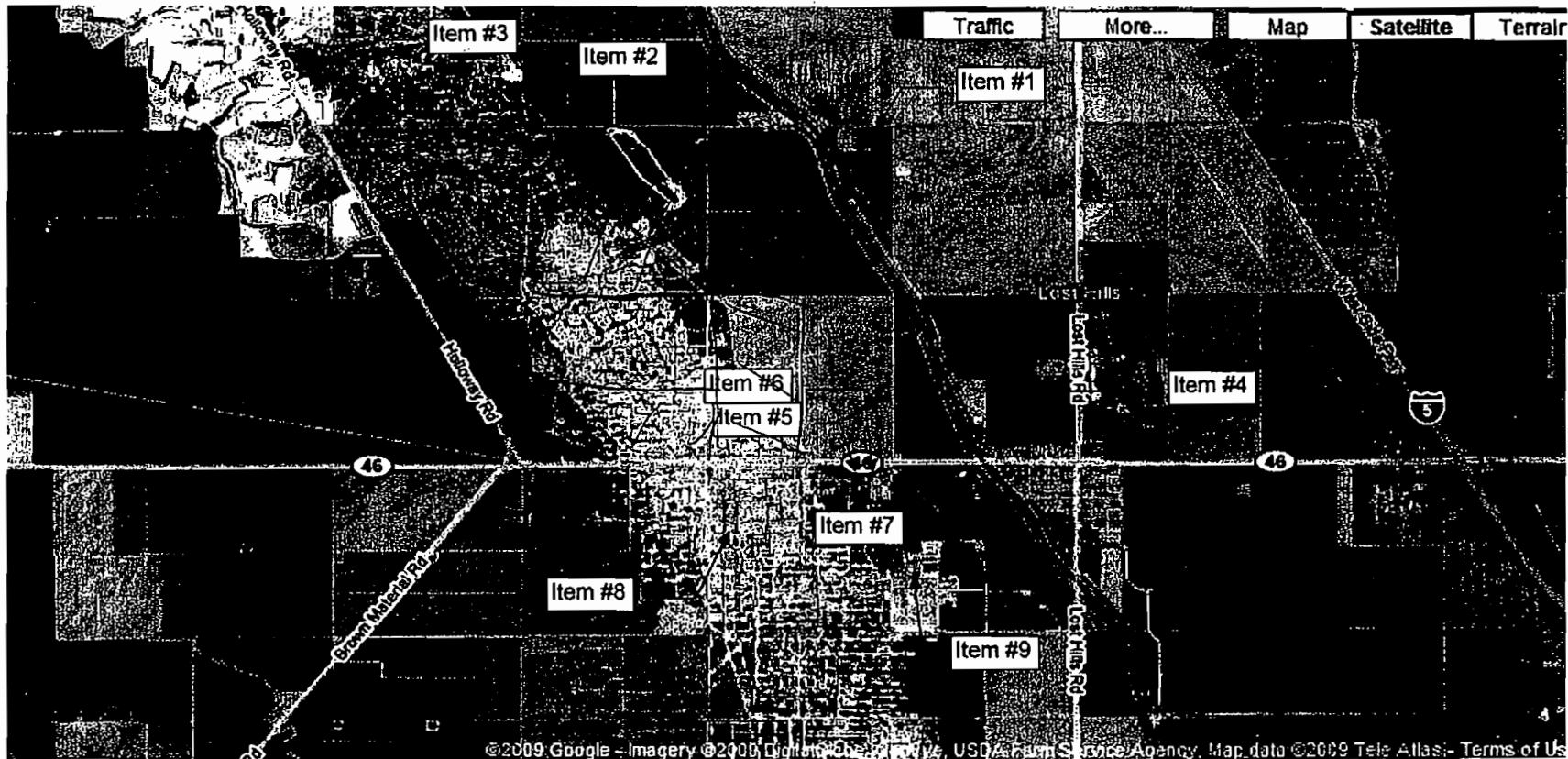
Attachments

- I: Location Map
- II: Steam Generator Diagram
- III: Manufacturer's Information on Low NOx Burner
- IV: Source Test Results
- V: Emissions Profiles
- VI: SSPE1 Calculations
- VII: BACT Guideline
- VIII: BACT Analysis
- IX: HRA and AAQA
- X: Compliance Certification
- XI: Draft ATCs

ATTACHMENT I
Location Map

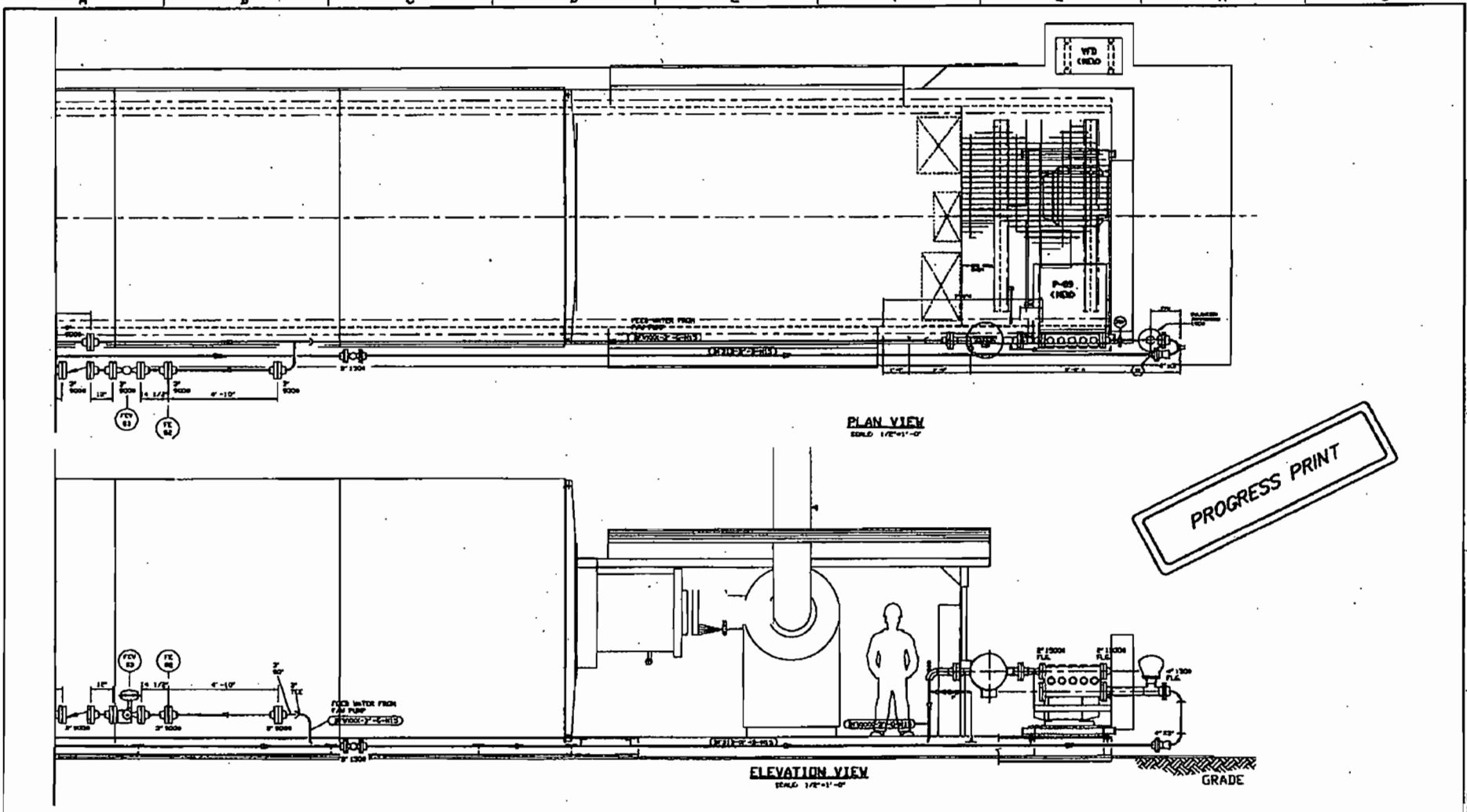
Chevron - Lost Hills Project



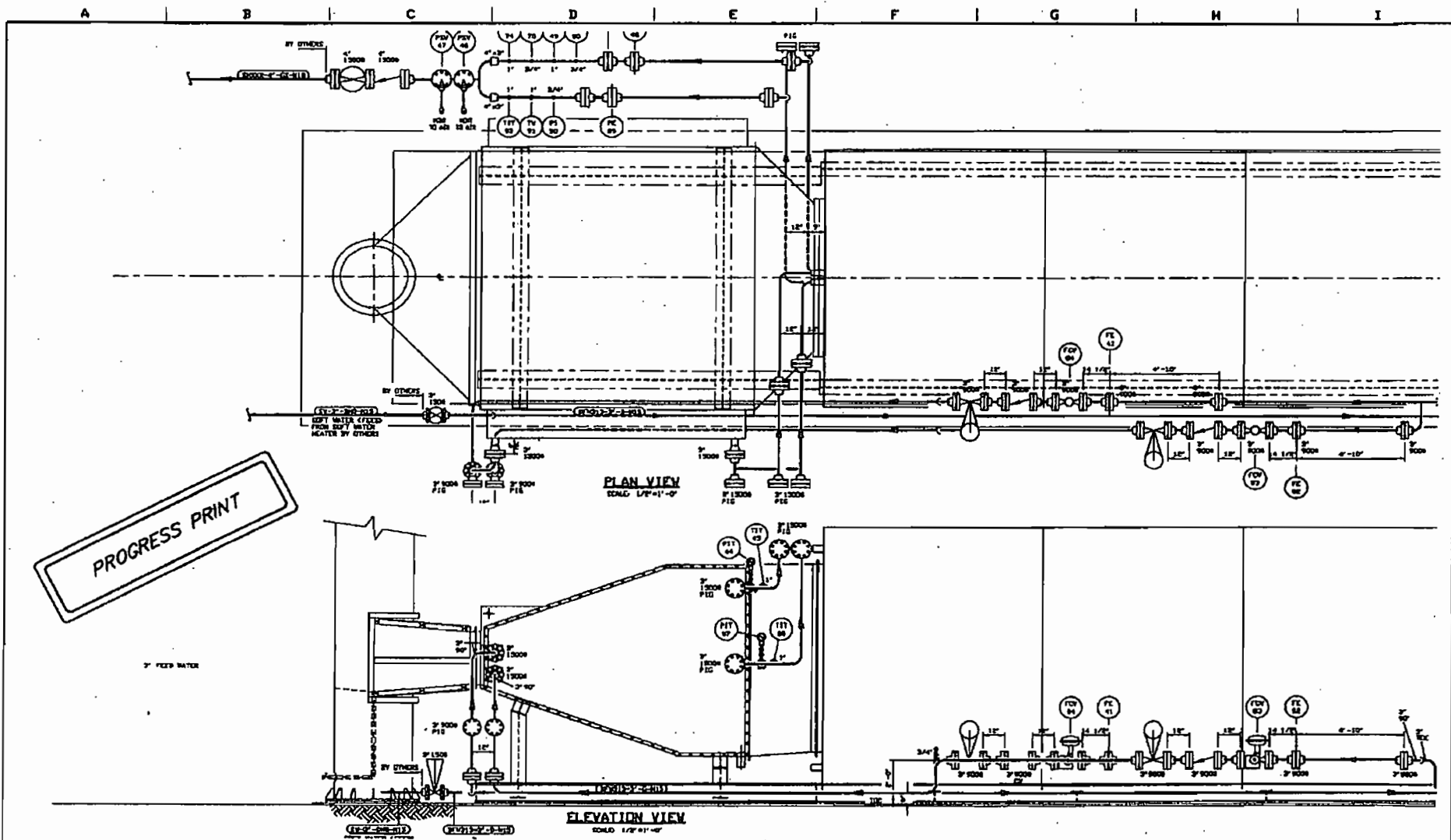


Item #	Description
1	Office- Farming Operations
2	Work shop, warehouse- Farming Operations
3	Warehouse Shop- Unknown
4	Closest Public Housing-City of Lost Hills.
5	Business Location-Auto Parts Store
6	Business Location-Pallet Repair Yard
7	Lost Hills School
8	Aera Oilfield Operations-Operator Office
9	Chevron Oilfield Operations-Engineering and Operations Management office
10	

ATTACHMENT II Steam Generator Diagram



REFERENCE DRAWINGS TITLE SHEET & BIDDING BOOK - ADDENDUM SK-05327-01		ISSUED FOR REVIEW 08/05/05		REVISIONS		ChevronTexaco		PIPING LAYOUT FEEDWATER PUMP & METERING SHY. 2 SPLIT - FLOW STEAM GENERATOR DESIGN PHASE 4 STEAM PLANTS 2 AND 3 CHEVON AREA, T. 302/R. 21E, SECTION 1	
TECROSS ENGINEERS SOLD BY: [] TAD: [] PLOT BY: [] CHECKED BY: [] T.E. ENGINEER: [] LAST CHECKED: []		[] []		[] []		SAN JOAQUIN VALLEY BUSINESS UNIT SCALE: 1/8"=1'-0" DATE STARTED: 08/02/05 DR. L. B. [] DR. APP. [] DWG. NO. []		APPROVED L. C. [] S. B. [] SK-05327-07-A	



PROGRESS PRINT

REFERENCE DRAWINGS TITLE SHEET & DRAWING INDEX - ECONOMICAL, SK-05327-02	TJ CROSS ENGINEERS SOLD 1/27/07 BY FRJ (202) 208-2028 PLOT BY JCL CHARGED BY FRJ T&E CHECKED BY LAST CHECKED BY FRJ	REVISIONS ISSUED FOR REVIEW 08/05/03	ChevronTexaco SAN JOAQUIN VALLEY BUSINESS UNIT SCALE 1/8"=1'-0" DATE STARTED 08/05/03 IN LAGUNA DR APP ENCL EDL	PIPING LAYOUT - CONNECTION SECTION INLET & OUTLET SUPPLY - FLOW STEAM GENERATOR DESIGN PHASE 4 STEAM PLANTS AREA 2 SECTION 2 SK-05327-06-A
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ATTACHMENT III
Manufacturer's Information on Low NOx Burner



North American

Manufacturing Company, Ltd.

4455 East 71st Street Cleveland, OH 44105-5600 USA

Tel 216.271.6000 Fax 216.641.7852 email: sales@namfg.com

August 6, 2008

Chevron North America
Exploration & Production Company
San Joaquin Valley Strategic Business Unit
9525 Camino Media
Bakersfield, CA 93311

Attention: Mr. John Gruber
Air Specialist Engineer

SUBJECT: Emission Guarantee for 62.5 and 85 MM Btu/hr GLE Combustion Systems

Dear Mr. Gruber,

We have reviewed the information that you have provided in the e-mails dated July 31, and August 4, 2008 on the fuels to be fired and the operational/dimensional parameters of the steam generators (both 62.5 and 85 MM Btu/hr units) to be covered in this guarantee of emission performance. Based on this information we can make the following emission guarantees for the two different size 4231-GLE Combustion Systems being considered.

The Guaranteed Emission Levels for these afore mentioned 4231-GLE Combustion Systems installed on standard sized 50,000 lb/hr (62.5 MM Btu/hr HHV gross heat input) and the 70,000 lb/hr (85 MM Btu/hr HHV gross heat input) generators in new or as new condition and outfitted with fully operational Flue Gas Recirculation (FGR) Systems is described as follows:

Guaranteed Emissions

NO_x

The burner generated NO_x, for either size unit, is guaranteed not to exceed:

- 7 ppmvd corrected to 3% O₂ subject to the conditions and limitations identified below.

Note: We understand that you wish to target 5.5 ppmdv, dry volume basis corrected to 3% O₂, as the emission value desired during low NO_x tuning in order to allow yourself a 1.5 ppmdv cushion below the required limit of 7 ppmdv to allow for some variability in daily emission performance and accuracy in portable emission monitors used to tune the burner.

CO

The burner generated CO, for either size unit, is guaranteed not to exceed:

- 25 ppmvd corrected to 3% O₂ subject to the conditions and limitations below.

VOC

The burner generated VOC, for either size unit, is guaranteed not to exceed:

- 0.0055 lb VOC/MMBtu at either 62.5 or 85 MMBtu/hr subject to the conditions and limitations below. These emission values are based on concentration of 13 ppmvd as methane equivalent corrected to 3% O₂, in the flue gas.

The following conditions were also considered in identifying the above emissions guarantee:

1. The system will fire one of the specified Fuel Gases from your email of 7/31/08, having a heating value of between 916 and 1076 BTU/ft³ HHV.
2. A fully functional & automatic FGR flow control system based on oxygen level in the vitiated combustion air providing up to 40% FGR by volume is required.
3. The final steam generator FGR and Excess Air rates will be set by North American in order to achieve the desired compliance targets.
4. The steam generators are to be of standard size with the 50,000 lb/hr (62.5 MM Btu/hr) units having a furnace dimension of 9'-6" ID X 38'-8" long and the 70,000 lb/hr (85 MM Btu/hr) units having a furnace dimension of 11'-3" ID X 38'-8" long (inside the tube bundle). These correspond to the dimensions supplied in your email of 8/04/08 with an additional 7" subtracted from the internal diameter to account for the tube bundle.
5. The above emissions are based on firing either the Model 4231-62.5-GLE or the 4231-85-GLE Combustion Systems controlled by the proprietary patented algorithms in the embedded 8379 CMS code provided with the burner by North American and a fully functional "mass flow control" fuel and air ratio system with Stack O₂ trim.
6. We can meet this emission guarantee contingent upon proper installation in a 50,000 lb/hr or 70,000 lb/hr steam generator in good clean (as new) condition and properly operated
7. Combustion air will be between 32°F – 120°F inlet temperature and 20.9% oxygen for emissions testing purposes. Combustion system fuel/air ratio will be varied on a mass flow basis based on this inlet temperature to ensure emissions compliance across all operating conditions.
8. The combustion air fan must be sufficient to deliver the required combination of FGR and Excess Air at the maximum firing rate.
9. The guarantee is valid over a 3:1 turndown from the high fire rating.
10. The emissions data will be obtained from a sample port at a point downstream of the exit of the burner reaction chamber.
11. The test data will be extracted from a single point and time averaged.

12. North American will verify all emission levels noted above following start-up when the operating mode of the burner and system is at steady state and absent of any pressure spikes in either the field supply or duct systems. North American **must** participate in the start-up/final tuning and emissions test for the guarantees to be valid. Our standard service rates outlined in our Sheet M-9-P-US-NA will apply. If no further testing is conducted as outlined in the attached **CONDITION AND LIMITS OF NORTH AMERICAN MANUFACTURING COMPANY ("NAMCO") EMISSIONS LEVELS GUARANTEE, JULY 2005 (Form 195-GRM12)**, this test will be sufficient to satisfy the guarantee.
13. North American will provide its "best efforts" in meeting the 7 ppmvd NOx (corrected to 3% O₂) guarantee at the customer request of 10% excess air and approximately 30% FGR. Final operational settings will be made on the basis of environmental compliance. Additional excess air may be required to achieve compliance and will be the first course of remedial action following adjustments in the FGR rate. Other compliance options may present themselves in the particular installation and will be discussed on a case by case basis.

In addition, based on the composition of the fuel being fired we would Expect to see the following emissions for PM10 and SOx:

Expected Emissions

PM10

The burner generated PM10, for either size unit, is expected to be:

- 0.0032 #PM10/MMBtu at either 62.5 or 85 MMBtu/hr.

The 4231-GLE burner is not an appreciable source of combustion generated particulate matter during normal gas fired operation. Particulate can be introduced in to the system in several ways, such as poor inlet air filtering, particulate or condensable laden fuel gas, and/or from deterioration of surfaces within the process furnace. North American cannot guarantee a burner generated particulate load due to these and other factors that are outside of its control or influence..

SOx

The burner generated SOx, for either size unit, is expected to be:

- 0.00285 #SOx/MMBtu at either 62.5 or 85 MMBtu/hr.

North American does not provide SOx guarantees as SOx emissions are solely a function of the sulfur content of the fuel and/or air entering the system. There is no combustion technology that provides reduced SOx formation, and therefore this is outside North American's control or influence.

Thank you for providing this opportunity to demonstrate the low emission performance of this ultra low NOx partial lean burn GLE technology when applied to a heat recovery

steam generator. Please feel free to contact me if there are any questions concerning this letter or if we can be of any further assistance with your current combustion equipment needs.

Very truly yours,
NORTH AMERICAN MFG. CO.

John M. Quiel
Manager, Oil Field Sales

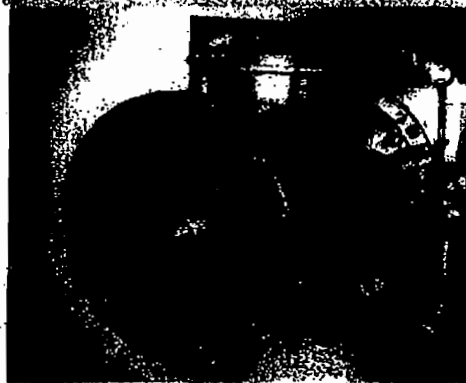
The North American Commitment

We continuously provide our customers with innovative solutions for all their industrial needs. Our creative energy and engineering expertise bring together to provide the latest in combustion technology - supplying breakthrough flow products and solutions that improve your facility's performance - and your bottom line.

We provide our customers with full service support. From sales, installation, start-up, and maintenance through parts, installation and service, North American provides complete customer support throughout the entire process.



4455 East 71st Street Cleveland, OH
44105-5600 USA
Tel: 216 271-8000 Fax: 216 641-7852



CUTTING EMISSIONS
THROUGH CUTTING EDGE
TECHNOLOGY

MAGNA-FLAME™ LE

The North American logo, consisting of a stylized globe icon followed by the text "North American".



through technology for the ultimate in performance.

Ultra Low NO_x without FGR

The Magna Flame LE uses a lean primary flame and ultra secondary combustion to achieve less than 18 ppm (corrected to 3% O₂) NO_x without FGR in many applications.

Low NO_x without sacrificing low CO and VOC's

In many low NO_x burners, CO and VOC emissions increase as NO_x emissions decrease. The Magna Flame LE utilizes a lean primary reaction chamber that changes the relationship and minimizes NO_x, CO, and VOCs simultaneously.

Get Even Lower NO_x with FGR

When FGR is used with the Magna Flame LE, the NO_x emissions can be taken to even lower levels (below 8 ppm (corrected to 3% O₂), 0.01 lb NO_x per MMBtu) (see FIG 1).

Preheat efficiencies

The LE's lean primary technology also provides low NO_x with preheated air. As the preheat temperature increases, the primary air flow rate adjusts to maintain consistent NO_x emissions.

How it works

The unique patented design of the Magna Flame LE uses a combination of lean primary combustion with a preheated reaction zone and ultra secondary combustion in the furnace to provide ultra low burner NO_x, CO, and VOC emissions.

FIG 2 illustrates how the NO_x emissions from a primary burner decrease as the amount of excess air is increased. The Magna Flame LE uses this method to operate at single digit NO_x emissions in the reaction chamber.

FIG 3 illustrates how the LE establishes a lean primary and then combusts the mixture in the primary reaction zone. The fuel and air are introduced separately into the

burner, where they are intimately mixed with an anti flashback burner. The mixture then decelerates into the reaction zone where the main combustion takes place.



Secondary gas is injected into the furnace where it mixes with furnace gases and the products

of combustion from the primary reaction zone. The secondary fuel flow provides near stoichiometric overall ratio for the burner. The entrained oxygen deficient furnace gases are vital to creating a natural approach of NO_x with the secondary jets.

FIG 1

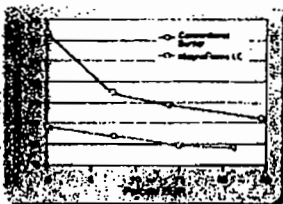


FIG 2

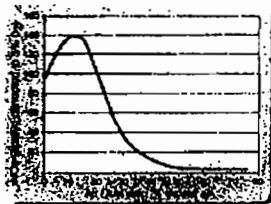
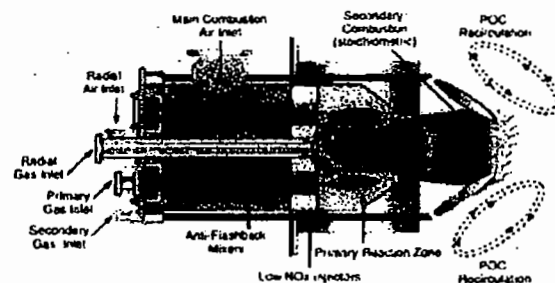


FIG 3 LE - CROSS SECTION



ATTACHMENT IV
PM10 Source Test Results

EPA Method 1-5
 Particulate Gravimetric Results
 @ 68° F & 29.92 "Hg

Run 1	Net mg	gr/dscf	gr/scf	lb/MMBtu	lb/hr
Probe & nozzle wash	0.2	0.00008	0.00007	0.00011	0.007
Filter	0.1	0.00005	0.00004	0.00007	0.004
Total front half	0.3	0.00013	0.00011	0.00018	0.010
Condensables (back half)	0.6	0.00025	0.00021	0.00034	0.020
Total front & back half	0.9	0.00039	0.00032	0.00052	0.030

Run 2	Net mg	gr/dscf	gr/scf	lb/MMBtu	lb/hr
Probe & nozzle wash	1.9	0.00080	0.00066	0.00107	0.062
Filter	0.0	0.00000	0.00000	0.00001	0.000
Total front half	1.9	0.00080	0.00066	0.00107	0.062
Condensables (back half)	1.5	0.00063	0.00052	0.00084	0.049
Total front & back half	3.4	0.00143	0.00118	0.00192	0.111

Run 3	Net mg	gr/dscf	gr/scf	lb/MMBtu	lb/hr
Probe & nozzle wash	1.0	0.00042	0.00034	0.00056	0.033
Filter	0.1	0.00004	0.00003	0.00005	0.003
Total front half	1.1	0.00045	0.00037	0.00061	0.036
Condensables (back half)	0.5	0.00021	0.00017	0.00028	0.016
Total front & back half	1.6	0.00066	0.00055	0.00089	0.052

Supporting Data

Run	Time		%O ₂	%CO ₂	%H ₂ O	Vm _(std)	DSCFM
	Start	Finish					
1	10:43	11:51	1.5	11.0	17.07	36.60	9081
2	12:16	13:22	1.5	11.0	17.51	36.71	9074
3	13:46	14:53	1.5	11.0	17.63	37.00	9126

Engineering Source Test Report

Chevron U.S.A., Inc.

**Cymric
Steam Generator 99**

**Prepared by
Aeros Environmental, Inc.**

**Determination of Concentrations of
Particulate Matter**

Project 104-6131Z

Tested August 8, 2008

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Project Information

Permit Holder:

Chevron U.S.A., Inc.
P.O. Box 1392
Bakersfield, CA 93302
(661) 654-7582 FAX (661) 654-7133

Attention: Bill Stone

Source:

One Steam Generators located at Cymric;
Steam Generator 99

Independent Contractor:

Aeros Environmental, Inc.
18828 Highway 65
Bakersfield, CA 93308
(661) 391-0112 FAX (661) 391-0153

Attention: Mike Gray



Certification

August 28, 2008

Bill Stone
Chevron U.S.A., Inc.
P.O. Box 1392
Bakersfield, CA 93302

RE: Source Test Project 104-6131Z
Cymric - Steam Generator 99

Dear Bill:

I, Jeff Beecher, as Project Supervisor and on-site director, of the testing program referred to above and described in this report, do hereby certify the sampling, analytical procedures, and results presented in this report are authentic and accurate according to the methods and procedures used.



Jeff Beecher

Regarding the source test project referred to above, I certify that I have reviewed the sampling, analytical procedures, and results reported herein, and have found them to be accurate and true according to the methods and procedures used.



Tim Brennan

"Professional Air Emissions Testing and Analytical Services"

18828 Highway 65 • Bakersfield, CA 93308
(661) 391-0112 • (661) 391-0153 Fax

Introduction

Introduction

On August 7, 2008, Aeros Environmental, Inc. performed engineering testing for Chevron U.S.A., Inc. Steam Generator 99 located at Cymric was tested for concentrations of particulate matter. The purpose of the testing was to gather engineering data. The following methods were used

Parameter	Method	Analysis Method	Test Runs
Particulate Matter	EPA Methods 1 - 5	Gravimetric Analysis of Front Half and Back Half	3 60 minute
F-factor and Calorific Value	EPA Method 19 ASTM D-1945 & D-3588	GC-TCD; C ₁ - C ₆ + O ₂ , CO ₂ , N ₂ and Btu/lb	1

The testing was conducted by Jeff Beecher, Rory Brennan, Mark Comtois and Kevin Platero, all of Aeros Environmental, Inc. The fuel sample was analyzed by Lisa Marriott-Smith at Aeros Environmental's Bakersfield facility. Operation of the unit was supervised by Bill Stone and Glenn Sliitor of Chevron U.S.A., Inc.

EPA Methods 1 - 5

EPA Method 1-5
Field Data
@ 68° F & 29.92 "Hg

Data Input

Run number	1	2	3
Start time	10:43	12:16	13:46
Finish time	11:51	13:22	14:53
Sample time in minutes	60	60	60
Dry gas volume sampled in ft ³ (V _m)	40.54	40.95	41.27
Meter calibration factor (Y)	0.9825	0.9825	0.9825
Barometric pressure in "Hg (P _{bar})	29.14	29.14	29.14
Stack pressure in "H ₂ O (P _g)	-0.35	-0.35	-0.35
Differential meter pressure in "H ₂ O (ΔH)	1.04	1.05	1.06
Meter temperature in °F (T _m)	101	105	105
Meter temperature in °R (T _m)	561	565	565
Volume H ₂ O in grams, condensed	160.1	165.6	168.2
Percent CO ₂ volume dry	11.0	11.0	11.0
Percent O ₂ volume dry	1.5	1.5	1.5
Percent N ₂ volume dry	87.5	87.5	87.5
Pitot tube coefficient (C _p)	0.84	0.84	0.84
Average ΔP in "H ₂ O	0.66	0.66	0.67
Average √ΔP in "H ₂ O	0.81	0.81	0.82
Stack temperature in °F	240	236	235
Stack temperature in °R	700	696	695
Stack diameter in inches	29.0	29.0	29.0
Stack area in ft ²	4.59	4.59	4.59
Nozzle diameter in inches	0.240	0.240	0.240
Nozzle area in ft ²	3.14E-04	3.14E-04	3.14E-04

Calculated Results

Run number	1	2	3	Average
Sample volume in DSCF (V _{m(Std)})	36.60	36.71	37.00	N/A
H ₂ O vapor as fractional % (B _{wv})	0.171	0.175	0.176	0.174
Moisture factor (MF) calculated as 1-B _{wv}	0.829	0.825	0.824	0.826
MW of stack gas, dry, in lb/lb-mole (M _d)	29.82	29.82	29.82	29.82
MW of stack gas, wet, in lb/lb-mole (M _w)	27.80	27.75	27.74	27.76
Absolute stack pressure (P _a) in "Hg	29.11	29.11	29.11	29.11
Stack gas velocity (V _a) in fps	54.21	54.15	54.45	54.27
Actual volume flow (Q-ACFM)	14920	14903	14985	14936
Dry standard volume flow (Q _{std} -DSCFM)	9081	9074	9126	9094
% Isokinetic sample rate	98.1	98.5	98.7	N/A

EPA Method 1-5
 Particulate Gravimetric Results
 @ 68° F & 29.92 "Hg

Run 1	Net mg	gr/dscf	gr/scf	gr/dscf @ 12% CO ₂	lb/hr
Probe & nozzle wash	0.2	0.00008	0.00007	0.00009	0.007
Filter	0.1	0.00005	0.00004	0.00006	0.004
Total front half	0.3	0.00013	0.00011	0.00015	0.010
Condensables (back half)	0.6	0.00025	0.00021	0.00028	0.020
Total front & back half	0.9	0.00039	0.00032	0.00042	0.030

Run 2	Net mg	gr/dscf	gr/scf	gr/dscf @ 12% CO ₂	lb/hr
Probe & nozzle wash	1.9	0.00080	0.00066	0.00087	0.062
Filter	0.0	0.00000	0.00000	0.00000	0.000
Total front half	1.9	0.00080	0.00066	0.00087	0.062
Condensables (back half)	1.5	0.00063	0.00052	0.00069	0.049
Total front & back half	3.4	0.00143	0.00118	0.00156	0.111

Run 3	Net mg	gr/dscf	gr/scf	gr/dscf @ 12% CO ₂	lb/hr
Probe & nozzle wash	1.0	0.00042	0.00034	0.00045	0.033
Filter	0.1	0.00004	0.00003	0.00004	0.003
Total front half	1.1	0.00045	0.00037	0.00049	0.036
Condensables (back half)	0.5	0.00021	0.00017	0.00023	0.016
Total front & back half	1.6	0.00066	0.00055	0.00072	0.052

Supporting Data

Run	Time		%O ₂	%CO ₂	%H ₂ O	Vm _(std)	DSCFM
	Start	Finish					
1	10:43	11:51	1.5	11.0	17.07	36.60	9081
2	12:16	13:22	1.5	11.0	17.51	36.71	9074
3	13:46	14:53	1.5	11.0	17.63	37.00	9126

EPA Method 19



Chevron U.S.A., Inc.
Steam Generator 99

Project 104-6131Z
Laboratory ID 080285-01

Sample Description: Natural Gas
 Sampled by: Mark Comtois

Date Sampled: August 8, 2008
 Date Received: August 11, 2008
 Date Reported: August 11, 2008

Fuel Gas Analysis Results

CONSTITUENT	MOLE %	WT. %	CHONS Wt.%	
Carbon Dioxide	3.990	8.968	Carbon	68.30
Oxygen	0.646	1.056	Hydrogen	20.62
Nitrogen	2.455	3.512	Oxygen	7.57
Carbon Monoxide	0.000	0.000	Nitrogen	3.51
Hydrogen Sulfide	0.000	0.000	Sulfur	0.00
Methane	81.300	66.598	H/C	0.302
Ethane	9.091	13.958		
Propane	2.287	5.149		
Isobutane	0.064	0.190	H ₂ S ppmv	H ₂ S gr/100 SCF*
N-Butane	0.106	0.316	ND < 1	ND < 0.06
Isopentane	0.011	0.039		
N-Pentane	0.007	0.025	TRS ppmv	TRS gr/100 SCF*
Hexanes	0.044	0.192	ND < 1	ND < 0.06
Total(s)	100.000	100.000		

* Reported as Sulfur

Specific Gravity (Air = 1)	0.6762
Specific Volume (cf/lb)	19.38
Gross Calorific Value, Dry (Btu/cf)	1050.67
Gross Calorific Value, Wet (Btu/cf)	1029.60
Gross Calorific Value, Dry (Btu/lb)	20360.05
Net Calorific Value, Dry (Btu/cf)	949.65
Net Calorific Value, Wet (Btu/cf)	930.60
Compressibility Factor "Z" @ 60° F, 1 atm	0.9973
EPA F-Factor @ 68° F (DSCF/MMBtu)	8671
EPA F-Factor @ 60° F (DSCF/MMBtu)	8541

References:

ASTM Methods D1945-96, D3588-98 & D6228-98
 Double GC, TCD, FPD
 TRS = Total Reduced Sulfur as H₂S

Lisa Marriott-Smith
 Lisa Marriott-Smith Laboratory Manager

"Professional Air Emissions Testing and Analytical Services"

18828 Highway 65 • Bakersfield, CA 93308
 (861) 391-0112 • (661) 391-0153 Fax

ATTACHMENT VII
BACT Guideline 1.2.1

San Joaquin Valley
Unified Air Pollution Control District

Best Available Control Technology (BACT) Guideline 1.2.1*

Last Update: 3/11/2005

Steam Generator (> or = 5 MMBtu/hr, Oil Field)

Pollutant	Achieved in Practice or contained in the SIP	Technologically Feasible	Alternate Basic Equipment
VOC	Gaseous fuel		
NOx	14 ppmvd @ 3% O2	7 ppmvd @ 3% O2 with SCR 9 ppmvd @ 3% O2	
SOx	Natural gas, LPG, waste gas treated to remove 95% by weight of sulfur compounds or treated such that the sulfur content does not exceed 1 gr of sulfur compounds (as S) per 100 scf, or use of a continuously operating SO2 scrubber and either achieving 95% by weight control of sulfur compounds or achieving an emission rate of 30 ppmvd SO2 at stack O2		
PM10	Natural gas, LPG, waste gas treated to remove 95% by weight of sulfur compounds or treated such that the sulfur content does not exceed 1 gr of sulfur compounds (as S) per 100 scf, or use of a continuously operating SO2 scrubber and either achieving 95% by weight control of sulfur compounds or achieving an emission rate of 30 ppmvd SO2 at stack O2		
CO	50 ppmvd @ 3% O2		

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)**

ATTACHMENT VIII BACT Analysis

❖ Top Down BACT Analysis for NO_x Emissions:

Step 1 - Identify All Possible Control Technologies

The SJVUAPCD BACT Clearinghouse guideline 1.2.1, 3rd quarter 2008, identifies achieved in practice and technologically feasible BACT for Steam Generator ≥ 5 MMbtu/hr, at an oil field as follows:

1. 14 ppmvd @ 3% O₂ - Achieved in Practice.
2. 9 ppmv @ 3% O₂ – Technologically Feasible
3. 7 ppmvd @ 3% O₂ with SCR – Technologically Feasible

Step 2 - Eliminate Technologically Infeasible Options

None of the above listed technologies are technologically infeasible.

Step 3 - Rank Remaining Control Technologies by Control Effectiveness

1. 7 ppmv @ 3% O₂ with SCR – Technologically Feasible
2. 9 ppmv @ 3% O₂.– Technologically Feasible
3. 14 ppmvd @ 3% O₂ - Achieved in practice.

Step 4 - Cost Effectiveness Analysis

As the most stringent NO_x limit (7 ppmvd @ 3% O₂) identified above is proposed by the applicant, a cost effectiveness analysis is not necessary.

Step 5 - Select BACT

BACT is satisfied by the applicant's proposal to meet a NO_x limit of 7 ppmvd @ 3% O₂ to be achieved with a Low NO_x burner and flue gas recirculation (FGR).

❖ **Top Down BACT Analysis for VOC Emissions:**

Step 1 - Identify all control technologies

The SJVUAPCD BACT Clearinghouse guideline 1.2.1, 3rd quarter 2008, identifies achieved in practice and technologically feasible BACT for Steam Generator ≥ 5 MMbtu/hr, at an oil field as follows:

1. Gaseous fuel - achieved in practice

Step 2 - Eliminate Technologically Infeasible Options

The above listed technology is technologically feasible.

Step 3 - Rank Remaining Control Technologies by Control Effectiveness

1. Gaseous fuel - achieved in practice

Step 4 - Cost Effectiveness Analysis

Only one control technology identified and this technology is achieved in practice, therefore, cost effectiveness analysis not necessary.

Step 5 - Select BACT for VOC

The use of gaseous fuel (natural gas) is selected as BACT for VOC emissions.

❖ **Top Down BACT Analysis for PM₁₀ and SO_x Emissions:**

Step 1 - Identify all control technologies

The SJVUAPCD BACT Clearinghouse guideline 1.2.1, 3rd quarter 2007, identifies achieved in practice and technologically feasible BACT for Steam Generator ≥ 5 MMbtu/hr, at an oil field as follows:

1. Natural gas, LPG, waste gas treated to remove 95% by weight of sulfur compounds or treated such that the sulfur content does not exceed 1 gr of sulfur compounds (as S) per 100 scf, or use of a continuously operating SO₂ scrubber and either achieving 95% by weight control of sulfur compounds or achieving an emission rate of 30 ppmvd SO₂ at stack
O₂ - achieved in practice

Step 2 - Eliminate Technologically Infeasible Options

The above listed technology is technologically feasible.

Step 3 - Rank Remaining Control Technologies by Control Effectiveness

1. Natural gas, LPG, waste gas treated to remove 95% by weight of sulfur compounds or treated such that the sulfur content does not exceed 1 gr of sulfur compounds (as S) per 100 scf, or use of a continuously operating SO₂ scrubber and either achieving 95% by

weight control of sulfur compounds or achieving an emission rate of 30 ppmvd SO₂ at stack
O₂ - achieved in practice

Step 4 - Cost Effectiveness Analysis

Only one control technology identified and this technology is achieved in practice, therefore, cost effectiveness analysis not necessary.

Step 5 - Select BACT for SO_x and PM₁₀

The use of natural gas as a primary fuel with a sulfur content not to exceed 1.0 gr-S/100 scf with no back up fuel is selected as BACT for SO_x and PM₁₀ emissions.

❖ **Top Down BACT Analysis for CO Emissions:**

Step 1 - Identify all control technologies

The SJVUAPCD BACT Clearinghouse guideline 1.2.1, 3rd quarter 2008, identifies achieved in practice and technologically feasible BACT for Steam Generator \geq 5 MMbtu/hr, at an oil field as follows:

1. 50 ppmvd @ 3% O₂ - achieved in practice

Step 2 - Eliminate Technologically Infeasible Options

The above listed technology is technologically feasible.

Step 3 - Rank Remaining Control Technologies by Control Effectiveness

1. 50 ppmvd @ 3% O₂ - achieved in practice

Step 4 - Cost Effectiveness Analysis

Only one control technology identified and this technology is achieved in practice, therefore, cost effectiveness analysis not necessary.

Step 5 - Select BACT for CO

25 ppmvd CO @ 3% O₂ is proposed and satisfies BACT for CO emissions.

ATTACHMENT IX
HRA and AAQA

San Joaquin Valley Air Pollution Control District Revised Risk Management Review

To: Richard Edgehill – Permit Services
 From: Leland Villalvazo– Technical Services
 Date: November 29, 2011
 Facility Name: Chevron USA Inc.
 Location: Light Oil Western
 Application #(s): S-2010-274-0 thru 284-0
 Project #: S-1092524

A. RMR SUMMARY

RMR Summary				
Categories	Steam Gen (274-0 thru 284-0)	Project Totals	Facility Totals	
Prioritization Score	0.384 ea. (0.282 for 284-0)	4.12	4.51	
Acute Hazard Index	0.0	0.0	0.0	
Chronic Hazard Index	0.0	0.0	0.0	
Maximum Individual Cancer Risk (10 ⁻⁶)	0.11 ea.	1.18	1.9	
T-BACT Required?	No			
Special Permit Conditions?	No			

Proposed Permit Conditions

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

Unit # 274-0 thru 284-0

No special condition are requires as the applicant will fully offset project emissions.

B. RMR REPORT

I. Project Description

Technical Services received a request on July 13, 2010 to perform an Ambient Air Quality Analysis and a Risk Management Review for 11 NG Fired Steam Generators.

II. Analysis

Technical Services performed modeling for criteria pollutants CO, NOx, SOx and PM₁₀; as well as a RMR. The emission rates used for criteria pollutant modeling were provided by the processing engineer.

The results from the Criteria Pollutant Modeling are as follows:

ATTACHMENT X
Compliance Certification Form

**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
 MINOR PERMIT MODIFICATION

ADMINISTRATIVE
AMENDMENT

COMPANY NAME: CHEVRON U.S.A. INC.	FACILITY ID: S - 2010
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:	
3. Agent to the Owner:	

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 foregoing is correct and true:



Signature of Responsible Official

Jason Donchin

Name of Responsible Official (please print)

SJVBU HES Manager

Title of Responsible Official (please print)

Oct. 6, 2011

Date

(11 steam generator project)

ATTACHMENT XI
Draft ATCs

San Joaquin Valley
Air Pollution Control District

AUTHORITY TO CONSTRUCT

ISSUANCE DATE: DRAFT
DRAFT

PERMIT NO: S-2010-274-0

LEGAL OWNER OR OPERATOR: CHEVRON USA INC
MAILING ADDRESS: PO BOX 1392
BAKERSFIELD, CA 93302

LOCATION: LIGHT OIL WESTERN STATIONARY SOURCE
CA

EQUIPMENT DESCRIPTION:

85 MMBTU/HR NATURAL GAS-FIRED STEAM GENERATOR WITH NORTH AMERICAN MODEL 4231-85-GLE LOW-NOX BURNER ASSEMBLY, OR EQUIVALENT LOW-NOX BURNER, WITH FLUE GAS RECIRCULATION, APPROVED TO OPERATE AT VARIOUS LOCATIONS

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 2520] 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. Chevron will surrender ERCs sufficient to offset operational emissions as required by District NSR requirements. [Public Resources Code 21000-21177: California Environmental Quality Act]
4. A qualified registered biologist will conduct a focused pre-construction survey to determine the presence/absence of potential impacts on sensitive species prior to the onset of ground disturbance. The survey shall be conducted in accordance with the standard protocol of the USFWS and CDFG. If more than 30 days pass before the onset of ground disturbance, an additional survey shall be conducted by a Certified Biological Representative within 30 days prior to the onset of ground disturbance. [Public Resources Code 21000-21177: California Environmental Quality Act]

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-2010-274-0; Dec 20 2011 3:08PM - EDOEHLR : Joint Inspection NOT Required

5. If sensitive species or their nests/dens are detected in the pre-construction survey, the appropriate standardized avoidance measures will be implemented to preclude take of the species. If standardized avoidance measures cannot be achieved Chevron will consult with the CDFG and USFWS to develop alternative compliance measures. If standardized avoidance measures fail and there is a take of a threatened or endangered species Chevron will notify USFWS and CDFG immediately. [Public Resources Code 21000-21177: California Environmental Quality Act]
6. A qualified registered biologist will conduct a focused pre-construction survey to determine the presence/absence of potential impacts on riparian habitats, sensitive natural communities and wetlands prior to the onset of ground disturbance. The survey shall be conducted in accordance with the standard protocol of the USFWS and CDFG. If more than 30 days pass before the onset of ground disturbance, an additional survey shall be conducted by a Certified Biological Representative within 30 days prior to the onset of ground disturbance. [Public Resources Code 21000-21177: California Environmental Quality Act]
7. A qualified registered biologist will conduct a focused pre-construction survey to determine the presence/absence of potential impacts on migratory corridors prior to the onset of ground disturbance. The survey shall be conducted in accordance with the standard protocol of the USFWS and CDFG. If more than 30 days pass before the onset of ground disturbance, an additional survey shall be conducted by a Certified Biological Representative within 30 days prior to the onset of ground disturbance. [Public Resources Code 21000-21177: California Environmental Quality Act]
8. In the event that archaeological/paleontological resources are discovered during ground-disturbing activities associated with construction of the proposed Project, all work within 100 feet of the find shall cease. Chevron will notify and retain a qualified archaeologist/paleontologist to assess and provide an evaluation of the significance of the find. Chevron shall determine whether avoidance is necessary and feasible in light of the factors such as the nature of the find, project design, costs, and other considerations, and, if necessary, develop appropriate mitigation measures in consultation with Kern County and other appropriate agencies and individuals. Work may resume on the Project site once the evaluation of the find is complete by the qualified archaeologist/paleontologist. [Public Resources Code 21000-21177: California Environmental Quality Act]
9. In the event that human remains are discovered during construction of the Project, all work within 100 feet shall be ceased and the discovery will immediately be reported to the County Coroner. If the remains are determined to be Native American in origin, the County Coroner shall notify the Native American Heritage Commission (NAHC) within 24 hours of the determination. The NAHC will solicit those persons it believe to be the nearest descendants of the remains for recommendations. Chevron shall, in consultation with the identified descendants of the remains and/or NAHC, will identify the appropriate measures for the treatment or disposition of the remains. [Public Resources Code 21000-21177: California Environmental Quality Act]
10. Prior to the start of construction activities, Chevron shall provide the District with documentation demonstrating that maps identifying all wells in the vicinity of the sites have been submitted to DOGGR for compliance with DOGGR's "Well Review Program". [Public Resources Code 21000-21177: California Environmental Quality Act]
11. During construction activities, if unknown, unrecorded or abandoned wells are discovered or if any wells are damaged, Chevron shall immediately notify DOGGR. [Public Resources Code 21000-21177: California Environmental Quality Act]
12. Any wells discovered or exposed during construction activities will be tested for flammable vapors. [Public Resources Code 21000-21177: California Environmental Quality Act]
13. This steam generator is permitted to operate at the following locations: Section 29 T26S/R21E, SE, SW Section 32, T26S/R21E, and NW, SW Section 33 T26S/R21E. [District Rule 4102] Federally Enforceable Through Title V Permit
14. The permittee shall notify the District Compliance Division of each location 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
15. The permittee shall obtain written District approval for the use of any equivalent equipment not specifically approved by this Authority to Construct. Approval of the equivalent equipment shall be made only after the District's determination that the submitted design and performance of the proposed alternate equipment is equivalent to the specifically authorized equipment. [District Rule 2201] Federally Enforceable Through Title V Permit

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CONDITIONS CONTINUE ON NEXT PAGE

16. The permittee's request for approval of equivalent equipment shall include the make, model, manufacturer's maximum rating, manufacturer's guaranteed emission rates, equipment drawing(s), and operational characteristics/parameters. [District Rule 2010] Federally Enforceable Through Title V Permit
17. Alternate equipment shall be of the same class and category of source as the equipment authorized by the Authority to Construct. [District Rule 2201] Federally Enforceable Through Title V Permit
18. No emission factor and no emission shall be greater for the alternate equipment than for the proposed equipment. No changes in the hours of operation, operating rate, throughput, or firing rate may be authorized for any alternate equipment. [District Rule 2201] Federally Enforceable Through Title V Permit
19. Flue gas recirculation (FGR) shall be utilized in conjunction with low-NOx burner to maintain ongoing compliance with permitted emission limits. [District Rule 2201] Federally Enforceable Through Title V Permit
20. Natural gas fuel sulfur content shall not exceed 1.0 grains-S/100 scf. [District Rule 2201] Federally Enforceable Through Title V Permit
21. Emission rates, except during startup, shutdown, and the initial shakedown period shall not exceed: NOx (as NO₂): 7 ppmvd @ 3% O₂ or 0.0085 lb/MMBtu; or CO: 25 ppmvd @ 3% O₂ or 0.0185 lb/MMBtu. [District Rule 2201, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
22. Emission rates shall not exceed any of the following: PM₁₀: 0.0032 lb/MMBtu; or VOC: 0.0055 lb/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
23. Duration of start-up and shutdown shall not exceed 2 hours each per occurrence. [District Rules 2201, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
24. Emission rates during startup and shutdown shall not exceed: NOx - 0.14 lb/MMBtu or 116 ppmv @ 3% O₂; CO - 0.296 lb/MMBtu or 400 ppmv @ 3% O₂ [District Rule 2201] Federally Enforceable Through Title V Permit
25. Emissions rate of NOx shall not exceed 62.1 lb/day nor 6329 lb/yr. [District Rule 2201] Federally Enforceable Through Title V Permit
26. Emissions rate of CO shall not exceed 132.1 lb/day nor 13,775 lb/yr. [District Rule 2201] Federally Enforceable Through Title V Permit
27. If the unit is fired on noncertified gaseous fuel and compliance with SOx emission limits is achieved through fuel sulfur content limitations, then the sulfur content of the gaseous fuel being fired in the unit shall be determined using ASTM D 1072, D 3031, D 3246, D 4084, D 4468, D 6667 or grab sample analysis by GC-FPD/TCD performed in the laboratory. [District Rule 1070, 2201, and 4320] Federally Enforceable Through Title V Permit
28. When complying with sulfur emission limits by fuel analysis or by a combination of source testing and fuel analysis, each fuel source shall be tested weekly for sulfur content and higher heating value. If compliance with the fuel sulfur content limit and sulfur emission limits has been demonstrated for 8 consecutive weeks for a fuel source, then the fuel testing frequency shall be semi-annually. If a semi-annual fuel content source test fails to show compliance, weekly testing shall resume. [District Rules 1070, 2201, and 4320] Federally Enforceable Through Title V Permit
29. If fuel analysis is used to demonstrate compliance with conditions of this permit, the fuel higher heating value for each fuel shall be certified by a third party fuel supplier or determined by ASTM D 1826 or D 1945 in conjunction with ASTM D 3588 for gaseous fuels. [District Rules 1070, 2201, and 4320] Federally Enforceable Through Title V Permit
30. The permittee shall monitor and record the stack concentration of NOx, CO, and O₂ at least once every month (in which a source test is not performed) 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. Monitoring shall be performed within 5 days of restarting the unit unless monitoring has been performed within the last month. [District Rules 2520, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit

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CONDITIONS CONTINUE ON NEXT PAGE

31. If either the NO_x or CO concentrations corrected to 3% 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 Rules 2520, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
32. 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 Rules 2520, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
33. The permittee shall maintain records of: (1) the date and time of NO_x, CO, and O₂ measurements, (2) the O₂ concentration in percent and the measured NO_x and CO concentrations corrected to 3% 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 Rules 2520, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
34. Compliance demonstration (source testing) shall be by District witnessed, or authorized, sample collection by ARB certified laboratory. [District Rule 1081] Federally Enforceable Through Title V Permit
35. All required source testing shall conform to the compliance testing procedures described in District Rule 1081 (Amended December 16, 1993). [District Rule 1081, and County Rules 108 (Kings), 108.1 (Fresno, Merced, San Joaquin, Tulare, Kern, and Stanislaus), and 110 (Madera)] Federally Enforceable Through Title V Permit
36. Source testing to measure NO_x and CO emissions from this unit shall be conducted within 60 days of initial start-up. [District Rules 2201, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
37. Source testing to measure natural gas-combustion NO_x and CO emissions from this unit shall be conducted at least once every twelve (12) months. After demonstrating compliance on two (2) consecutive annual source tests, the unit shall be tested not less than once every thirty-six (36) months. If the result of the 36-month source test demonstrates that the unit does not meet the applicable emission limits, the source testing frequency shall revert to at least once every twelve (12) months. [District Rules 2201, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
38. The source test plan shall identify which basis (ppmv or lb/MMBtu) will be used to demonstrate compliance. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
39. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
40. The following test methods shall be used: NO_x (ppmv) - EPA Method 7E or ARB Method 100, NO_x (lb/MMBtu) - EPA Method 19, CO (ppmv) - EPA Method 10 or 10B or ARB Method 100, stack gas oxygen - EPA Method 3 or 3A or ARB Method 100, SO_x (lb/MMBtu) - ARB Method 8 or 100 or EPA Method 6, 6B, 6C, or 8, or fuel gas sulfur content analysis and EPA Method 19, fuel gas sulfur content - ASTM D1072, D3031, D3246, D4084, D4468, D6667 or double GC for H₂S and mercaptans performed in laboratory, fuel gas hhv - ASTM D1826 or D1945 in conjunction with ASTM D3588. [District Rules 1081, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
41. For emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. If two of three runs are above an applicable limit the test cannot be used to demonstrate compliance with an applicable limit. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit

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CONDITIONS CONTINUE ON NEXT PAGE

42. All emissions measurements shall be made with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. No determination of compliance shall be established within two hours after a continuous period in which fuel flow to the unit is shut off for 30 minutes or longer, or within 30 minutes after a re-ignition as defined in District Rules 4306 and 4320. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
43. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit
44. Copies of all gas purchase contracts, supplier certifications, and test results to determine compliance with the conditions of this permit shall be maintained. The operator shall record daily amount and type(s) of fuel(s) combusted, fuel sources, and all dates on which unit is fired on any noncertified fuel and record specific type of noncertified fuel used. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
45. Prior to operating equipment under this Authority to Construct, permittee shall surrender emission reduction credits for the following quantities of emissions: NOx: 2374 lb/quarter; PM10: 894 lb/quarter, and VOC: 1536 lb/qtr. Offsets include the applicable offset ratio specified in Section 4.8 of Rule 2201 (as amended 9/21/06). [District Rule 2201] Federally Enforceable Through Title V Permit
46. ERC Certificate Numbers S-3629-2 (NOx), S-3145-1 (VOC), and S-3598-4 (PM10) (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
47. Permittee shall maintain a record of the duration of each startup of this unit. [District Rule 4306] Federally Enforceable Through Title V Permit
48. 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, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit

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San Joaquin Valley
Air Pollution Control District

AUTHORITY TO CONSTRUCT

ISSUANCE DATE: DRAFT
DRAFT

PERMIT NO: S-2010-275-0

LEGAL OWNER OR OPERATOR: CHEVRON USA INC
MAILING ADDRESS: PO BOX 1392
BAKERSFIELD, CA 93302

LOCATION: LIGHT OIL WESTERN STATIONARY SOURCE
CA

EQUIPMENT DESCRIPTION:

85 MMBTU/HR NATURAL GAS-FIRED STEAM GENERATOR WITH NORTH AMERICAN MODEL 4231-85-GLE LOW-NOX BURNER ASSEMBLY, OR EQUIVALENT LOW-NOX BURNER, WITH FLUE GAS RECIRCULATION, APPROVED TO OPERATE AT VARIOUS LOCATIONS

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 2520] 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. Chevron will surrender ERCs sufficient to offset operational emissions as required by District NSR requirements. [Public Resources Code 21000-21177: California Environmental Quality Act]
4. A qualified registered biologist will conduct a focused pre-construction survey to determine the presence/absence of potential impacts on sensitive species prior to the onset of ground disturbance. The survey shall be conducted in accordance with the standard protocol of the USFWS and CDFG. If more than 30 days pass before the onset of ground disturbance, an additional survey shall be conducted by a Certified Biological Representative within 30 days prior to the onset of ground disturbance. [Public Resources Code 21000-21177: California Environmental Quality Act]

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-2010-275-0 : Dec 20 2011 3:08PM - EDGEHILR : Joint Inspection NOT Required

5. If sensitive species or their nests/dens are detected in the pre-construction survey, the appropriate standardized avoidance measures will be implemented to preclude take of the species. If standardized avoidance measures cannot be achieved Chevron will consult with the CDFG and USFWS to develop alternative compliance measures. If standardized avoidance measures fail and there is a take of a threatened or endangered species Chevron will notify USFWS and CDFG immediately. [Public Resources Code 21000-21177: California Environmental Quality Act]
6. A qualified registered biologist will conduct a focused pre-construction survey to determine the presence/absence of potential impacts on riparian habitats, sensitive natural communities and wetlands prior to the onset of ground disturbance. The survey shall be conducted in accordance with the standard protocol of the USFWS and CDFG. If more than 30 days pass before the onset of ground disturbance, an additional survey shall be conducted by a Certified Biological Representative within 30 days prior to the onset of ground disturbance. [Public Resources Code 21000-21177: California Environmental Quality Act]
7. A qualified registered biologist will conduct a focused pre-construction survey to determine the presence/absence of potential impacts on migratory corridors prior to the onset of ground disturbance. The survey shall be conducted in accordance with the standard protocol of the USFWS and CDFG. If more than 30 days pass before the onset of ground disturbance, an additional survey shall be conducted by a Certified Biological Representative within 30 days prior to the onset of ground disturbance. [Public Resources Code 21000-21177: California Environmental Quality Act]
8. In the event that archaeological/paleontological resources are discovered during ground-disturbing activities associated with construction of the proposed Project, all work within 100 feet of the find shall cease. Chevron will notify and retain a qualified archaeologist/paleontologist to assess and provide an evaluation of the significance of the find. Chevron shall determine whether avoidance is necessary and feasible in light of the factors such as the nature of the find, project design, costs, and other considerations, and, if necessary, develop appropriate mitigation measures in consultation with Kern County and other appropriate agencies and individuals. Work may resume on the Project site once the evaluation of the find is complete by the qualified archaeologist/paleontologist. [Public Resources Code 21000-21177: California Environmental Quality Act]
9. In the event that human remains are discovered during construction of the Project, all work within 100 feet shall be ceased and the discovery will immediately be reported to the County Coroner. If the remains are determined to be Native American in origin, the County Coroner shall notify the Native American Heritage Commission (NAHC) within 24 hours of the determination. The NAHC will solicit those persons it believe to be the nearest descendants of the remains for recommendations. Chevron shall, in consultation with the identified descendants of the remains and/or NAHC, will identify the appropriate measures for the treatment or disposition of the remains. [Public Resources Code 21000-21177: California Environmental Quality Act]
10. Prior to the start of construction activities, Chevron shall provide the District with documentation demonstrating that maps identifying all wells in the vicinity of the sites have been submitted to DOGGR for compliance with DOGGR's "Well Review Program". [Public Resources Code 21000-21177: California Environmental Quality Act]
11. During construction activities, if unknown, unrecorded or abandoned wells are discovered or if any wells are damaged, Chevron shall immediately notify DOGGR. [Public Resources Code 21000-21177: California Environmental Quality Act]
12. Any wells discovered or exposed during construction activities will be tested for flammable vapors. [Public Resources Code 21000-21177: California Environmental Quality Act]
13. This steam generator is permitted to operate at the following locations: Section 29 T26S/R21E, SE, SW Section 32, T26S/R21E, and NW, SW Section 33 T26S/R21E. [District Rule 4102] Federally Enforceable Through Title V Permit
14. The permittee shall notify the District Compliance Division of each location 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
15. The permittee shall obtain written District approval for the use of any equivalent equipment not specifically approved by this Authority to Construct. Approval of the equivalent equipment shall be made only after the District's determination that the submitted design and performance of the proposed alternate equipment is equivalent to the specifically authorized equipment. [District Rule 2201] Federally Enforceable Through Title V Permit

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CONDITIONS CONTINUE ON NEXT PAGE

16. The permittee's request for approval of equivalent equipment shall include the make, model, manufacturer's maximum rating, manufacturer's guaranteed emission rates, equipment drawing(s), and operational characteristics/parameters. [District Rule 2010] Federally Enforceable Through Title V Permit
17. Alternate equipment shall be of the same class and category of source as the equipment authorized by the Authority to Construct. [District Rule 2201] Federally Enforceable Through Title V Permit
18. No emission factor and no emission shall be greater for the alternate equipment than for the proposed equipment. No changes in the hours of operation, operating rate, throughput, or firing rate may be authorized for any alternate equipment. [District Rule 2201] Federally Enforceable Through Title V Permit
19. Flue gas recirculation (FGR) shall be utilized in conjunction with low-NOx burner to maintain ongoing compliance with permitted emission limits. [District Rule 2201] Federally Enforceable Through Title V Permit
20. Natural gas fuel sulfur content shall not exceed 1.0 grains-S/100 scf. [District Rule 2201] Federally Enforceable Through Title V Permit
21. Emission rates, except during startup, shutdown, and the initial shakedown period shall not exceed: NOx (as NO₂): 7 ppmvd @ 3% O₂ or 0.0085 lb/MMBtu; or CO: 25 ppmvd @ 3% O₂ or 0.0185 lb/MMBtu. [District Rule 2201, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
22. Emission rates shall not exceed any of the following: PM₁₀: 0.0032 lb/MMBtu; or VOC: 0.0055 lb/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
23. Duration of start-up and shutdown shall not exceed 2 hours each per occurrence. [District Rules 2201, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
24. Emission rates during startup and shutdown shall not exceed: NOx - 0.14 lb/MMBtu or 116 ppmv @ 3% O₂; CO - 0.296 lb/MMBtu or 400 ppmv @ 3% O₂ [District Rule 2201] Federally Enforceable Through Title V Permit
25. Emissions rate of NOx shall not exceed 62.1 lb/day nor 6329 lb/yr. [District Rule 2201] Federally Enforceable Through Title V Permit
26. Emissions rate of CO shall not exceed 132.1 lb/day nor 13,775 lb/yr. [District Rule 2201] Federally Enforceable Through Title V Permit
27. If the unit is fired on noncertified gaseous fuel and compliance with SOx emission limits is achieved through fuel sulfur content limitations, then the sulfur content of the gaseous fuel being fired in the unit shall be determined using ASTM D 1072, D 3031, D 3246, D 4084, D 4468, D 6667 or grab sample analysis by GC-FPD/TCD performed in the laboratory. [District Rule 1070, 2201, and 4320] Federally Enforceable Through Title V Permit
28. When complying with sulfur emission limits by fuel analysis or by a combination of source testing and fuel analysis, each fuel source shall be tested weekly for sulfur content and higher heating value. If compliance with the fuel sulfur content limit and sulfur emission limits has been demonstrated for 8 consecutive weeks for a fuel source, then the fuel testing frequency shall be semi-annually. If a semi-annual fuel content source test fails to show compliance, weekly testing shall resume. [District Rules 1070, 2201, and 4320] Federally Enforceable Through Title V Permit
29. If fuel analysis is used to demonstrate compliance with conditions of this permit, the fuel higher heating value for each fuel shall be certified by a third party fuel supplier or determined by ASTM D 1826 or D 1945 in conjunction with ASTM D 3588 for gaseous fuels. [District Rules 1070, 2201, and 4320] Federally Enforceable Through Title V Permit
30. The permittee shall monitor and record the stack concentration of NOx, CO, and O₂ at least once every month (in which a source test is not performed) 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. Monitoring shall be performed within 5 days of restarting the unit unless monitoring has been performed within the last month. [District Rules 2520, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit

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CONDITIONS CONTINUE ON NEXT PAGE

31. If either the NO_x or CO concentrations corrected to 3% 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 Rules 2520, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
32. 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 Rules 2520, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
33. The permittee shall maintain records of: (1) the date and time of NO_x, CO, and O₂ measurements, (2) the O₂ concentration in percent and the measured NO_x and CO concentrations corrected to 3% 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 Rules 2520, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
34. Compliance demonstration (source testing) shall be by District witnessed, or authorized, sample collection by ARB certified laboratory. [District Rule 1081] Federally Enforceable Through Title V Permit
35. All required source testing shall conform to the compliance testing procedures described in District Rule 1081 (Amended December 16, 1993). [District Rule 1081, and County Rules 108 (Kings), 108.1 (Fresno, Merced, San Joaquin, Tulare, Kern, and Stanislaus), and 110 (Madera)] Federally Enforceable Through Title V Permit
36. Source testing to measure NO_x and CO emissions from this unit shall be conducted within 60 days of initial start-up. [District Rules 2201, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
37. Source testing to measure natural gas-combustion NO_x and CO emissions from this unit shall be conducted at least once every twelve (12) months. After demonstrating compliance on two (2) consecutive annual source tests, the unit shall be tested not less than once every thirty-six (36) months. If the result of the 36-month source test demonstrates that the unit does not meet the applicable emission limits, the source testing frequency shall revert to at least once every twelve (12) months. [District Rules 2201, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
38. The source test plan shall identify which basis (ppmv or lb/MMBtu) will be used to demonstrate compliance. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
39. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
40. The following test methods shall be used: NO_x (ppmv) - EPA Method 7E or ARB Method 100, NO_x (lb/MMBtu) - EPA Method 19, CO (ppmv) - EPA Method 10 or 10B or ARB Method 100, stack gas oxygen - EPA Method 3 or 3A or ARB Method 100, SO_x (lb/MMBtu) - ARB Method 8 or 100 or EPA Method 6, 6B, 6C, or 8, or fuel gas sulfur content analysis and EPA Method 19, fuel gas sulfur content - ASTM D1072, D3031, D3246, D4084, D4468, D6667 or double GC for H₂S and mercaptans performed in laboratory, fuel gas hhv - ASTM D1826 or D1945 in conjunction with ASTM D3588. [District Rules 1081, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
41. For emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. If two of three runs are above an applicable limit the test cannot be used to demonstrate compliance with an applicable limit. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit

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CONDITIONS CONTINUE ON NEXT PAGE

42. All emissions measurements shall be made with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. No determination of compliance shall be established within two hours after a continuous period in which fuel flow to the unit is shut off for 30 minutes or longer, or within 30 minutes after a re-ignition as defined in District Rules 4306 and 4320. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
43. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit
44. Copies of all gas purchase contracts, supplier certifications, and test results to determine compliance with the conditions of this permit shall be maintained. The operator shall record daily amount and type(s) of fuel(s) combusted, fuel sources, and all dates on which unit is fired on any noncertified fuel and record specific type of noncertified fuel used. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
45. Prior to operating equipment under this Authority to Construct, permittee shall surrender emission reduction credits for the following quantities of emissions: NO_x: 2374 lb/quarter; PM₁₀: 894 lb/quarter, and VOC: 1536 lb/qtr. Offsets include the applicable offset ratio specified in Section 4.8 of Rule 2201 (as amended 9/21/06). [District Rule 2201] Federally Enforceable Through Title V Permit
46. ERC Certificate Numbers S-3629-2 (NO_x), S-3145-1 (VOC), and S-3598-4 (PM₁₀) (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
47. Permittee shall maintain a record of the duration of each startup of this unit. [District Rule 4306] Federally Enforceable Through Title V Permit
48. 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, 4305, 4306, and 4320] 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-2010-276-0

LEGAL OWNER OR OPERATOR: CHEVRON USA INC
MAILING ADDRESS: PO BOX 1392
BAKERSFIELD, CA 93302

LOCATION: LIGHT OIL WESTERN STATIONARY SOURCE
CA

EQUIPMENT DESCRIPTION:

85 MMBTU/HR NATURAL GAS-FIRED STEAM GENERATOR WITH NORTH AMERICAN MODEL 4231-85-GLE LOW-NOX BURNER ASSEMBLY, OR EQUIVALENT LOW-NOX BURNER, WITH FLUE GAS RECIRCULATION, APPROVED TO OPERATE AT VARIOUS LOCATIONS

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 2520] 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. Chevron will surrender ERCs sufficient to offset operational emissions as required by District NSR requirements. [Public Resources Code 21000-21177: California Environmental Quality Act]
4. A qualified registered biologist will conduct a focused pre-construction survey to determine the presence/absence of potential impacts on sensitive species prior to the onset of ground disturbance. The survey shall be conducted in accordance with the standard protocol of the USFWS and CDFG. If more than 30 days pass before the onset of ground disturbance, an additional survey shall be conducted by a Certified Biological Representative within 30 days prior to the onset of ground disturbance. [Public Resources Code 21000-21177: California Environmental Quality Act]

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-2010-276-0 : Dec 20 2011 3:08PM - EDGEHLR : Joint Inspection NOT Required

5. If sensitive species or their nests/dens are detected in the pre-construction survey, the appropriate standardized avoidance measures will be implemented to preclude take of the species. If standardized avoidance measures cannot be achieved Chevron will consult with the CDFG and USFWS to develop alternative compliance measures. If standardized avoidance measures fail and there is a take of a threatened or endangered species Chevron will notify USFWS and CDFG immediately. [Public Resources Code 21000-21177: California Environmental Quality Act]
6. A qualified registered biologist will conduct a focused pre-construction survey to determine the presence/absence of potential impacts on riparian habitats, sensitive natural communities and wetlands prior to the onset of ground disturbance. The survey shall be conducted in accordance with the standard protocol of the USFWS and CDFG. If more than 30 days pass before the onset of ground disturbance, an additional survey shall be conducted by a Certified Biological Representative within 30 days prior to the onset of ground disturbance. [Public Resources Code 21000-21177: California Environmental Quality Act]
7. A qualified registered biologist will conduct a focused pre-construction survey to determine the presence/absence of potential impacts on migratory corridors prior to the onset of ground disturbance. The survey shall be conducted in accordance with the standard protocol of the USFWS and CDFG. If more than 30 days pass before the onset of ground disturbance, an additional survey shall be conducted by a Certified Biological Representative within 30 days prior to the onset of ground disturbance. [Public Resources Code 21000-21177: California Environmental Quality Act]
8. In the event that archaeological/paleontological resources are discovered during ground-disturbing activities associated with construction of the proposed Project, all work within 100 feet of the find shall cease. Chevron will notify and retain a qualified archaeologist/paleontologist to assess and provide an evaluation of the significance of the find. Chevron shall determine whether avoidance is necessary and feasible in light of the factors such as the nature of the find, project design, costs, and other considerations, and, if necessary, develop appropriate mitigation measures in consultation with Kern County and other appropriate agencies and individuals. Work may resume on the Project site once the evaluation of the find is complete by the qualified archaeologist/paleontologist. [Public Resources Code 21000-21177: California Environmental Quality Act]
9. In the event that human remains are discovered during construction of the Project, all work within 100 feet shall be ceased and the discovery will immediately be reported to the County Coroner. If the remains are determined to be Native American in origin, the County Coroner shall notify the Native American Heritage Commission (NAHC) within 24 hours of the determination. The NAHC will solicit those persons it believe to be the nearest descendants of the remains for recommendations. Chevron shall, in consultation with the identified descendants of the remains and/or NAHC, will identify the appropriate measures for the treatment or disposition of the remains. [Public Resources Code 21000-21177: California Environmental Quality Act]
10. Prior to the start of construction activities, Chevron shall provide the District with documentation demonstrating that maps identifying all wells in the vicinity of the sites have been submitted to DOGGR for compliance with DOGGR's "Well Review Program". [Public Resources Code 21000-21177: California Environmental Quality Act]
11. During construction activities, if unknown, unrecorded or abandoned wells are discovered or if any wells are damaged, Chevron shall immediately notify DOGGR. [Public Resources Code 21000-21177: California Environmental Quality Act]
12. Any wells discovered or exposed during construction activities will be tested for flammable vapors. [Public Resources Code 21000-21177: California Environmental Quality Act]
13. This steam generator is permitted to operate at the following locations: Section 29 T26S/R21E, SE, SW Section 32, T26S/R21E, and NW, SW Section 33 T26S/R21E. [District Rule 4102] Federally Enforceable Through Title V Permit
14. The permittee shall notify the District Compliance Division of each location 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
15. The permittee shall obtain written District approval for the use of any equivalent equipment not specifically approved by this Authority to Construct. Approval of the equivalent equipment shall be made only after the District's determination that the submitted design and performance of the proposed alternate equipment is equivalent to the specifically authorized equipment. [District Rule 2201] Federally Enforceable Through Title V Permit

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CONDITIONS CONTINUE ON NEXT PAGE

16. The permittee's request for approval of equivalent equipment shall include the make, model, manufacturer's maximum rating, manufacturer's guaranteed emission rates, equipment drawing(s), and operational characteristics/parameters. [District Rule 2010] Federally Enforceable Through Title V Permit
17. Alternate equipment shall be of the same class and category of source as the equipment authorized by the Authority to Construct. [District Rule 2201] Federally Enforceable Through Title V Permit
18. No emission factor and no emission shall be greater for the alternate equipment than for the proposed equipment. No changes in the hours of operation, operating rate, throughput, or firing rate may be authorized for any alternate equipment. [District Rule 2201] Federally Enforceable Through Title V Permit
19. Flue gas recirculation (FGR) shall be utilized in conjunction with low-NOx burner to maintain ongoing compliance with permitted emission limits. [District Rule 2201] Federally Enforceable Through Title V Permit
20. Natural gas fuel sulfur content shall not exceed 1.0 grains-S/100 scf. [District Rule 2201] Federally Enforceable Through Title V Permit
21. Emission rates, except during startup, shutdown, and the initial shakedown period shall not exceed: NOx (as NO₂): 7 ppmvd @ 3% O₂ or 0.0085 lb/MMBtu; or CO: 25 ppmvd @ 3% O₂ or 0.0185 lb/MMBtu. [District Rule 2201, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
22. Emission rates shall not exceed any of the following: PM₁₀: 0.0032 lb/MMBtu; or VOC: 0.0055 lb/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
23. Duration of start-up and shutdown shall not exceed 2 hours each per occurrence. [District Rules 2201, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
24. Emission rates during startup and shutdown shall not exceed: NOx - 0.14 lb/MMBtu or 116 ppmv @ 3% O₂; CO - 0.296 lb/MMBtu or 400 ppmv @ 3% O₂ [District Rule 2201] Federally Enforceable Through Title V Permit
25. Emissions rate of NOx shall not exceed 62.1 lb/day nor 6329 lb/yr. [District Rule 2201] Federally Enforceable Through Title V Permit
26. Emissions rate of CO shall not exceed 132.1 lb/day nor 13,775 lb/yr. [District Rule 2201] Federally Enforceable Through Title V Permit
27. If the unit is fired on noncertified gaseous fuel and compliance with SOx emission limits is achieved through fuel sulfur content limitations, then the sulfur content of the gaseous fuel being fired in the unit shall be determined using ASTM D 1072, D 3031, D 3246, D 4084, D 4468, D 6667 or grab sample analysis by GC-FPD/TCD performed in the laboratory. [District Rule 1070, 2201, and 4320] Federally Enforceable Through Title V Permit
28. When complying with sulfur emission limits by fuel analysis or by a combination of source testing and fuel analysis, each fuel source shall be tested weekly for sulfur content and higher heating value. If compliance with the fuel sulfur content limit and sulfur emission limits has been demonstrated for 8 consecutive weeks for a fuel source, then the fuel testing frequency shall be semi-annually. If a semi-annual fuel content source test fails to show compliance, weekly testing shall resume. [District Rules 1070, 2201, and 4320] Federally Enforceable Through Title V Permit
29. If fuel analysis is used to demonstrate compliance with conditions of this permit, the fuel higher heating value for each fuel shall be certified by a third party fuel supplier or determined by ASTM D 1826 or D 1945 in conjunction with ASTM D 3588 for gaseous fuels. [District Rules 1070, 2201, and 4320] Federally Enforceable Through Title V Permit
30. The permittee shall monitor and record the stack concentration of NOx, CO, and O₂ at least once every month (in which a source test is not performed) 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. Monitoring shall be performed within 5 days of restarting the unit unless monitoring has been performed within the last month. [District Rules 2520, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit

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CONDITIONS CONTINUE ON NEXT PAGE

31. If either the NO_x or CO concentrations corrected to 3% 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 Rules 2520, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
32. 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 Rules 2520, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
33. The permittee shall maintain records of: (1) the date and time of NO_x, CO, and O₂ measurements, (2) the O₂ concentration in percent and the measured NO_x and CO concentrations corrected to 3% 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 Rules 2520, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
34. Compliance demonstration (source testing) shall be by District witnessed, or authorized, sample collection by ARB certified laboratory. [District Rule 1081] Federally Enforceable Through Title V Permit
35. All required source testing shall conform to the compliance testing procedures described in District Rule 1081 (Amended December 16, 1993). [District Rule 1081, and County Rules 108 (Kings), 108.1 (Fresno, Merced, San Joaquin, Tulare, Kern, and Stanislaus), and 110 (Madera)] Federally Enforceable Through Title V Permit
36. Source testing to measure NO_x and CO emissions from this unit shall be conducted within 60 days of initial start-up. [District Rules 2201, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
37. Source testing to measure natural gas-combustion NO_x and CO emissions from this unit shall be conducted at least once every twelve (12) months. After demonstrating compliance on two (2) consecutive annual source tests, the unit shall be tested not less than once every thirty-six (36) months. If the result of the 36-month source test demonstrates that the unit does not meet the applicable emission limits, the source testing frequency shall revert to at least once every twelve (12) months. [District Rules 2201, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
38. The source test plan shall identify which basis (ppmv or lb/MMBtu) will be used to demonstrate compliance. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
39. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
40. The following test methods shall be used: NO_x (ppmv) - EPA Method 7E or ARB Method 100, NO_x (lb/MMBtu) - EPA Method 19, CO (ppmv) - EPA Method 10 or 10B or ARB Method 100, stack gas oxygen - EPA Method 3 or 3A or ARB Method 100, SO_x (lb/MMBtu) - ARB Method 8 or 100 or EPA Method 6, 6B, 6C, or 8; or fuel gas sulfur content analysis and EPA Method 19, fuel gas sulfur content - ASTM D1072, D3031, D3246, D4084, D4468, D6667 or double GC for H₂S and mercaptans performed in laboratory, fuel gas hhv - ASTM D1826 or D1945 in conjunction with ASTM D3588. [District Rules 1081, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
41. For emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. If two of three runs are above an applicable limit the test cannot be used to demonstrate compliance with an applicable limit. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit

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CONDITIONS CONTINUE ON NEXT PAGE

42. All emissions measurements shall be made with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. No determination of compliance shall be established within two hours after a continuous period in which fuel flow to the unit is shut off for 30 minutes or longer, or within 30 minutes after a re-ignition as defined in District Rules 4306 and 4320. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
43. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit
44. Copies of all gas purchase contracts, supplier certifications, and test results to determine compliance with the conditions of this permit shall be maintained. The operator shall record daily amount and type(s) of fuel(s) combusted, fuel sources, and all dates on which unit is fired on any noncertified fuel and record specific type of noncertified fuel used. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
45. Prior to operating equipment under this Authority to Construct, permittee shall surrender emission reduction credits for the following quantities of emissions: NOx: 2374 lb/quarter; PM10: 894 lb/quarter, and VOC: 1536 lb/qtr. Offsets include the applicable offset ratio specified in Section 4.8 of Rule 2201 (as amended 9/21/06). [District Rule 2201] Federally Enforceable Through Title V Permit
46. ERC Certificate Numbers S-3629-2 (NOx), S-3145-1 (VOC), and S-3598-4 (PM10) (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
47. Permittee shall maintain a record of the duration of each startup of this unit. [District Rule 4306] Federally Enforceable Through Title V Permit
48. 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, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit

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San Joaquin Valley
Air Pollution Control District

AUTHORITY TO CONSTRUCT

ISSUANCE DATE: DRAFT
DRAFT

PERMIT NO: S-2010-277-0

LEGAL OWNER OR OPERATOR: CHEVRON USA INC
MAILING ADDRESS: PO BOX 1392
BAKERSFIELD, CA 93302

LOCATION: LIGHT OIL WESTERN STATIONARY SOURCE
CA

EQUIPMENT DESCRIPTION:

85 MMBTU/HR NATURAL GAS-FIRED STEAM GENERATOR WITH NORTH AMERICAN MODEL 4231-85-GLE LOW-NOX BURNER ASSEMBLY, OR EQUIVALENT LOW-NOX BURNER, WITH FLUE GAS RECIRCULATION, APPROVED TO OPERATE AT VARIOUS LOCATIONS

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 2520] 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. Chevron will surrender ERCs sufficient to offset operational emissions as required by District NSR requirements. [Public Resources Code 21000-21177: California Environmental Quality Act]
4. A qualified registered biologist will conduct a focused pre-construction survey to determine the presence/absence of potential impacts on sensitive species prior to the onset of ground disturbance. The survey shall be conducted in accordance with the standard protocol of the USFWS and CDFG. If more than 30 days pass before the onset of ground disturbance, an additional survey shall be conducted by a Certified Biological Representative within 30 days prior to the onset of ground disturbance. [Public Resources Code 21000-21177: California Environmental Quality Act]

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-2010-277-0 : Dec 20 2011 3:08PM - EDGEHILL : Joint Inspection NOT Required

5. If sensitive species or their nests/dens are detected in the pre-construction survey, the appropriate standardized avoidance measures will be implemented to preclude take of the species. If standardized avoidance measures cannot be achieved Chevron will consult with the CDFG and USFWS to develop alternative compliance measures. If standardized avoidance measures fail and there is a take of a threatened or endangered species Chevron will notify USFWS and CDFG immediately. [Public Resources Code 21000-21177: California Environmental Quality Act]
6. A qualified registered biologist will conduct a focused pre-construction survey to determine the presence/absence of potential impacts on riparian habitats, sensitive natural communities and wetlands prior to the onset of ground disturbance. The survey shall be conducted in accordance with the standard protocol of the USFWS and CDFG. If more than 30 days pass before the onset of ground disturbance, an additional survey shall be conducted by a Certified Biological Representative within 30 days prior to the onset of ground disturbance. [Public Resources Code 21000-21177: California Environmental Quality Act]
7. A qualified registered biologist will conduct a focused pre-construction survey to determine the presence/absence of potential impacts on migratory corridors prior to the onset of ground disturbance. The survey shall be conducted in accordance with the standard protocol of the USFWS and CDFG. If more than 30 days pass before the onset of ground disturbance, an additional survey shall be conducted by a Certified Biological Representative within 30 days prior to the onset of ground disturbance. [Public Resources Code 21000-21177: California Environmental Quality Act]
8. In the event that archaeological/paleontological resources are discovered during ground-disturbing activities associated with construction of the proposed Project, all work within 100 feet of the find shall cease. Chevron will notify and retain a qualified archaeologist/paleontologist to assess and provide an evaluation of the significance of the find. Chevron shall determine whether avoidance is necessary and feasible in light of the factors such as the nature of the find, project design, costs, and other considerations, and, if necessary, develop appropriate mitigation measures in consultation with Kern County and other appropriate agencies and individuals. Work may resume on the Project site once the evaluation of the find is complete by the qualified archaeologist/paleontologist. [Public Resources Code 21000-21177: California Environmental Quality Act]
9. In the event that human remains are discovered during construction of the Project, all work within 100 feet shall be ceased and the discovery will immediately be reported to the County Coroner. If the remains are determined to be Native American in origin, the County Coroner shall notify the Native American Heritage Commission (NAHC) within 24 hours of the determination. The NAHC will solicit those persons it believe to be the nearest descendants of the remains for recommendations. Chevron shall, in consultation with the identified descendants of the remains and/or NAHC, will identify the appropriate measures for the treatment or disposition of the remains. [Public Resources Code 21000-21177: California Environmental Quality Act]
10. Prior to the start of construction activities, Chevron shall provide the District with documentation demonstrating that maps identifying all wells in the vicinity of the sites have been submitted to DOGGR for compliance with DOGGR's "Well Review Program". [Public Resources Code 21000-21177: California Environmental Quality Act]
11. During construction activities, if unknown, unrecorded or abandoned wells are discovered or if any wells are damaged, Chevron shall immediately notify DOGGR. [Public Resources Code 21000-21177: California Environmental Quality Act]
12. Any wells discovered or exposed during construction activities will be tested for flammable vapors. [Public Resources Code 21000-21177: California Environmental Quality Act]
13. This steam generator is permitted to operate at the following locations: Section 29 T26S/R21E, SE, SW Section 32, T26S/R21E, and NW, SW Section 33 T26S/R21E. [District Rule 4102] Federally Enforceable Through Title V Permit
14. The permittee shall notify the District Compliance Division of each location 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
15. The permittee shall obtain written District approval for the use of any equivalent equipment not specifically approved by this Authority to Construct. Approval of the equivalent equipment shall be made only after the District's determination that the submitted design and performance of the proposed alternate equipment is equivalent to the specifically authorized equipment. [District Rule 2201] Federally Enforceable Through Title V Permit

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16. The permittee's request for approval of equivalent equipment shall include the make, model, manufacturer's maximum rating, manufacturer's guaranteed emission rates, equipment drawing(s), and operational characteristics/parameters. [District Rule 2010] Federally Enforceable Through Title V Permit
17. Alternate equipment shall be of the same class and category of source as the equipment authorized by the Authority to Construct. [District Rule 2201] Federally Enforceable Through Title V Permit
18. No emission factor and no emission shall be greater for the alternate equipment than for the proposed equipment. No changes in the hours of operation, operating rate, throughput, or firing rate may be authorized for any alternate equipment. [District Rule 2201] Federally Enforceable Through Title V Permit
19. Flue gas recirculation (FGR) shall be utilized in conjunction with low-NOx burner to maintain ongoing compliance with permitted emission limits. [District Rule 2201] Federally Enforceable Through Title V Permit
20. Natural gas fuel sulfur content shall not exceed 1.0 grains-S/100 scf. [District Rule 2201] Federally Enforceable Through Title V Permit
21. Emission rates, except during startup, shutdown, and the initial shakedown period shall not exceed: NOx (as NO₂): 7 ppmvd @ 3% O₂ or 0.0085 lb/MMBtu; or CO: 25 ppmvd @ 3% O₂ or 0.0185 lb/MMBtu. [District Rule 2201, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
22. Emission rates shall not exceed any of the following: PM₁₀: 0.0032 lb/MMBtu; or VOC: 0.0055 lb/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
23. Duration of start-up and shutdown shall not exceed 2 hours each per occurrence. [District Rules 2201, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
24. Emission rates during startup and shutdown shall not exceed: NOx - 0.14 lb/MMBtu or 116 ppmv @ 3% O₂; CO - 0.296 lb/MMBtu or 400 ppmv @ 3% O₂ [District Rule 2201] Federally Enforceable Through Title V Permit
25. Emissions rate of NOx shall not exceed 62.1 lb/day nor 6329 lb/yr. [District Rule 2201] Federally Enforceable Through Title V Permit
26. Emissions rate of CO shall not exceed 132.1 lb/day nor 13,775 lb/yr. [District Rule 2201] Federally Enforceable Through Title V Permit
27. If the unit is fired on noncertified gaseous fuel and compliance with SOx emission limits is achieved through fuel sulfur content limitations, then the sulfur content of the gaseous fuel being fired in the unit shall be determined using ASTM D 1072, D 3031, D 3246, D 4084, D 4468, D 6667 or grab sample analysis by GC-FPD/TCD performed in the laboratory. [District Rule 1070, 2201, and 4320] Federally Enforceable Through Title V Permit
28. When complying with sulfur emission limits by fuel analysis or by a combination of source testing and fuel analysis, each fuel source shall be tested weekly for sulfur content and higher heating value. If compliance with the fuel sulfur content limit and sulfur emission limits has been demonstrated for 8 consecutive weeks for a fuel source, then the fuel testing frequency shall be semi-annually. If a semi-annual fuel content source test fails to show compliance, weekly testing shall resume. [District Rules 1070, 2201, and 4320] Federally Enforceable Through Title V Permit
29. If fuel analysis is used to demonstrate compliance with conditions of this permit, the fuel higher heating value for each fuel shall be certified by a third party fuel supplier or determined by ASTM D 1826 or D 1945 in conjunction with ASTM D 3588 for gaseous fuels. [District Rules 1070, 2201, and 4320] Federally Enforceable Through Title V Permit
30. The permittee shall monitor and record the stack concentration of NOx, CO, and O₂ at least once every month (in which a source test is not performed) 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. Monitoring shall be performed within 5 days of restarting the unit unless monitoring has been performed within the last month. [District Rules 2520, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit

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CONDITIONS CONTINUE ON NEXT PAGE

31. If either the NOx or CO concentrations corrected to 3% 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 Rules 2520, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
32. 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 Rules 2520, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
33. The permittee shall maintain records of: (1) the date and time of NO_x, CO, and O₂ measurements, (2) the O₂ concentration in percent and the measured NO_x and CO concentrations corrected to 3% 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 Rules 2520, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
34. Compliance demonstration (source testing) shall be by District witnessed, or authorized, sample collection by ARB certified laboratory. [District Rule 1081] Federally Enforceable Through Title V Permit
35. All required source testing shall conform to the compliance testing procedures described in District Rule 1081 (Amended December 16, 1993). [District Rule 1081, and County Rules 108 (Kings), 108.1 (Fresno, Merced, San Joaquin, Tulare, Kern, and Stanislaus), and 110 (Madera)] Federally Enforceable Through Title V Permit
36. Source testing to measure NO_x and CO emissions from this unit shall be conducted within 60 days of initial start-up. [District Rules 2201, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
37. Source testing to measure natural gas-combustion NO_x and CO emissions from this unit shall be conducted at least once every twelve (12) months. After demonstrating compliance on two (2) consecutive annual source tests, the unit shall be tested not less than once every thirty-six (36) months. If the result of the 36-month source test demonstrates that the unit does not meet the applicable emission limits, the source testing frequency shall revert to at least once every twelve (12) months. [District Rules 2201, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
38. The source test plan shall identify which basis (ppmv or lb/MMBtu) will be used to demonstrate compliance. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
39. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
40. The following test methods shall be used: NO_x (ppmv) - EPA Method 7E or ARB Method 100, NO_x (lb/MMBtu) - EPA Method 19, CO (ppmv) - EPA Method 10 or 10B or ARB Method 100, stack gas oxygen - EPA Method 3 or 3A or ARB Method 100, SO_x (lb/MMBtu) - ARB Method 8 or 100 or EPA Method 6, 6B, 6C, or 8, or fuel gas sulfur content analysis and EPA Method 19, fuel gas sulfur content - ASTM D1072, D3031, D3246, D4084, D4468, D6667 or double GC for H₂S and mercaptans performed in laboratory, fuel gas hhv - ASTM D1826 or D1945 in conjunction with ASTM D3588. [District Rules 1081, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
41. For emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. If two of three runs are above an applicable limit the test cannot be used to demonstrate compliance with an applicable limit. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit

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CONDITIONS CONTINUE ON NEXT PAGE

42. All emissions measurements shall be made with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. No determination of compliance shall be established within two hours after a continuous period in which fuel flow to the unit is shut off for 30 minutes or longer, or within 30 minutes after a re-ignition as defined in District Rules 4306 and 4320. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
43. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit
44. Copies of all gas purchase contracts, supplier certifications, and test results to determine compliance with the conditions of this permit shall be maintained. The operator shall record daily amount and type(s) of fuel(s) combusted, fuel sources, and all dates on which unit is fired on any noncertified fuel and record specific type of noncertified fuel used. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
45. Prior to operating equipment under this Authority to Construct, permittee shall surrender emission reduction credits for the following quantities of emissions: NOx: 2374 lb/quarter; PM10: 894 lb/quarter, and VOC: 1536 lb/qtr. Offsets include the applicable offset ratio specified in Section 4.8 of Rule 2201 (as amended 9/21/06). [District Rule 2201] Federally Enforceable Through Title V Permit
46. ERC Certificate Numbers S-3629-2 (NOx), S-3145-1 (VOC), and S-3598-4 (PM10) (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
47. Permittee shall maintain a record of the duration of each startup of this unit. [District Rule 4306] Federally Enforceable Through Title V Permit
48. 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, 4305, 4306, and 4320] 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-2010-278-0

LEGAL OWNER OR OPERATOR: CHEVRON USA INC
MAILING ADDRESS: PO BOX 1392
BAKERSFIELD, CA 93302

LOCATION: LIGHT OIL WESTERN STATIONARY SOURCE
CA

EQUIPMENT DESCRIPTION:

85 MMBTU/HR NATURAL GAS-FIRED STEAM GENERATOR WITH NORTH AMERICAN MODEL 4231-85-GLE LOW-NOX BURNER ASSEMBLY, OR EQUIVALENT LOW-NOX BURNER, WITH FLUE GAS RECIRCULATION, APPROVED TO OPERATE AT VARIOUS LOCATIONS

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 2520] 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. Chevron will surrender ERCs sufficient to offset operational emissions as required by District NSR requirements. [Public Resources Code 21000-21177: California Environmental Quality Act]
4. A qualified registered biologist will conduct a focused pre-construction survey to determine the presence/absence of potential impacts on sensitive species prior to the onset of ground disturbance. The survey shall be conducted in accordance with the standard protocol of the USFWS and CDFG. If more than 30 days pass before the onset of ground disturbance, an additional survey shall be conducted by a Certified Biological Representative within 30 days prior to the onset of ground disturbance. [Public Resources Code 21000-21177: California Environmental Quality Act]

CONDITIONS CONTINUE ON NEXT PAGE

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Seyed Sadredin, Executive Director APCO

DAVID WARNER, Director of Permit Services

S-2010-278-0 : Dec 20 2011 3:08PM - EDGEHLR : Joint Inspection NOT Required

5. If sensitive species or their nests/dens are detected in the pre-construction survey, the appropriate standardized avoidance measures will be implemented to preclude take of the species. If standardized avoidance measures cannot be achieved Chevron will consult with the CDFG and USFWS to develop alternative compliance measures. If standardized avoidance measures fail and there is a take of a threatened or endangered species Chevron will notify USFWS and CDFG immediately. [Public Resources Code 21000-21177: California Environmental Quality Act]
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17. Alternate equipment shall be of the same class and category of source as the equipment authorized by the Authority to Construct. [District Rule 2201] Federally Enforceable Through Title V Permit
18. No emission factor and no emission shall be greater for the alternate equipment than for the proposed equipment. No changes in the hours of operation, operating rate, throughput, or firing rate may be authorized for any alternate equipment. [District Rule 2201] Federally Enforceable Through Title V Permit
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20. Natural gas fuel sulfur content shall not exceed 1.0 grains-S/100 scf. [District Rule 2201] Federally Enforceable Through Title V Permit
21. Emission rates, except during startup, shutdown, and the initial shakedown period shall not exceed: NO_x (as NO₂): 7 ppmvd @ 3% O₂ or 0.0085 lb/MMBtu; or CO: 25 ppmvd @ 3% O₂ or 0.0185 lb/MMBtu. [District Rule 2201, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
22. Emission rates shall not exceed any of the following: PM₁₀: 0.0032 lb/MMBtu; or VOC: 0.0055 lb/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
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27. If the unit is fired on noncertified gaseous fuel and compliance with SO_x emission limits is achieved through fuel sulfur content limitations, then the sulfur content of the gaseous fuel being fired in the unit shall be determined using ASTM D 1072, D 3031, D 3246, D 4084, D 4468, D 6667 or grab sample analysis by GC-FPD/TCD performed in the laboratory. [District Rule 1070, 2201, and 4320] Federally Enforceable Through Title V Permit
28. When complying with sulfur emission limits by fuel analysis or by a combination of source testing and fuel analysis, each fuel source shall be tested weekly for sulfur content and higher heating value. If compliance with the fuel sulfur content limit and sulfur emission limits has been demonstrated for 8 consecutive weeks for a fuel source, then the fuel testing frequency shall be semi-annually. If a semi-annual fuel content source test fails to show compliance, weekly testing shall resume. [District Rules 1070, 2201, and 4320] Federally Enforceable Through Title V Permit
29. If fuel analysis is used to demonstrate compliance with conditions of this permit, the fuel higher heating value for each fuel shall be certified by a third party fuel supplier or determined by ASTM D 1826 or D 1945 in conjunction with ASTM D 3588 for gaseous fuels. [District Rules 1070, 2201, and 4320] Federally Enforceable Through Title V Permit
30. The permittee shall monitor and record the stack concentration of NO_x, CO, and O₂ at least once every month (in which a source test is not performed) 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. Monitoring shall be performed within 5 days of restarting the unit unless monitoring has been performed within the last month. [District Rules 2520, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit

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CONDITIONS CONTINUE ON NEXT PAGE

31. If either the NO_x or CO concentrations corrected to 3% 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 Rules 2520, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
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33. The permittee shall maintain records of: (1) the date and time of NO_x, CO, and O₂ measurements, (2) the O₂ concentration in percent and the measured NO_x and CO concentrations corrected to 3% 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 Rules 2520, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
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36. Source testing to measure NO_x and CO emissions from this unit shall be conducted within 60 days of initial start-up. [District Rules 2201, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
37. Source testing to measure natural gas-combustion NO_x and CO emissions from this unit shall be conducted at least once every twelve (12) months. After demonstrating compliance on two (2) consecutive annual source tests, the unit shall be tested not less than once every thirty-six (36) months. If the result of the 36-month source test demonstrates that the unit does not meet the applicable emission limits, the source testing frequency shall revert to at least once every twelve (12) months. [District Rules 2201, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
38. The source test plan shall identify which basis (ppmv or lb/MMBtu) will be used to demonstrate compliance. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
39. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
40. The following test methods shall be used: NO_x (ppmv) - EPA Method 7E or ARB Method 100, NO_x (lb/MMBtu) - EPA Method 19, CO (ppmv) - EPA Method 10 or 10B or ARB Method 100, stack gas oxygen - EPA Method 3 or 3A or ARB Method 100, SO_x (lb/MMBtu) - ARB Method 8 or 100 or EPA Method 6, 6B, 6C, or 8, or fuel gas sulfur content analysis and EPA Method 19, fuel gas sulfur content - ASTM D1072, D3031, D3246, D4084, D4468, D6667 or double GC for H₂S and mercaptans performed in laboratory, fuel gas hhv - ASTM D1826 or D1945 in conjunction with ASTM D3588. [District Rules 1081, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
41. For emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. If two of three runs are above an applicable limit the test cannot be used to demonstrate compliance with an applicable limit. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit

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CONDITIONS CONTINUE ON NEXT PAGE

42. All emissions measurements shall be made with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. No determination of compliance shall be established within two hours after a continuous period in which fuel flow to the unit is shut off for 30 minutes or longer, or within 30 minutes after a re-ignition as defined in District Rules 4306 and 4320. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
43. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit
44. Copies of all gas purchase contracts, supplier certifications, and test results to determine compliance with the conditions of this permit shall be maintained. The operator shall record daily amount and type(s) of fuel(s) combusted, fuel sources, and all dates on which unit is fired on any noncertified fuel and record specific type of noncertified fuel used. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
45. Prior to operating equipment under this Authority to Construct, permittee shall surrender emission reduction credits for the following quantities of emissions: NOx: 2374 lb/quarter; PM10: 894 lb/quarter, and VOC: 1536 lb/qtr. Offsets include the applicable offset ratio specified in Section 4.8 of Rule 2201 (as amended 9/21/06). [District Rule 2201] Federally Enforceable Through Title V Permit
46. ERC Certificate Numbers S-3629-2 (NOx), S-3145-1 (VOC), and S-3598-4 (PM10) (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
47. Permittee shall maintain a record of the duration of each startup of this unit. [District Rule 4306] Federally Enforceable Through Title V Permit
48. 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, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit

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San Joaquin Valley
Air Pollution Control District

AUTHORITY TO CONSTRUCT

ISSUANCE DATE: DRAFT
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PERMIT NO: S-2010-279-0

LEGAL OWNER OR OPERATOR: CHEVRON USA INC
MAILING ADDRESS: PO BOX 1392
BAKERSFIELD, CA 93302

LOCATION: LIGHT OIL WESTERN STATIONARY SOURCE
CA

EQUIPMENT DESCRIPTION:

85 MMBTU/HR NATURAL GAS-FIRED STEAM GENERATOR WITH NORTH AMERICAN MODEL 4231-85-GLE LOW-NOX BURNER ASSEMBLY, OR EQUIVALENT LOW-NOX BURNER, WITH FLUE GAS RECIRCULATION, APPROVED TO OPERATE AT VARIOUS LOCATIONS

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 2520] 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. Chevron will surrender ERCs sufficient to offset operational emissions as required by District NSR requirements. [Public Resources Code 21000-21177: California Environmental Quality Act]
4. A qualified registered biologist will conduct a focused pre-construction survey to determine the presence/absence of potential impacts on sensitive species prior to the onset of ground disturbance. The survey shall be conducted in accordance with the standard protocol of the USFWS and CDFG. If more than 30 days pass before the onset of ground disturbance, an additional survey shall be conducted by a Certified Biological Representative within 30 days prior to the onset of ground disturbance. [Public Resources Code 21000-21177: California Environmental Quality Act]

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

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DAVID WARNER, Director of Permit Services

S-2010-279-0 : Dec 20 2011 3:08PM - EDGEHLR : Joint Inspection NOT Required

5. If sensitive species or their nests/dens are detected in the pre-construction survey, the appropriate standardized avoidance measures will be implemented to preclude take of the species. If standardized avoidance measures cannot be achieved Chevron will consult with the CDFG and USFWS to develop alternative compliance measures. If standardized avoidance measures fail and there is a take of a threatened or endangered species Chevron will notify USFWS and CDFG immediately. [Public Resources Code 21000-21177: California Environmental Quality Act]
6. A qualified registered biologist will conduct a focused pre-construction survey to determine the presence/absence of potential impacts on riparian habitats, sensitive natural communities and wetlands prior to the onset of ground disturbance. The survey shall be conducted in accordance with the standard protocol of the USFWS and CDFG. If more than 30 days pass before the onset of ground disturbance, an additional survey shall be conducted by a Certified Biological Representative within 30 days prior to the onset of ground disturbance. [Public Resources Code 21000-21177: California Environmental Quality Act]
7. A qualified registered biologist will conduct a focused pre-construction survey to determine the presence/absence of potential impacts on migratory corridors prior to the onset of ground disturbance. The survey shall be conducted in accordance with the standard protocol of the USFWS and CDFG. If more than 30 days pass before the onset of ground disturbance, an additional survey shall be conducted by a Certified Biological Representative within 30 days prior to the onset of ground disturbance. [Public Resources Code 21000-21177: California Environmental Quality Act]
8. In the event that archaeological/paleontological resources are discovered during ground-disturbing activities associated with construction of the proposed Project, all work within 100 feet of the find shall cease. Chevron will notify and retain a qualified archaeologist/paleontologist to assess and provide an evaluation of the significance of the find. Chevron shall determine whether avoidance is necessary and feasible in light of the factors such as the nature of the find, project design, costs, and other considerations, and, if necessary, develop appropriate mitigation measures in consultation with Kern County and other appropriate agencies and individuals. Work may resume on the Project site once the evaluation of the find is complete by the qualified archaeologist/paleontologist. [Public Resources Code 21000-21177: California Environmental Quality Act]
9. In the event that human remains are discovered during construction of the Project, all work within 100 feet shall be ceased and the discovery will immediately be reported to the County Coroner. If the remains are determined to be Native American in origin, the County Coroner shall notify the Native American Heritage Commission (NAHC) within 24 hours of the determination. The NAHC will solicit those persons it believe to be the nearest descendants of the remains for recommendations. Chevron shall, in consultation with the identified descendants of the remains and/or NAHC, will identify the appropriate measures for the treatment or disposition of the remains. [Public Resources Code 21000-21177: California Environmental Quality Act]
10. Prior to the start of construction activities, Chevron shall provide the District with documentation demonstrating that maps identifying all wells in the vicinity of the sites have been submitted to DOGGR for compliance with DOGGR's "Well Review Program". [Public Resources Code 21000-21177: California Environmental Quality Act]
11. During construction activities, if unknown, unrecorded or abandoned wells are discovered or if any wells are damaged, Chevron shall immediately notify DOGGR. [Public Resources Code 21000-21177: California Environmental Quality Act]
12. Any wells discovered or exposed during construction activities will be tested for flammable vapors. [Public Resources Code 21000-21177: California Environmental Quality Act]
13. This steam generator is permitted to operate at the following locations: Section 29 T26S/R21E, SE, SW Section 32, T26S/R21E, and NW, SW Section 33 T26S/R21E. [District Rule 4102] Federally Enforceable Through Title V Permit
14. The permittee shall notify the District Compliance Division of each location 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
15. The permittee shall obtain written District approval for the use of any equivalent equipment not specifically approved by this Authority to Construct. Approval of the equivalent equipment shall be made only after the District's determination that the submitted design and performance of the proposed alternate equipment is equivalent to the specifically authorized equipment. [District Rule 2201] Federally Enforceable Through Title V Permit

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CONDITIONS CONTINUE ON NEXT PAGE

16. The permittee's request for approval of equivalent equipment shall include the make, model, manufacturer's maximum rating, manufacturer's guaranteed emission rates, equipment drawing(s), and operational characteristics/parameters. [District Rule 2010] Federally Enforceable Through Title V Permit
17. Alternate equipment shall be of the same class and category of source as the equipment authorized by the Authority to Construct. [District Rule 2201] Federally Enforceable Through Title V Permit
18. No emission factor and no emission shall be greater for the alternate equipment than for the proposed equipment. No changes in the hours of operation, operating rate, throughput, or firing rate may be authorized for any alternate equipment. [District Rule 2201] Federally Enforceable Through Title V Permit
19. Flue gas recirculation (FGR) shall be utilized in conjunction with low-NOx burner to maintain ongoing compliance with permitted emission limits. [District Rule 2201] Federally Enforceable Through Title V Permit
20. Natural gas fuel sulfur content shall not exceed 1.0 grains-S/100 scf. [District Rule 2201] Federally Enforceable Through Title V Permit
21. Emission rates, except during startup, shutdown, and the initial shakedown period shall not exceed: NOx (as NO₂): 7 ppmvd @ 3% O₂ or 0.0085 lb/MMBtu; or CO: 25 ppmvd @ 3% O₂ or 0.0185 lb/MMBtu. [District Rule 2201, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
22. Emission rates shall not exceed any of the following: PM₁₀: 0.0032 lb/MMBtu; or VOC: 0.0055 lb/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
23. Duration of start-up and shutdown shall not exceed 2 hours each per occurrence. [District Rules 2201, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
24. Emission rates during startup and shutdown shall not exceed: NOx - 0.14 lb/MMBtu or 116 ppmv @ 3% O₂; CO - 0.296 lb/MMBtu or 400 ppmv @ 3% O₂ [District Rule 2201] Federally Enforceable Through Title V Permit
25. Emissions rate of NOx shall not exceed 62.1 lb/day nor 6329 lb/yr. [District Rule 2201] Federally Enforceable Through Title V Permit
26. Emissions rate of CO shall not exceed 132.1 lb/day nor 13,775 lb/yr. [District Rule 2201] Federally Enforceable Through Title V Permit
27. If the unit is fired on noncertified gaseous fuel and compliance with SOx emission limits is achieved through fuel sulfur content limitations, then the sulfur content of the gaseous fuel being fired in the unit shall be determined using ASTM D 1072, D 3031, D 3246, D 4084, D 4468, D 6667 or grab sample analysis by GC-FPD/TCD performed in the laboratory. [District Rule 1070, 2201, and 4320] Federally Enforceable Through Title V Permit
28. When complying with sulfur emission limits by fuel analysis or by a combination of source testing and fuel analysis, each fuel source shall be tested weekly for sulfur content and higher heating value. If compliance with the fuel sulfur content limit and sulfur emission limits has been demonstrated for 8 consecutive weeks for a fuel source, then the fuel testing frequency shall be semi-annually. If a semi-annual fuel content source test fails to show compliance, weekly testing shall resume. [District Rules 1070, 2201, and 4320] Federally Enforceable Through Title V Permit
29. If fuel analysis is used to demonstrate compliance with conditions of this permit, the fuel higher heating value for each fuel shall be certified by a third party fuel supplier or determined by ASTM D 1826 or D 1945 in conjunction with ASTM D 3588 for gaseous fuels. [District Rules 1070, 2201, and 4320] Federally Enforceable Through Title V Permit
30. The permittee shall monitor and record the stack concentration of NOx, CO, and O₂ at least once every month (in which a source test is not performed) 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. Monitoring shall be performed within 5 days of restarting the unit unless monitoring has been performed within the last month. [District Rules 2520, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit

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CONDITIONS CONTINUE ON NEXT PAGE

31. If either the NO_x or CO concentrations corrected to 3% 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 Rules 2520, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
32. 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 Rules 2520, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
33. The permittee shall maintain records of: (1) the date and time of NO_x, CO, and O₂ measurements, (2) the O₂ concentration in percent and the measured NO_x and CO concentrations corrected to 3% 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 Rules 2520, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
34. Compliance demonstration (source testing) shall be by District witnessed, or authorized, sample collection by ARB certified laboratory. [District Rule 1081] Federally Enforceable Through Title V Permit
35. All required source testing shall conform to the compliance testing procedures described in District Rule 1081 (Amended December 16, 1993). [District Rule 1081, and County Rules 108 (Kings), 108.1 (Fresno, Merced, San Joaquin, Tulare, Kern, and Stanislaus), and 110 (Madera)] Federally Enforceable Through Title V Permit
36. Source testing to measure NO_x and CO emissions from this unit shall be conducted within 60 days of initial start-up. [District Rules 2201, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
37. Source testing to measure natural gas-combustion NO_x and CO emissions from this unit shall be conducted at least once every twelve (12) months. After demonstrating compliance on two (2) consecutive annual source tests, the unit shall be tested not less than once every thirty-six (36) months. If the result of the 36-month source test demonstrates that the unit does not meet the applicable emission limits, the source testing frequency shall revert to at least once every twelve (12) months. [District Rules 2201, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
38. The source test plan shall identify which basis (ppmv or lb/MMBtu) will be used to demonstrate compliance. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
39. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
40. The following test methods shall be used: NO_x (ppmv) - EPA Method 7E or ARB Method 100; NO_x (lb/MMBtu) - EPA Method 19, CO (ppmv) - EPA Method 10 or 10B or ARB Method 100, stack gas oxygen - EPA Method 3 or 3A or ARB Method 100, SO_x (lb/MMBtu) - ARB Method 8 or 100 or EPA Method 6, 6B, 6C, or 8, or fuel gas sulfur content analysis and EPA Method 19, fuel gas sulfur content - ASTM D1072, D3031, D3246, D4084, D4468, D6667 or double GC for H₂S and mercaptans performed in laboratory, fuel gas hhv - ASTM D1826 or D1945 in conjunction with ASTM D3588. [District Rules 1081, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
41. For emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. If two of three runs are above an applicable limit the test cannot be used to demonstrate compliance with an applicable limit. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit

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CONDITIONS CONTINUE ON NEXT PAGE

42. All emissions measurements shall be made with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. No determination of compliance shall be established within two hours after a continuous period in which fuel flow to the unit is shut off for 30 minutes or longer, or within 30 minutes after a re-ignition as defined in District Rules 4306 and 4320. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
43. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit
44. Copies of all gas purchase contracts, supplier certifications, and test results to determine compliance with the conditions of this permit shall be maintained. The operator shall record daily amount and type(s) of fuel(s) combusted, fuel sources, and all dates on which unit is fired on any noncertified fuel and record specific type of noncertified fuel used. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
45. Prior to operating equipment under this Authority to Construct, permittee shall surrender emission reduction credits for the following quantities of emissions: NOx: 2374 lb/quarter; PM10: 894 lb/quarter, and VOC: 1536 lb/qtr. Offsets include the applicable offset ratio specified in Section 4.8 of Rule 2201 (as amended 9/21/06). [District Rule 2201] Federally Enforceable Through Title V Permit
46. ERC Certificate Numbers S-3629-2 (NOx), S-3145-1 (VOC), and S-3598-4 (PM10) (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
47. Permittee shall maintain a record of the duration of each startup of this unit. [District Rule 4306] Federally Enforceable Through Title V Permit
48. 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, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit

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San Joaquin Valley
Air Pollution Control District

AUTHORITY TO CONSTRUCT

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ISSUANCE DATE: DRAFT

PERMIT NO: S-2010-280-0

LEGAL OWNER OR OPERATOR: CHEVRON USA INC
MAILING ADDRESS: PO BOX 1392
BAKERSFIELD, CA 93302

LOCATION: LIGHT OIL WESTERN STATIONARY SOURCE
CA

EQUIPMENT DESCRIPTION:

85 MMBTU/HR NATURAL GAS-FIRED STEAM GENERATOR WITH NORTH AMERICAN MODEL 4231-85-GLE LOW-NOX BURNER ASSEMBLY, OR EQUIVALENT LOW-NOX BURNER, WITH FLUE GAS RECIRCULATION, APPROVED TO OPERATE AT VARIOUS LOCATIONS

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 2520] 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. Chevron will surrender ERCs sufficient to offset operational emissions as required by District NSR requirements. [Public Resources Code 21000-21177: California Environmental Quality Act]
4. A qualified registered biologist will conduct a focused pre-construction survey to determine the presence/absence of potential impacts on sensitive species prior to the onset of ground disturbance. The survey shall be conducted in accordance with the standard protocol of the USFWS and CDFG. If more than 30 days pass before the onset of ground disturbance, an additional survey shall be conducted by a Certified Biological Representative within 30 days prior to the onset of ground disturbance. [Public Resources Code 21000-21177: California Environmental Quality Act]

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

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DAVID WARNER, Director of Permit Services
S-2010-280-0 : Dec 20 2011 3:08PM - EDGEHILL : Joint Inspection NOT Required

5. If sensitive species or their nests/dens are detected in the pre-construction survey, the appropriate standardized avoidance measures will be implemented to preclude take of the species. If standardized avoidance measures cannot be achieved Chevron will consult with the CDFG and USFWS to develop alternative compliance measures. If standardized avoidance measures fail and there is a take of a threatened or endangered species Chevron will notify USFWS and CDFG immediately. [Public Resources Code 21000-21177: California Environmental Quality Act]
6. A qualified registered biologist will conduct a focused pre-construction survey to determine the presence/absence of potential impacts on riparian habitats, sensitive natural communities and wetlands prior to the onset of ground disturbance. The survey shall be conducted in accordance with the standard protocol of the USFWS and CDFG. If more than 30 days pass before the onset of ground disturbance, an additional survey shall be conducted by a Certified Biological Representative within 30 days prior to the onset of ground disturbance. [Public Resources Code 21000-21177: California Environmental Quality Act]
7. A qualified registered biologist will conduct a focused pre-construction survey to determine the presence/absence of potential impacts on migratory corridors prior to the onset of ground disturbance. The survey shall be conducted in accordance with the standard protocol of the USFWS and CDFG. If more than 30 days pass before the onset of ground disturbance, an additional survey shall be conducted by a Certified Biological Representative within 30 days prior to the onset of ground disturbance. [Public Resources Code 21000-21177: California Environmental Quality Act]
8. In the event that archaeological/paleontological resources are discovered during ground-disturbing activities associated with construction of the proposed Project, all work within 100 feet of the find shall cease. Chevron will notify and retain a qualified archaeologist/paleontologist to assess and provide an evaluation of the significance of the find. Chevron shall determine whether avoidance is necessary and feasible in light of the factors such as the nature of the find, project design, costs, and other considerations, and, if necessary, develop appropriate mitigation measures in consultation with Kern County and other appropriate agencies and individuals. Work may resume on the Project site once the evaluation of the find is complete by the qualified archaeologist/paleontologist. [Public Resources Code 21000-21177: California Environmental Quality Act]
9. In the event that human remains are discovered during construction of the Project, all work within 100 feet shall be ceased and the discovery will immediately be reported to the County Coroner. If the remains are determined to be Native American in origin, the County Coroner shall notify the Native American Heritage Commission (NAHC) within 24 hours of the determination. The NAHC will solicit those persons it believe to be the nearest descendants of the remains for recommendations. Chevron shall, in consultation with the identified descendants of the remains and/or NAHC, will identify the appropriate measures for the treatment or disposition of the remains. [Public Resources Code 21000-21177: California Environmental Quality Act]
10. Prior to the start of construction activities, Chevron shall provide the District with documentation demonstrating that maps identifying all wells in the vicinity of the sites have been submitted to DOGGR for compliance with DOGGR's "Well Review Program". [Public Resources Code 21000-21177: California Environmental Quality Act]
11. During construction activities, if unknown, unrecorded or abandoned wells are discovered or if any wells are damaged, Chevron shall immediately notify DOGGR. [Public Resources Code 21000-21177: California Environmental Quality Act]
12. Any wells discovered or exposed during construction activities will be tested for flammable vapors. [Public Resources Code 21000-21177: California Environmental Quality Act]
13. This steam generator is permitted to operate at the following locations: Section 29 T26S/R21E, SE, SW Section 32, T26S/R21E, and NW, SW Section 33 T26S/R21E. [District Rule 4102] Federally Enforceable Through Title V Permit
14. The permittee shall notify the District Compliance Division of each location 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
15. The permittee shall obtain written District approval for the use of any equivalent equipment not specifically approved by this Authority to Construct. Approval of the equivalent equipment shall be made only after the District's determination that the submitted design and performance of the proposed alternate equipment is equivalent to the specifically authorized equipment. [District Rule 2201] Federally Enforceable Through Title V Permit

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CONDITIONS CONTINUE ON NEXT PAGE

16. The permittee's request for approval of equivalent equipment shall include the make, model, manufacturer's maximum rating, manufacturer's guaranteed emission rates, equipment drawing(s), and operational characteristics/parameters. [District Rule 2010] Federally Enforceable Through Title V Permit
17. Alternate equipment shall be of the same class and category of source as the equipment authorized by the Authority to Construct. [District Rule 2201] Federally Enforceable Through Title V Permit
18. No emission factor and no emission shall be greater for the alternate equipment than for the proposed equipment. No changes in the hours of operation, operating rate, throughput, or firing rate may be authorized for any alternate equipment. [District Rule 2201] Federally Enforceable Through Title V Permit
19. Flue gas recirculation (FGR) shall be utilized in conjunction with low-NOx burner to maintain ongoing compliance with permitted emission limits. [District Rule 2201] Federally Enforceable Through Title V Permit
20. Natural gas fuel sulfur content shall not exceed 1.0 grains-S/100 scf. [District Rule 2201] Federally Enforceable Through Title V Permit
21. Emission rates, except during startup, shutdown, and the initial shakedown period shall not exceed: NOx (as NO₂): 7 ppmvd @ 3% O₂ or 0.0085 lb/MMBtu; or CO: 25 ppmvd @ 3% O₂ or 0.0185 lb/MMBtu. [District Rule 2201, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
22. Emission rates shall not exceed any of the following: PM₁₀: 0.0032 lb/MMBtu; or VOC: 0.0055 lb/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
23. Duration of start-up and shutdown shall not exceed 2 hours each per occurrence. [District Rules 2201, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
24. Emission rates during startup and shutdown shall not exceed: NOx - 0.14 lb/MMBtu or 116 ppmv @ 3% O₂; CO - 0.296 lb/MMBtu or 400 ppmv @ 3% O₂ [District Rule 2201] Federally Enforceable Through Title V Permit
25. Emissions rate of NOx shall not exceed 62.1 lb/day nor 6329 lb/yr. [District Rule 2201] Federally Enforceable Through Title V Permit
26. Emissions rate of CO shall not exceed 132.1 lb/day nor 13,775 lb/yr. [District Rule 2201] Federally Enforceable Through Title V Permit
27. If the unit is fired on noncertified gaseous fuel and compliance with SOx emission limits is achieved through fuel sulfur content limitations, then the sulfur content of the gaseous fuel being fired in the unit shall be determined using ASTM D 1072, D 3031, D 3246, D 4084, D 4468, D 6667 or grab sample analysis by GC-FPD/TCD performed in the laboratory. [District Rule 1070, 2201, and 4320] Federally Enforceable Through Title V Permit
28. When complying with sulfur emission limits by fuel analysis or by a combination of source testing and fuel analysis, each fuel source shall be tested weekly for sulfur content and higher heating value. If compliance with the fuel sulfur content limit and sulfur emission limits has been demonstrated for 8 consecutive weeks for a fuel source, then the fuel testing frequency shall be semi-annually. If a semi-annual fuel content source test fails to show compliance, weekly testing shall resume. [District Rules 1070, 2201, and 4320] Federally Enforceable Through Title V Permit
29. If fuel analysis is used to demonstrate compliance with conditions of this permit, the fuel higher heating value for each fuel shall be certified by a third party fuel supplier or determined by ASTM D 1826 or D 1945 in conjunction with ASTM D 3588 for gaseous fuels. [District Rules 1070, 2201, and 4320] Federally Enforceable Through Title V Permit
30. The permittee shall monitor and record the stack concentration of NOx, CO, and O₂ at least once every month (in which a source test is not performed) 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. Monitoring shall be performed within 5 days of restarting the unit unless monitoring has been performed within the last month. [District Rules 2520, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit

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CONDITIONS CONTINUE ON NEXT PAGE

31. If either the NO_x or CO concentrations corrected to 3% 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 Rules 2520, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
32. 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 Rules 2520, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
33. The permittee shall maintain records of: (1) the date and time of NO_x, CO, and O₂ measurements, (2) the O₂ concentration in percent and the measured NO_x and CO concentrations corrected to 3% 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 Rules 2520, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
34. Compliance demonstration (source testing) shall be by District witnessed, or authorized, sample collection by ARB certified laboratory. [District Rule 1081] Federally Enforceable Through Title V Permit
35. All required source testing shall conform to the compliance testing procedures described in District Rule 1081 (Amended December 16, 1993). [District Rule 1081, and County Rules 108 (Kings), 108.1 (Fresno, Merced, San Joaquin, Tulare, Kern, and Stanislaus), and 110 (Madera)] Federally Enforceable Through Title V Permit
36. Source testing to measure NO_x and CO emissions from this unit shall be conducted within 60 days of initial start-up. [District Rules 2201, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
37. Source testing to measure natural gas-combustion NO_x and CO emissions from this unit shall be conducted at least once every twelve (12) months. After demonstrating compliance on two (2) consecutive annual source tests, the unit shall be tested not less than once every thirty-six (36) months. If the result of the 36-month source test demonstrates that the unit does not meet the applicable emission limits, the source testing frequency shall revert to at least once every twelve (12) months. [District Rules 2201, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
38. The source test plan shall identify which basis (ppmv or lb/MMBtu) will be used to demonstrate compliance. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
39. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
40. The following test methods shall be used: NO_x (ppmv) - EPA Method 7E or ARB Method 100, NO_x (lb/MMBtu) - EPA Method 19, CO (ppmv) - EPA Method 10 or 10B or ARB Method 100, stack gas oxygen - EPA Method 3 or 3A or ARB Method 100, SO_x (lb/MMBtu) - ARB Method 8 or 100 or EPA Method 6, 6B, 6C, or 8, or fuel gas sulfur content analysis and EPA Method 19, fuel gas sulfur content - ASTM D1072, D3031, D3246, D4084, D4468, D6667 or double GC for H₂S and mercaptans performed in laboratory, fuel gas hhv - ASTM D1826 or D1945 in conjunction with ASTM D3588. [District Rules 1081, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
41. For emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. If two of three runs are above an applicable limit the test cannot be used to demonstrate compliance with an applicable limit. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit

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CONDITIONS CONTINUE ON NEXT PAGE

42. All emissions measurements shall be made with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. No determination of compliance shall be established within two hours after a continuous period in which fuel flow to the unit is shut off for 30 minutes or longer, or within 30 minutes after a re-ignition as defined in District Rules 4306 and 4320. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
43. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit
44. Copies of all gas purchase contracts, supplier certifications, and test results to determine compliance with the conditions of this permit shall be maintained. The operator shall record daily amount and type(s) of fuel(s) combusted, fuel sources, and all dates on which unit is fired on any noncertified fuel and record specific type of noncertified fuel used. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
45. Prior to operating equipment under this Authority to Construct, permittee shall surrender emission reduction credits for the following quantities of emissions: NOx: 2374 lb/quarter; PM10: 894 lb/quarter, and VOC: 1536 lb/qtr. Offsets include the applicable offset ratio specified in Section 4.8 of Rule 2201 (as amended 9/21/06). [District Rule 2201] Federally Enforceable Through Title V Permit
46. ERC Certificate Numbers S-3629-2 (NOx), S-3145-1 (VOC), and S-3598-4 (PM10) (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
47. Permittee shall maintain a record of the duration of each startup of this unit. [District Rule 4306] Federally Enforceable Through Title V Permit
48. 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, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit

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San Joaquin Valley
Air Pollution Control District

AUTHORITY TO CONSTRUCT

ISSUANCE DATE: DRAFT
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PERMIT NO: S-2010-281-0

LEGAL OWNER OR OPERATOR: CHEVRON USA INC
MAILING ADDRESS: PO BOX 1392
BAKERSFIELD, CA 93302

LOCATION: LIGHT OIL WESTERN STATIONARY SOURCE
CA

EQUIPMENT DESCRIPTION:

85 MMBTU/HR NATURAL GAS-FIRED STEAM GENERATOR WITH NORTH AMERICAN MODEL 4231-85-GLE LOW-NOX BURNER ASSEMBLY, OR EQUIVALENT LOW-NOX BURNER, WITH FLUE GAS RECIRCULATION, APPROVED TO OPERATE AT VARIOUS LOCATIONS

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 2520] 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. Chevron will surrender ERCs sufficient to offset operational emissions as required by District NSR requirements. [Public Resources Code 21000-21177: California Environmental Quality Act]
4. A qualified registered biologist will conduct a focused pre-construction survey to determine the presence/absence of potential impacts on sensitive species prior to the onset of ground disturbance. The survey shall be conducted in accordance with the standard protocol of the USFWS and CDFG. If more than 30 days pass before the onset of ground disturbance, an additional survey shall be conducted by a Certified Biological Representative within 30 days prior to the onset of ground disturbance. [Public Resources Code 21000-21177: California Environmental Quality Act]

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

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DAVID WARNER, Director of Permit Services
S-2010-281-0 : Dec 20 2011 3:09PM - EDGEMILR : Joint Inspection NOT Required

5. If sensitive species or their nests/dens are detected in the pre-construction survey, the appropriate standardized avoidance measures will be implemented to preclude take of the species. If standardized avoidance measures cannot be achieved Chevron will consult with the CDFG and USFWS to develop alternative compliance measures. If standardized avoidance measures fail and there is a take of a threatened or endangered species Chevron will notify USFWS and CDFG immediately. [Public Resources Code 21000-21177: California Environmental Quality Act]
6. A qualified registered biologist will conduct a focused pre-construction survey to determine the presence/absence of potential impacts on riparian habitats, sensitive natural communities and wetlands prior to the onset of ground disturbance. The survey shall be conducted in accordance with the standard protocol of the USFWS and CDFG. If more than 30 days pass before the onset of ground disturbance, an additional survey shall be conducted by a Certified Biological Representative within 30 days prior to the onset of ground disturbance. [Public Resources Code 21000-21177: California Environmental Quality Act]
7. A qualified registered biologist will conduct a focused pre-construction survey to determine the presence/absence of potential impacts on migratory corridors prior to the onset of ground disturbance. The survey shall be conducted in accordance with the standard protocol of the USFWS and CDFG. If more than 30 days pass before the onset of ground disturbance, an additional survey shall be conducted by a Certified Biological Representative within 30 days prior to the onset of ground disturbance. [Public Resources Code 21000-21177: California Environmental Quality Act]
8. In the event that archaeological/paleontological resources are discovered during ground-disturbing activities associated with construction of the proposed Project, all work within 100 feet of the find shall cease. Chevron will notify and retain a qualified archaeologist/paleontologist to assess and provide an evaluation of the significance of the find. Chevron shall determine whether avoidance is necessary and feasible in light of the factors such as the nature of the find, project design, costs, and other considerations, and, if necessary, develop appropriate mitigation measures in consultation with Kern County and other appropriate agencies and individuals. Work may resume on the Project site once the evaluation of the find is complete by the qualified archaeologist/paleontologist. [Public Resources Code 21000-21177: California Environmental Quality Act]
9. In the event that human remains are discovered during construction of the Project, all work within 100 feet shall be ceased and the discovery will immediately be reported to the County Coroner. If the remains are determined to be Native American in origin, the County Coroner shall notify the Native American Heritage Commission (NAHC) within 24 hours of the determination. The NAHC will solicit those persons it believe to be the nearest descendants of the remains for recommendations. Chevron shall, in consultation with the identified descendants of the remains and/or NAHC, will identify the appropriate measures for the treatment or disposition of the remains. [Public Resources Code 21000-21177: California Environmental Quality Act]
10. Prior to the start of construction activities, Chevron shall provide the District with documentation demonstrating that maps identifying all wells in the vicinity of the sites have been submitted to DOGGR for compliance with DOGGR's "Well Review Program". [Public Resources Code 21000-21177: California Environmental Quality Act]
11. During construction activities, if unknown, unrecorded or abandoned wells are discovered or if any wells are damaged, Chevron shall immediately notify DOGGR. [Public Resources Code 21000-21177: California Environmental Quality Act]
12. Any wells discovered or exposed during construction activities will be tested for flammable vapors. [Public Resources Code 21000-21177: California Environmental Quality Act]
13. This steam generator is permitted to operate at the following locations: Section 29 T26S/R21E, SE, SW Section 32, T26S/R21E, and NW, SW Section 33 T26S/R21E. [District Rule 4102] Federally Enforceable Through Title V Permit
14. The permittee shall notify the District Compliance Division of each location 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
15. The permittee shall obtain written District approval for the use of any equivalent equipment not specifically approved by this Authority to Construct. Approval of the equivalent equipment shall be made only after the District's determination that the submitted design and performance of the proposed alternate equipment is equivalent to the specifically authorized equipment. [District Rule 2201] Federally Enforceable Through Title V Permit

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CONDITIONS CONTINUE ON NEXT PAGE

16. The permittee's request for approval of equivalent equipment shall include the make, model, manufacturer's maximum rating, manufacturer's guaranteed emission rates, equipment drawing(s), and operational characteristics/parameters. [District Rule 2010] Federally Enforceable Through Title V Permit
17. Alternate equipment shall be of the same class and category of source as the equipment authorized by the Authority to Construct. [District Rule 2201] Federally Enforceable Through Title V Permit
18. No emission factor and no emission shall be greater for the alternate equipment than for the proposed equipment. No changes in the hours of operation, operating rate, throughput, or firing rate may be authorized for any alternate equipment. [District Rule 2201] Federally Enforceable Through Title V Permit
19. Flue gas recirculation (FGR) shall be utilized in conjunction with low-NOx burner to maintain ongoing compliance with permitted emission limits. [District Rule 2201] Federally Enforceable Through Title V Permit
20. Natural gas fuel sulfur content shall not exceed 1.0 grains-S/100 scf. [District Rule 2201] Federally Enforceable Through Title V Permit
21. Emission rates, except during startup, shutdown, and the initial shakedown period shall not exceed: NOx (as NO₂): 7 ppmvd @ 3% O₂ or 0.0085 lb/MMBtu; or CO: 25 ppmvd @ 3% O₂ or 0.0185 lb/MMBtu. [District Rule 2201, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
22. Emission rates shall not exceed any of the following: PM₁₀: 0.0032 lb/MMBtu; or VOC: 0.0055 lb/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
23. Duration of start-up and shutdown shall not exceed 2 hours each per occurrence. [District Rules 2201, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
24. Emission rates during startup and shutdown shall not exceed: NOx - 0.14 lb/MMBtu or 116 ppmv @ 3% O₂; CO - 0.296 lb/MMBtu or 400 ppmv @ 3% O₂ [District Rule 2201] Federally Enforceable Through Title V Permit
25. Emissions rate of NOx shall not exceed 62.1 lb/day nor 6329 lb/yr. [District Rule 2201] Federally Enforceable Through Title V Permit
26. Emissions rate of CO shall not exceed 132.1 lb/day nor 13,775 lb/yr. [District Rule 2201] Federally Enforceable Through Title V Permit
27. If the unit is fired on noncertified gaseous fuel and compliance with SOx emission limits is achieved through fuel sulfur content limitations, then the sulfur content of the gaseous fuel being fired in the unit shall be determined using ASTM D 1072, D 3031, D 3246, D 4084, D 4468, D 6667 or grab sample analysis by GC-FPD/TCD performed in the laboratory. [District Rule 1070, 2201, and 4320] Federally Enforceable Through Title V Permit
28. When complying with sulfur emission limits by fuel analysis or by a combination of source testing and fuel analysis, each fuel source shall be tested weekly for sulfur content and higher heating value. If compliance with the fuel sulfur content limit and sulfur emission limits has been demonstrated for 8 consecutive weeks for a fuel source, then the fuel testing frequency shall be semi-annually. If a semi-annual fuel content source test fails to show compliance, weekly testing shall resume. [District Rules 1070, 2201, and 4320] Federally Enforceable Through Title V Permit
29. If fuel analysis is used to demonstrate compliance with conditions of this permit, the fuel higher heating value for each fuel shall be certified by a third party fuel supplier or determined by ASTM D 1826 or D 1945 in conjunction with ASTM D 3588 for gaseous fuels. [District Rules 1070, 2201, and 4320] Federally Enforceable Through Title V Permit
30. The permittee shall monitor and record the stack concentration of NOx, CO, and O₂ at least once every month (in which a source test is not performed) 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. Monitoring shall be performed within 5 days of restarting the unit unless monitoring has been performed within the last month. [District Rules 2520, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit

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CONDITIONS CONTINUE ON NEXT PAGE

31. If either the NO_x or CO concentrations corrected to 3% 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 Rules 2520, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
32. 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 Rules 2520, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
33. The permittee shall maintain records of: (1) the date and time of NO_x, CO, and O₂ measurements, (2) the O₂ concentration in percent and the measured NO_x and CO concentrations corrected to 3% 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 Rules 2520, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
34. Compliance demonstration (source testing) shall be by District witnessed, or authorized, sample collection by ARB certified laboratory. [District Rule 1081] Federally Enforceable Through Title V Permit
35. All required source testing shall conform to the compliance testing procedures described in District Rule 1081 (Amended December 16, 1993). [District Rule 1081, and County Rules 108 (Kings), 108.1 (Fresno, Merced, San Joaquin, Tulare, Kern, and Stanislaus), and 110 (Madera)] Federally Enforceable Through Title V Permit
36. Source testing to measure NO_x and CO emissions from this unit shall be conducted within 60 days of initial start-up. [District Rules 2201, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
37. Source testing to measure natural gas-combustion NO_x and CO emissions from this unit shall be conducted at least once every twelve (12) months. After demonstrating compliance on two (2) consecutive annual source tests, the unit shall be tested not less than once every thirty-six (36) months. If the result of the 36-month source test demonstrates that the unit does not meet the applicable emission limits, the source testing frequency shall revert to at least once every twelve (12) months. [District Rules 2201, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
38. The source test plan shall identify which basis (ppmv or lb/MMBtu) will be used to demonstrate compliance. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
39. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
40. The following test methods shall be used: NO_x (ppmv) - EPA Method 7E or ARB Method 100, NO_x (lb/MMBtu) - EPA Method 19, CO (ppmv) - EPA Method 10 or 10B or ARB Method 100, stack gas oxygen - EPA Method 3 or 3A or ARB Method 100, SO_x (lb/MMBtu) - ARB Method 8 or 100 or EPA Method 6, 6B, 6C, or 8, or fuel gas sulfur content analysis and EPA Method 19, fuel gas sulfur content - ASTM D1072, D3031, D3246, D4084, D4468, D6667 or double GC for H₂S and mercaptans performed in laboratory, fuel gas hhv - ASTM D1826 or D1945 in conjunction with ASTM D3588. [District Rules 1081, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
41. For emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. If two of three runs are above an applicable limit the test cannot be used to demonstrate compliance with an applicable limit. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit

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CONDITIONS CONTINUE ON NEXT PAGE

42. All emissions measurements shall be made with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. No determination of compliance shall be established within two hours after a continuous period in which fuel flow to the unit is shut off for 30 minutes or longer, or within 30 minutes after a re-ignition as defined in District Rules 4306 and 4320. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
43. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit
44. Copies of all gas purchase contracts, supplier certifications, and test results to determine compliance with the conditions of this permit shall be maintained. The operator shall record daily amount and type(s) of fuel(s) combusted, fuel sources, and all dates on which unit is fired on any noncertified fuel and record specific type of noncertified fuel used. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
45. Prior to operating equipment under this Authority to Construct, permittee shall surrender emission reduction credits for the following quantities of emissions: NOx: 2374 lb/quarter; PM10: 894 lb/quarter, and VOC: 1536 lb/qtr. Offsets include the applicable offset ratio specified in Section 4.8 of Rule 2201 (as amended 9/21/06). [District Rule 2201] Federally Enforceable Through Title V Permit
46. ERC Certificate Numbers S-3629-2 (NOx), S-3145-1 (VOC), and S-3598-4 (PM10) (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
47. Permittee shall maintain a record of the duration of each startup of this unit. [District Rule 4306] Federally Enforceable Through Title V Permit
48. 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, 4305, 4306, and 4320] 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-2010-282-0

LEGAL OWNER OR OPERATOR: CHEVRON USA INC
MAILING ADDRESS: PO BOX 1392
BAKERSFIELD, CA 93302

LOCATION: LIGHT OIL WESTERN STATIONARY SOURCE
CA

EQUIPMENT DESCRIPTION:

85 MMBTU/HR NATURAL GAS-FIRED STEAM GENERATOR WITH NORTH AMERICAN MODEL 4231-85-GLE LOW-NOX BURNER ASSEMBLY, OR EQUIVALENT LOW-NOX BURNER, WITH FLUE GAS RECIRCULATION, APPROVED TO OPERATE AT VARIOUS LOCATIONS

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 2520] 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. Chevron will surrender ERCs sufficient to offset operational emissions as required by District NSR requirements. [Public Resources Code 21000-21177: California Environmental Quality Act]
4. A qualified registered biologist will conduct a focused pre-construction survey to determine the presence/absence of potential impacts on sensitive species prior to the onset of ground disturbance. The survey shall be conducted in accordance with the standard protocol of the USFWS and CDFG. If more than 30 days pass before the onset of ground disturbance, an additional survey shall be conducted by a Certified Biological Representative within 30 days prior to the onset of ground disturbance. [Public Resources Code 21000-21177: California Environmental Quality Act]

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-2010-282-0 : Dec 20 2011 3:09PM - EDGEHILL : Joint Inspection NOT Required

5. If sensitive species or their nests/dens are detected in the pre-construction survey, the appropriate standardized avoidance measures will be implemented to preclude take of the species. If standardized avoidance measures cannot be achieved Chevron will consult with the CDFG and USFWS to develop alternative compliance measures. If standardized avoidance measures fail and there is a take of a threatened or endangered species Chevron will notify USFWS and CDFG immediately. [Public Resources Code 21000-21177: California Environmental Quality Act]
6. A qualified registered biologist will conduct a focused pre-construction survey to determine the presence/absence of potential impacts on riparian habitats, sensitive natural communities and wetlands prior to the onset of ground disturbance. The survey shall be conducted in accordance with the standard protocol of the USFWS and CDFG. If more than 30 days pass before the onset of ground disturbance, an additional survey shall be conducted by a Certified Biological Representative within 30 days prior to the onset of ground disturbance. [Public Resources Code 21000-21177: California Environmental Quality Act]
7. A qualified registered biologist will conduct a focused pre-construction survey to determine the presence/absence of potential impacts on migratory corridors prior to the onset of ground disturbance. The survey shall be conducted in accordance with the standard protocol of the USFWS and CDFG. If more than 30 days pass before the onset of ground disturbance, an additional survey shall be conducted by a Certified Biological Representative within 30 days prior to the onset of ground disturbance. [Public Resources Code 21000-21177: California Environmental Quality Act]
8. In the event that archaeological/paleontological resources are discovered during ground-disturbing activities associated with construction of the proposed Project, all work within 100 feet of the find shall cease. Chevron will notify and retain a qualified archaeologist/paleontologist to assess and provide an evaluation of the significance of the find. Chevron shall determine whether avoidance is necessary and feasible in light of the factors such as the nature of the find, project design, costs, and other considerations, and, if necessary, develop appropriate mitigation measures in consultation with Kern County and other appropriate agencies and individuals. Work may resume on the Project site once the evaluation of the find is complete by the qualified archaeologist/paleontologist. [Public Resources Code 21000-21177: California Environmental Quality Act]
9. In the event that human remains are discovered during construction of the Project, all work within 100 feet shall be ceased and the discovery will immediately be reported to the County Coroner. If the remains are determined to be Native American in origin, the County Coroner shall notify the Native American Heritage Commission (NAHC) within 24 hours of the determination. The NAHC will solicit those persons it believe to be the nearest descendants of the remains for recommendations. Chevron shall, in consultation with the identified descendants of the remains and/or NAHC, will identify the appropriate measures for the treatment or disposition of the remains. [Public Resources Code 21000-21177: California Environmental Quality Act]
10. Prior to the start of construction activities, Chevron shall provide the District with documentation demonstrating that maps identifying all wells in the vicinity of the sites have been submitted to DOGGR for compliance with DOGGR's "Well Review Program". [Public Resources Code 21000-21177: California Environmental Quality Act]
11. During construction activities, if unknown, unrecorded or abandoned wells are discovered or if any wells are damaged, Chevron shall immediately notify DOGGR. [Public Resources Code 21000-21177: California Environmental Quality Act]
12. Any wells discovered or exposed during construction activities will be tested for flammable vapors. [Public Resources Code 21000-21177: California Environmental Quality Act]
13. This steam generator is permitted to operate at the following locations: Section 29 T26S/R21E, SE, SW Section 32, T26S/R21E, and NW, SW Section 33 T26S/R21E. [District Rule 4102] Federally Enforceable Through Title V Permit
14. The permittee shall notify the District Compliance Division of each location 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
15. The permittee shall obtain written District approval for the use of any equivalent equipment not specifically approved by this Authority to Construct. Approval of the equivalent equipment shall be made only after the District's determination that the submitted design and performance of the proposed alternate equipment is equivalent to the specifically authorized equipment. [District Rule 2201] Federally Enforceable Through Title V Permit

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CONDITIONS CONTINUE ON NEXT PAGE

16. The permittee's request for approval of equivalent equipment shall include the make, model, manufacturer's maximum rating, manufacturer's guaranteed emission rates, equipment drawing(s), and operational characteristics/parameters. [District Rule 2010] Federally Enforceable Through Title V Permit
17. Alternate equipment shall be of the same class and category of source as the equipment authorized by the Authority to Construct. [District Rule 2201] Federally Enforceable Through Title V Permit
18. No emission factor and no emission shall be greater for the alternate equipment than for the proposed equipment. No changes in the hours of operation, operating rate, throughput, or firing rate may be authorized for any alternate equipment. [District Rule 2201] Federally Enforceable Through Title V Permit
19. Flue gas recirculation (FGR) shall be utilized in conjunction with low-NO_x burner to maintain ongoing compliance with permitted emission limits. [District Rule 2201] Federally Enforceable Through Title V Permit
20. Natural gas fuel sulfur content shall not exceed 1.0 grains-S/100 scf. [District Rule 2201] Federally Enforceable Through Title V Permit
21. Emission rates, except during startup, shutdown, and the initial shakedown period shall not exceed: NO_x (as NO₂): 7 ppmvd @ 3% O₂ or 0.0085 lb/MMBtu; or CO: 25 ppmvd @ 3% O₂ or 0.0185 lb/MMBtu. [District Rule 2201, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
22. Emission rates shall not exceed any of the following: PM₁₀: 0.0032 lb/MMBtu; or VOC: 0.0055 lb/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
23. Duration of start-up and shutdown shall not exceed 2 hours each per occurrence. [District Rules 2201, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
24. Emission rates during startup and shutdown shall not exceed: NO_x - 0.14 lb/MMBtu or 116 ppmv @ 3% O₂; CO - 0.296 lb/MMBtu or 400 ppmv @ 3% O₂ [District Rule 2201] Federally Enforceable Through Title V Permit
25. Emissions rate of NO_x shall not exceed 62.1 lb/day nor 6329 lb/yr. [District Rule 2201] Federally Enforceable Through Title V Permit
26. Emissions rate of CO shall not exceed 132.1 lb/day nor 13,775 lb/yr. [District Rule 2201] Federally Enforceable Through Title V Permit
27. If the unit is fired on noncertified gaseous fuel and compliance with SO_x emission limits is achieved through fuel sulfur content limitations, then the sulfur content of the gaseous fuel being fired in the unit shall be determined using ASTM D 1072, D 3031, D 3246, D 4084, D 4468, D 6667 or grab sample analysis by GC-FPD/TCD performed in the laboratory. [District Rule 1070, 2201, and 4320] Federally Enforceable Through Title V Permit
28. When complying with sulfur emission limits by fuel analysis or by a combination of source testing and fuel analysis, each fuel source shall be tested weekly for sulfur content and higher heating value. If compliance with the fuel sulfur content limit and sulfur emission limits has been demonstrated for 8 consecutive weeks for a fuel source, then the fuel testing frequency shall be semi-annually. If a semi-annual fuel content source test fails to show compliance, weekly testing shall resume. [District Rules 1070, 2201, and 4320] Federally Enforceable Through Title V Permit
29. If fuel analysis is used to demonstrate compliance with conditions of this permit, the fuel higher heating value for each fuel shall be certified by a third party fuel supplier or determined by ASTM D 1826 or D 1945 in conjunction with ASTM D 3588 for gaseous fuels. [District Rules 1070, 2201, and 4320] Federally Enforceable Through Title V Permit
30. The permittee shall monitor and record the stack concentration of NO_x, CO, and O₂ at least once every month (in which a source test is not performed) 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. Monitoring shall be performed within 5 days of restarting the unit unless monitoring has been performed within the last month. [District Rules 2520, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit

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CONDITIONS CONTINUE ON NEXT PAGE

31. If either the NO_x or CO concentrations corrected to 3% 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 Rules 2520, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
32. 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 Rules 2520, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
33. The permittee shall maintain records of: (1) the date and time of NO_x, CO, and O₂ measurements, (2) the O₂ concentration in percent and the measured NO_x and CO concentrations corrected to 3% 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 Rules 2520, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
34. Compliance demonstration (source testing) shall be by District witnessed, or authorized, sample collection by ARB certified laboratory. [District Rule 1081] Federally Enforceable Through Title V Permit
35. All required source testing shall conform to the compliance testing procedures described in District Rule 1081 (Amended December 16, 1993). [District Rule 1081, and County Rules 108 (Kings), 108.1 (Fresno, Merced, San Joaquin, Tulare, Kern, and Stanislaus), and 110 (Madera)] Federally Enforceable Through Title V Permit
36. Source testing to measure NO_x and CO emissions from this unit shall be conducted within 60 days of initial start-up. [District Rules 2201, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
37. Source testing to measure natural gas-combustion NO_x and CO emissions from this unit shall be conducted at least once every twelve (12) months. After demonstrating compliance on two (2) consecutive annual source tests, the unit shall be tested not less than once every thirty-six (36) months. If the result of the 36-month source test demonstrates that the unit does not meet the applicable emission limits, the source testing frequency shall revert to at least once every twelve (12) months. [District Rules 2201, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
38. The source test plan shall identify which basis (ppmv or lb/MMBtu) will be used to demonstrate compliance. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
39. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
40. The following test methods shall be used: NO_x (ppmv) - EPA Method 7E or ARB Method 100, NO_x (lb/MMBtu) - EPA Method 19, CO (ppmv) - EPA Method 10 or 10B or ARB Method 100, stack gas oxygen - EPA Method 3 or 3A or ARB Method 100, SO_x (lb/MMBtu) - ARB Method 8 or 100 or EPA Method 6, 6B, 6C, or 8, or fuel gas sulfur content analysis and EPA Method 19, fuel gas sulfur content - ASTM D1072, D3031, D3246, D4084, D4468, D6667 or double GC for H₂S and mercaptans performed in laboratory, fuel gas hhv - ASTM D1826 or D1945 in conjunction with ASTM D3588. [District Rules 1081, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
41. For emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. If two of three runs are above an applicable limit the test cannot be used to demonstrate compliance with an applicable limit. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit

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CONDITIONS CONTINUE ON NEXT PAGE

42. All emissions measurements shall be made with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. No determination of compliance shall be established within two hours after a continuous period in which fuel flow to the unit is shut off for 30 minutes or longer, or within 30 minutes after a re-ignition as defined in District Rules 4306 and 4320. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
43. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit
44. Copies of all gas purchase contracts, supplier certifications, and test results to determine compliance with the conditions of this permit shall be maintained. The operator shall record daily amount and type(s) of fuel(s) combusted, fuel sources, and all dates on which unit is fired on any noncertified fuel and record specific type of noncertified fuel used. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
45. Prior to operating equipment under this Authority to Construct, permittee shall surrender emission reduction credits for the following quantities of emissions: NOx: 2374 lb/quarter; PM10: 894 lb/quarter, and VOC: 1536 lb/qtr. Offsets include the applicable offset ratio specified in Section 4.8 of Rule 2201 (as amended 9/21/06). [District Rule 2201] Federally Enforceable Through Title V Permit
46. ERC Certificate Numbers S-3629-2 (NOx), S-3145-1 (VOC), and S-3598-4 (PM10) (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
47. Permittee shall maintain a record of the duration of each startup of this unit. [District Rule 4306] Federally Enforceable Through Title V Permit
48. 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, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit

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San Joaquin Valley
Air Pollution Control District

AUTHORITY TO CONSTRUCT

ISSUANCE DATE: DRAFT
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PERMIT NO: S-2010-283-0

LEGAL OWNER OR OPERATOR: CHEVRON USA INC
MAILING ADDRESS: PO BOX 1392
BAKERSFIELD, CA 93302

LOCATION: LIGHT OIL WESTERN STATIONARY SOURCE
CA

EQUIPMENT DESCRIPTION:

85 MMBTU/HR NATURAL GAS-FIRED STEAM GENERATOR WITH NORTH AMERICAN MODEL 4231-85-GLE LOW-NOX BURNER ASSEMBLY, OR EQUIVALENT LOW-NOX BURNER, WITH FLUE GAS RECIRCULATION, APPROVED TO OPERATE AT VARIOUS LOCATIONS

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 2520] 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. Chevron will surrender ERCs sufficient to offset operational emissions as required by District NSR requirements. [Public Resources Code 21000-21177: California Environmental Quality Act]
4. A qualified registered biologist will conduct a focused pre-construction survey to determine the presence/absence of potential impacts on sensitive species prior to the onset of ground disturbance. The survey shall be conducted in accordance with the standard protocol of the USFWS and CDFG. If more than 30 days pass before the onset of ground disturbance, an additional survey shall be conducted by a Certified Biological Representative within 30 days prior to the onset of ground disturbance. [Public Resources Code 21000-21177: California Environmental Quality Act]

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

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DAVID WARNER, Director of Permit Services

S-2010-283-0 : Dec 20 2011 3:09PM - EDGEHILR : Joint Inspection NOT Required

5. If sensitive species or their nests/dens are detected in the pre-construction survey, the appropriate standardized avoidance measures will be implemented to preclude take of the species. If standardized avoidance measures cannot be achieved Chevron will consult with the CDFG and USFWS to develop alternative compliance measures. If standardized avoidance measures fail and there is a take of a threatened or endangered species Chevron will notify USFWS and CDFG immediately. [Public Resources Code 21000-21177: California Environmental Quality Act]
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7. A qualified registered biologist will conduct a focused pre-construction survey to determine the presence/absence of potential impacts on migratory corridors prior to the onset of ground disturbance. The survey shall be conducted in accordance with the standard protocol of the USFWS and CDFG. If more than 30 days pass before the onset of ground disturbance, an additional survey shall be conducted by a Certified Biological Representative within 30 days prior to the onset of ground disturbance. [Public Resources Code 21000-21177: California Environmental Quality Act]
8. In the event that archaeological/paleontological resources are discovered during ground-disturbing activities associated with construction of the proposed Project, all work within 100 feet of the find shall cease. Chevron will notify and retain a qualified archaeologist/paleontologist to assess and provide an evaluation of the significance of the find. Chevron shall determine whether avoidance is necessary and feasible in light of the factors such as the nature of the find, project design, costs, and other considerations, and, if necessary, develop appropriate mitigation measures in consultation with Kern County and other appropriate agencies and individuals. Work may resume on the Project site once the evaluation of the find is complete by the qualified archaeologist/paleontologist. [Public Resources Code 21000-21177: California Environmental Quality Act]
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10. Prior to the start of construction activities, Chevron shall provide the District with documentation demonstrating that maps identifying all wells in the vicinity of the sites have been submitted to DOGGR for compliance with DOGGR's "Well Review Program". [Public Resources Code 21000-21177: California Environmental Quality Act]
11. During construction activities, if unknown, unrecorded or abandoned wells are discovered or if any wells are damaged, Chevron shall immediately notify DOGGR. [Public Resources Code 21000-21177: California Environmental Quality Act]
12. Any wells discovered or exposed during construction activities will be tested for flammable vapors. [Public Resources Code 21000-21177: California Environmental Quality Act]
13. This steam generator is permitted to operate at the following locations: Section 29 T26S/R21E, SE, SW Section 32, T26S/R21E, and NW, SW Section 33 T26S/R21E. [District Rule 4102] Federally Enforceable Through Title V Permit
14. The permittee shall notify the District Compliance Division of each location 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
15. The permittee shall obtain written District approval for the use of any equivalent equipment not specifically approved by this Authority to Construct. Approval of the equivalent equipment shall be made only after the District's determination that the submitted design and performance of the proposed alternate equipment is equivalent to the specifically authorized equipment. [District Rule 2201] Federally Enforceable Through Title V Permit

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16. The permittee's request for approval of equivalent equipment shall include the make, model, manufacturer's maximum rating, manufacturer's guaranteed emission rates, equipment drawing(s), and operational characteristics/parameters. [District Rule 2010] Federally Enforceable Through Title V Permit
17. Alternate equipment shall be of the same class and category of source as the equipment authorized by the Authority to Construct. [District Rule 2201] Federally Enforceable Through Title V Permit
18. No emission factor and no emission shall be greater for the alternate equipment than for the proposed equipment. No changes in the hours of operation, operating rate, throughput, or firing rate may be authorized for any alternate equipment. [District Rule 2201] Federally Enforceable Through Title V Permit
19. Flue gas recirculation (FGR) shall be utilized in conjunction with low-NOx burner to maintain ongoing compliance with permitted emission limits. [District Rule 2201] Federally Enforceable Through Title V Permit
20. Natural gas fuel sulfur content shall not exceed 1.0 grains-S/100 scf. [District Rule 2201] Federally Enforceable Through Title V Permit
21. Emission rates, except during startup, shutdown, and the initial shakedown period shall not exceed: NOx (as NO₂): 7 ppmvd @ 3% O₂ or 0.0085 lb/MMBtu; or CO: 25 ppmvd @ 3% O₂ or 0.0185 lb/MMBtu. [District Rule 2201, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
22. Emission rates shall not exceed any of the following: PM₁₀: 0.0032 lb/MMBtu; or VOC: 0.0055 lb/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
23. Duration of start-up and shutdown shall not exceed 2 hours each per occurrence. [District Rules 2201, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
24. Emission rates during startup and shutdown shall not exceed: NOx - 0.14 lb/MMBtu or 116 ppmv @ 3% O₂; CO - 0.296 lb/MMBtu or 400 ppmv @ 3% O₂ [District Rule 2201] Federally Enforceable Through Title V Permit
25. Emissions rate of NOx shall not exceed 62.1 lb/day nor 6329 lb/yr. [District Rule 2201] Federally Enforceable Through Title V Permit
26. Emissions rate of CO shall not exceed 132.1 lb/day nor 13,775 lb/yr. [District Rule 2201] Federally Enforceable Through Title V Permit
27. If the unit is fired on noncertified gaseous fuel and compliance with SOx emission limits is achieved through fuel sulfur content limitations, then the sulfur content of the gaseous fuel being fired in the unit shall be determined using ASTM D 1072, D 3031, D 3246, D 4084, D 4468, D 6667 or grab sample analysis by GC-FPD/TCD performed in the laboratory. [District Rule 1070, 2201, and 4320] Federally Enforceable Through Title V Permit
28. When complying with sulfur emission limits by fuel analysis or by a combination of source testing and fuel analysis, each fuel source shall be tested weekly for sulfur content and higher heating value. If compliance with the fuel sulfur content limit and sulfur emission limits has been demonstrated for 8 consecutive weeks for a fuel source, then the fuel testing frequency shall be semi-annually. If a semi-annual fuel content source test fails to show compliance, weekly testing shall resume. [District Rules 1070, 2201, and 4320] Federally Enforceable Through Title V Permit
29. If fuel analysis is used to demonstrate compliance with conditions of this permit, the fuel higher heating value for each fuel shall be certified by a third party fuel supplier or determined by ASTM D 1826 or D 1945 in conjunction with ASTM D 3588 for gaseous fuels. [District Rules 1070, 2201, and 4320] Federally Enforceable Through Title V Permit
30. The permittee shall monitor and record the stack concentration of NOx, CO, and O₂ at least once every month (in which a source test is not performed) 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. Monitoring shall be performed within 5 days of restarting the unit unless monitoring has been performed within the last month. [District Rules 2520, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit

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31. If either the NO_x or CO concentrations corrected to 3% 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 Rules 2520, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
32. 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 Rules 2520, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
33. The permittee shall maintain records of: (1) the date and time of NO_x, CO, and O₂ measurements, (2) the O₂ concentration in percent and the measured NO_x and CO concentrations corrected to 3% 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 Rules 2520, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
34. Compliance demonstration (source testing) shall be by District witnessed, or authorized, sample collection by ARB certified laboratory. [District Rule 1081] Federally Enforceable Through Title V Permit
35. All required source testing shall conform to the compliance testing procedures described in District Rule 1081 (Amended December 16, 1993). [District Rule 1081, and County Rules 108 (Kings), 108:1 (Fresno, Merced, San Joaquin, Tulare, Kern, and Stanislaus), and 110 (Madera)] Federally Enforceable Through Title V Permit
36. Source testing to measure NO_x and CO emissions from this unit shall be conducted within 60 days of initial start-up. [District Rules 2201, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
37. Source testing to measure natural gas-combustion NO_x and CO emissions from this unit shall be conducted at least once every twelve (12) months. After demonstrating compliance on two (2) consecutive annual source tests, the unit shall be tested not less than once every thirty-six (36) months. If the result of the 36-month source test demonstrates that the unit does not meet the applicable emission limits, the source testing frequency shall revert to at least once every twelve (12) months. [District Rules 2201, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
38. The source test plan shall identify which basis (ppmv or lb/MMBtu) will be used to demonstrate compliance. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
39. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
40. The following test methods shall be used: NO_x (ppmv) - EPA Method 7E or ARB Method 100, NO_x (lb/MMBtu) - EPA Method 19, CO (ppmv) - EPA Method 10 or 10B or ARB Method 100, stack gas oxygen - EPA Method 3 or 3A or ARB Method 100, SO_x (lb/MMBtu) - ARB Method 8 or 100 or EPA Method 6, 6B, 6C, or 8, or fuel gas sulfur content analysis and EPA Method 19, fuel gas sulfur content - ASTM D1072, D3031, D3246, D4084, D4468, D6667 or double GC for H₂S and mercaptans performed in laboratory, fuel gas hhv - ASTM D1826 or D1945 in conjunction with ASTM D3588. [District Rules 1081, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
41. For emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. If two of three runs are above an applicable limit the test cannot be used to demonstrate compliance with an applicable limit. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit

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CONDITIONS CONTINUE ON NEXT PAGE

42. All emissions measurements shall be made with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. No determination of compliance shall be established within two hours after a continuous period in which fuel flow to the unit is shut off for 30 minutes or longer, or within 30 minutes after a re-ignition as defined in District Rules 4306 and 4320. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
43. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit
44. Copies of all gas purchase contracts, supplier certifications, and test results to determine compliance with the conditions of this permit shall be maintained. The operator shall record daily amount and type(s) of fuel(s) combusted, fuel sources, and all dates on which unit is fired on any noncertified fuel and record specific type of noncertified fuel used. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
45. Prior to operating equipment under this Authority to Construct, permittee shall surrender emission reduction credits for the following quantities of emissions: NOx: 2374 lb/quarter; PM10: 894 lb/quarter, and VOC: 1536 lb/qtr. Offsets include the applicable offset ratio specified in Section 4.8 of Rule 2201 (as amended 9/21/06). [District Rule 2201] Federally Enforceable Through Title V Permit
46. ERC Certificate Numbers S-3629-2 (NOx), S-3145-1 (VOC), and S-3598-4 (PM10) (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
47. Permittee shall maintain a record of the duration of each startup of this unit. [District Rule 4306] Federally Enforceable Through Title V Permit
48. 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, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit

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San Joaquin Valley
Air Pollution Control District

AUTHORITY TO CONSTRUCT

PERMIT NO: S-2010-284-0

ISSUANCE DATE: DRAFT

LEGAL OWNER OR OPERATOR: CHEVRON USA INC
MAILING ADDRESS: PO BOX 1392
BAKERSFIELD, CA 93302

LOCATION: LIGHT OIL WESTERN STATIONARY SOURCE
CA

EQUIPMENT DESCRIPTION:

62.5 MMBTU/HR NATURAL GAS-FIRED STEAM GENERATOR WITH NORTH AMERICAN MODEL 4231-85-GLE LOW-NOX BURNER ASSEMBLY, OR EQUIVALENT LOW-NOX BURNER, WITH FLUE GAS RECIRCULATION, APPROVED TO OPERATE AT VARIOUS LOCATIONS

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 2520] 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. Chevron will surrender ERCs sufficient to offset operational emissions as required by District NSR requirements. [Public Resources Code 21000-21177: California Environmental Quality Act]
4. A qualified registered biologist will conduct a focused pre-construction survey to determine the presence/absence of potential impacts on sensitive species prior to the onset of ground disturbance. The survey shall be conducted in accordance with the standard protocol of the USFWS and CDFG. If more than 30 days pass before the onset of ground disturbance, an additional survey shall be conducted by a Certified Biological Representative within 30 days prior to the onset of ground disturbance. [Public Resources Code 21000-21177: California Environmental Quality Act]

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-2010-284-0 : Dec 20 2011 3:00PM - EDGENILR : Joint Inspection NOT Required

5. If sensitive species or their nests/dens are detected in the pre-construction survey, the appropriate standardized avoidance measures will be implemented to preclude take of the species. If standardized avoidance measures cannot be achieved Chevron will consult with the CDFG and USFWS to develop alternative compliance measures. If standardized avoidance measures fail and there is a take of a threatened or endangered species Chevron will notify USFWS and CDFG immediately. [Public Resources Code 21000-21177: California Environmental Quality Act]
6. A qualified registered biologist will conduct a focused pre-construction survey to determine the presence/absence of potential impacts on riparian habitats, sensitive natural communities and wetlands prior to the onset of ground disturbance. The survey shall be conducted in accordance with the standard protocol of the USFWS and CDFG. If more than 30 days pass before the onset of ground disturbance, an additional survey shall be conducted by a Certified Biological Representative within 30 days prior to the onset of ground disturbance. [Public Resources Code 21000-21177: California Environmental Quality Act]
7. A qualified registered biologist will conduct a focused pre-construction survey to determine the presence/absence of potential impacts on migratory corridors prior to the onset of ground disturbance. The survey shall be conducted in accordance with the standard protocol of the USFWS and CDFG. If more than 30 days pass before the onset of ground disturbance, an additional survey shall be conducted by a Certified Biological Representative within 30 days prior to the onset of ground disturbance. [Public Resources Code 21000-21177: California Environmental Quality Act]
8. In the event that archaeological/paleontological resources are discovered during ground-disturbing activities associated with construction of the proposed Project, all work within 100 feet of the find shall cease. Chevron will notify and retain a qualified archaeologist/paleontologist to assess and provide an evaluation of the significance of the find. Chevron shall determine whether avoidance is necessary and feasible in light of the factors such as the nature of the find, project design, costs, and other considerations, and, if necessary, develop appropriate mitigation measures in consultation with Kern County and other appropriate agencies and individuals. Work may resume on the Project site once the evaluation of the find is complete by the qualified archaeologist/paleontologist. [Public Resources Code 21000-21177: California Environmental Quality Act]
9. In the event that human remains are discovered during construction of the Project, all work within 100 feet shall be ceased and the discovery will immediately be reported to the County Coroner. If the remains are determined to be Native American in origin, the County Coroner shall notify the Native American Heritage Commission (NAHC) within 24 hours of the determination. The NAHC will solicit those persons it believe to be the nearest descendants of the remains for recommendations. Chevron shall, in consultation with the identified descendants of the remains and/or NAHC, will identify the appropriate measures for the treatment or disposition of the remains. [Public Resources Code 21000-21177: California Environmental Quality Act]
10. Prior to the start of construction activities, Chevron shall provide the District with documentation demonstrating that maps identifying all wells in the vicinity of the sites have been submitted to DOGGR for compliance with DOGGR's "Well Review Program". [Public Resources Code 21000-21177: California Environmental Quality Act]
11. During construction activities, if unknown, unrecorded or abandoned wells are discovered or if any wells are damaged, Chevron shall immediately notify DOGGR. [Public Resources Code 21000-21177: California Environmental Quality Act]
12. Any wells discovered or exposed during construction activities will be tested for flammable vapors. [Public Resources Code 21000-21177: California Environmental Quality Act]
13. This steam generator is permitted to operate at the following locations: Section 29 T26S/R21E, SE, SW Section 32, T26S/R21E, and NW, SW Section 33 T26S/R21E. [District Rule 4102] Federally Enforceable Through Title V Permit
14. The permittee shall notify the District Compliance Division of each location 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
15. The permittee shall obtain written District approval for the use of any equivalent equipment not specifically approved by this Authority to Construct. Approval of the equivalent equipment shall be made only after the District's determination that the submitted design and performance of the proposed alternate equipment is equivalent to the specifically authorized equipment. [District Rule 2201] Federally Enforceable Through Title V Permit

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CONDITIONS CONTINUE ON NEXT PAGE

16. The permittee's request for approval of equivalent equipment shall include the make, model, manufacturer's maximum rating, manufacturer's guaranteed emission rates, equipment drawing(s), and operational characteristics/parameters. [District Rule 2010] Federally Enforceable Through Title V Permit
17. Alternate equipment shall be of the same class and category of source as the equipment authorized by the Authority to Construct. [District Rule 2201] Federally Enforceable Through Title V Permit
18. No emission factor and no emission shall be greater for the alternate equipment than for the proposed equipment. No changes in the hours of operation, operating rate, throughput, or firing rate may be authorized for any alternate equipment. [District Rule 2201] Federally Enforceable Through Title V Permit
19. Flue gas recirculation (FGR) shall be utilized in conjunction with low-NOx burner to maintain ongoing compliance with permitted emission limits. [District Rule 2201] Federally Enforceable Through Title V Permit
20. Natural gas fuel sulfur content shall not exceed 1.0 grains-S/100 scf. [District Rule 2201] Federally Enforceable Through Title V Permit
21. Emission rates, except during startup, shutdown, and the initial shakedown period shall not exceed: NOx (as NO2): 7 ppmvd @ 3% O2 or 0.0085 lb/MMBtu; or CO: 25 ppmvd @ 3% O2 or 0.0185 lb/MMBtu. [District Rule 2201, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
22. Emission rates shall not exceed any of the following: PM10: 0.0032 lb/MMBtu; or VOC: 0.0055 lb/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
23. Duration of start-up and shutdown shall not exceed 2 hours each per occurrence. [District Rules 2201, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
24. Emission rates during startup and shutdown shall not exceed: NOx - 0.14 lb/MMBtu or 116 ppmv @ 3% O2; CO - 0.296 lb/MMBtu or 400 ppmv @ 3% O2 [District Rule 2201] Federally Enforceable Through Title V Permit
25. Emissions rate of NOx shall not exceed 45.6 lb/day nor 4654 lb/yr. [District Rule 2201] Federally Enforceable Through Title V Permit
26. Emissions rate of CO shall not exceed 97.1 lb/day nor 10,129 lb/yr. [District Rule 2201] Federally Enforceable Through Title V Permit
27. If the unit is fired on noncertified gaseous fuel and compliance with SOx emission limits is achieved through fuel sulfur content limitations, then the sulfur content of the gaseous fuel being fired in the unit shall be determined using ASTM D 1072, D 3031, D 3246, D 4084, D 4468, D 6667 or grab sample analysis by GC-FPD/TCD performed in the laboratory. [District Rule 1070, 2201, and 2520]] Federally Enforceable Through Title V Permit
28. When complying with sulfur emission limits by fuel analysis or by a combination of source testing and fuel analysis, each fuel source shall be tested weekly for sulfur content and higher heating value. If compliance with the fuel sulfur content limit and sulfur emission limits has been demonstrated for 8 consecutive weeks for a fuel source, then the fuel testing frequency shall be semi-annually. If a semi-annual fuel content source test fails to show compliance, weekly testing shall resume. [District Rules 1070, 2201, and 2520] Federally Enforceable Through Title V Permit
29. If fuel analysis is used to demonstrate compliance with conditions of this permit, the fuel higher heating value for each fuel shall be certified by a third party fuel supplier or determined by ASTM D 1826 or D 1945 in conjunction with ASTM D 3588 for gaseous fuels. [District Rules 1070, 2201, and 2520] Federally Enforceable Through Title V Permit
30. The permittee shall monitor and record the stack concentration of NOx, CO, and O2 at least once every month (in which a source test is not performed) 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. Monitoring shall be performed within 5 days of restarting the unit unless monitoring has been performed within the last month. [District Rules 2520, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit

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CONDITIONS CONTINUE ON NEXT PAGE

31. If either the NO_x or CO concentrations corrected to 3% 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 Rules 2520, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
32. 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 Rules 2520, 4305, 4306, and 4320]
33. The permittee shall maintain records of: (1) the date and time of NO_x, CO, and O₂ measurements, (2) the O₂ concentration in percent and the measured NO_x and CO concentrations corrected to 3% 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 Rules 2520, 4305, 4306, and 4320]
34. Compliance demonstration (source testing) shall be by District witnessed, or authorized, sample collection by ARB certified laboratory. [District Rule 1081] Federally Enforceable Through Title V Permit
35. All required source testing shall conform to the compliance testing procedures described in District Rule 1081 (Amended December 16, 1993). [District Rule 1081, and County Rules 108 (Kings), 108.1 (Fresno, Merced, San Joaquin, Tulare, Kern, and Stanislaus), and 110 (Madera)] Federally Enforceable Through Title V Permit
36. Source testing to measure NO_x and CO emissions from this unit shall be conducted within 60 days of initial start-up. [District Rules 2201, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
37. Source testing to measure natural gas-combustion NO_x and CO emissions from this unit shall be conducted at least once every twelve (12) months. After demonstrating compliance on two (2) consecutive annual source tests, the unit shall be tested not less than once every thirty-six (36) months. If the result of the 36-month source test demonstrates that the unit does not meet the applicable emission limits, the source testing frequency shall revert to at least once every twelve (12) months. [District Rules 2201, 4305, 4306, and 4320]
38. The source test plan shall identify which basis (ppmv or lb/MMBtu) will be used to demonstrate compliance. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
39. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
40. The following test methods shall be used: NO_x (ppmv) - EPA Method 7E or ARB Method 100, NO_x (lb/MMBtu) - EPA Method 19, CO (ppmv) - EPA Method 10 or 10B or ARB Method 100, stack gas oxygen - EPA Method 3 or 3A or ARB Method 100, SO_x (lb/MMBtu) - ARB Method 8 or 100 or EPA Method 6, 6B, 6C, or 8, or fuel gas sulfur content analysis and EPA Method 19, fuel gas sulfur content - ASTM D1072, D3031, D3246, D4084, D4468, D6667 or double GC for H₂S and mercaptans performed in laboratory, fuel gas hhv - ASTM D1826 or D1945 in conjunction with ASTM D3588. [District Rules 1081, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
41. For emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. If two of three runs are above an applicable limit the test cannot be used to demonstrate compliance with an applicable limit. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit

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CONDITIONS CONTINUE ON NEXT PAGE

42. All emissions measurements shall be made with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. No determination of compliance shall be established within two hours after a continuous period in which fuel flow to the unit is shut off for 30 minutes or longer, or within 30 minutes after a re-ignition as defined in District Rules 4306 and 4320. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
43. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit
44. Copies of all gas purchase contracts, supplier certifications, and test results to determine compliance with the conditions of this permit shall be maintained. The operator shall record daily amount and type(s) of fuel(s) combusted, fuel sources, and all dates on which unit is fired on any noncertified fuel and record specific type of noncertified fuel used. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
45. Prior to operating under this Authority to Construct, permittee shall surrender emission reduction credits for the following quantities of emissions: NOx, 1,745 lb/quarter; PM10, 657 lb/quarter and VOC, 1129 lb/quarter. Offsets include the applicable offset ratio specified in Section 4.8 of Rule 2201 (as amended 9/21/06). [District Rule 2201] Federally Enforceable Through Title V Permit
46. ERC Certificate Numbers S-2041024/401 (NOx), S-3145-1 (VOC), and S-3084-4 (PM10) (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

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ATTACHMENT V Emissions Profiles

Permit #: S-2010-274-0 Last Updated
Facility: CHEVRON USA INC 12/20/2011 EDGEHILR

Equipment Pre-Baselined: NO

	<u>NOX</u>	<u>SOX</u>	<u>PM10</u>	<u>CO</u>	<u>VOC</u>
Potential to Emit (lb/Yr):	6329.0	2122.0	2383.0	13775.0	4095.0
Daily Emis. Limit (lb/Day)	62.1	5.8	6.5	132.1	11.2
Quarterly Net Emissions Change (lb/Qtr)					
Q1:	1582.0	530.0	595.0	3443.0	1023.0
Q2:	1582.0	530.0	596.0	3444.0	1024.0
Q3:	1582.0	531.0	596.0	3444.0	1024.0
Q4:	1583.0	531.0	596.0	3444.0	1024.0
Check if offsets are triggered but exemption applies	N	N	N	N	N
Offset Ratio	1.5		1.5		1.5
Quarterly Offset Amounts (lb/Qtr)					
Q1:	2374.0		894.0		1536.0
Q2:	2374.0		894.0		1536.0
Q3:	2374.0		894.0		1536.0
Q4:	2374.0		894.0		1536.0

Permit #: S-2010-275-0	Last Updated
Facility: CHEVRON USA INC	12/20/2011 EDGEHILR

Equipment Pre-Baselined: NO

	<u>NOX</u>	<u>SOX</u>	<u>PM10</u>	<u>CO</u>	<u>VOC</u>
Potential to Emit (lb/Yr):	6329.0	2122.0	2383.0	13775.0	4095.0
Daily Emis. Limit (lb/Day)	62.1	5.8	6.5	132.1	11.2
Quarterly Net Emissions Change (lb/Qtr)					
Q1:	1582.0	530.0	595.0	3443.0	1023.0
Q2:	1582.0	530.0	596.0	3444.0	1024.0
Q3:	1582.0	531.0	596.0	3444.0	1024.0
Q4:	1583.0	531.0	596.0	3444.0	1024.0
Check if offsets are triggered but exemption applies	N	N	N	N	N
Offset Ratio	1.5		1.5		1.5
Quarterly Offset Amounts (lb/Qtr)					
Q1:	2374.0		894.0		1536.0
Q2:	2374.0		894.0		1536.0
Q3:	2374.0		894.0		1536.0
Q4:	2374.0		894.0		1536.0

Permit #: S-2010-276-0	Last Updated
Facility: CHEVRON USA INC	12/20/2011 EDGEHILR

Equipment Pre-Baselined: NO

	<u>NOX</u>	<u>SOX</u>	<u>PM10</u>	<u>CO</u>	<u>VOC</u>
Potential to Emit (lb/Yr):	6329.0	2122.0	2383.0	13775.0	4095.0
Daily Emis. Limit (lb/Day)	62.1	5.8	6.5	132.1	11.2
Quarterly Net Emissions Change (lb/Qtr)					
Q1:	1582.0	530.0	595.0	3443.0	1023.0
Q2:	1582.0	530.0	596.0	3444.0	1024.0
Q3:	1582.0	531.0	596.0	3444.0	1024.0
Q4:	1583.0	531.0	596.0	3444.0	1024.0
Check if offsets are triggered but exemption applies	N	N	N	N	N
Offset Ratio	1.5		1.5		1.5
Quarterly Offset Amounts (lb/Qtr)					
Q1:	2374.0		894.0		1536.0
Q2:	2374.0		894.0		1536.0
Q3:	2374.0		894.0		1536.0
Q4:	2374.0		894.0		1536.0

Permit #: S-2010-277-0	Last Updated
Facility: CHEVRON USA INC	12/20/2011 EDGEHILR

Equipment Pre-Baselined: NO

	<u>NOX</u>	<u>SOX</u>	<u>PM10</u>	<u>CO</u>	<u>VOC</u>
Potential to Emit (lb/Yr):	6329.0	2122.0	2383.0	13775.0	4095.0
Daily Emis. Limit (lb/Day)	62.1	5.8	6.5	132.1	11.2
Quarterly Net Emissions Change (lb/Qtr)					
Q1:	1582.0	350.0	595.0	3443.0	1023.0
Q2:	1582.0	530.0	596.0	3444.0	1024.0
Q3:	1582.0	531.0	596.0	3444.0	1024.0
Q4:	1583.0	531.0	596.0	3444.0	1024.0
Check if offsets are triggered but exemption applies	N	N	N	N	N
Offset Ratio	1.5		1.5		1.5
Quarterly Offset Amounts (lb/Qtr)					
Q1:	2374.0		894.0		1536.0
Q2:	2374.0		894.0		1536.0
Q3:	2374.0		894.0		1536.0
Q4:	2374.0		894.0		1536.0

Permit #: S-2010-278-0	Last Updated
Facility: CHEVRON USA INC	12/20/2011 EDGEHILR

Equipment Pre-Baselined: NO

	<u>NOX</u>	<u>SOX</u>	<u>PM10</u>	<u>CO</u>	<u>VOC</u>
Potential to Emit (lb/Yr):	6329.0	2122.0	2383.0	13775.0	4095.0
Daily Emis. Limit (lb/Day)	62.1	5.8	6.5	132.1	11.2
Quarterly Net Emissions Change (lb/Qtr)					
Q1:	1582.0	530.0	595.0	3443.0	1023.0
Q2:	1582.0	530.0	596.0	3444.0	1024.0
Q3:	1582.0	531.0	596.0	3444.0	1024.0
Q4:	1583.0	531.0	596.0	3444.0	1024.0
Check if offsets are triggered but exemption applies	N	N	N	N	N
Offset Ratio	1.5		1.5		1.5
Quarterly Offset Amounts (lb/Qtr)					
Q1:	2374.0		894.0		1536.0
Q2:	2374.0		894.0		1536.0
Q3:	2374.0		894.0		1536.0
Q4:	2374.0		894.0		1536.0

Permit #: S-2010-279-0	Last Updated
Facility: CHEVRON USA INC	12/20/2011 EDGEHILR

Equipment Pre-Baselined: NO

	<u>NOX</u>	<u>SOX</u>	<u>PM10</u>	<u>CO</u>	<u>VOC</u>
Potential to Emit (lb/Yr):	6329.0	2122.0	2383.0	13775.0	4095.0
Daily Emis. Limit (lb/Day)	62.1	5.8	6.5	132.1	11.2
Quarterly Net Emissions Change (lb/Qtr)					
Q1:	1582.0	530.0	595.0	3443.0	1023.0
Q2:	1582.0	530.0	596.0	3444.0	1024.0
Q3:	1582.0	531.0	596.0	3444.0	1024.0
Q4:	1583.0	531.0	596.0	3444.0	1024.0
Check if offsets are triggered but exemption applies	N	N	N	N	N
Offset Ratio	1.5		1.5		1.5
Quarterly Offset Amounts (lb/Qtr)					
Q1:	2374.0		894.0		1536.0
Q2:	2374.0		894.0		1536.0
Q3:	2374.0		894.0		1536.0
Q4:	2374.0		894.0		1536.0

Permit #: S-2010-280-0	Last Updated
Facility: CHEVRON USA INC	12/20/2011 EDGEHILR

Equipment Pre-Baselined: NO

	<u>NOX</u>	<u>SOX</u>	<u>PM10</u>	<u>CO</u>	<u>VOC</u>
Potential to Emit (lb/Yr):	5958.0	2122.0	2383.0	13775.0	4095.0
Daily Emis. Limit (lb/Day)	62.1	5.8	6.5	132.1	11.2
Quarterly Net Emissions Change (lb/Qtr)					
Q1:	1582.0	530.0	595.0	3443.0	1023.0
Q2:	1582.0	530.0	596.0	3443.0	1024.0
Q3:	1582.0	531.0	596.0	3444.0	1024.0
Q4:	1583.0	531.0	596.0	3444.0	1024.0
Check if offsets are triggered but exemption applies	N	N	N	N	N
Offset Ratio	1.5		0.5		1.5
Quarterly Offset Amounts (lb/Qtr)					
Q1:	2374.0		894.0		1536.0
Q2:	2374.0		894.0		1536.0
Q3:	2374.0		894.0		1536.0
Q4:	2374.0		894.0		1536.0

Permit #: S-2010-281-0 Last Updated
Facility: CHEVRON USA INC 12/20/2011 EDGEHILR

Equipment Pre-Baselined: NO

	<u>NOX</u>	<u>SOX</u>	<u>PM10</u>	<u>CO</u>	<u>VOC</u>
Potential to Emit (lb/Yr):	6329.0	2122.0	2383.0	13775.0	4095.0
Daily Emis. Limit (lb/Day)	62.1	5.8	6.5	132.1	11.2
Quarterly Net Emissions Change (lb/Qtr)					
Q1:	1582.0	530.0	595.0	3443.0	1023.0
Q2:	1582.0	530.0	595.0	3444.0	1024.0
Q3:	1582.0	531.0	596.0	3444.0	1024.0
Q4:	1583.0	531.0	596.0	3444.0	1024.0
Check if offsets are triggered but exemption applies	N	N	N	N	N
Offset Ratio	1.5		1.5		1.5
Quarterly Offset Amounts (lb/Qtr)					
Q1:	2374.0		894.0		1536.0
Q2:	2374.0		894.0		1536.0
Q3:	2374.0		894.0		1536.0
Q4:	2374.0		894.0		1536.0

Permit #: S-2010-282-0	Last Updated
Facility: CHEVRON USA INC	12/20/2011 EDGEHILR

Equipment Pre-Baselined: NO

	<u>NOX</u>	<u>SOX</u>	<u>PM10</u>	<u>CO</u>	<u>VOC</u>
Potential to Emit (lb/Yr):	5958.0	2122.0	2383.0	13775.0	4095.0
Daily Emis. Limit (lb/Day)	62.1	5.8	6.5	132.1	11.2
Quarterly Net Emissions Change (lb/Qtr)					
Q1:	1582.0	530.0	595.0	3443.0	1023.0
Q2:	1582.0	530.0	595.0	3444.0	1024.0
Q3:	1582.0	531.0	596.0	3444.0	1024.0
Q4:	1583.0	531.0	596.0	3444.0	1024.0
Check if offsets are triggered but exemption applies	N	N	N	N	N
Offset Ratio	1.5		1.5		1.5
Quarterly Offset Amounts (lb/Qtr)					
Q1:	2374.0		894.0		1536.0
Q2:	2374.0		894.0		1536.0
Q3:	2374.0		894.0		1536.0
Q4:	2374.0		894.0		1536.0

Permit #: S-2010-283-0	Last Updated
Facility: CHEVRON USA INC	12/20/2011 EDGEHILR

Equipment Pre-Baselined: NO

	<u>NOX</u>	<u>SOX</u>	<u>PM10</u>	<u>CO</u>	<u>VOC</u>
Potential to Emit (lb/Yr):	6329.0	2122.0	2383.0	13775.0	4095.0
Daily Emis. Limit (lb/Day)	62.1	5.8	6.5	132.1	11.2
Quarterly Net Emissions Change (lb/Qtr)					
Q1:	1582.0	530.0	595.0	3443.0	1023.0
Q2:	1582.0	530.0	596.0	3444.0	1024.0
Q3:	1582.0	531.0	596.0	3444.0	1024.0
Q4:	1583.0	531.0	596.0	3444.0	1024.0
Check if offsets are triggered but exemption applies	N	N	N	N	N
Offset Ratio	1.5		1.5		1.5
Quarterly Offset Amounts (lb/Qtr)					
Q1:	2374.0		894.0		1536.0
Q2:	2374.0		894.0		1536.0
Q3:	2374.0		894.0		1536.0
Q4:	2374.0		894.0		1536.0

Permit #: S-2010-284-0 Last Updated
Facility: CHEVRON USA INC 12/20/2011 EDGEHILR

Equipment Pre-Baselined: NO

	<u>NOX</u>	<u>SOX</u>	<u>PM10</u>	<u>CO</u>	<u>VOC</u>
Potential to Emit (lb/Yr):	4654.0	1560.0	1752.0	10129.0	3011.0
Daily Emis. Limit (lb/Day)	45.6	4.3	4.8	97.1	8.3
Quarterly Net Emissions Change (lb/Qtr)					
Q1:	1163.0	390.0	438.0	2532.0	752.0
Q2:	1163.0	390.0	438.0	2532.0	753.0
Q3:	1164.0	390.0	438.0	2532.0	753.0
Q4:	1164.0	390.0	438.0	2533.0	753.0
Check if offsets are triggered but exemption applies	N	N	N	N	N
Offset Ratio	1.5		1.5		1.5
Quarterly Offset Amounts (lb/Qtr)					
Q1:	1745.0		657.0		1129.0
Q2:	1745.0		657.0		1129.0
Q3:	1745.0		657.0		1129.0
Q4:	1745.0		657.0		1129.0

Permit #: S-2010-285-0	Last Updated
Facility: CHEVRON USA INC	04/19/2011 EDGEHILR

Equipment Pre-Baselined: NO

	<u>NOX</u>	<u>SOX</u>	<u>PM10</u>	<u>CO</u>	<u>VOC</u>
Potential to Emit (lb/Yr):	4654.0	1560.0	1752.0	10129.0	3011.0
Daily Emis. Limit (lb/Day)	45.6	4.3	4.8	97.1	8.3
Quarterly Net Emissions Change (lb/Qtr)					
Q1:	1163.0	390.0	438.0	2532.0	752.0
Q2:	1163.0	390.0	438.0	2532.0	753.0
Q3:	1164.0	390.0	438.0	2532.0	753.0
Q4:	1164.0	390.0	438.0	2533.0	753.0
Check if offsets are triggered but exemption applies	N	N	N	N	N
Offset Ratio	1.5		1.5		1.5
Quarterly Offset Amounts (lb/Qtr)					
Q1:	1745.0		228.0		1129.0
Q2:	1745.0		228.0		1129.0
Q3:	1745.0		228.0		1129.0
Q4:	1745.0		228.0		1129.0

ATTACHMENT VI SSPE1 Calculations

Detailed SSPE Report

Region	Facility	Unit	Mod	NOx	SOx	PM10	CO	VOC	Number of Outstanding ATCs
S	2010	0	1						0
S	2010	3	8	0	0	0	0	13323	0
S	2010	4	7	0	0	0	0	5913	1
S	2010	8	6	0	0	0	0	0	0
S	2010	9	6	0	0	0	0	0	0
S	2010	10	3	0	0	0	0	0	0
S	2010	11	3	0	0	0	0	0	0
S	2010	12	2						1
S	2010	15	2						1
S	2010	20	5						0
S	2010	23	26	0	0	0	0	81835	1
S	2010	24	5	0	0	0	0	0	0
S	2010	25	4	0	0	0	0	0	0
S	2010	26	4	0	0	0	0	0	0
S	2010	55	6	0	0	0	0	7512	0
S	2010	122	1						0
S	2010	123	4						0
S	2010	124	1						0
S	2010	130	2						0
S	2010	142	14	0	0	0	0	548	1
S	2010	143	4						0
S	2010	144	2						0
S	2010	146	2						0
S	2010	147	3						0
S	2010	148	5	0	0	0	0	37	0
S	2010	198	2	1080	86	228	2520	165	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	2010	199	2	2048	64	228	2520	165	0
S	2010	200	4	3679	749	1997	9724	1445	2
S	2010	201	1	0	0	0	0	0	0
S	2010	203	1	0	0	0	0	0	0
S	2010	204	1	0	0	0	0	0	0
S	2010	205	1	0	0	0	0	0	0
S	2010	206	1	0	0	0	0	0	0
S	2010	207	1	0	0	0	0	0	0
S	2010	208	1	0	0	0	0	0	0
S	2010	209	1	0	0	0	0	0	0
S	2010	210	1	0	0	0	0	0	0
S	2010	211	1	0	0	0	0	0	0
S	2010	212	1	0	0	0	0	0	0
S	2010	213	1	0	0	0	0	0	0
S	2010	214	1	0	0	0	0	0	0
S	2010	217	1	0	0	0	0	365	0
S	2010	219	1	0	0	0	0	8432	0
S	2010	220	6	0	0	0	0	0	0
S	2010	221	1	0	0	0	0	0	0
S	2010	223	1	0	0	0	0	66	0
S	2010	224	2	0	0	0	0	37	0
S	2010	226	2	0	0	0	0	0	0
S	2010	227	2	0	0	0	0	0	0
S	2010	228	2	0	0	0	0	0	0
S	2010	229	2	0	0	0	0	0	0
S	2010	245	2	0	0	0	0	1606	0
S	2010	250	2	0	0	0	0	1606	0
S	2010	264	2	0	0	0	0	1679	0
S	2010	266	2	0	0	0	0	3322	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	2010	267	2	0	0	0	2336	0	
S	2010	268	1				3157	0	
S	2010	269	1				4725	0	
S	2010	272	2	0	0	0	5337	0	
S	2010	286	0				37397	0	
S	2010	287	0				454	0	
S	2010	294	1	0	0	0	6484	0	
S	2010	295	1	0	0	0	6484	0	
S	2010	296	1	0	0	0	6484	0	
S	2010	300	0	706	1	13	82	49	0
S	2010	301	0	662	1	17	199	50	0
S	2010	302	0	662	1	17	199	50	0
S	2010	303	0	924	1	24	292	49	0
S	2010	304	0	1028	1	15	220	73	0
S	2010	305	0	1362	2	25	143	72	0
S	2010	306	0	1362	2	25	143	72	0
S	2010	307	0						0
<i>SSPE (lbs)</i>			13513	908	2589	16042	201329		

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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.