



NOV 25 2009

Brandon Smith
Ventura Coastal
12310 Avenue 328
Visalia, CA 93291

Re: Notice of Preliminary Decision - Authority to Construct
Project Number: S-1093854

Dear Mr. Smith:

Enclosed for your review and comment is the District's analysis of Ventura Coastal's application for an Authority to Construct for modifications to the boilers for compliance with District Rule 4320, at 12310 Avenue 368 in Visalia, CA.

The notice of preliminary decision for this project will be published approximately three days from the date of this letter. Please submit your written comments on this project within the 30-day public comment period, which begins on the date of publication of the public notice.

Thank you for your cooperation in this matter. If you have any questions regarding this matter, please contact Mr. Mark Schonhoff of Permit Services at (209) 557-6448.

Sincerely,

David Warner
Director of Permit Services

DW:MJS/lis

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



NOV 25 2009

Mike Tollstrup, Chief
Project Assessment Branch
Stationary Source Division
California Air Resources Board
PO Box 2815
Sacramento, CA 95812-2815

**Re: Notice of Preliminary Decision - Authority to Construct
Project Number: S-1093854**

Dear Mr. Tollstrup:

Enclosed for your review and comment is the District's analysis of Ventura Coastal's application for an Authority to Construct for modifications to the boilers for compliance with District Rule 4320, at 12310 Avenue 368 in Visalia, CA.

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Visalia Times-Delta
Visalia Times-Delta

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

NOTICE IS HEREBY GIVEN that the San Joaquin Valley Unified Air Pollution Control District solicits public comment on the proposed issuance of Authority to Construct to Ventura Coastal for modifications to the boilers for compliance with District Rule 4320, at 12310 Avenue 368 in Visalia, CA.

The analysis of the regulatory basis for this proposed action, Project #S-1093854, is available for public inspection at http://www.valleyair.org/notices/public_notices_idx.htm and the District office at the address below. Written comments on this project must be submitted within 30 days of the publication date of this notice to **DAVID WARNER, DIRECTOR OF PERMIT SERVICES, SAN JOAQUIN VALLEY UNIFIED AIR POLLUTION CONTROL DISTRICT, 4800 ENTERPRISE WAY, MODESTO, CA.**

Authority to Construct Application Review

Facility Name: Ventura Coastal
Mailing Address: 12310 Avenue 368
Visalia, CA 93291

Date: October 20, 2009

Contact Person: Brandon Smith
Telephone: (559) 737-9836

Engineer: Mark Schonhoff
Application #: S-1896-2-3
S-1896-7-1

Project #: S-1093854

Deemed Complete: July 2, 2009

I. Proposal

S-1896-2-3:

The applicant is proposing to receive an Authority to Construct permit to limit the emissions from this unit to 7 ppmvd @ 3% O₂ for Rule 4320 compliance. This emission level will be achieved by upgrading the burner control system. The permitted rating of this unit is currently 48 MMBtu/hr but the applicant reported that the rating is currently, and has always been 50.2 MMBtu/hr. The burner rating will be corrected at this time also.

S-1896-7-1:

The applicant is proposing to receive an Authority to Construct authorizing replacement of the burner for the purpose of meeting the Rule 4320 NO_x limit of 7 ppmvd @ 3% O₂.

II. Applicable Rules

- 2201 New and Modified Stationary Source Review Rule (9/21/06)
- 2520 Federally Mandated Operating Permits (6/21/01)
- 2550 Federally Mandated Preconstruction Review for Major Sources of Air Toxics (6/18/98)
- 4001 New Source Performance Standards (4/14/99)
- 4002 National Emission Standards for Hazardous Air Pollutants (5/20/04)
- 4101 Visible Emissions (11/15/01)
- 4102 Nuisance (12/17/92)
- 4201 Particulate Matter Concentration (12/17/92)

- 4304 Equipment Tuning Procedure for Boilers, Steam Generators and process Heaters (10/19/09)
 - 4305 Boilers, Steam Generators and Process Heaters – Phase 2 (12/19/96)
 - 4306 Boilers, Steam Generators and Process Heaters – Phase 3 (10/16/08)
 - 4320 Advanced Emission Reduction Options for Boilers, Steam Generators and Process Heaters Greater than 5.0 MMBtu/hr (10/16/08)
 - 4801 Sulfur Compounds (12/17/92)
- California Environmental Quality Act (CEQA)
CH&SC 41700
CH&SC 42301.6

III. Project Location

12310 Avenue 368
Visalia, CA

The equipment is not located within 1,000 feet of a K-12 school.

IV. Process Description

The units will combust natural gas for the purpose of heating water for use in processes at the plant.

V. Equipment Listing

S-1896-2:

Premodification:

48 MMBTU/HR CLEAVER BROOKS MODEL D-60 NATURAL GAS-FIRED BOILER WITH CLEAVER BROOKS MODEL PROFIRE NTS LOW NOX BURNER

Postmodification:

50.2 MMBTU/HR CLEAVER BROOKS MODEL D-60 NATURAL GAS-FIRED BOILER WITH A CLEAVER BROOKS MODEL NTS504NGX-09S-2P BURNER AND A FLUE GAS RECIRCULATION SYSTEM

S-1896-7:

Premodification:

31.5 MMBTU/HR HURST MODEL S5-X-750-200 NATURAL GAS-FIRED BOILER WITH A POWER FLAME MODEL LN1 NVC-13-G-30 ULTRA LOW NOX BURNER AND A FLUE GAS RECIRCULATION (FGR) SYSTEM

Postmodification:

31.5 MMBTU/HR HURST MODEL S5-X-750-200 NATURAL GAS-FIRED BOILER WITH A CLEAVER BROOKS NTD336GXR-F09-R BURNER AND A FLUE GAS RECIRCULATION SYSTEM

VI. Emission Control Technology Evaluation

Low-NO_x burners reduce NO_x formation by producing lower flame temperatures (and longer flames) than conventional burners. Conventional burners thoroughly mix all the fuel and air in a single stage just prior to combustion, whereas low-NO_x burners delay the mixing of fuel and air by introducing the fuel (or sometimes the air) in multiple stages. Generally, in the first combustion stage, the air-fuel mixture is fuel rich. In a fuel rich environment, all the oxygen will be consumed in reactions with the fuel, leaving no excess oxygen available to react with nitrogen to produce thermal NO_x. In the secondary and tertiary stages, the combustion zone is maintained in a fuel-lean environment. The excess air in these stages helps to reduce the flame temperature so that the reaction between the excess oxygen with nitrogen is minimized.

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 it, 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.

VII. General Calculations

A. Assumptions

Assumptions will be stated as they are made.

Emission Calculations:

B. Emission Factors

Premodification:

The premodification emission factors are from the current Permits to Operate.

	Emission Factors				
	ppmvd @ 15% O ₂ (lb/MMBtu)		Lb/MMBtu		
	NO _x	CO	VOC	SO _x	PM10
S-1896-2-2	9	100	0.0055	0.00285	0.0076
S-1896-7-0	9	80	0.0042	0.00285	0.0076

Postmodification:

The NO_x, CO and VOC emissions were proposed by the applicant.

The SO_x and PM₁₀ emission factors are from the current Permits to Operate.

	Emission Factors				
	ppmvd @ 15% O ₂ (lb/MMBtu)		Lb/MMBtu		
	NO _x	CO	VOC	SO _x	PM ₁₀
S-1896-2-3	7	200	0.0041	0.00285	0.0076
S-1896-7-1	7	200	0.0041	0.00285	0.0076

C. Potential to Emit (PE)

The following equation (or a variation) will be utilized to calculate the premodification and postmodification emissions for the pollutants with limits in terms of ppmvd:

$$PE = (\text{ppm})(\text{MW})(2.63 \times 10^{-9})(\text{ff})(\text{C})(20.9/(20.9 - \%O_2)) \text{ lb/hr}$$

Where: ppm is the emission concentration
MW is the molecular wt. of the pollutant
NO_x = 46
CO = 28
VOC = 16
2.63 X 10⁻⁹ is a constant (at 60 degrees F)
ff is the f-factor of natural gas (8,578 dscf/MMBtu at 60 degrees F)
C is the capacity of the equipment (in MMBtu/hr)
% O₂ is the oxygen content to which the stack exhaust is corrected (3%)

1. Daily PE

Premodification PE:

S-1896-2-2:

Rating: 48 MMBtu/hr
Op. Schedule: 24 hr/day

$$PE_{NOx} = [(9)(46)(2.63 \times 10^{-9})(8,578)(48)(20.9/(20.9-3))\text{lb/hr} \\ \times (24 \text{ hr/day})] = 12.6 \text{ lb/day}$$

$$PE_{CO} = [(100)(28)(2.63 \times 10^{-9})(8,578)(48)(20.9/(20.9-3))\text{lb/hr} \\ \times (24 \text{ hr/day})] = 85.0 \text{ lb/day}$$

$$PE_{VOC} = (48 \text{ MMBtu/hr})(0.0055 \text{ lb/MMBtu})(24 \text{ hr/day}) = 6.3 \text{ lb/day}$$

$$PE_{SOx} = (48 \text{ MMBtu/hr})(0.00285 \text{ lb/MMBtu})(24 \text{ hr/day}) = 3.3 \text{ lb/day}$$

$$PE_{PM10} = (48 \text{ MMBtu/hr})(0.0076 \text{ lb/MMBtu})(24 \text{ hr/day}) = 8.8 \text{ lb/day}$$

S-1896-7-0:

Rating: 31.5 MMBtu/hr
Op. Schedule: 24 hr/day

$$PE_{NOx} = [(9)(46)(2.63 \times 10^{-9})(8,578)(31.5)(20.9/(20.9-3))\text{lb/hr}] \times (24 \text{ hr/day}) = 8.2 \text{ lb/day}$$

$$PE_{CO} = [(80)(28)(2.63 \times 10^{-9})(8,578)(31.5)(20.9/(20.9-3))\text{lb/hr}] \times (24 \text{ hr/day}) = 44.6 \text{ lb/day}$$

$$PE_{VOC} = (31.5 \text{ MMBtu/hr})(0.0042 \text{ lb/MMBtu})(24 \text{ hr/day}) = 3.2 \text{ lb/day}$$

$$PE_{SOx} = (31.5 \text{ MMBtu/hr})(0.00285 \text{ lb/MMBtu})(24 \text{ hr/day}) = 2.2 \text{ lb/day}$$

$$PE_{PM10} = (31.5 \text{ MMBtu/hr})(0.0076 \text{ lb/MMBtu})(24 \text{ hr/day}) = 5.7 \text{ lb/day}$$

Post Modification PE:

S-1896-2-3:

Rating: 50.2 MMBtu/hr
Op. Schedule: 24 hr/day

$$PE_{NOx} = [(7)(46)(2.63 \times 10^{-9})(8,578)(50.2)(20.9/(20.9-3))\text{lb/hr}] \times (24 \text{ hr/day}) = 10.2 \text{ lb/day}$$

$$PE_{CO} = [(200)(28)(2.63 \times 10^{-9})(8,578)(50.2)(20.9/(20.9-3))\text{lb/hr}] \times (24 \text{ hr/day}) = 177.7 \text{ lb/day}$$

$$PE_{VOC} = (50.2 \text{ MMBtu/hr})(0.0041 \text{ lb/MMBtu})(24 \text{ hr/day}) = 4.9 \text{ lb/day}$$

$$PE_{SOx} = (50.2 \text{ MMBtu/hr})(0.00285 \text{ lb/MMBtu})(24 \text{ hr/day}) = 3.4 \text{ lb/day}$$

$$PE_{PM10} = (50.2 \text{ MMBtu/hr})(0.0076 \text{ lb/MMBtu})(24 \text{ hr/day}) = 9.2 \text{ lb/day}$$

S-1896-7-1:

Rating: 31.5 MMBtu/hr
Op. Schedule: 24 hr/day

$$PE_{NOx} = [(7)(46)(2.63 \times 10^{-9})(8,578)(31.5)(20.9/(20.9-3))\text{lb/hr}] \times (24 \text{ hr/day}) = 6.4 \text{ lb/day}$$

$$PE_{CO} = [(200)(28)(2.63 \times 10^{-9})(8,578)(31.5)(20.9/(20.9-3))\text{lb/hr}] \times (24 \text{ hr/day}) = 111.5 \text{ lb/day}$$

$$PE_{VOC} = (31.5 \text{ MMBtu/hr})(0.0041 \text{ lb/MMBtu})(24 \text{ hr/day}) = 3.1 \text{ lb/day}$$

$$PE_{SOx} = (31.5 \text{ MMBtu/hr})(0.00285 \text{ lb/MMBtu})(24 \text{ hr/day}) = 2.2 \text{ lb/day}$$

$$PE_{PM10} = (31.5 \text{ MMBtu/hr})(0.0076 \text{ lb/MMBtu})(24 \text{ hr/day}) = 5.7 \text{ lb/day}$$

2. Annual PE

Premodification PE:

S-1896-2-2:

Rating: 48 MMBtu/hr
Op. Schedule: 8,760 hr/yr

$$PE_{NOx} = [(9)(46)(2.63 \times 10^{-9})(8,578)(48)(20.9/(20.9-3))\text{lb/hr}] \times (8,760 \text{ hr/yr}) = 4,585 \text{ lb/yr}$$

$$PE_{CO} = [(100)(28)(2.63 \times 10^{-9})(8,578)(48)(20.9/(20.9-3))\text{lb/hr}] \times (8,760 \text{ hr/yr}) = 31,013 \text{ lb/yr}$$

$$PE_{VOC} = (48 \text{ MMBtu/hr})(0.0055 \text{ lb/MMBtu})(8,760 \text{ hr/yr}) = 2,313 \text{ lb/yr}$$

$$PE_{SOx} = (48 \text{ MMBtu/hr})(0.00285 \text{ lb/MMBtu})(8,760 \text{ hr/yr}) = 1,198 \text{ lb/yr}$$

$$PE_{PM10} = (48 \text{ MMBtu/hr})(0.0076 \text{ lb/MMBtu})(8,760 \text{ hr/yr}) = 3,196 \text{ lb/yr}$$

S-1896-7-0:

Rating: 31.5 MMBtu/hr
Op. Schedule: 8,760 hr/yr

$$PE_{NOx} = [(9)(46)(2.63 \times 10^{-9})(8,578)(31.5)(20.9/(20.9-3))\text{lb/hr}] \times (8,760 \text{ hr/yr}) = 3,009 \text{ lb/yr}$$

$$PE_{CO} = [(80)(28)(2.63 \times 10^{-9})(8,578)(31.5)(20.9/(20.9-3))\text{lb/hr}] \times (8,760 \text{ hr/yr}) = 16,282 \text{ lb/yr}$$

$$PE_{VOC} = (31.5 \text{ MMBtu/hr})(0.0042 \text{ lb/MMBtu})(8,760 \text{ hr/yr}) = 1,159 \text{ lb/yr}$$

$$PE_{SOx} = (31.5 \text{ MMBtu/hr})(0.00285 \text{ lb/MMBtu})(8,760 \text{ hr/yr}) = 786 \text{ lb/yr}$$

$$PE_{PM10} = (31.5 \text{ MMBtu/hr})(0.0076 \text{ lb/MMBtu})(8,760 \text{ hr/yr}) = 2,097 \text{ lb/yr}$$

Post Modification PE:

S-1896-2-3:

Rating: 50.2 MMBtu/hr
Op. Schedule: 8,760 hr/yr

$$PE_{NOx} = [(7)(46)(2.63 \times 10^{-9})(8,578)(50.2)(20.9/(20.9-3))\text{lb/hr}] \times (8,760 \text{ hr/yr}) = 3,730 \text{ lb/yr}$$

$$PE_{CO} = [(200)(28)(2.63 \times 10^{-9})(8,578)(50.2)(20.9/(20.9-3))\text{lb/hr}] \times (8,760 \text{ hr/yr}) = 64,868 \text{ lb/yr}$$

$$PE_{VOC} = (50.2 \text{ MMBtu/hr})(0.0041 \text{ lb/MMBtu})(8,760 \text{ hr/yr}) = 1,803 \text{ lb/yr}$$

$$PE_{SOx} = (50.2 \text{ MMBtu/hr})(0.00285 \text{ lb/MMBtu})(8,760 \text{ hr/yr}) = 1,253 \text{ lb/yr}$$

$$PE_{PM10} = (50.2 \text{ MMBtu/hr})(0.0076 \text{ lb/MMBtu})(8,760 \text{ hr/yr}) = 3,342 \text{ lb/yr}$$

S-1896-7-1:

Rating: 31.5 MMBtu/hr
Op. Schedule: 8,760 hr/yr

$$PE_{NOx} = [(7)(46)(2.63 \times 10^{-9})(8,578)(31.5)(20.9/(20.9-3))\text{lb/hr}] \times (8,760 \text{ hr/yr}) = 2,340 \text{ lb/yr}$$

$$PE_{CO} = [(200)(28)(2.63 \times 10^{-9})(8,578)(31.5)(20.9/(20.9-3))\text{lb/hr}] \times (8,760 \text{ hr/yr}) = 40,704 \text{ lb/yr}$$

$$PE_{VOC} = (31.5 \text{ MMBtu/hr})(0.0041 \text{ lb/MMBtu})(8,760 \text{ hr/yr}) = 1,131 \text{ lb/yr}$$

$$PE_{SOx} = (31.5 \text{ MMBtu/hr})(0.00285 \text{ lb/MMBtu})(8,760 \text{ hr/yr}) = 786 \text{ lb/yr}$$

$$PE_{PM10} = (31.5 \text{ MMBtu/hr})(0.0076 \text{ lb/MMBtu})(8,760 \text{ hr/yr}) = 2,097 \text{ lb/yr}$$

D. Increase in Permitted Emissions (IPE)

1. Quarterly IPE

S-1896-2:

$$\begin{aligned} \text{IPE}_{\text{NOx}} &= (3,730 \text{ lb/yr} - 4,585 \text{ lb/yr}) / (4 \text{ qtr/yr}) = -213.75 \text{ lb/qtr} \\ \text{IPE}_{\text{CO}} &= (64,868 \text{ lb/yr} - 31,013 \text{ lb/yr}) / (4 \text{ qtr/yr}) = 8,463.75 \text{ lb/qtr} \\ \text{IPE}_{\text{VOC}} &= (1,803 \text{ lb/yr} - 2,313 \text{ lb/yr}) / (4 \text{ qtr/yr}) = -127.5 \text{ lb/qtr} \\ \text{IPE}_{\text{SOx}} &= (1,253 \text{ lb/yr} - 1,198 \text{ lb/yr}) / (4 \text{ qtr/yr}) = 13.75 \text{ lb/qtr} \\ \text{IPE}_{\text{PM}_{10}} &= (3,342 \text{ lb/yr} - 3,196 \text{ lb/yr}) / (4 \text{ qtr/yr}) = 36.5 \text{ lb/qtr} \end{aligned}$$

The emission profile for this ATC will include the following:

	NOx (lb)	SOx (lb)	PM10 (lb)	CO (lb)	VOC (lb)
Annual PE	3,730	1,253	3,342	64,868	1,803
Daily PE	10.2	3.4	9.2	177.7	4.9
Δ PE (Qtr 1)	-213	13	36	8,463	-127
Δ PE (Qtr 2)	-214	14	36	8,464	-127
Δ PE (Qtr 3)	-214	14	37	8,464	-128
Δ PE (Qtr 4)	-214	14	37	8,464	-128

S-1896-7:

$$\begin{aligned} \text{IPE}_{\text{NOx}} &= (2,340 \text{ lb/yr} - 3,009 \text{ lb/yr}) / (4 \text{ qtr/yr}) = -167.25 \text{ lb/qtr} \\ \text{IPE}_{\text{CO}} &= (40,704 \text{ lb/yr} - 16,282 \text{ lb/yr}) / (4 \text{ qtr/yr}) = 6,105.5 \text{ lb/qtr} \\ \text{IPE}_{\text{VOC}} &= (1,131 \text{ lb/yr} - 1,159 \text{ lb/yr}) / (4 \text{ qtr/yr}) = -7 \text{ lb/qtr} \\ \text{IPE}_{\text{SOx}} &= (786 \text{ lb/yr} - 786 \text{ lb/yr}) / (4 \text{ qtr/yr}) = 0.0 \text{ lb/qtr} \\ \text{IPE}_{\text{PM}_{10}} &= (2,097 \text{ lb/yr} - 2,097 \text{ lb/yr}) / (4 \text{ qtr/yr}) = 0.0 \text{ lb/qtr} \end{aligned}$$

The emission profile for this ATC will include the following:

	NOx (lb)	SOx (lb)	PM10 (lb)	CO (lb)	VOC (lb)
Annual PE	2,340	786	2,097	40,704	1,131
Daily PE	6.4	2.2	5.7	111.5	3.1
Δ PE (Qtr 1)	-167	0	0	6,105	-7
Δ PE (Qtr 2)	-167	0	0	6,105	-7
Δ PE (Qtr 3)	-167	0	0	6,106	-7
Δ PE (Qtr 4)	-168	0	0	6,106	-7

2. Adjusted Increase in Permitted Emissions (AIPE)

AIPE is utilized to determine whether or not Best Available Control Technology (BACT) is required for modified units.

$$\text{AIPE} = \text{PE2} - \text{HAPE}$$

Where: PE2 is the post project PE, in lb/day
HAPE is the Historically Adjusted Potential to Emit, in lb/day.

$$\text{Where: HAPE} = \text{PE1}(\text{EF2}/\text{EF1})$$

Where: PE1 is the pre-project PE, in lb/day
EF1 is the pre-project emission factor
EF2 is the post-project emission factor

Note: If EF2 is greater than EF1, then EF2/EF1 is set to 1

S-1896-2:

	PE2 (lb/day)	PE1 (lb/day)	EF2/EF1	AIPE (lb/day)
NOx	10.2	12.6	7 / 9	0.4
CO	177.7	85.0	1 ¹	92.7
VOC	4.9	6.3	0.0041 / 0.0055	0.2
SOx	3.4	3.3	0.00285 / 0.00285	0.1
PM10	9.2	8.8	0.0076 / 0.0076	0.4

S-1896-7:

The purpose of calculating AIPE is to determine whether Best Available Control Technology (BACT) is required for modified units. This modification is solely for compliance with District Rule 4320 and per section 4.2.3 of Rule 2201, is exempt from BACT. Therefore, AIPE calculations are not necessary.

¹ EF2 is greater than EF 1, therefore, EF2/EF1 was set to zero.

E. Facility Emissions

1. Pre Project Stationary Source Potential to Emit (SSPE1)

	SSPE1 (lb/yr)				
	NOx	CO	VOC	SOx	PM10
S-1896-2-2	4,585	31,013	2,313	1,198	3,196
S-1896-7-0	3,009	16,282	1,159	786	2,097
ERC's	0	0	0	0	0
Total	7,594	47,295	3,472	1,984	5,293

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

	SSPE2 (lb/yr)				
	NOx	CO	VOC	SOx	PM10
S-1896-2-3	3,730	64,868	1,803	1,253	3,342
S-1896-7-1	2,340	40,704	1,131	786	2,097
ERC's	0	0	0	0	0
Total	6,070	105,572	2,934	2,039	5,439

3. Stationary Source Increase in Permitted Emissions (SSIPE)

$$\text{SSIPE} = \text{SSPE2} - \text{SSPE1}$$

The SSPE1 and SSPE2 balances are from sections VII.E.1 and VII.E.2 of this document. SSIPE's calculated to be zero will be set to zero.

	SSPE2 (lb/yr)	SSPE1 (lb/yr)	SSIPE (lb/yr)
NOx	6,070	7,594	0
CO	105,572	47,295	58,277
VOC	2,934	3,472	0
SOx	2,039	1,984	55
PM10	5,439	5,293	146

4. Baseline Emissions

Section 3.7.1.1 of Rule 2201 states that for non-Major Source pollutants, the Baseline Emissions are equal to the premodification potential to emit. As shown in section VII.F of this document, the facility is a non-Major Source for all pollutants, therefore, the Baseline Emissions are equal to the premodification potential to emit. Since the facility has not generated on site emission reduction credits, the Baseline Emissions are equal to the SSPE1 value presented in section VII.E.1 of this document.

NOx (lb/yr)	CO (lb/yr)	VOC (lb/yr)	SOx (lb/yr)	PM10 (lb/yr)
7,594	47,295	3,472	1,984	5,293

F. Major Source Determination

Per Section 3.2.4 of District Rule 2201, the Major Source thresholds are as follows:

Pollutant	Threshold [lb/yr]
NOx	50,000
CO	200,000
VOC	50,000
SOx	140,000
PM10	140,000

Post-modification Potential to Emit:

Since no emission reduction credits have been generated at this facility, the post-modification potential to emit is equivalent to the SSPE2.

Pollutant	Potential to Emit [lb/yr]	Major Source
NOx	6,070	No
CO	105,572	No
VOC	2,934	No
SOx	2,039	No
PM10	5,439	No

G. Major Modification Determination

District Rule 2201 Major Modification:

The purpose of District Major Modification calculations is to determine the following:

If Best Available Control Technology (BACT) is triggered for a new or modified emission unit that results in a Major Modification (District Rule 2201, §4.1.3); and

If a public notification is triggered (District Rule 2201, §5.4.1).

As shown in section VII.F of this document, the facility is not a Major Source for any pollutant. Therefore, the proposed project cannot trigger a Major Modification.

Federal Major Modification:

Pursuant to Section 3.17 of District Rule 2201, in order to qualify as a Federal Major Modification, a modification must first be a District Major Modification. The proposed project is not a District Major Modification, so it cannot be a Federal Major Modification.

VIII. Compliance

Rule 2201 New and Modified Stationary Source Review Rule

A. BACT

1. BACT Applicability

New or Relocated Units:

Except for CO, BACT is required for each pollutant with a PE of greater than 2.0 pounds per day. For CO, BACT is triggered if the PE of CO is greater than two pounds per day and the SSPE2 of CO is 200,000 pounds per year or greater.

Modified Units:

Except for CO, BACT is required for each pollutant with an AIPE of greater than 2.0 pounds per day. For CO, BACT is triggered if the AIPE of CO is greater than 2.0 pounds per day and the SSPE2 of CO is 200,000 pounds or greater.

Applicability:

S-1896-2-2:

Although this modification will include adding Rule 4320 conditions to the permit, it will include an increase in burner rating. This action therefore does not qualify for the BACT exemption specified in section 4.2.3 of Rule 2201. The following table shows the AIPE of each pollutant, the relevant SSPE2 information and whether or not BACT is required:

Pollutant	AIPE (lb/day)	SSPE2 (lb/yr)	BACT Required
NOx	0.4	N/A	No
CO	92.7	< 200,000	No
VOC	0.2	N/A	No
SOx	0.1	N/A	No
PM10	0.4	N/A	No

S-1896-7-1:

This modification is solely for compliance with District Rule 4320. Therefore, per section 4.2.3 of Rule 2201, this permitting action is exempt from BACT.

2. BACT Analysis

BACT is not required, therefore, a BACT analysis is not necessary.

B. OFFSETS

1. Offset Applicability

Per section 4.5.3 of Rule 2201, offsets are examined on a pollutant by pollutant basis and are triggered for any pollutant with an SSPE2 equal to or greater than the value on the following table:

Pollutant	SSPE2 (lb/yr)
NOx	20,000
CO (in CO attainment areas)	200,000
VOC	20,000
SOx	54,750
PM10	29,200

As shown in section VII.E.2 of this document, the SSPE2 of each pollutant is:

Pollutant	SSPE2 (lb/yr)	Offsets Triggered
NOx	6,070	No
CO	105,572	No
VOC	2,934	No
SOx	2,039	No
PM10	5,439	No

2. Quantity of Offsets Required

Offsets are not triggered and are therefore not required.

C. PUBLIC NOTIFICATION

1. Applicability

Section 5.4 of District Rule 2201 requires a public notification for the affected pollutants from the following types of projects:

- a. New Major Sources
- b. Major Modifications
- c. New emission units with a PE > 100 lb/day of any one pollutant (IPE Notifications)
- d. Modifications with SSPE1 below an offset threshold and SSPE 2 above an offset threshold on a pollutant by pollutant basis (Existing Facility Offset Threshold Exceedence Notification)
- e. New stationary sources with SSPE2 exceeding offset thresholds (New Facility Offset Threshold Exceedence Notification)

f. Any permitting action with a SSIPE exceeding 20,000 lb/yr for any one pollutant. (SSIPE Notice)

a. New Major Source Notice Determination:

The facility is not new, therefore, a New Major Source Determination notice is not required.

b. Major Modification Notice:

As shown in section VII.G of this document, this modification is not a Major Modification.

c. PE Notification:

A notification is required for each new emission unit with the potential to emit more than 100 pounds per day of any one affected pollutant. None of the units involved in this project are new, therefore, a notification is not required.

d. Existing Facility Offset Threshold Exceedence Notification

The SSPE of no pollutant will go from below to above an offset threshold. Therefore, a public notification is not required.

e. New Facility Offset Threshold Exceedence Notification

This is an existing facility. This section does not require a public notification.

f. SSIPE Notification:

A notification is required for any permitting action that results in an SSIPE of more than 20,000 lb/yr of any affected pollutant. As shown in section VII.E.4 of this document, the SSIPE of CO will be greater than 20,000 pounds per year. Therefore, an SSIPE notification is required.

2. Public Notice

As shown above, a public notification is required.

D. DAILY EMISSION LIMITS

S-1896-2-3:

The NOx emissions shall not exceed 7 ppmvd @ 3% O₂ or 0.008 lb/MMBtu.
The CO emissions shall not exceed 200 ppmvd @ 3% O₂ or 0.15 lb/MMBtu.
The VOC emissions shall not exceed 0.0041 lb/MMBtu.
The SOx emissions shall not exceed 0.00285 lb/MMBtu.
The PM10 emissions shall not exceed 0.0076 lb/MMBtu.

S-1896-7-1:

The NOx emissions shall not exceed 7 ppmvd @ 3% O₂ or 0.008 lb/MMBtu.
The CO emissions shall not exceed 200 ppmvd @ 3% O₂ or 0.15 lb/MMBtu.
The VOC emissions shall not exceed 0.0041 lb/MMBtu.
The SOx emissions shall not exceed 0.00285 lb/MMBtu.
The PM10 emissions shall not exceed 0.0076 lb/MMBtu.

E. Air Quality Impact Analysis

Section 4.14.2 of this rule requires that an Air Quality Impact Analysis (AQIA) be conducted to determine whether the operation of the proposed equipment will cause or make worse a violation of an air quality standard. The required analysis was conducted by the Technical Services Division of the SJVAPCD. Refer to appendix C of this document for the AQIA summary sheet.

As shown in the AAQIA included in appendix C of this document, the addition of the proposed equipment will not cause, or make worse a violation of an ambient air quality standard

F. Compliance Assurance

1. Source Testing

Source testing is required by District Rule 4320 and the ATC's and PTO's will reflect those requirements.

Compliance with the NOx limit of Rule 4320 has not yet been shown for either unit. Therefore, an initial source test to show compliance with the NOx and CO emission limits of this rule must be conducted by the Rule 4320 compliance demonstration deadline of July 1, 2010. The ATC's will require such testing.

2. Monitoring

Each unit is subject to the periodic emission monitoring requirements of Rule 4320. Refer to section VIII (Rule 4320 Compliance) for a discussion of monitoring requirements.

3. Record Keeping

Each unit is subject to the periodic emission monitoring requirements of Rule 4320 and as required by that rule, records of the periodic monitoring activities will be required.

40 CFR Part 60 Subpart Dc requires that monthly fuel usage records be kept for each unit. Such records will be required.

4. Reporting

As they apply to the equipment currently under consideration, no District rule or policy requires reporting.

Rule 2520 Federally Mandated Operating Permits

This rule applies to Major Sources of air pollutants and to Major Air Toxics Sources. As shown in section VII.F of this document, the facility is not a Major source and as shown below, it is not a Major Air Toxics Source. Therefore, this rule does not apply.

Major Air Toxics Source Determination:

To determine whether the facility is a Major Air Toxics Source, the facility-wide hazardous air pollutant (HAP) emissions will be compared to the Major Air Toxics Source thresholds. Those thresholds are 10 tons/yr of any single HAP or combined HAP emissions of 25 tons/yr. To determine the facility-wide potential to emit of HAPS, the facility-wide natural gas usage limit will be applied to the appropriate emission factor. Except for nickel and copper, the emissions factors are from the California Air Toxics Emission Factors (CATEF) database. The nickel and copper factors are from Tables 1.4-3 and 1.4-4 of EPA Document AP-42.

Boiler Ratings:

S-1896-2:	50.2 MMBtu/hr
S-1896-7:	31.5 MMBtu/hr
Total	81.7 MMBtu/hr

Fuel Usage:

Permitted Operating Hr: 8,760/yr
Natural gas heat content: 1,000 Btu/scf

$$\begin{aligned} \text{Annual Fuel Usage} &= (81.7 \text{ MMBtu/hr})(8,760 \text{ hr/yr})(\text{scf}/1000 \text{ Btu}) \\ &= 715.7 \text{ MMscf/yr} \end{aligned}$$

HAP Emissions:

Compound	Emission Factor (lb/MMscf)	Potential to Emit (lb/yr)
Acetaldehyde	0.00887	6.3
Benzene	0.00431	3.1
Copper	0.00085	0.6
Formaldehyde	0.0221	15.8
Nickel	0.0021	1.5
Toluene	0.0034	2.4
Total	---	29.7

As can be seen, the potential to emit of no single HAP will exceed 10 tons per year and the combined HAP emissions will not exceed 25 tons/yr. The facility is therefore not a Major Air Toxics Source.

Rule 4001 New Source Performance Standards**40 CFR Part 60 Subpart Dc:**

This subpart applies to the units rated at 100 MMBtu/hr or less. This application includes the following subject units:

- S-1896-2 (50.2 MMBtu/hr PUC-regulated natural gas fired boiler)
- S-1896-7 (31.5 MMBtu/hr PUC-regulated natural gas fired boiler)

Emission Standards:**SO_x Emission Standard:**

Section 60.42c applies only to units that combust coal or oil. None of the subject units burn these fuels, therefore, this subpart does not apply.

Particulate Matter Emission Standard:

Section 60.43c applies only to units that combust coal, wood or oil. None of the subject units burn these fuels, therefore, this subpart does not apply.

Compliance Testing:**SO_x Compliance Testing:**

This subpart does not include a SO_x standard to test for compliance with, therefore, SO_x testing is not required.

Particulate Matter Testing:

This subpart does not include a particulate matter standard to test for compliance with, therefore, particulate matter testing is not required.

Emission Monitoring:

These units are not subject to the section 60.42(c) SO_x limit or the 60.43(c) PM₁₀ limit of this subpart. Therefore, monitoring is not required.

Reporting and Record Keeping:

Section 60.48c (a) states that the owner or operator of each affected facility shall submit notification of the date of construction or reconstruction, anticipated startup, and actual startup, as provided by §60.7 of this part. This notification shall include:

- (1) The design heat input capacity of the affected facility and identification of fuels to be combusted in the affected facility.

The design heat input capacity and type of fuel combusted at the facility will be listed on the unit's equipment description. No conditions are required to ensure compliance with this requirement.

- (2) If applicable, a copy of any Federally enforceable requirement that limits the annual capacity factor for any fuel mixture of fuels under §60.42c or §40.43c.

This requirement is not applicable since the units are not subject to §60.42c or §40.43c.

- (3) The annual capacity factor at which the owner or operator anticipates operating the affected facility based on all fuels fired and based on each individual fuel fired.

The facility has not proposed an annual capacity factor; therefore one will not be required.

- (4) Notification if an emerging technology will be used for controlling SO₂ emissions. The Administrator will examine the description of the control device and will determine whether the technology qualifies as an emerging technology. In making this determination, the Administrator may require the owner or operator of the affected facility to submit additional information concerning the control device. The affected facility is subject to the provisions of §60.42c(a) or (b)(1), unless and until this determination is made by the Administrator.

This requirement is not applicable since the units will not be equipped with an emerging technology used to control SO₂ emissions.

Section 60.48c(g) requires that the owner or operator of each affected facility record and maintain records of the amount daily amount of fuel combusted unless an applicable alternative is provided 60.48(g)(2) or 60.48(g)(3). Section 60.48(g)(2), which allows monthly records applies because only natural gas will be burned, therefore, monthly fuel usage records will be required.

Section 60.48c(i) states that all records required under this section shall be maintained by the owner or operator of the affected facility for a period of two years following the date of such record. District Rule 4320 requires that records be kept for five years.

Rule 4002 National Emission Standards for Hazardous Air Pollutants

40 CFR Part 63 Subpart DDDDD

This subpart applies to boilers located at Major HAP Sources. As shown in section VIII (Rule 2520 Compliance), the facility is not a Major HAP Source. Therefore, this subpart does not apply.

Rule 4101 Visible Emissions

As long as the equipment is properly maintained and operated, the visible emissions are not expected to exceed 20% opacity for a period or periods aggregating more than 3 minutes in any one hour. Compliance with the provisions of this rule is expected.

Rule 4102 Nuisance

A. California Health & Safety Code 41700 (Risk Management Review)

A Risk Management Review (RMR) was conducted by the Technical Services Division of the SJVAPCD. As shown on the RMR summary that is included in Appendix C of this document, the prioritization score is zero. Such a score is indicative of emissions that will not cause a significant health risk to the public and the project is therefore approvable.

B. Toxics BACT (T-BACT)

As shown in the RMR summary that is in Appendix C of this document, Toxics BACT is not required.

Rule 4201 Particulate Matter Concentration

S-1896-2:

EF_{PM10}: 0.0076 lb/MMBtu
Rating: 50.2 MMBtu/hr
Exhaust Flow: 17,400 cfm (applicant)

$$PE = (0.0076 \text{ lb/MMBtu})(50.2 \text{ MMBtu/hr}) = 0.38 \text{ lb/hr}$$

$$\text{Concentration} = (0.38 \text{ lb/hr})(7,000 \text{ gr/lb})(1 \text{ hr}/60 \text{ min})(\text{min}/17,400 \text{ ft}^3) = 0.0025 \text{ gr/ft}^3$$

The unit is expected to comply with the PM limit of 0.1 gr/dscf of exhaust flow.

S-1896-7:

EF_{PM10}: 0.0076 lb/MMBtu
Rating: 31.5 MMBtu/hr
Exhaust Flow: 11,600 cfm (applicant)

$$PE = (0.0076 \text{ lb/MMBtu})(31.5 \text{ MMBtu/hr}) = 0.24 \text{ lb/hr}$$

$$\text{Concentration} = (0.24 \text{ lb/hr})(7,000 \text{ gr/lb})(1 \text{ hr}/60 \text{ min})(\text{min}/11,600 \text{ ft}^3) = 0.0024 \text{ gr/ft}^3$$

The unit is expected to comply with the PM limit of 0.1 gr/dscf of exhaust flow.

Rule 4304 Equipment Tuning Procedure for Boilers, Steam Generators and process Heaters

Per section 6.3.12 of Rule 4320, tune-ups are not required for units equipped with Continuous Emission Monitoring Systems (CEMS) or whose emissions are periodically monitored utilizing a District approved alternate monitoring system. The stack NO_x, CO and O₂ are periodically monitored in accordance with Scheme A of District Policy SSP-1105 and therefore tune-ups are not required and this rule does not apply.

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

Pursuant to Section 2.0 of District Rule 4305, this unit is subject to District Rule 4305, *Boilers, Steam Generators and Process Heaters – Phase 2*.

Since the requirements of District Rule 4320 are either equivalent or more stringent than the requirements of District Rule 4305, compliance with District Rule 4320 requirements will satisfy requirements of District Rule 4305. Therefore, no further discussion is required.

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

Pursuant to Section 2.0 of District Rule 4306, this unit is subject to District Rule 4306, *Boilers, Steam Generators and Process Heaters – Phase 3*.

Since the requirements of District Rule 4320 are either equivalent or more stringent than the requirements of District Rule 4306, compliance with District Rule 4320 requirements will satisfy requirements of District Rule 4306. Therefore, no further discussion is required.

Rule 4320 Advanced Emission Reduction Options for Boilers, Steam Generators and Process heaters Greater Than 5.0 MMBtu/hr

Applicability:

The rule applies to any gaseous fuel or liquid fuel fired boiler, steam generator or process heater with a heat input rating of greater than 5 MMBtu/hr.

The units currently under consideration are boilers rated at more than 5 MMBtu/hr. Therefore, they are subject to this rule.

Emission Limits:

NOx Limit:

Both units are rated at more than 20 MMBtu/hr and are therefore subject to the Category B NOx emission limit of Table 1. That limit is 7 ppmvd @ 3% O₂ or 0.008 lb/MMBtu. The applicant is proposing to limit the NOx emissions from each unit to that level, therefore, compliance with the NOx emission limit of this rule is expected.

CO Limit:

Per section 5.2.1, the CO emission limit is 400 ppmvd @ 3% O₂. The applicant is proposing CO limits of much less than this, therefore, compliance with the CO emission limit of this rule is expected.

Control Requirements:

Particulate Matter Control:

Section 5.1.1 requires that particulate matter be controlled by one of the methods specified in sections 5.4.1.1 through 5.4.1.4.

Section 5.4.1.1 states that compliance may be met by operating the units solely on PUC-quality natural gas, commercial propane, butane, liquefied petroleum gas, or a combination of such gasses. The applicant is proposing to fire the units solely on natural gas, therefore compliance with the particulate matter control requirement of this rule is expected.

Monitoring:

NO_x, CO and O₂ Monitoring:

Section 5.7.1 requires the operator of a unit subject to section 5.2 of this rule to install and maintain Continuous Emission Monitoring (CEM) equipment for NO_x, CO and O₂, or to conduct alternate District approved monitoring.

To satisfy the applicable monitoring requirements, the applicant is proposing to continue with the monthly monitoring of NO_x, CO and O₂ utilizing a District approved emissions analyzer in accordance with Scheme A of District Policy SSP-1105.

SO_x Emission Monitoring:

Facilities complying with sections 5.4.1.1 or 5.4.1.2 of this rule are required by section 5.7.6.1 to provide a fuel analysis to the District on at least an annual basis. The units currently under consideration will fire solely on PUC quality natural gas, and are therefore subject to section 5.4.1.1.

Per District Policy APR 1720, the District assumes that natural gas has a sulfur content not exceeding 1.0 grains/100 scf. Therefore, the District will accept analyses or other equivalent certification documents from the fuel supplier for demonstrating compliance with the SO_x emission monitoring requirement. The following condition will be included on the permit:

*On and after July 1, 2010, the permittee shall submit an analysis showing the fuel sulfur content at least once every year. Valid purchase contracts, supplier certifications, tariff sheets, or transportation contracts may be used to satisfy this requirement, provided they establish the fuel parameters mentioned above.
[District Rule 4320]*

Record Keeping:

Section 6.1.3 also requires the operator to monitor relevant operational characteristics of the units to ensure that the emission limits of section 5.2 are met during 36-month source testing intervals. The monitoring requirements are discussed above and records of that monitoring will be required.

Section 6.1.4 requires that records of the duration of each start-up and shut-down period be kept. Such records will be required.

Section 6.1 requires that all records be maintained for a period of at least 5 years and that they be made available to the District and to the EPA upon request. Such a requirement will be placed on the Authorities to Construct and the Permits to Operate.

Source Testing:

Section 6.3.1 of this rule requires that subject units be source tested to determine compliance with the applicable emission limits of this rule at least once every 12 months. Once compliance is shown on two consecutive 12-month tests, the testing frequency may decrease to once every 36 months. This section further states that if compliance is not shown during a 36 month test, the testing frequency shall revert to once every 12 months. The ATC's and the PTO's will require that testing be conducted at this frequency. The initial source testing requirements are as follows:

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This unit will undergo a burner control system upgrade to make it capable of complying with the NOx and CO limits of rule 4320. Normally, such a modification would result in the requirement to source test within 60 days after start-up with the new control system. However, Rule 4320 requires that for such units, compliance with the NOx and CO limits of Rule 4320 (which are the same as the permitted limits) be demonstrated by source testing by July 1, 2010. Since there are conflicting source testing deadlines, testing will be required by the earlier of the two dates. The following condition will be included on the Authority to Construct:

Source testing to determine compliance with the NOx and CO limits of this permit shall be conducted within 60 days after initial start-up with the upgraded burner control system or by July 1, 2010, which ever is earlier.

S-1896-7-1

This unit will undergo a burner replacement to make the unit capable of complying with the NOx and CO limits of rule 4320. Normally, such a modification would result in the requirement to source test within 60 days after start-up with the new burner. However, Rule 4320 requires that for such units, compliance with the NOx and CO limits of Rule 4320 (which are the same as the permitted limits) be demonstrated by source testing by July 1, 2010. Since there are conflicting source testing deadlines, testing will be required by the earlier of the two dates. The following condition will be included on the Authority to Construct:

Source testing to determine compliance with the NOx and CO limits of this permit shall be conducted within 60 days after initial start-up with the new burner or by July 1, 2010, which ever is earlier.

Section 6.2 of this rule specifies the source test methods that may be utilized. The ATC's and the PTO's will include conditions specifying the test methods to be used.

Tune-ups:

Section 6.3.1.1 requires that during each 36 month source testing interval, the unit be tuned in accordance with the provisions of section 5.5.1 of this rule. However, per section 6.3.1.2, the tune-ups are not required if the permittee maintains a CEMS or an APCO approved Alternate Monitoring System where the applicable emission limits are periodically monitored. The applicant will be monitoring the stack NO_x, CO and O₂ in accordance with Scheme A of District Policy SSP-1105, therefore, tune-ups are 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 performed an Engineering Evaluation (this document) for the proposed project and determined that the activity will occur at an existing facility and the project involves negligible expansion of the existing use. Furthermore, the District determined that the activity will not have a significant effect on the environment. The District finds that the activity is categorically exempt from the provisions of CEQA pursuant to CEQA Guideline § 15031 (Existing Facilities), and finds that the project is exempt per the general rule that CEQA applies only to projects which have the potential for causing a significant effect on the environment (CEQA Guidelines §15061(b)(3)).

California Health & Safety Code 42301.6 (School Notice)

The equipment will not be located within 1,000 feet of a K-12 school, therefore, a school notice is not required.

IX. Recommendation

Issue Authorities to Construct with the conditions on the attached Draft Authorities to Construct.

X. Billing Information

Premodification:

Permit #	Description	Fee Schedule
S-1896-2-2	48 MMBtu/hr	3020-H
S-1896-7-0	31.5 MMBtu/hr	3020-H

Post modification:

Permit #	Description	Fee Schedule
S-1896-2-3	50.2 MMBtu/hr	3020-H
S-1896-7-1	31.5 MMBtu/hr	3020-H

Appendices

Appendix A: Draft ATC's

Appendix B: Current PTO's

Appendix C: Risk Management Review and Air Quality Impact Analysis Summaries

Appendix A
Draft ATC's

San Joaquin Valley
Air Pollution Control District

AUTHORITY TO CONSTRUCT

ISSUANCE DATE: DRAFT

PERMIT NO: S-1896-2-3

LEGAL OWNER OR OPERATOR: VENTURA COASTAL CORPORATION

MAILING ADDRESS: 12310 AVENUE 368
VISALIA, CA 93291

LOCATION: 12310 AVENUE 368
VISALIA, CA 93291

EQUIPMENT DESCRIPTION:

48 MMBTU/HR CLEAVER BROOKS MODEL D-60 NATURAL GAS-FIRED BOILER WITH CLEAVER BROOKS MODEL PROFIRE NTS LOW NOX BURNER. MODIFICATION TO UPGRADE THE BURNER CONTROL SYSTEM TO MEET THE RULE 4320 EMISSION LIMITS AND TO CORRECT THE BURNER RATING TO 50.2 MMBTU/HR SUCH THAT THE EQUIPMENT DESCRIPTION IS: 50.2 MMBTU/HR CLEAVER BROOKS MODEL D-60 NATURAL GAS-FIRED BOILER WITH A CLEAVER BROOKS MODEL NTS504NGX-09S-2P BURNER AND A FLUE GAS RECIRCULATION SYSTEM.

CONDITIONS

1. {98} No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
2. {15} No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101]
3. All equipment shall be maintained in good operating condition and shall be operated in a manner to minimize emissions of air contaminants into the atmosphere. [District Rule 2201]
4. {1898} The exhaust stack shall vent vertically upward. The vertical exhaust flow shall not be impeded by a rain cap (flapper ok), roof overhang, or any other obstruction. [District Rule 4102]
5. The unit shall only be fired on PUC-regulated natural gas. [District Rule 2201]
6. NOx emissions shall not exceed 7 ppmvd @ 3% O2 or 0.008 lb/MMBtu referenced as NO2. [District Rules 2201, 4305, 4306 and 4320]
7. CO emissions shall not exceed 200 ppmvd @ 3% O2 or 0.15 lb/MMBtu. [District Rules 2201, 4305, 4306 and 4320]
8. VOC emissions shall not exceed 0.0041 lb/MMBtu. [District Rule 2201]
9. SOx emissions shall not exceed 0.00285 lb/MMBtu. [District Rule 2201]

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-1896-2-3 : Oct 20 2009 9:39AM - SCHOINHOM : Joint Inspection NOT Required

10. PM10 emissions shall not exceed 0.0076 lb/MMBtu. [District Rule 2201]
11. Source testing to determine compliance with the NOx and CO limits of this permit shall be conducted within 60 days after initial start-up with the upgraded burner control system or by July 1, 2010, which ever is earlier. [District Rules 2201 and 4320]
12. This unit shall be tested for compliance with the NOx and CO limits of this permit at least once every twelve months. After demonstrating compliance on two consecutive annual source tests, the unit shall be tested not less than once every thirty-six months. If the result of a 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 months. [District Rules 4305, 4306 and 4320]
13. 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, 7.1]
14. The source test plan shall identify which basis (ppmv or lb/MMBtu) will be used to demonstrate compliance. [District Rules 4305, 4306 and 4320]
15. 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 Rule 4320. [District Rules 4305, 4306 and 4320]
16. For NOx and CO emission 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]
17. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081, 7.3]
18. Source testing to measure NOx emissions shall be conducted using EPA Method 7E, EPA Method 19, or CARB Method 100. [District Rules 4305, 4306 and 4320]
19. CO emissions for source test purposes shall be determined using EPA Method 10 or ARB Method 100. [District Rules 4305, 4305 and 4320]
20. Stack gas oxygen (O2) shall be determined using EPA Method 3 or 3A or ARB Method 100. [District Rules 4305, 4306 and 4320]
21. Stack gas velocities shall be determined using EPA Method 2. [District Rules 4305, 4306 and 4320]
22. The permittee shall monitor and record the stack concentration of NOx, CO and O2 at least once during each month in which source testing is not performed. NOx, CO and O2 monitoring shall be conducted utilizing 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 it has been performed within the last month. [District Rules 2520, 9.3.2, 4305, 4306 and 4320]
23. If the NOx or CO emission concentrations, as measured by the portable analyzer exceed the permitted levels the permittee shall return the emissions to compliant levels as soon as possible, but no longer than 1 hour of operation after detection. If the portable analyzer continues to show emission limit violations after 1 hour of operation following detection, the permittee shall notify the District within the following 1 hour and conduct a certified source test within 60 days after the first exceedence. In lieu of conducting a source test, the permittee may stipulate a violation that is subject to enforcement action has occurred. 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 District Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rules 1100, 4305, 4306 and 4320]

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CONDITIONS CONTINUE ON NEXT PAGE

24. NO_x, CO and O₂ emission readings shall be taken with the unit operating at conditions representative of normal operation or under the conditions specified in the Permit to Operate. The NO_x, CO and O₂ analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Analyzer readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample or by taking at least five samples evenly spaced out over the 15 consecutive-minute period. [District Rules 4305, 4306 and 4320]
25. 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 the portable analyzer, (4) portable analyzer calibration records and (5) a description of any corrective action taken to maintain the emissions at or below compliant levels. [District Rules 2520, 9.3.2, 4305, 4306 and 4320]
26. A daily record of the duration of each start-up and shutdown period shall be kept. [District Rules 4306 and 4320]
27. A monthly record of the amount of fuel burned by this unit shall be kept. [40 CFR Part 60.48c(g)(2)]
28. On and after July 1, 2010, the permittee shall submit an analysis showing the fuel's sulfur content at least once every year. Valid purchase contracts, supplier certifications, tariff sheets, or transportation contracts may be used to satisfy this requirement provided they establish the fuel parameters mentioned above. [District Rule 4320]
29. All records shall be retained for a period of at least 5 years and shall be made available for District inspection upon request. [District Rules 4305, 4306 and 4320]

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San Joaquin Valley
Air Pollution Control District

AUTHORITY TO CONSTRUCT

ISSUANCE DATE: DRAFT
DRAFT

PERMIT NO: S-1896-7-1

LEGAL OWNER OR OPERATOR: VENTURA COASTAL CORPORATION
MAILING ADDRESS: 12310 AVENUE 368
VISALIA, CA 93291

LOCATION: 12310 AVENUE 368
VISALIA, CA 93291

EQUIPMENT DESCRIPTION:

31.5 MMBTU/HR HURST MODEL S5-X-750-200 NATURAL GAS-FIRED BOILER WITH A POWER FLAME MODEL LN1 NVC-13-G-30 ULTRA LOW NOX BURNER AND A FLUE GAS RECIRCULATION (FGR) SYSTEM. MODIFICATION TO REPLACE THE BURNER TO COMPLY WITH THE RULE 4320 EMISSION LIMITS. THE EQUIPMENT DESCRIPTION WILL BE: 31.5 MMBTU/HR HURST MODEL S5-X-750-200 NATURAL GAS-FIRED BOILER WITH A CLEAVER BROOKS NTD336GXR-F09-R BURNER AND A FLUE GAS RECIRCULATION SYSTEM.

CONDITIONS

1. {98} No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
2. {15} No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101]
3. All equipment shall be maintained in good operating condition and shall be operated in a manner to minimize emissions of air contaminants into the atmosphere. [District Rule 2201]
4. {1898} The exhaust stack shall vent vertically upward. The vertical exhaust flow shall not be impeded by a rain cap (flapper ok), roof overhang, or any other obstruction. [District Rule 4102]
5. The unit shall only be fired on PUC-regulated natural gas. [District Rule 2201]
6. NOx emissions shall not exceed 7 ppmvd @ 3% O2 or 0.008 lb/MMBtu referenced as NO2. [District Rules 2201, 4305, 4306 and 4320]
7. CO emissions shall not exceed 200 ppmvd @ 3% O2 or 0.15 lb/MMBtu. [District Rules 2201, 4305, 4306 and 4320]
8. VOC emissions shall not exceed 0.0041 lb/MMBtu. [District Rule 2201]
9. SOx emissions shall not exceed 0.00285 lb/MMBtu. [District Rule 2201]

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 YAPCO

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DAVID WARNER, Director of Permit Services

S-1896-7-1: Oct 20 2009 9:38AM - SCHOONHOM : Joint Inspection NOT Required

10. PM10 emissions shall not exceed 0.0076 lb/MMBtu. [District Rule 2201]
11. Source testing to measure the NOx and CO emissions from this unit shall be conducted within 60 days after starting up with the new burner or by July 1, 2010, which ever is earlier. [District Rule 4320]
12. This unit shall be tested for compliance with the NOx and CO limits of this permit at least once every twelve months. After demonstrating compliance on two consecutive annual source tests, the unit shall be tested not less than once every thirty-six months. If the result of a 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 months. [District Rules 4305, 4306 and 4320]
13. 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, 7.1]
14. The source test plan shall identify which basis (ppmv or lb/MMBtu) will be used to demonstrate compliance. [District Rules 4305, 4306 and 4320]
15. 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 Rule 4320. [District Rules 4305, 4306 and 4320]
16. For NOx and CO emission 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]
17. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081, 7.3]
18. Source testing to measure NOx emissions shall be conducted using EPA Method 7E, EPA Method 19, or CARB Method 100. [District Rules 4305, 4306 and 4320]
19. CO emissions for source test purposes shall be determined using EPA Method 10 or ARB Method 100. [District Rules 4305, 4305 and 4320]
20. Stack gas oxygen (O2) shall be determined using EPA Method 3 or 3A or ARB Method 100. [District Rules 4305, 4306 and 4320]
21. Stack gas velocities shall be determined using EPA Method 2. [District Rules 4305, 4306 and 4320]
22. The permittee shall monitor and record the stack concentration of NOx, CO and O2 at least once during each month in which source testing is not performed. NOx, CO and O2 monitoring shall be conducted utilizing 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 it has been performed within the last month. [District Rules 2520, 9.3.2, 4305, 4306 and 4320]
23. If the NOx or CO emission concentrations, as measured by the portable analyzer exceed the permitted levels the permittee shall return the emissions to compliant levels as soon as possible, but no longer than 1 hour of operation after detection. If the portable analyzer continues to show emission limit violations after 1 hour of operation following detection, the permittee shall notify the District within the following 1 hour and conduct a certified source test within 60 days after the first exceedence. In lieu of conducting a source test, the permittee may stipulate a violation that is subject to enforcement action has occurred. 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 District Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rules 1100, 4305, 4306 and 4320]
24. NOx, CO and O2 emission readings shall be taken with the unit operating at conditions representative of normal operation or under the conditions specified in the Permit to Operate. The NOx, CO and O2 analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Analyzer readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample or by taking at least five samples evenly spaced out over the 15 consecutive-minute period. [District Rules 4305, 4306 and 4320]

CONDITIONS CONTINUE ON NEXT PAGE

25. 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 the portable analyzer, (4) portable analyzer calibration records and (5) a description of any corrective action taken to maintain the emissions at or below compliant levels. [District Rules 2520, 9.3.2, 4305, 4306 and 4320]
26. A daily record of the duration of each start-up and shutdown period shall be kept. [District Rules 4306 and 4320]
27. A monthly record of the amount of fuel burned by this unit shall be kept. [40 CFR Part 60.48c(g)(2)]
28. On and after July 1, 2010, the permittee shall submit an analysis showing the fuel's sulfur content at least once every year. Valid purchase contracts, supplier certifications, tariff sheets, or transportation contracts may be used to satisfy this requirement provided they establish the fuel parameters mentioned above. [District Rule 4320]
29. All records shall be retained for a period of at least 5 years and shall be made available for District inspection upon request. [District Rules 4305, 4306 and 4320]

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Appendix B
Current PTO's

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1896-2-2

EXPIRATION DATE: 01/31/2014

EQUIPMENT DESCRIPTION:

48 MMBTU/HR CLEAVER BROOKS MODEL D-60 NATURAL GAS-FIRED BOILER WITH CLEAVER BROOKS MODEL PROFIRE NTS LOW NOX BURNER

PERMIT UNIT REQUIREMENTS

1. All equipment shall be maintained in good operating condition and shall be operated in a manner to minimize emissions of air contaminants into the atmosphere. [District Rule 2201]
2. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
3. No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101]
4. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201]
5. The unit shall only be fired on PUC-regulated natural gas. [District Rule 2201]
6. Emissions rates from the natural gas-fired unit shall not exceed any of the following limits: 9 ppmv NO_x @ 3% O₂ or 0.011 lb-NO_x/MMBtu, 0.00285 lb-SO_x/MMBtu, 0.0076 lb-PM₁₀/MMBtu, 100 ppmv CO @ 3% O₂ or 0.074 lb-CO/MMBtu, or 0.0055 lb-VOC/MMBtu. [District Rules 2201, 4305, and 4306]
7. 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 4305 and 4306]
8. 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 performing the notification and testing required by this condition. [District Rules 4305 and 4306]
9. 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 and 4306]

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

10. 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 4305 and 4306]
11. 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 and 4306]
12. 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 4305 and 4306]
13. The source test plan shall identify which basis (ppmv or lb/MMBtu) will be used to demonstrate compliance. [District Rules 4305 and 4306]
14. Source testing to measure natural gas-combustion NO_x and CO emissions from this unit shall be conducted within 60 days of initial start-up. [District Rules 2201, 4305 and 4306]
15. 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]
16. 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 and 4306]
17. CO emissions for source test purposes shall be determined using EPA Method 10 or ARB Method 100. [District Rules 4305 and 4306]
18. Stack gas oxygen (O₂) shall be determined using EPA Method 3 or 3A or ARB Method 100. [District Rules 4305 and 4306]
19. 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 and 4306]
20. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081]
21. 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, and 4306]

These terms and conditions are part of the Facility-wide Permit to Operate.

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1896-7-0

EXPIRATION DATE: 01/31/2014

EQUIPMENT DESCRIPTION:

31.5 MMBTU/HR HURST MODEL S5-X-750-200 NATURAL GAS-FIRED BOILER WITH A POWER FLAME MODEL LN1 NVC-13-G-30 ULTRA LOW NOX BURNER AND A FLUE GAS RECIRCULATION (FGR) SYSTEM

PERMIT UNIT REQUIREMENTS

1. All equipment shall be maintained in good operating condition and shall be operated in a manner to minimize emissions of air contaminants into the atmosphere. [District Rule 2201]
2. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
3. No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101]
4. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201]
5. The unit shall only be fired on PUC-regulated natural gas. [District Rule 2201]
6. Emissions from the natural gas-fired unit shall not exceed any of the following limits: 9 ppmvd NO_x @ 3% O₂ or 0.0108 lb-NO_x/MMBtu, 0.00285 lb-SO_x/MMBtu, 0.0076 lb-PM₁₀/MMBtu, 80 ppmvd CO @ 3% O₂ or 0.059 lb-CO/MMBtu, or 0.0042 lb-VOC/MMBtu. [District Rules 2201, 4305, and 4306]
7. 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 and 4306]
8. Source testing to measure NO_x 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 and 4306]
9. The source test plan shall identify which basis (ppmv or lb/MMBtu) will be used to demonstrate compliance. [District Rules 4305 and 4306]
10. 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]
11. 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 and 4306]
12. CO emissions for source test purposes shall be determined using EPA Method 10 or ARB Method 100. [District Rules 4305 and 4306]
13. Stack gas oxygen (O₂) shall be determined using EPA Method 3 or 3A or ARB Method 100. [District Rules 4305 and 4306]

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE
These terms and conditions are part of the Facility-wide Permit to Operate.

14. 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 and 4306]
15. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081]
16. 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 4305 and 4306]
17. 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 performing the notification and testing required by this condition. [District Rules 4305 and 4306]
18. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rules 4305 and 4306]
19. 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 4305 and 4306]
20. 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, and 4306]

These terms and conditions are part of the Facility-wide Permit to Operate.

Appendix C
RMR and AQIA Summaries

San Joaquin Valley Air Pollution Control District Risk Management Review

To: Mark Schonhoff
 From: Matthew Cegielski-Technical Services
 Date: October 16, 2009
 Facility Name: Ventura Coastal
 Location: 12310 Avenue 368 Visalia, CA
 Application #(s): S-1896 2-3, 7-1
 Project #: S-1093854

A. RMR SUMMARY

Categories	50.2 MMBtu/hr NG Boiler	Project Totals	Facility Totals
Prioritization Score	0.0	0.0	0.2
Acute Hazard Index	N/A ¹	N/A ¹	0.0
Chronic Hazard Index	N/A ¹	N/A ¹	0.0
Maximum Individual Cancer Risk (10 ⁻⁶)	N/A ¹	N/A ¹	0.0
T-BACT Required?	No		
Special Permit Conditions?	No		

¹ No further analysis was required since the prioritization score was below 1.0.

Proposed Permit Conditions

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

Units 2-3, 7-1

1. {1898} The exhaust stack shall vent vertically upward. The vertical exhaust flow shall not be impeded by a rain cap, roof overhang, or any other obstruction. [District Rule 4102] N
2. Conditions listed on Engineering evaluation.

B. RMR REPORT

I. Project Description

Technical Services received a request on October 16, 2009 to perform a Risk Management Review (RMR) and an Ambient Air Quality Analysis (AAQA) for the increase of fuel use (2.2 MMBtu/hr) on an existing 48 MMBtu/hr Natural Gas-Fired Boiler (2-3) and an reduction in the NOx limit and an increase in the CO limit for an existing 31.5 MMBtu/hr Natural Gas-Fired Boiler (7-1).

II. Analysis

Toxic emissions for this proposed unit (2-3) were calculated using Ventura County's emission factors for natural gas external combustion. No calculations were made for Unit 7-1 since the toxic emissions did not change. In accordance with the District's *Risk Management Policy for Permitting New and Modified Sources* (APR 1905, March 2, 2001), risks from the proposed unit's toxic emissions were prioritized using the procedure in the 1990 CAPCOA Facility Prioritization Guidelines and incorporated in the District's HEARTs database. The prioritization score for the proposed units were less than 1.0 (see RMR Summary Table). Therefore, no further analysis was necessary.

The following parameters were used for the review:

Analysis Parameters NG fired Boiler 2-3			
Source Type	Point	Location Type	Rural
Stack Height (m)	9.1	Closest Receptor (m)	244
Stack Diameter. (m)	0.81	Type of Receptor	Residence
Stack Exit Velocity (m/s)	15.8	Rating (MMBtu/hr)	50.2
Stack Exit Temp. (°K)	505.4	Max Hours per Year	8760

Analysis Parameters NG fired Boiler 7-1			
Source Type	Point	Location Type	Rural
Stack Height (m)	9.1	Closest Receptor (m)	244
Stack Diameter. (m)	0.71	Type of Receptor	Residence
Stack Exit Velocity (m/s)	13.8	Rating (MMBtu/hr)	31.5
Stack Exit Temp. (°K)	505.4	Max Hours per Year	8760

Technical Services performed AAQA modeling for criteria pollutants CO, NO_x, SO_x and PM₁₀ (There was increase only in CO emissions on unit 7-1).

Criteria Pollutant Modeling Results*

Diesel ICE	1 Hour	3 Hours	8 Hours.	24 Hours	Annual
CO	Pass	X	Pass	X	X
NO _x	Pass	X	X	X	Pass
SO _x	Pass	Pass	X	Pass	Pass
PM ₁₀	X	X	X	Pass	Pass

*Results were taken from the attached PSD spreadsheet.

¹The criteria pollutants are below EPA's level of significance as found in 40 CFR Part 51.165 (b)(2).

PM₁₀ Pollutant Modeling Results*
Values are in µg/m³

Category	24 Hours	Annual
Proposed	1	0.14
Significance Level	5.0	1.0
Result	Pass	Pass

III. Conclusion

The prioritization score is less than 1.0. **In accordance with the District's Risk Management Policy, the project is approved without Toxic Best Available Control Technology (T-BACT).**

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

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

AAQA

The emissions from the proposed equipment will not cause or contribute significantly to a violation of the State and National AAQS if compliance with the proposed conditions is maintained.

Attachments:

- A. RMR Request
- B. AAQA
- C. Toxic emissions summary
- D. Prioritization score
- E. Miscellaneous