San Joaquin Valley
AIR POLLUTION CONTROL DISTRICT

HEALTHY AIR LIVING™

AUG 1 2 2016

Mr. Timothy Alburger
Seneca Resources Corporation
2131 Mars Court
Bakersfield, CA 93308

Re: Proposed ATC / Certificate of Conformity (Significant Mod)
District Facility # S-1114
Project # S-1143503

Dear Mr. Alburger:

Enclosed for your review is the District's analysis of an application for Authorities to Construct for the facility identified above. You requested that Certificates of Conformity with the procedural requirements of 40 CFR Part 70 be issued with this project. This application is for 50 new TEOR heavy oil wells, one 4.9 MMBtu/hr tank heater, one 10.0 MMBtu/hr heater treater, one wemco unit, one FWKO vessel, and five oil storage tanks.

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

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

Thank you for your cooperation in this matter.

Sincerely,

Arnaud Marjollet
Director of Permit Services

Enclosures

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

Seyed Sadredin
Executive Director/Air Pollution Control Officer

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Central Region (Main Office)
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www.valleyair.org www.healthyairliving.com

San Joaquin Valley Air Pollution Control District
Authority to Construct Application Review

50 New TEOR Wells and Associated Processing & Storage Equipment

Facility Name:	Seneca Resources Corporation	Date:	July 29, 2016
Mailing Address:	2131 Mars Ct Bakersfield, CA 93308	Engineer: Lead Engineer:	Kamaljit Sran Joven Refuerzo
Contact Person:	Timothy Alburger		
Telephone:	661-399-4270 x3544		
Fax:	661-399-7706		
E-Mail:	alburgert@srcx.com		
Application #(s):	S-1114-9-18, and-126-0 thru -133-0		
Project #:	S-1143503		
Deemed Complete:	December 19, 2014		

I. Proposal

Seneca Resources Corporation is requesting Authorities to Construct (ATCs) for 50 new TEOR wells, associated processing equipment, and tank battery equipment at its existing North Midway-Sunset Oilfield.

- TEOR Wells: 50 heavy oil wells connected to a casing vapor recovery system.
- Processing Equipment: One FWKO pressure vessel, one LACT truck loading rack, one 4.9 MMBtu/hr tank heater, one Wemco unit, and one 10.0 MMBtu/hr heater treater (currently permitted as a Dormant Emissions Unit (DEU) S-1114-9-16).
- Storage Equipment: One 3,000 bbl wash tank, one 3,000 bbl multi-purpose tank, two 2,000 bbl LACT tanks, one 1,000 bbl jet wash/settling tank, and permit-exempt clean produced water (<35 mg/L VOCs) storage equipment.

Seneca Resources is a major stationary source with a Title V permit. This modification can be classified as a Title V significant modification pursuant to Rule 2520, and can be processed with a Certificate of Conformity (COC). Since the facility has specifically requested that this project be processed in that manner, the 45-day EPA comment period will be satisfied prior to the issuance of the ATC permits. Seneca Resources must apply to administratively amend their Title V permit.

II. Applicable Rules

Rule 2201	New and Modified Stationary Source Review Rule (4/21/11)
Rule 2410	Prevention of Significant Deterioration (6/16/11 effective 11/26/12)
Rule 2520	Federally Mandated Operating Permits (6/21/01)

Rule 4001	New Source Performance Standards (4/14/99) • Subpart Kb (Amended 4/14/99) - Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) Is not applicable. This subpart does not apply to vessels with a design capacity ≤ 1,589.874 m^3 (≤ 420,000 gallons) used for petroleum or condensate stored, processed, or treated prior to custody transfer. The capacity of these tanks is ≤ 420,000 gallons, and they store crude oil prior to custody transfer; therefore, this subpart does not apply to the tanks in this project. • Subpart OOOO (Adopted 8/16/2012) - Standards of Performance for Crude Oil and Natural Gas Production, Transmission, and Distribution.
Rule 4002	National Emissions Standards for Hazardous Air Pollutants (5/20/04)
Rule 4101	Visible Emissions (2/17/05)
Rule 4102	Nuisance (12/17/92)
Rule 4201	Particulate Matter Concentration (12/17/92)
Rule 4301	Fuel Burning Equipment (12/17/92)
Rule 4305	Boilers, Steam Generators & Process Heaters – Phase II (8/21/03)
Rule 4306	Boilers, Steam Generators & Process Heaters – Phase III (3/17/05)
Rule 4307	Boilers, Steam Generators, and Process Heaters - 2.0 MMBtu/hr to 5.0 MMBtu/hr (05/19/11)
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 and Process Heaters – Phase 1 (8/21/03)
Rule 4401	Steam-Enhanced Crude Oil Production Wells (6/16/11)
Rule 4623	Storage of Organic Liquid (5/19/2005)
Rule 4801	Sulfur Compounds (12/17/92)
CH&SC 41700	Health Risk Assessment
CH&SC 42301.6	School Notice

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

III. Project Location

The proposed equipment will be located at the Visalia Lease in the North Midway-Sunset Heavy Oilfield, Section 25, T31S, R22E in Kern County.

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.

IV. Process Description

In thermally-enhanced oil recovery (TEOR), steam generators produce steam for injection into heavy crude oil-bearing strata via injection wells to reduce the viscosity of the crude oil, thereby facilitating petroleum production. A well head casing vapor collection system collects vapors from the well head, condenses out the entrained liquids

and routes the non-condensable vapors to the sulfur removal system and then to steam generators for incineration. Non-condensable vapors from tank vapor control systems are also routed to the steam generators for incineration.

The free water knockout vessel is used to remove excessive amounts of free water in the flow lines ahead of the treating plant. Free water is water produced with oil that settles out within five minutes while the well fluids are stationary in a settling space within a vessel. Free water, then, is not part of the emulsion and may be readily separated by the force of gravity alone.

Crude oil tanks are used in petroleum production operations to hold crude oil or a mixture of produced crude oil and produced water.

A heater treater (also called a flow treater or emulsion treater) is a device that combines all the various pieces of equipment used to treat heavy or emulsified oil in one vessel. Heater treater is used to heat an oil/water emulsion to aid in the separation of the oil from the water in subsequent operations. This unit is currently permitted as a non-compliant DEU under Permit to Operate (PTO) S-1114-9-16. The two existing 6.0 MMBtu/hr burners are currently limited to 5.0 MMBtu/hr and will be will be replaced with 5.0 MMBtu/hr ultra low-NOx burners.

The action that occurs in a wash tank to separate oil and water is divided into two main parts, washing and settling. The washing is done in the free-water layer, and the settling occurs in the emulsion layer. Because all emulsions are not alike, no set pattern on the amount of free water that should be held in a wash tank can be established. For instance, washing has little or no effect on certain emulsions; therefore, in such cases a very small amount of free water in the tank is all that is necessary. On the other hand, some emulsions completely break down by washing; therefore, it is advantageous to have a large amount of free water in the wash tank. Basically, a wash tank or gun barrel is a settling tank that is fitted with an internal or external boot, or flume.

A Wemco separates minor amounts of oil from produced water prior to water injection or disposal. It uses natural gas to float solids and oil out of the produced water.

After gas has been separated from the oil and the oil has been treated to remove water and sediment (if present), the oil goes to stock tanks which make up the tank battery. The stock tanks in a tank battery will vary in number and in size, depending upon the daily production of the lease and the frequency of pipeline runs. The introduction of Lease Automatic Custody Transfer (LACT) units and their acceptance by pipelines and producers has reduced storage requirements.

Storage tanks are attached to a closed-type vapor recovery system. This system is capable of collecting all reactive organic compound vapors. It also has a vapor return or disposal system capable of processing such vapors so as to prevent their emission to the atmosphere at vapor loss control efficiency of at least 95 percent by weight.

V. Equipment Listing

Pre-Project Equipment Description:

S-1114-9-16 10 MMBTU/HR GAS-FIRED C.E. NATCO M&M HEATER TREATER #3: DORMANT EMISSIONS UNIT

Proposed Modification:

S-1114-9-18 MODIFICATION OF 10 MMBTU/HR GAS-FIRED C.E. NATCO M&M HEATER TREATER #3 DORMANT EMISSIONS UNIT: REPLACE EXISTING BURNERS WITH TWO 5.0 ULTRA LOW-NOX MMBTU/HR BURNERS

S-1114-126-0 UP TO 50 TEOR WELLS WITH CASING VENTS CONNECTED TO VAPOR RECOVERY SYSTEM INCLUDING FINFAN HEAT EXCHANGER, INLET SCRUBER, VAPOR COMPRESSOR, SULFATREAT UNIT WITH PIPING TO AUTHORIZED STEAM GENERATOR

S-1114-127-0 3,000 BBL FIXED ROOF WASH TANK WITH VAPOR CONTROL SYSTEM INCLUDING INLET SCRUBER, VAPOR COMPRESSOR, SULFATREAT UNIT WITH PIPING TO AUTHORIZED STEAM GENERATOR AND SERVING TANKS S-1114-128, 129, 130, 131, AND 132

S-1114-128-0 3,000 BBL FIXED ROOF MULTI-PURPOSE TANK WITH VAPOR RECOVERY SYSTEM LISTED ON PERMIT UNIT S-1114-127

S-1114-129-0 2,000 BBL FIXED ROOF LACT TANK WITH VAPOR RECOVERY SYSTEM LISTED ON PERMIT UNIT S-1114-127

S-1114-130-0 2,000 BBL FIXED ROOF LACT TANK WITH VAPOR RECOVERY SYSTEM LISTED ON PERMIT UNIT S-1114-127

S-1114-131-0 1,000 BBL FIXED ROOF SKIM/SAND DUMP TANK WITH VAPOR RECOVERY SYSTEM LISTED ON PERMIT UNIT S-1114-127

S-1114-132-0 WEMCO UNIT WITH VAPOR RECOVERY SYSTEM LISTED ON PERMIT UNIT S-1114-127

S-1114-133-0 4.9 MMBTU/HR NATURAL GAS FIRED TANK HEATER WITH ULTRA LOW NOX BURNER SERVING LACT TANKS

Post Project Equipment Description:

S-1114-9-18 10 MMBTU/HR GAS-FIRED C.E. NATCO M&M HEATER TREATER #3 WITH TWO 5.0 ULTRA LOW-NOX MMBTU/HR BURNERS

S-1114-126-0 UP TO 50 TEOR WELLS WITH CASING VENTS CONNECTED TO VAPOR RECOVERY SYSTEM INCLUDING FINFAN HEAT EXCHANGER, INLET SCRUBER, VAPOR COMPRESSOR, SULFATREAT UNIT WITH PIPING TO AUTHORIZED STEAM GENERATOR

S-1114-127-0 3,000 BBL FIXED ROOF WASH TANK WITH VAPOR CONTROL SYSTEM INCLUDING INLET SCRUBER, VAPOR COMPRESSOR, SULFATREAT UNIT WITH PIPING TO AUTHORIZED STEAM GENERATOR AND SERVING TANKS S-1114-128, 129, 130, 131, AND 132

S-1114-128-0 3,000 BBL FIXED ROOF MULTI-PURPOSE TANK WITH VAPOR RECOVERY SYSTEM LISTED ON PERMIT UNIT S-1114-127

S-1114-129-0 2,000 BBL FIXED ROOF LACT TANK WITH VAPOR RECOVERY SYSTEM LISTED ON PERMIT UNIT S-1114-127

S-1114-130-0 2,000 BBL FIXED ROOF LACT TANK WITH VAPOR RECOVERY SYSTEM LISTED ON PERMIT UNIT S-1114-127

S-1114-131-0 1,000 BBL FIXED ROOF SKIM/SAND DUMP TANK WITH VAPOR RECOVERY SYSTEM LISTED ON PERMIT UNIT S-1114-127

S-1114-132-0 WEMCO UNIT WITH VAPOR RECOVERY SYSTEM LISTED ON PERMIT UNIT S-1114-127

S-1114-133-0 4.9 MMBTU/HR NATURAL GAS FIRED TANK HEATER WITH ULTRA LOW NOX BURNER SERVING LACT TANKS

VI. Emission Control Technology Evaluation

The tank heater and heater treater in this project are capable of generating emissions of NOx, CO, VOC, PM_{10}, and SOx due to the combustion of natural gas fuel. These units are equipped with ultra low-NOx burners, ULNBs.

ULNBs have different features from a conventional burner. A ULNB uses fuel staging and flue gas inspiration (i.e., internal recirculation). Flue gas is internally recirculated using the pressure energy of fuel gas. These burners are designed to recirculate relatively cooler flue gas from the firebox back into the combustion zone. This recirculation of largely inert flue gases into the combustion zone reduces peak flame temperature and average O_2 concentration. The internal flue gas recirculation creates a similar effect as the external flue gas recirculation.

TEOR operations are a potential source of VOC emissions. The steam enhanced wells are served by a well vent vapor collection system which discharges to District approved incinerating steam generator. Or the wells may operate with closed casing vents so long as they produce into tanks under vapor control. The TEOR operation meets District Rule 4401 vapor control requirements as it is equipped with a casing collection and control systems discharging to District approved disposal options with greater than 99% control efficiency.

The tank vapor control system collects vapors from tanks and routes the uncondensed vapors to District approved incinerating steam generator. The efficiency of the vapor control system is at least 99%.

VII. General Calculations

A. Assumptions

- The maximum operating schedule is 24 hours per day (per applicant)
- EPA F-factor for natural gas is 8,578 dscf/MMBtu (40 CFR 60, Appendix B)
- Natural/Field Gas Heating Value: 1,000 Btu/scf (District Practice)
- Pre-project heat input of each of the two burner is limited to 5 MMBtu/hr for a total of 10 MMBtu/hr or 87.6 billion MMBtu/year (= 2 burners x 5 MMBtu/hr/burner x 24 hr/day x 365 days/year) (current PTO limit)
- VOC content of hydrocarbons in the gas stream are < 10% by weight. In accordance with District SSP 2015 policy "Quantifying Fugitive VOC Emissions at Petroleum and SOCMI Facilities", VOC emissions are not assessed to piping and components handling vapor streams with a VOC content of 10% or less by weight and condensate streams having water content greater than 50%. Therefore, fugitive emissions components do not emit VOCs and there are no post project emissions associated with permit units S-1114-126-0 thru -132-0 (i.e. PE2 = 0 lb/day and 0 lb/year)

B. Emission Factors (EF)

Pre-project EF for S-1114-9-16		
Pollutant	Emission Factors	Source
NOx	0.037 lb/MMBtu	Permit Condition
SOx	0.001 lb/MMBtu	Permit Condition
PM_{10}	0.005 lb/MMBtu	Permit Condition
CO	0.084 lb/MMBtu	Permit Condition
VOC	0.003 lb/MMBtu	Permit Condition

Post-project EF for S-1114-9-17 and -133-0			
Pollutant	Emission Factors		Source
NOx	0.011 lb/MMBtu	9.0 ppmv	Applicant
SOx	0.00285 lb/MMBtu	1.0 gr/100 scf	District Policy APR 1720
PM_{10}	0.0070 lb/MMBtu		AP-42 Table 1.4-2
CO	0.037 lb/MMBtu	50.0 ppmv	Applicant
VOC	0.0020 lb/MMBtu	5.0 ppmv	Applicant

C. Calculations

1. Pre-Project Potential to Emit (PE1)

Pollutant	S-1114-9-16, Daily Pre-Project Potential to Emit (PE1)								
	Emission Factors			Heat input		Hours per day		Daily	
NO_X	0.037	(lb-NO_X/MMBtu)	x	10	(MMBtu/hr)	x 24 (hr/day)	=	8.9	(lb-NO_X/day)
SO_X	0.001	(lb-SO_X/MMBtu)	x	10	(MMBtu/hr)	x 24 (hr/day)	=	0.2	(lb-SO_X/day)
PM_{10}	0.005	(lb-PM_{10}/MMBtu)	x	10	(MMBtu/hr)	x 24 (hr/day)	=	1.2	(lb-PM_{10}/day)
CO	0.084	(lb-CO/MMBtu)	x	10	(MMBtu/hr)	x 24 (hr/day)	=	20.2	(lb-CO/day)
VOC	0.003	(lb-VOC/MMBtu)	x	10	(MMBtu/hr)	x 24 (hr/day)	=	0.7	(lb-VOC/day)

Pollutant	S-1114-9-16, Annual Pre-Project Potential to Emit (PE1)							
	Emission Factors			Annual Max Heat input			Annual	
NO_X	0.037	(lb-NO_X/MMBtu)	x	87.6	(billion Btu/year)	=	3,241	(lb-NO_X/year)
SO_X	0.001	(lb-SO_X/MMBtu)	x	87.6	(billion Btu/year)	=	88	(lb-SO_X/year)
PM_{10}	0.005	(lb-PM_{10}/MMBtu)	x	87.6	(billion Btu/year)	=	438	(lb-PM_{10}/year)
CO	0.084	(lb-CO/MMBtu)	x	87.6	(billion Btu/year)	=	7,358	(lb-CO/year)
VOC	0.003	(lb-VOC/MMBtu)	x	87.6	(billion Btu/year)	=	263	(lb-VOC/year)

Since the other units are new emissions units, PE1 = 0 for all pollutants

2. Post-Project Potential to Emit (PE2)

Post-project potential to emit is usually calculated based on the fugitive component counts. However, per District policy SSP-2015 gas streams with < 10% VOC by weight, no VOC emissions are assessed.

Permit unit	Daily VOCs	Annual VOCs
S-1114-126-0, 50 TEOR Well Vent	0.0	0.0
S-1114-127-0, 3,000 BBL Wash Tank	0.0	0.0
S-1114-128-0, 3,000 BBL Multi-Purpose Tank	0.0	0.0
S-1114-129-0, 2,000 BBL LACT Tank	0.0	0.0
S-1114-130-0, 2,000 BBL LACT Tank	0.0	0.0
S-1114-131-0, 1,000 BBL Skim/Sand Dump Tank	0.0	0.0
S-1114-132-0, WEMCO Unit	0.0	0.0

Pollutant	S-1114-9-18 Daily Post-Project Potential to Emit (PE2)									
	Emission Factors			Heat input		Hours per day			Daily	
NO_X	0.011	(lb-NO_X/MMBtu)	x	10	(MMBtu/hr)	x 24	(hr/day)	=	2.6	(lb-NO_X/day)
SO_X	0.0029	(lb-SO_X/MMBtu)	x	10	(MMBtu/hr)	x 24	(hr/day)	=	0.7	(lb-SO_X/day)
PM_{10}	0.007	(lb-PM_{10}/MMBtu)	x	10	(MMBtu/hr)	x 24	(hr/day)	=	1.7	(lb-PM_{10}/day)
CO	0.0370	(lb-CO/MMBtu)	x	10	(MMBtu/hr)	x 24	(hr/day)	=	8.9	(lb-CO/day)
VOC	0.002	(lb-VOC/MMBtu)	x	10	(MMBtu/hr)	x 24	(hr/day)	=	0.5	(lb-VOC/day)

Pollutant	S-1114-9-18 Annual Post-Project Potential to Emit (PE2)						
	Emission Factors			Annual Max Heat input			Annual	
NO_X	0.011	(lb-NO_X/MMBtu)	x	87.6	(billion Btu/year)	=	964	(lb-NO_X/year)
SO_X	0.0029	(lb-SO_X/MMBtu)	x	87.6	(billion Btu/year)	=	254	(lb-SO_X/year)
PM_{10}	0.007	(lb-PM_{10}/MMBtu)	x	87.6	(billion Btu/year)	=	613	(lb-PM_{10}/year)
CO	0.0370	(lb-CO/MMBtu)	x	87.6	(billion Btu/year)	=	3,241	(lb-CO/year)
VOC	0.002	(lb-VOC/MMBtu)	x	87.6	(billion Btu/year)	=	175	(lb-VOC/year)

Pollutant	S-1114-133-0 Daily Post-Project Potential to Emit (PE2)									
	Emission Factors			Heat input		Hours per day			Daily	
NO_X	0.011	(lb-NO_X/MMBtu)	x	4.9	(MMBtu/hr)	x 24	(hr/day)	=	1.3	(lb-NO_X/day)
SO_X	0.0029	(lb-SO_X/MMBtu)	x	4.9	(MMBtu/hr)	x 24	(hr/day)	=	0.3	(lb-SO_X/day)
PM_{10}	0.007	(lb-PM_{10}/MMBtu)	x	4.9	(MMBtu/hr)	x 24	(hr/day)	=	0.8	(lb-PM_{10}/day)
CO	0.0370	(lb-CO/MMBtu)	x	4.9	(MMBtu/hr)	x 24	(hr/day)	=	4.4	(lb-CO/day)
VOC	0.002	(lb-VOC/MMBtu)	x	4.9	(MMBtu/hr)	x 24	(hr/day)	=	0.2	(lb-VOC/day)

Pollutant	S-1114-133-0 Annual Post-Project Potential to Emit (PE2)						
	Emission Factors			Annual Max Heat input			Annual	
NO_X	0.011	(lb-NO_X/MMBtu)	x	42.9	(billion Btu/year)	=	472	(lb-NO_X/year)
SO_X	0.0029	(lb-SO_X/MMBtu)	x	42.9	(billion Btu/year)	=	124	(lb-SO_X/year)
PM_{10}	0.007	(lb-PM_{10}/MMBtu)	x	42.9	(billion Btu/year)	=	300	(lb-PM_{10}/year)
CO	0.0370	(lb-CO/MMBtu)	x	42.9	(billion Btu/year)	=	1,587	(lb-CO/year)
VOC	0.0020	(lb-VOC/MMBtu)	x	42.9	(billion Btu/year)	=	86	(lb-VOC/year)

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

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

Facility emissions are already above the Offset and Major Source Thresholds for all pollutants except PM_{10} & $PM_{2.5}$. Therefore, SSPE1 calculations are not necessary but are summarized from project S-1143178.

Pre-Project Stationary Source Potential to Emit (SSPE1)*					
Permit Unit	NOx	SOx	PM_{10}	CO	VOC
SSPE1	68,906	326,779	99,599	270,415	137,619

*From project S-1143178

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

Pursuant to District Rule 2201, the 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 (AER) that have occurred at the source, and which have not been used on-site (not applicable).

Facility emissions are already above the Offset and Major Source Thresholds for all pollutants except PM_{10} & $PM_{2.5}$. Therefore, SSPE2 calculations are not necessary but are summarized below.

Post-Project Stationary Source Potential to Emit (SSPE2)					
Permit Unit	NOx	SOx	PM_{10}	CO	VOC
SSPE1	68,906	326,779	99,599	270,415	137,619
S-1114-9-16	-3,241	-88	-438	-7,358	-263
S-1114-9-17	964	254	613	3,241	175
S-1114-126-0	0	0	0	0	0
S-1114-127-0	0	0	0	0	0
S-1114-128-0	0	0	0	0	0
S-1114-129-0	0	0	0	0	0
S-1114-130-0	0	0	0	0	0
S-1114-131-0	0	0	0	0	0
S-1114-132-0	0	0	0	0	0
S-1114-133-0	472	124	300	1,587	86
SSPE2	67,101	327,069	100,074	267,885	137,617

5. Major Source Determination

Rule 2201 Major Source Determination:

Pursuant to 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. For the purposes of determining major source status the following shall not be included:

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

Major Source Threshold (lb/year)						
	NO_X	SO_X	PM_{10}	$PM_{2.5}$	CO	VOC
Pre-Project	68,906	326,779	99,599	99,599	270,415	137,619
Post-Project	67,101	327,069	100,074	267,885	137,617	67,101
Major Source Threshold	20,000	140,000	140,000	200,000	200,000	20,000
Major Source?	Yes	Yes	No	No	Yes	Yes

This source is an existing Major Source for NOx, SOx, CO, and VOC and will remain a Major Source for these air contaminants. The source is an existing non-major source for PM_{10} and $PM_{2.5}$ and is not becoming a major source for PM_{10} and $PM_{2.5}$ in this project.

Rule 2410 Major Source Determination:

The facility or the equipment evaluated under this project is not listed as one of the categories specified in 40 CFR 52.21 (b)(1)(iii). Therefore the PSD Major Source threshold is 250 tpy for any regulated NSR pollutant.

PSD Major Source Determination (tons/year)						
	NO_2	VOC	SO_2	CO	PM_{10}	$PM_{2.5}$
Estimated Facility PE before Project Increase (tpy)	34.5	68.8	163.4	135.2	49.8	49.8
PSD Major Source Thresholds (tpy)	250	250	250	250	250	250
PSD Major Source ? (Y/N)	N	N	N	N	N	N

As shown above, the facility is not an existing major source for PSD for any regulated pollutant.

6. Baseline Emissions (BE)

BE calculations (lb/yr) are performed on a pollutant-by-pollutant basis 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 per Section 3.22 of Rule 2201.

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

7. SB 288 Major Modification

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

Since this facility is a Major Source for NOx, SOx, and VOC, the emissions from this project are compared to the SB 288 Major Modification Thresholds in the following table in order to determine if the SB 288 Major Modification calculation is required.

SB 288 Major Modification Thresholds			
Pollutant	Project PE2 (lb/year)	Threshold (lb/year)	SB 288 Major Modification Calculation Required?
NO_x	1,428	50,000	No
SO_x	378	80,000	No
VOC	261	50,000	No

Since none of the SB 288 Major Modification Thresholds are surpassed with this project, this project does not constitute a SB288 Major Modification. As demonstrated in the preceding table, this project is not an SB 288 Major Modification.

8. Federal Major Modification

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

Step 1

For new emissions units, the increase in emissions is equal to the PE2 for S-1114-133-0 included in this project.

For existing emissions units, the increase in emissions is calculated as follows.

Emission Increase = PAE – BAE - UBC

Where: PAE = Projected Actual Emissions, and
BAE = Baseline Actual Emissions
UBC = Unused baseline capacity

Existing unit is currently permitted as a non-compliant DEU under Permit to Operate (PTO) S-1114-9-16. The two existing 6.0 MMBtu/hr burners are currently limited to 5.0 MMBtu/hr and will be will be replaced with 5.0 MMBtu/hr ultra low-NOx burners. Therefore BAE and UBC are considered zero

The project's combined total emission increases are compared to the Federal Major Modification Thresholds in the following table

Federal Major Modification Thresholds for Emission Increases			
Pollutant	**Total Emissions Increases (lb/yr)**	**Thresholds (lb/yr)**	**Federal Major Modification?**
NO_x*	1,436	0	Yes
VOC*	261	0	Yes
PM_{10}	913	30,000	No
$PM_{2.5}$	913	20,000	No
SO_x	378	80,000	No

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

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

Federal Offset Quantities:
The Federal offset quantity is only calculated only for the pollutants for which the project is a Federal Major Modification. The Federal offset quantity is the sum of the annual emission changes for all new and modified emission units in a project calculated as the potential to emit after the modification (PE2) minus the actual emissions (AE) during the baseline period for each emission unit times the applicable federal offset ratio. There are no special calculations performed for units covered by an SLC.

NOx **Federal Offset Ratio** **1.5**

Permit No.	Actual Emissions (lb/year)	Potential Emissions (lb/year)	Emissions Change (lb/yr)
S-1114-9-18	0	964	964
S-1114-133-0	0	472	472
		Net Emission Change (lb/year):	1,436
		Federal Offset Quantity: (NEC * 1.5)	2,154

VOC **Federal Offset Ratio** **1.5**

Permit No.	Actual Emissions (lb/year)	Potential Emissions (lb/year)	Emissions Change (lb/yr)
S-1114-9-18	0	175	175
S-1114-133-0	0	86	86
		Net Emission Change (lb/year):	261
		Federal Offset Quantity: (NEC * 1.5)	392

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

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

- NO_2 (as a primary pollutant)
- SO_2 (as a primary pollutant)
- CO
- PM
- PM_{10}
- Sulfuric acid mist
- Hydrogen sulfide (H_2S)
- Total reduced sulfur (including H_2S)
- Reduced sulfur

I. Project Emissions Increase – New Major Source Determination

The post-project potentials to emit from all new and modified units are compared to the PSD major source thresholds to determine if the project constitutes a new Major Source subject to PSD requirements.

The facility or the equipment evaluated under this project is not listed as one of the categories specified in 40 CFR 52.21 (b)(1)(i). The PSD Major Source threshold is 250 tpy for any regulated NSR pollutant.

PSD Major Source Determination: Potential to Emit (tons/year)						
	NO_2	VOC	SO_2	CO	PM_{10}	$PM_{2.5}$
Total PE from New and Modified units	0.7	0.1	0.2	2.4	0.5	0.5
PSD Major Source Thresholds	250	250	250	250	250	250
New PSD Major Source? (Y/N)	N	N	N	N	N	N

As shown in the table above, the potential to emit for the project, by itself does not exceed any PSD major source threshold. Therefore Rule 2410 is not applicable and no further analysis is required.

10. 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. Detailed QNEC calculations are included in Appendix F.

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. Unless exempted pursuant to Section 4.2, BACT shall be required for the following actions:*

a. Any new emissions unit with a potential to emit exceeding two pounds per day,
b. The relocation from one Stationary Source to another of an existing emissions unit with a potential to emit exceeding two pounds per day,
c. Modifications to an existing emissions unit with a valid Permit to Operate resulting in an AIPE exceeding two pounds per day, and/or
d. Any new or modified emissions unit, in a stationary source project, which results in an SB288 Major Modification or a Federal Major Modification, as defined by the rule.

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

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

As seen in Section VII.C.2 above, the applicant is proposing 50 new TEOR wells and associated tank battery equipment. Per District policy SSP-2015 gas stream with < 10% VOC by weight no VOC emissions are assessed, therefore BACT is not triggered for permit units S-1114-126-0 through -132-0.

As seen in Section VII.C.2 above, the applicant is proposing to install a new 4.9 MMBtu/hr tank heater. Emissions from this burner are listed in the table below.

S-1114-133-0	
	PE2 (lb/day)
NO_x	1.3
SO_x	0.3
PM_{10}	0.8
CO	4.4
VOC	0.2

The PE is greater than 2 lb/day for CO only for permit unit S-1114-133-0 and therefore BACT is triggered as the SSPE2 for CO is greater than 200,000 lb/year, as demonstrated in Section VII.C.5 above.

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

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

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

As seen in Section VII.C.2 above, the applicant is proposing to modify an existing 12 MMBtu/hr heater treater by changing the burners to two separate 5.0 MMBtu/hr burners (emissions units). Emissions from these burners are listed in the table below.

S-1114-9-18 (each burner)	
	PE2 (lb/day)
NO_x	1.3
SO_x	0.3
PM_{10}	0.8
CO	4.4
VOC	0.2

AIPE = PE2 – HAPE

Where,

AIPE = Adjusted Increase in Permitted Emissions, (lb/day)
PE2 = Post-Project Potential to Emit, (lb/day)
HAPE = Historically Adjusted Potential to Emit, (lb/day)

HAPE = PE1 x (EF2/EF1)

Where,

PE1 = The emissions unit's PE prior to modification or relocation, (lb/day)
EF2 = The emissions unit's permitted emission factor for the pollutant after modification or relocation. If EF2 is greater than EF1 then EF2/EF1 shall be set to 1
EF1 = The emissions unit's permitted emission factor for the pollutant before the modification or relocation

AIPE = PE2 – (PE1 * (EF2 / EF1))

S-1114-9-18 (each burner)					
	PE2 (lb/day)	PE1 (lb/day)	EF2	EF1	AIPE
NO_x	1.3	4.4	0.011	0.037	0.0
SO_x	0.3	0.1	0.0029	0.001	0.0
PM_{10}	0.8	0.6	0.007	0.005	0.0
CO	4.4	10.1	0.0370	0.084	0.0
VOC	0.2	0.4	0.002	0.003	0.1

As demonstrated above, the AIPE is not greater than 2.0 lb/day for any emissions from these burners. Therefore BACT is not triggered for the modified emission units of S-1114-9-18.

d. SB 288/Federal Major Modification

As discussed in Sections VII.C.7 and VII.C.8 above, this project does constitute a Federal Major Modification for NOx and VOC emissions. Therefore BACT is triggered for NOx and VOC for all emissions units in the project for which there is an emission increase. Therefore, BACT is triggered for NOx and VOC for permit unit S-1114-133-0.

2. BACT Guideline

Please note that BACT Guideline [Process Heater (non-refinery, < or = 20 MMBtu/hr] have been rescinded and replaced by District Rule 4320 for NOx. Previously determined BACT for CO and VOC is Natural Gas as fuel with no technologically feasible options (See rescinded BACT guideline 1.8.5).

3. Top-Down BACT Analysis

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

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

NO_x: 9 ppmvd @ 3% 02
CO: Natural gas as fuel
VOC: Natural gas as fuel

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.

Offset Determination (lb/year)					
	NO_X	SO_X	PM_{10}	CO	VOC
SSPE2	67,101	327,069	100,074	267,885	137,617
Offset Threshold	20,000	54,750	29,200	200,000	20,000
Offsets required?	Yes	Yes	Yes	Yes	Yes

2. Quantity of Offsets Required

As seen above, the facility is an existing Major Source for NO_X, SO_x,, CO, and VOCs and the SSPE2 is greater than the offset thresholds; 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 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) = (Σ[PE2 – BE] + ICCE) x 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)

There are only two permit units with emission increases associated with this project and there are no increases in cargo carrier emissions; therefore offsets can be determined as follows:

Offset Calculations:

Offsets required (lb/year) = ([PE2 — BE]) x DOR

S-1114-9-18: BE = HAE = 0 (This is an existing DEU, which, based on the Inspection Reports, hasn't operated since at least 2009. Therefore, it is not a Highly Utilized Unit. This unit was an existing unit when the initial Title V permit was issued (04/30/06) and was not offset at that time, therefore, it is not a Fully Offset Unit. The pre-project emission factors do not qualify it as an existing Clean Unit.)

S-1114-133-0: BE = 0 (This is a new emissions unit.)

NOx: S-1114-9-18

PE2 = 964 lb NOx/yr
BE = HAE = 0 lb NOx/yr

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

Offsets required (lb/year) = 964 x 1.5 = 1,446 lb-NO_X/year

The quarterly credits required are as follows:

Pollutant	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
NO_x	361	361	362	362

The applicant has stated that the facility plans to use ERC certificate N-1338-2, or a certificate derived from it, to offset the increases in NOx emissions associated with this project. The above quarterly quantities have been reserved for the project.

SOx: S-1114-9-18

PE2 = 254 lb SOx/yr
BE = HAE = 0 lb SOx/yr

Assuming DOR = 1.5, the amount of SOx ERCs that need to be withdrawn is:

Offsets required (lb/year) = 254 x 1.5 = 381 lb-SO_X/year

The quarterly credits required are as follows:

Pollutant	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
SO_x	95	95	95	96

The applicant has stated that the facility plans to use ERC certificate S-4590-5, or a certificate derived from it, to offset the increases in SOx emissions associated with this project. The above quarterly quantities have been reserved for the project.

PM_{10}: S-1114-9-18

PE2 = 613 lb PM_{10}/yr
BE = HAE = 0 lb PM_{10}/yr

Assuming DOR = 1.5, the amount of PM_{10} ERCs that need to be withdrawn is:

Offsets required (lb/year) = 613 x 1.5 = 920 lb-PM_{10}/year

The quarterly credits required are as follows:

Pollutant	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
PM_{10}	0	0	0	920

The applicant has stated that the facility plans to use ERC certificate C-1360-4, or a certificate derived from it, to offset the increases in PM_{10} emissions associated with this project. The applicant is proposing 4th quarter credits to offset emissions

from all quarters. This is allowed per section 4.13.7 of District Rule 2201. The 4th quarter credits have been reserved for the project.

CO: S-1114-9-18

PE2 = 3,241 lb CO/yr
BE = HAE = 0 lb CO/yr

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

VOC: S-1114-9-18

PE2 = 175 lb VOC/yr
BE = HAE = 0 lb VOC/yr

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

Offsets required (lb/year) = 175 x 1.5 = 263 lb-VOC/year

The quarterly credits required are as follows:

Pollutant	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
VOC	65	66	66	66

The applicant has stated that the facility plans to use ERC certificate N-1336-1, or a certificate derived from it, to offset the increases in VOC emissions associated with this project. The above quarterly quantities have been reserved for the project.

Proposed Rule 2201 (offset) Conditions for S-1114-9-18:

- Prior to operating equipment under this Authority to Construct, permittee shall surrender NOx emission reduction following credits for the quantity of emissions: 1st quarter - 361 lb, 2nd quarter - 361 lb, 3rd quarter – 362 lb, and fourth quarter - 362 lb. These amounts include the applicable offset ratio specified in Rule 2201 Section 4.8 (as amended 4/21/11) for the ERC specified below. [District Rule 2201]

- ERC Certificate Number N-1338-2 (or certificates split from this certificate) 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]

- Prior to operating equipment under this Authority to Construct, permittee shall surrender SOx emission reduction credits for the following quantity of emissions: 1st quarter - 95 lb, 2nd quarter - 95 lb, 3rd quarter - 95 lb, and fourth quarter - 96 lb. These amounts include the applicable offset ratio specified in Rule 2201 Section 4.8 (as amended 4/21/11) for the ERC specified below. [District Rule 2201]

- ERC Certificate Number S-4590-5 (or a certificate split from this certificate) 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]

- Prior to operating equipment under this Authority to Construct, permittee shall surrender PM10 emission reduction credits for the following quantity of emissions: fourth quarter – 920 lb. This amount includes the applicable offset ratio specified in Rule 2201 Section 4.8 (as amended 4/21/11) for the ERC specified below. [District Rule 2201]

- ERC Certificate Number C-1360-4 (or a certificate split from this certificate) 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]

- Prior to operating equipment under this Authority to Construct, permittee shall surrender VOC emission reduction credits for the following quantity of emissions: 1st quarter - 65 lb, 2nd quarter - 66 lb, 3rd quarter - 66 lb, and fourth quarter - 66 lb. These amounts include the applicable offset ratio specified in Rule 2201 Section 4.8 (as amended 4/21/11) for the ERC specified below. [District Rule 2201]

- ERC Certificate Number N-1336-1 (or a certificate split from this certificate) 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]

NOx: S-1114-133-0

PE2 = 472 lb NOx/yr
BE = PE1 = 0 lb NOx/year

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

Offsets required (lb/year) = 472 x 1.5 = 708 lb-NO_X/year

The quarterly credits required are as follows:

Pollutant	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
NO_x	177	177	177	177

The applicant has stated that the facility plans to use ERC certificate N-1338-2, or a certificate derived from it, to offset the increases in NOx emissions associated with this project. The above quarterly quantities have been reserved for the project.

SOx: S-1114-133-0

PE2 = 124 lb SOx/yr
BE = PE1 = 0 lb SOx/year

Assuming DOR = 1.5, the amount of SOx ERCs that need to be withdrawn is:

Offsets required (lb/year) = 124 x 1.5 = 186 lb-SO_X/year

The quarterly credits required are as follows:

Pollutant	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
SO_x	46	46	47	47

The applicant has stated that the facility plans to use ERC certificate, or a certificate derived from it, to offset the increases in SOx emissions associated with this project. The above quarterly quantities have been reserved for the project.

PM_{10}: S-1114-133-0

PE2 = 300 lb PM_{10}/yr
BE = PE1 = 0 lb PM_{10}/year

Assuming DOR = 1.5, the amount of PM_{10} ERCs that need to be withdrawn is:

Offsets required (lb/year) = 300 x 1.5 = 450 lb-PM_{10}/year

The quarterly credits required are as follows:

Pollutant	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
PM_{10}	0	0	0	450

The applicant has stated that the facility plans to use ERC certificate C-1360-4, or a certificate derived from it, to offset the increases in PM_{10} emissions associated with this project. The applicant is proposing 4th quarter credits to offset emissions from all quarters. This is allowed per section 4.13.7 of District Rule 2201. The 4th quarter credits have been reserved for the project.

CO: S-1114-133-0

PE2 = 1,587 lb CO/yr
BE = PE1 = 0 lb CO/year

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

VOC: S-1114-133-0

PE2 = 86 lb VOC/yr
BE = PE1 = 0 lb VOC/year

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

Offsets required (lb/year) = 86 x 1.5 = 129 lb-VOC/year

The quarterly credits required are as follows:

Pollutant	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
VOC	32	32	32	33

The applicant has stated that the facility plans to use ERC certificate N-1336-1, or a certificate derived from it, to offset the increases in VOC emissions associated with this project. The above quarterly quantities have been reserved for the project.

Proposed Rule 2201 (offset) Conditions for S-1114-133-0:

- Prior to operating equipment under this Authority to Construct, permittee shall surrender NOx emission reduction credits for the following quantity of emissions:

1st quarter - 177 lb, 2nd quarter – 177 lb, 3rd quarter - 177 lb, and fourth quarter - 177 lb. These amounts include the applicable offset ratio specified in Rule 2201 Section 4.8 (as amended 4/21/11) for the ERC specified below. [District Rule 2201]

- ERC Certificate Number N-1338-2 (or certificates split from this certificate) 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]

- Prior to operating equipment under this Authority to Construct, permittee shall surrender SOx emission reduction credits for the following quantity of emissions: 1st quarter - 46 lb, 2nd quarter - 46 lb, 3rd quarter - 47 lb, and fourth quarter - 47 lb. These amounts include the applicable offset ratio specified in Rule 2201 Section 4.8 (as amended 4/21/11) for the ERC specified below. [District Rule 2201]

- ERC Certificate Number S-4590-5 (or a certificate split from this certificate) 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]

- Prior to operating equipment under this Authority to Construct, permittee shall surrender PM10 emission reduction credits for the following quantity of emissions: fourth quarter - 450 lb. This amount includes the applicable offset ratio specified in Rule 2201 Section 4.8 (as amended 4/21/11) for the ERC specified below. [District Rule 2201]

- ERC Certificate Number C-1360-4 (or a certificate split from this certificate) 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]

- Prior to operating equipment under this Authority to Construct, permittee shall surrender VOC emission reduction credits for the following quantity of emissions: 1st quarter - 32 lb, 2nd quarter - 32 lb, 3rd quarter - 32 lb, and fourth quarter - 33 lb. These amounts include the applicable offset ratio specified in Rule 2201 Section 4.8 (as amended 4/21/11) for the ERC specified below. [District Rule 2201]

- ERC Certificate Number N-1336-1 (or a certificate split from this certificate) 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]

Offset Summary:

NOx	1st	2nd	3rd	4th	Total
S-1114-133-0	177	177	177	177	708
S-1114-9-18	361	361	362	362	1,446
Total	538	538	539	539	2,154
ERC N-1338-2	**587**	**588**	**587**	**587**	**2,349**

SOx	1st	2nd	3rd	4th	Total
S-1114-133-0	46	46	47	47	186
S-1114-9-18	95	95	95	96	381
Total	141	141	142	143	567
ERC S-4590-5	**154**	**153**	**154**	**154**	**615**

PM_{10}	1st	2nd	3rd	4th	Total
S-1114-133-0	0	0	0	450	450
S-1114-9-18	0	0	0	920	920
Total	0	0	0	1,370	1,370
ERC C-1360-4	**0**	**0**	**0**	**1,509**	**1,509**

VOC	1st	2nd	3rd	4th	Total
S-1114-133-0	32	32	32	33	129
S-1114-9-18	65	66	66	66	263
Total	97	98	98	99	392
ERC N-1336-1	**108**	**108**	**108**	**108**	**432**

C. Public Notification

1. Applicability

Public noticing is required for:

a. New Major Sources, Federal Major Modifications, and SB288 Major Modifications,
b. Any new emissions unit with a Potential to Emit greater than 100 pounds during any one day for any one pollutant,
c. Any project which results in the offset thresholds being surpassed, and/or
d. Any project with an SSIPE of greater than 20,000 lb/year for any pollutant.
e. Any project which results in a Title V significant permit modification

a. New Major Sources, Federal Major Mods, and SB288 Major Mods

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

As demonstrated in VII.C.7, this project does constitute a Federal Major Modification; therefore, public noticing for SB 288 or Federal Major Modification purposes is required.

b. 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. There are no new emissions units associated with this project; therefore public noticing is not required for this project for Potential to Emit Purposes.

c. Offset Threshold

The SSPE1 is already over the offset thresholds and there is no increase in annual emissions proposed or expected. Approving this project will not result in the emissions being increased from a level below the offset threshold to a level exceeding the offset threshold, for any pollutant; therefore public noticing is not required for offset purposes.

d. SSIPE > 20,000 lb/year

Public notification is required for any permitting action that results in a 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. Because SSPE2 = SSPE1, the SSIPE = 0 for all pollutants; therefore public noticing for SSIPE purposes is not required.

e. Title V Significant Permit Modification

As shown in the Discussion of Rule 2520 below, this project constitutes a Title V significant modification. Therefore, public noticing for Title V significant modifications is required for this project.

2. Public Notice Action

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

D. Daily Emission Limits (DELs)

Daily Emissions Limitations (DELs) and other enforceable conditions are required by Section 3.15 to restrict a unit's maximum daily emissions, to a level at or below the

emissions associated with the maximum design capacity. Per Sections 3.16.1 and 3.16.2, the DEL must be contained in the latest ATC and contained in or enforced by the latest PTO and enforceable, in a practicable manner, on a daily basis. DELs are also required to enforce the applicability of BACT. The DELs are comprised of the EF (lb/MMBtu) * maximum heat input (MMBtu/hr * 24 hr/day).
Proposed Rule 2201 (DEL) Conditions:

S-1114-126-0: Wells

- The VOC content of the well vent gas shall not exceed 10% by weight. [District Rules 2201 and 4401]

S-1114-127-0, -128-0, -129-0, -130-0, -131-0 and -132-0: Tanks

- The VOC content of the gas shall not exceed 10% by weight. [District Rules 2201 and 4623]

S-1114-133-0: 4.9 MMBtu/hr Tank Heater

- Emissions from the natural gas-fired unit shall not exceed any of the following limits: NOx; 9 ppmvd @ 3% O2 or 0.011 lb-NOx/MMBtu, 0.007 lb-PM10/MMBtu, CO; 50 ppmvd @ 3% O2 or 0.037 lb-CO/MMBtu, or VOC: 5 ppmv @ 3% O2 as methane or 0.002 lb-VOC/MMBtu. [District Rules 2201 and 4307]

- Tank Heater shall only be fired on produced gas, PUC-quality gas, or PUC-regulated gas with a sulfur content not exceeding 1.0 gr S/100 scf. [District Rule 2201]

S-1114-9-18: 10.0 MMBtu/hr Heater Treater

- Emissions shall not exceed any of the following limits: NOx; 9 ppmvd @ 3% O2 or 0.011 lb-NOx/MMBtu, 0.007 lb-PM10/MMBtu, CO; 50 ppmvd @ 3% O2 or 0.037 lb-CO/MMBtu, or VOC: 5 ppmv @ 3% O2 as methane or 0.002 lb-VOC/MMBtu. [District Rules 2201, 4301, 4305, 4306, and 4320]

- Heater treater shall only be fired on produced gas, PUC-quality gas, or PUC-regulated gas with a sulfur content not exceeding 1.0 gr S/100 scf. [District Rules 2201 and 4320]

E. Compliance Assurance

1. Source Testing

Unit S-1114-126-0 is subject to Rule 4401 *Steam-Enhanced Crude Oil Production Wells*. Source testing requirements, in accordance with District Rule 4401 will be discussed in Section VIII, District Rule 4401 of this evaluation.

Units S-1114-127-0, -128-0, -129-0, -130-0, -130-0 and -132-0 are subject to Rule 4623 Storage of Organic Liquid. Source testing requirements, in accordance with District Rule 4623 will be discussed in Section VIII, District Rule 4623 of this evaluation.

Unit -133-0 is subject to District Rule 4307, *Boilers, Steam Generators and Process Heaters, 2.0 MMBtu/hr to 5.0 MMBtu/hr*. Source testing requirements, in accordance with District Rule 4307 will be discussed in Section VIII, District Rule 4307 of this evaluation.

Unit -9-18 is subject to District Rule 4305, *Boilers, Steam Generators and Process Heaters, Phase 2*, District Rule 4306, *Boilers, Steam Generators and Process Heaters, Phase 3,* and District 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 Rule 4320 of this evaluation.

4. Monitoring

Unit S-1114-126-0 is subject to Rule 4401 *Steam-Enhanced Crude Oil Production Wells*. Monitoring requirements, in accordance with District Rule 4401 will be discussed in Section VIII, District Rule 4401 of this evaluation.

Units S-1114-127-0, -128-0, -129-0, -130-0, -131-0 and -132-0 are subject to Rule 4623 Storage of Organic Liquid. Monitoring requirements, in accordance with District Rule 4623 will be discussed in Section VIII, District Rule 4623 of this evaluation.

Unit -133-0 is subject to District Rule 4307, *Boilers, Steam Generators and Process Heaters, 2.0 MMBtu/hr to 5.0 MMBtu/hr.* Monitoring requirements, in accordance with District Rule 4307 will be discussed in Section VIII, District Rule 4307 of this evaluation.

Unit -9-18 is subject to District Rule 4305, *Boilers, Steam Generators and Process Heaters, Phase 2,* District Rule 4306, *Boilers, Steam Generators and Process Heaters, Phase 3,* and District Rule 4320 *Advanced Emission Reduction Options for Boilers, Steam Generators, and Process Heaters Greater than 5.0 MMBtu/hr*, these units are subject to monitoring requirements. Monitoring requirements, in accordance with District Rules 4305, 4306, and 4320 will be discussed in Section VIII, District Rule 4320 of this evaluation.

5. Recordkeeping

Unit S-1114-126-0 is subject to Rule 4401 *Steam-Enhanced Crude Oil Production Wells*. Recordkeeping requirements, in accordance with District Rule 4401 will be discussed in Section VIII, District Rule 4401 of this evaluation.

Units S-1114-127-0, -128-0, -129-0, -130-0, -131-0 and -132-0 are subject to Rule 4623 Storage of Organic Liquid. Recordkeeping requirements, in accordance with District Rule 4623 will be discussed in Section VIII, District Rule 4623 of this evaluation.

Unit -133-0 is subject to District Rule 4307, *Boilers, Steam Generators and Process Heaters, 2.0 MMBtu/hr to 5.0 MMBtu/hr*. Recordkeeping requirements, in accordance with District Rule 4307 will be discussed in Section VIII, District Rule 4307, of this evaluation.

Unit -9-18 is subject to District Rule 4305, *Boilers, Steam Generators and Process Heaters, Phase 2,* District Rule 4306, *Boilers, Steam Generators and Process Heaters, Phase 3,* and District Rule 4320 *Advanced Emission Reduction Options for Boilers, Steam Generators, and Process Heaters Greater than 5.0 MMBtu/hr*, this unit is subject to recordkeeping requirements. Recordkeeping requirements, in accordance with District Rules 4305, 4306, and 4320 will be discussed in Section VIII, District Rule 4320 of this evaluation.

4. Reporting

No reporting is required to demonstrate compliance with Rule 2201.

F. Ambient Air Quality Analysis

Section 4.6.1 of this rule states that emissions offsets are not required for increases in carbon monoxide in attainment areas provided the applicant demonstrates to the satisfaction of the APCO that the Ambient Air Quality Standards are not violated in the areas to be affected, such emissions will be consistent with Reasonable Further Progress, and will not cause or contribute to a violation of Ambient Air Quality Standards.

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.

The proposed location is in an attainment area for NO_X, CO, and SO_X. The proposed location is in a non-attainment area for PM_{10}. The increase in criteria pollutants due to the proposed equipment will not cause a violation as shown on the table below titled "Criteria pollutant Modeling Results".

The results from the Criteria Pollutant Modeling are as follows:

Criteria Pollutant Modeling Results*

	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[1]	Pass[1]

* Results were taken from the attached PSD spreadsheet.
1 The criteria pollutants are below EPA's level of significance as found in 40 CFR Part 51.165 (b)(2).

As shown, the calculated contribution of CO, NO_X, SO_X, PM_{10}, and $PM_{2.5}$, will not exceed the EPA significance level. The project is not expected to cause or make worse a violation of an air quality standard. See **Appendix C** of this document for the AAQA summary sheet.

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 VII.C.5 and VII-C.8, above, this facility is an existing major source and this project does constitute a Title I modification, therefore this requirement is applicable. Included in **Appendix D** is Seneca's Statewide Compliance Statement.

H. Alternate Siting Analysis

The current project occurs at an existing facility. The applicant proposes to install 50 new TEOR wells, associated processing equipment, and tank battery equipment.

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

Rule 2410 Prevention of Significant Deterioration

As shown in Section VII. C. 9. above, this project does not result in a new PSD major source or PSD major modification. No further discussion is required.

Rule 2520 Federally Mandated Operating Permits

This facility is subject to this Rule, and has received their Title V Operating Permit. Section 3.29 defines a significant permit modification as a "permit amendment that does not qualify as a minor permit modification or administrative amendment."

The project is Federal Major Modification and therefore is also a Title V Significant Modification. 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, prior to operating with the proposed modifications. Included in **Appendix E** is Seneca's Title V Compliance Certification form.

Rule 4001 New Source Performance Standards

This rule incorporates the New Source Performance Standards from 40 CFR Part 60. 40 CFR Part 60, Subparts, K, Ka, Kb, and OOOO and could potentially apply to the storage tanks located at this facility.

40 CFR Part 60, Subparts, K, Ka, and Kb could potentially apply to the storage tanks located at this facility. However, pursuant to 40 CFR 60.110 (b), 60.110(a) (b), and 60.110(b) (b), these subparts do not apply to storage vessels less than 10,000 bbls, used for petroleum or condensate, that is stored, processed, and/or treated at a drilling and production facility prior to custody transfer.

40 CFR Part 60, Subpart OOOO—Standards of Performance for Crude Oil and Natural Gas Production, Transmission and Distribution (constructed, reconstructed, or modified after 8/23/11) applies to single storage vessel, located in the oil and natural gas production segment, natural gas processing segment or natural gas transmission and storage segment. The subject tanks are subject to this subpart. However, Subpart OOOO has no standards for tanks with annual VOC emissions less than 6 tons per year. Therefore, the storage tanks (S-1114-127-0 thru -131-0) are not an affected facility.

40 CFR Part 60, Subpart Dc applies to Small Industrial-Commercial-Industrial Process heaters between 10 MMBtu/hr and 100 MMBtu/hr.

This heater treater (S-1114-9-18) has a rating of 10.0 MMBtu/hr and is fired on natural gas. Subpart Dc has no standards for gas-fired units. Therefore, testing and monitoring requirements of subpart Dc do not apply.

Subpart Dc, subpart 60.48c requires the owner or operator of each affected facility to submit notification of the date of construction or reconstruction, anticipated startup, actual startup, as provided by §60.7 of this part. Notification shall include:

(1) The design heat input capacity of the facility and identification of the fuels to be combusted:

The designed heat input capacity and the identified fuels will be listed on the equipment description. No other permit conditions are required.

(2) If applicable, a copy of any federally enforceable requirements that limit the annual capacity factor for any fuel mixture of fuel under §60.42c or §60.43c.

The requirements is not applicable since the unit is not subject to §60.42c or §60.43c.

(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 and one will not be imposed on the facility.

(4) Notification if an emerging technology will be used for controlling SO_2 emissions. The Administrator will examine the description of the control 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 the unit determination is made by the Administrator.

Section 60.48c(g) states that the owner or operator of each affected facility shall record and maintain records of the amounts of each fuel combusted during each day.

Since the unit has been evaluated assuming that it will consume the maximum amount of fuel allowed by the unit each day, the facility will not be required to record the daily fuel consumption.

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

District Rule 4306 and 4320 both require that records be kept for 5 years.

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

This rule incorporates NESHAPs from Part 61, Chapter I, Subchapter C, Title 40, CFR and the NESHAPs from Part 63, Chapter I, Subchapter C, Title 40, CFR; and applies to all sources of hazardous air pollution listed in 40 CFR Part 61 or 40 CFR Part 63. However, no subparts of 40 CFR Part 61 or 40 CFR Part 63 apply to the tank operations.

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.

The subject tank heater and heater treater combust natural gas therefore continued compliance 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

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

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

The cancer risk for this project is shown below:

RMR Summary		
Units	Cancer Risk	T-BACT Required
S-1114-126-0 thru -133-0	0.722 per million	No

District policy APR 1905 also specifies that the increase in emissions associated with a proposed new source or modification not have acute or chronic indices, or a cancer risk greater than the District's significance levels (i.e. acute and/or chronic indices greater than 1 and a cancer risk greater than 20 in a million). As outlined by the HRA Summary in Attachment VI of this report, the emissions increases for this project was determined to be less than significant.

To ensure that human health risks will not exceed District allowable levels, the project is approved with the following special condition:

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

Rule 4201 Particulate Matter Concentration

Rule 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.

S-1114-9-18 & -133-0

F-Factor for NG: 8,578 dscf/MMBtu at 60 °F

PM_{10} Emission Factor: 0.007 lb-PM_{10}/MMBtu (worst case)

Percentage of PM as PM_{10} in Exhaust: 100%

Exhaust Oxygen (O_2) Concentration: 3%

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

PM concentration = [0.007 lb-PM_{10}/MMBtu x 7000 grains/lb-PM_{10}] / [8578 ft^3/MMBtu x 1.17]

PM concentration = 0.005 grains/dscf < 0.1 grain/dscf

Therefore, compliance with the requirements of this rule is expected.

Rule 4301 Fuel Burning Equipment

This rule specifies maximum emission rates in lb/hr for SO_2, NO_2, 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.

Rule 4301 Limits			
	NO_2	Total PM	SO_2
S-1114-133-0	4.9 x 0.011 = 0.05	4.9 x 0.007 = 0.03	4.9 x 0.003 = 0.02
S-1114-9-18	10.0 x 0.011 = 0.11	10.0 x 0.007 = 0.07	10.0 x 0.003 = 0.03
Rule Limit (lb/hr)	140	10	200

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

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

The permit units S-1114-9-18 & -133-0 are subject to Rule 4305, *Boilers, Steam Generators and Process Heaters – Phase 2*. In addition, the units are also subject to District Rule 4320.

Since emissions limits of Rule 4320 and all other requirements are equivalent or more stringent than District Rule 4305 requirements, compliance with District Rule 4320 requirements will satisfy requirements of District Rule 4305.

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

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

The permit units S-1114-9-18 & -133-0 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.

District Rule 4307 Boilers, Steam Generators and Process Heaters – 2.0 MMBtu/hr to 5.0 MMBtu/hr

The permit unit S-1114-133-0 is a natural gas fired tank heater with a maximum heat input of 4.9 MMBtu/hr. Pursuant to Section 2.0 of District Rule 4307, the unit is subject to this rule.

Section 5.1, NO_X and CO Emissions Limits

The tank heater is a non-atmospheric unit, is located in an oilfield and will be installed after to 1/1/16; therefore, the unit is subject to the 9 ppmv NOx and 400 ppmv CO limits of Table 1. The unit will be limited to 9 ppmv NOx and 50 ppmv CO.

Section 5.2 applies to atmospheric units and therefore doesn't apply to the proposed non-atmospheric unit.

Pursuant to section 5.3 the applicant has proposed to limit the fuel sulfur content to no more than five (5) grains of total sulfur per one hundred (100) standard cubic feet which meets the particulate matter control requirements of this rule.

Pursuant to section 5.4 the applicable emission limits of Sections 5.1 and 5.2.1.2 shall not apply during start-up or shutdown. The applicant has not requested startup and shutdown provisions; therefore, this section does not apply.

Section 5.5 requires the operator to:

Monitor, at least once a month, the operational characteristics recommended by the manufacturer and approved by the APCO; and

Tune the unit at least twice per calendar year, (from four to eight months apart) using a qualified technician in accordance with the procedure described in Rule 4304 (Equipment Tuning Procedure for Boilers, Steam Generators, and Process Heaters). If the unit does not operate throughout a continuous six-month period within a calendar year, only one tune-up is required for that calendar year. No tune-up is required for any unit that is not operated during that calendar year; this unit may be test fired to verify availability of the unit for its intended use, but once the test firing is completed the unit shall be shutdown. In lieu of tuning the unit, operators shall monitor the emissions with a portable NOx analyzer and adjust the unit's operating parameters accordingly to assure compliance with the emission limits of this rule.

The following conditions will be added to the permit for unit -133-0 to ensure compliance with this section:

- {3824} The owner/operator shall monitor, at least once a month, the operational characteristics recommended by the manufacturer and approved by the APCO. [District Rule 4307]

- The permittee shall tune the unit at least twice per calendar year, (from four to eight months apart) using a qualified technician in accordance with the procedure described in Rule 4304. If the unit does not operate throughout a continuous six-month period within a calendar year, only one tune-up is required for a calendar year. No tune-up is required if the unit is not operated during that calendar year. The unit may be test fired to verify availability of the unit for its intended use, but once the test firing is complete the unit shall be shutdown. [District Rule 4307]

- {3827} In lieu of tuning the unit twice each calendar year, the owner/operator shall monitor the emissions with a portable NOx analyzer at least twice each calendar year and adjust the unit's operating parameters accordingly to assure compliance with the emission limits of this rule. [District Rule 4307]

Emission certification was not requested; therefore, section 5.6 does not apply.

Pursuant to section 6.1.2 the operator of any unit subject to the applicable requirements of Sections 5.5.1.1 and 5.5.1.2 shall maintain records to verify that tune-up and monitoring of the operational characteristics of the unit have been performed. The following conditions will be added to the permit for unit -133-0 to ensure compliance with this section:

- {3828} The owner/operator shall maintain records to verify that the required monitoring of the operational characteristics, and tune-ups or portable NOx analyzing has been performed. [District Rule 4307]

- {3898} Tune-up records shall include: 1) date of tune-up, 2) name of technician performing tune-up, and 3) reason that they are qualified. [District Rule 4307]

- {3899} Portable analyzer records shall include: 1) date of emissions analyzing, 2) results of emissions analyzing, 3) name of technician performing analyzing, 4) make and model of analyzer, 5) date of last calibration of the analyzer, and 6) a description of any adjustments made to the unit's operating parameters for the purposes of assuring compliance. [District Rule 4307]

- {3820} 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 Rules 4307]

The following conditions will be added to the permit for unit -133-0 to ensure compliance with the source test method requirements of section 6.2:

- {3834} NOx 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 Rule 4307]

- {3835} CO emissions for source test purposes shall be determined using EPA Method 10 or ARB Method 100. [District Rule 4307]

- {3836} Stack gas oxygen (O2) shall be determined using EPA Method 3 or 3A or ARB Method 100. [District Rule 4307]

- {3838} The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 4307]

- {3828} The owner/operator shall maintain records to verify that the required monitoring of the operational characteristics, and tune-ups or portable NOx analyzing has been performed. [District Rule 4307]

Pursuant to section 6.3 the operator shall conduct an initial source test at the time of installation and/or modification for each non-certified unit or each non-certified retrofit control technology to demonstrate compliance with the applicable certification emission limits in Section 5.1. Units demonstrating compliance are eligible for certification under the provisions of Section 9.0.

The following conditions will ensure compliance with section 6.3:

- Source testing to measure NOx and CO emissions from this unit shall be conducted no later than 60 days after the start-up. [District Rules 2201 and 4307]

- {3833} 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]

Therefore, compliance with District Rule 4307 requirements is expected.

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

Section 5.2, NOx and CO Emission Limits

The 10.0 MMBtu/hr process heater (S-1114-9-18) is subject to the NOx limits in Table 2, as shown below.

The applicant has proposed to meet the standard schedule NOx emission limit.

Rule 4320 Emissions Limits				
Category	Operated on gaseous fuel		Operated on liquid fuel	
	NO_X Limit	CO Limit	NO_X Limit	CO Limit
A. Units with a total rated heat input > 5.0 MMBtu/hr to < 20.0 MMBtu/hr, except for Categories C through G units	a) Standard Schedule 9 ppmv or 0.011 lb/MMBtu; or	400 ppmv	40 ppmv; or 0.052 lb/MMBtu	400 ppmv
	b) Enhanced Schedule 6 ppmv or 0.007 lb/MMBtu			

The proposed NO_x emission factor is 9 ppmvd @ 3% O_2 (0.011 lb/MMBtu), and the proposed CO emission factor is 25 ppmvd @ 3% O_2 (0.074 lb/MMBtu).

Therefore, compliance with Section 5.2 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 5.4 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 SO_2 emissions by at least 95% by weight; or limit exhaust SO_2 to less than or equal to 9 ppmv corrected to 3.0% O_2 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.

The heater treater will only be fired on produced gas, PUC-quality gas, or PUC-regulated gas with a sulfur content not exceeding 1.0 gr S/100 scf.

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.

Startup and shutdown conditions have not been proposed.

Section 5.7, Monitoring Provisions

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

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 O_2 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 permit 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 NOX 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 SOx 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% SOx 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. Therefore, the following permit condition will be listed on the permits as follows:

- Heater treater shall only be fired on produced gas, PUC-quality gas, or PUC-regulated gas with a sulfur content not exceeding 1.0 gr S/100 scf. [District Rules 2201 and 4320]

- Valid purchase contracts, supplier certifications, tariff sheets, or transportation contracts may be used to satisfy the fuel sulfur content analysis, provided they establish the fuel sulfur concentration and higher heating value. [District Rule 4320]

Section 5.8, Compliance Determination

Section 5.8.1 requires that the operator of any unit 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). Therefore, the following condition will be retained or listed on the permits as follows:

- {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 shall 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. Therefore, the following permit condition will be listed on the permits as follows:

- {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. 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 of District Rule 4320. For the purposes of permittee-performed alternate monitoring, emissions measurements may be performed at any time after the unit reaches conditions representative of normal operation. [District Rules 4305, 4306 and 4320]

Section 5.8.4 requires that 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 (5) readings evenly spaced out over the 15-consecutive-minute period. Therefore, the following permit condition will be listed on the permits as follows:

- {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 requires that 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 (3) 30-consecutive-minute test runs shall apply. If two (2) of three (3) runs are above an applicable limit the test cannot be used to demonstrate compliance with an applicable limit. Therefore, the following permit condition will be listed on the permit as follows:

- {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. Therefore, the following permit condition will be listed on the permit as follows:

- 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, 4320 and 40 CFR 60.48c(i)]

Section 6.2, Test Methods

Section 6.2 identifies test methods to be used when determining compliance with the rule. The following conditions will be listed on the permits:

- {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]

- The following test methods shall be used: NOx (ppmv) - EPA Method 7E or ARB Method 100, NOx (lb/MMBtu) - EPA Method 19; CO (ppmv) - EPA Method 10 or ARB

Method 100; Stack gas oxygen (O2) - EPA Method 3 or 3A or ARB Method 100; stack gas velocities – EPA Method 2; Stack gas moisture content – EPA Method 4; SOx – EPA Method 6C or 8 or ARB Method 100; fuel gas sulfur as H2S content – EPA Method 11 or 15; and fuel hhv (MMBtu) –ASTM D 1826 or D 1945 in conjunction with ASTM D 3588. [District Rules 4305, 4306 and 4320]

Section 6.3, Compliance Testing

Section 6.3.1 requires that each unit subject to the requirements in Section 5.2 shall be source tested at least once every 12 months, except if two consecutive annual source tests demonstrate compliance, source testing may be performed every 36 months. If such a source test demonstrates non-compliance, source testing shall revert to every 12 months. The following conditions will be included in the permits:

- A source test to demonstrate compliance with NOx and CO emission limits shall be performed within 60 days of startup of this unit. [District Rules 2201 and 4320]

- Source testing to measure natural gas-combustion NOx and CO emissions from this unit shall be conducted at least once every twelve (12) months (no more than 30 days before or after the required annual source test date). After demonstrating compliance on two (2) consecutive annual source tests, the unit shall be tested not less than once every thirty-six (36) months (no more than 30 days before or after the required 36-month source test date). 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]

- {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 proposed in this project. Therefore these sections are not applicable.

Conclusion

Conditions will be incorporated into the permit in order to ensure compliance with each section of this rule, see attached draft permits. Therefore, compliance with District Rule 4320 requirements is expected.

Rule 4351 Boilers, Steam Generators and Process Heaters – Phase 1

This rule applies to boilers, steam generators, and process heaters at NO_x Major Sources that are not located west of Interstate 5 in Fresno, Kings, or Kern counties. If applicable, the emission limits, monitoring provisions, and testing requirements of this rule are satisfied when the unit is operated in compliance with Rule 4320. Therefore, compliance with this rule is expected.

Rule 4401 Steam Enhanced Crude Oil Production Well Vents

The purpose of this rule is to limit the VOC emissions from steam-enhanced crude oil production well vents. This rule is applicable to all steam-enhanced crude oil production wells and any associated vapor collection and control systems.

Section 3.0, Definitions

Section 3.20.1 defines various types of gas and liquid leaks. The following condition will be included on the ATC S-1114-126-0 to ensure compliance:

- Gas and liquid leaks are as defined in Section 3.20 of Rule 4401. [District Rule 4401]

Section 4.0, Exemptions

Section 4.1 states that any steam-enhanced crude oil production well undergoing service or repair during the time the well is not producing is exempt from the requirements of this rule as stated in the following condition on ATC S-1114-126-0:

- During the time any steam-enhanced crude oil production well is undergoing service or repair while the well is not producing, it shall be exempt from the emission control requirements of District Rule 4401, 5.0. [District Rule 4401]

Section 4.7 states the requirements of Section 5.4.1 through Section 5.4.7 of this rule shall not apply to components exclusively handling gas/vapor or liquid with a VOC content of ten percent by weight or less (≤10 wt.%), as determined by the test methods in Section 6.3.4. Therefore, the following condition will be listed on ATC S-1114-126-0 to ensure compliance:

- The inspection requirements of Section 5.4.1 through Section 5.4.6 of Rule 4401 shall not apply to components exclusively handling gas/vapor or liquid with a VOC content of ten percent by weight (10% wt) or less, as determined by the test methods in Section 6.3.4 of Rule 4401. [District Rule 4401]

Section 5.1, Vapor Control System Requirements

Section 5.1.1 requires that the steam-enhanced crude oil production well vent is closed and the front line production equipment downstream of the wells that carry produced fluids (crude oil or mixture of crude oil and water) is connected to a VOC collection and control system as defined in Section 3.0. The well vent may be temporarily opened during periods of attended service or repair of the well provided such activity is done as expeditiously as possible with minimal spillage of material and VOC emissions to the atmosphere. Therefore, the following condition will be listed on ATC S-1114-126-0 to ensure compliance:

- An operator shall not operate a steam-enhanced crude oil production well unless the operator complies with either of the following requirements: The steam-enhanced crude oil production well vent is closed and the front line production equipment downstream of the wells that carry produced fluids (crude oil or mixture of crude oil

and water) is connected to a VOC collection and control system as defined in Section 3.0 of Rule 4401, the well vent may be temporarily opened during periods of attended service or repair of the well provided such activity is done as expeditiously as possible with minimal spillage of material and VOC emissions to the atmosphere, or the steam-enhanced crude oil production well vent is open and the well vent is connected to a VOC collection and control system as defined in Section 3.0 of Rule 4401. [District Rule 4401]

Section 5.2, Determination of Compliance with Leak Standards:

Section 5.2.1 requires that an operator shall be in violation of this rule if any District inspection demonstrates that one or more of the conditions in Section 5.2.2 exist at the facility or if any operator inspection conducted pursuant to Section 5.4 demonstrates that one or more of the conditions in Section 5.2.2 exist at the facility.

Section 5.2.2 requires that the following conditions shall be used for determination of violation during an inspection pursuant to the provisions of Section 5.2.1:

5.2.2.1 Existence of an open-ended line or a valve located at the end of the line that is not sealed with a blind flange, plug, cap, or a second closed valve that is not closed at all times, except during attended operations requiring process fluid flow through the open-ended lines. Attended operations include draining or degassing operations, connection of temporary process equipment, sampling of process streams, emergency venting, and other normal operational needs, provided such operations are done as expeditiously as possible and with minimal spillage of material and VOC emissions to the atmosphere.

5.2.2.2 Existence of a component with a major liquid leak as defined in Section 3.0.

5.2.2.3 Existence of a component with a gas leak greater than 50,000 ppmv.

5.2.2.4 Existence of a component leak described in Section 5.2.2.4.1 through Section 5.2.2.4.3 in excess of the allowable number of leaks specified in Table 2.

5.2.2.4.1 A minor liquid leak, or

5.2.2.4.2 A minor gas leak, or

5.2.2.4.3 A gas leak greater than 10,000 ppmv up to 50,000 ppmv.

Rule 4401 Number of Allowable Leaks	
Number of Steam-Enhanced Crude Oil Production Wells Connected to a VOC Collection and Control System	Number of Allowable Leaks
1 to 25	3
26 to 50	6
51 to 100	8
101 to 250	10
251 to 500	15
More than 500	One (1) for each 20 wells tested with a minimum of 50 wells tested.

Therefore, the following condition will be listed on ATC S-1114-126-0 to ensure compliance:

- An operator shall be in violation of this rule if any District inspection demonstrates or if any operator inspection conducted pursuant to Section 5.4 of Rule 4401 demonstrates the existence of an open-ended line or a valve located at the end of the line that is not sealed with a blind flange, plug, cap, or a second closed valve that is not closed at all times, except during attended operations as defined by Section 5.2.2.1 of Rule 4401 requiring process fluid flow through the open-ended lines, a component with a major liquid leak, or a component with a gas leak greater than 50,000 ppmv. [District Rule 4401]

- An operator shall be in violation of this rule if any District inspection demonstrates or if any operator inspection conducted pursuant to Section 5.4 of Rule 4401 demonstrates the existence of any combination of components with minor liquid leaks, minor gas leaks, or a gas leaks greater than 10,000 ppmv up to 50,000 ppmv that totals more than number of leaks allowed by Table 2 of Rule 4401. [District Rule 4401]

Section 5.3, Operating Requirements

Section 5.3.1 requires that an operator shall not use any component with a leak as defined in Section 3.0, or that is found to be in violation of the provisions of Section 5.2.2. However, components that were found leaking may be used provided such leaking components have been identified with a tag for repair, are repaired, or awaiting re-inspection after being repaired within the applicable time frame specified in Section 5.5 of this rule. Therefore, the following condition will be listed on ATC S-1114-126-0 to ensure compliance:

- An operator shall not use any component with a leak as defined in Section 3.0 of Rule 4401, or that is found to be in violation of the provisions of Section 5.2.2 of Rule 4401. However, components that were found leaking may be used provided such leaking components have been identified with a tag for repair, are repaired, or awaiting re-inspection after being repaired within the applicable time frame specified in Section 5.5 of Rule 4401. [District Rule 4401]

Section 5.3.2 requires that each hatch shall be closed at all times except during sampling or adding of process material through the hatch, or during attended repair, replacement, or maintenance operations, provided such activities are done as expeditiously as possible with minimal spillage of material and VOC emissions to the atmosphere. Therefore, the following condition will be listed on ATC S-1114-126-0 to ensure compliance:

- Each hatch shall be closed at all times except during sampling or adding of process material through the hatch, or during attended repair, replacement, or maintenance operations, provided such activities are done as expeditiously as possible with minimal spillage of material and VOC emissions to the atmosphere. [District Rule 4401]

Section 5.3.3 requires that an operator shall comply with the requirements of Section 6.7, if there is any change in the description of major components or critical components. Section 6.7 requires that by January 30 of each year after 2008, an operator shall submit to the APCO for approval, in writing, an annual report indicating any changes to an existing Operator Management Plan. Therefore, the following condition will be listed on ATC S-1114-126-0 to ensure compliance:

- An operator shall comply with the requirements of Section 6.7 of Rule 4401 if there is any change in the description of major components or critical components. [District Rule 4401]

Section 5.4 Inspection and Re-Inspection Requirements:

Section 5.4.1 requires that except for pipes and unsafe-to-monitor components, as operator shall inspect all other components pursuant to the requirements of Section 6.3.3 at least once every year.

Section 5.4.2 requires that an operator shall visually inspect all pipes at least once every year. Any visual inspection of pipes that indicates a leak that cannot be immediately repaired to meet the leak standards of this rule shall be inspected within 24 hours after detecting the leak. If a leak is found, the leak shall be repaired as soon as practicable but not later than the time frame specified in Table 3 of this rule. Therefore, the following conditions will be listed on ATC S-1114-126-0 to ensure compliance:

- Except for pipes and unsafe-to-monitor components, an operator shall inspect all other components pursuant to the requirements of Section 6.3.3 of Rule 4401 at least once every year. [District Rule 4401]

- An operator shall visually inspect all pipes at least once every year. Any visual inspection of pipes that indicates a leak that cannot be immediately repaired to meet the leak standards of this rule shall be inspected within 24 hours after detecting the leak. If a leak is found, the leak shall be repaired as soon as practicable but not later than the time frame specified in Table 2 of Rule 4401. [District Rule 4401]

Section 5.4.3 requires that in addition to the inspections required by Section 5.4.1, an operator shall inspect for leaks all accessible operating pumps, compressors, and pressure relief devices (PRDs) in service as follows:

5.4.3.1 An operator shall audio-visually (by hearing and by sight) inspect for leaks all accessible operating pumps, compressors, and PRDs in service at least once each calendar week.

5.4.3.2 Any audio-visual inspection of an accessible operating pump, compressor, and PRD performed by an operator that indicates a leak that cannot be immediately repaired to meet the leak standards of this rule shall be inspected not later than 24 hours after conducting the audio-visual inspection. If a leak is found, the leak shall be repaired as soon as practicable but not later than the time frame specified in Table 3 of this rule.

Therefore, the following condition will be listed on ATC S-1114-126-0 to ensure compliance:

- In addition to the inspections required by Section 5.4.1 of Rule 4401, an operator shall inspect for leaks all accessible operating pumps, compressors, and PRDs in service as follows: An operator shall audio-visually (by hearing and by sight) inspect for leaks all accessible operating pumps, compressors, and PRDs in service at least once each calendar week. Any audio-visual inspection of an accessible operating pump, compressor, and PRD performed by an operator that indicates a leak that cannot be immediately repaired to meet the leak standards of this rule shall be inspected not later than 24 hours after conducting the audio-visual inspection. If a leak is found, the leak shall be repaired as soon as practicable but not later than the time frame specified in Table 3 of Rule 4401. [District Rule 4401, 5.4.3]

Section 5.4.4 requires that in addition to the inspections required by Section 5.4.1, Section 5.4.2 and Section 5.4.3, an operator shall perform the following inspections:

5.4.4.1 An operator shall initially inspect a PRD that releases to the atmosphere as soon as practicable but not later than 24 hours after the discovery of the release. An operator shall re-inspect the PRD not earlier than 24 hours after the initial inspection but not later than 15 calendar days after the initial inspection.

5.4.4.2 An operator shall inspect all new, replaced, or repaired fittings, flanges, and threaded connections within 72 hours of placing the component in service.

5.4.4.3 Except for PRDs subject to the requirements of Section 5.4.4.1, an operator shall inspect a component that has been repaired or replaced not later than 15 calendar days after the component was repaired or replaced.

Therefore, the following condition will be listed on ATC S-1114-126-0 to ensure compliance:

- In addition to the inspections required by Sections 5.4.1, 5.4.2 and 5.4.3 of Rule 4401, operator shall perform the following: initially inspect a PRD that releases to the atmosphere as soon as practicable but not later than 24 hours after the discovery of the release, re-inspect the PRD not earlier than 24 hours after the initial inspection but not later than 15 calendar days after the initial inspection, inspect all new, replaced, or repaired fittings, flanges, and threaded connections within 72 hours of placing the component in service. Except for PRDs subject to the requirements of Section 5.4.4.1 of Rule 4401, an operator shall inspect a component that has been repaired or replaced not later than 15 calendar days after the component was repaired or replaced. [District Rule 4401]

Section 5.4.5 requires that an operator shall inspect all unsafe-to-monitor components during each turnaround. Therefore, the following condition will be listed on the permit to ensure compliance:

- An operator shall inspect all unsafe-to-monitor components during each turnaround. [District Rule 4401]

Section 5.4.6 requires that a District inspection in no way fulfills any of the mandatory inspection requirements that are placed upon operators and cannot be used or counted as an inspection required of an operator. The following condition will be listed on ATC S-1114-126-0 to ensure compliance:

- District inspection in no way fulfills any of the mandatory inspection requirements that are placed upon operators and cannot be used or counted as an inspection required of an operator. [District Rule 4401]

Section 5.5, Leak Repair Requirements

Section 5.5.1 requires that an operator shall affix a readily visible weatherproof tag to a leaking component upon detection of the leak. An operator shall include the following information on the tag:

1) The date and time of leak detection.
2) The date and time of leak measurement.
3) For a gaseous leak, the leak concentration in ppmv.
4) For a liquid leak, whether it is a major liquid leak or a minor liquid leak.
5) Whether the component is an essential component, an unsafe-to-monitor component, or a critical component.

Section 5.5.2 requires that an operator shall keep the tag affixed to the component until an operator has met all of the following conditions:

1) Repaired or replaced the leaking component, and
2) Re-inspected the component using the test method in Section 6.3.3, and
3) The component is found to be in compliance with the requirements of this rule.
4) An operator shall minimize a component leak in order to stop or reduce leakage to the atmosphere immediately to the extent possible, but not later than one (1) hour after detection of the leak.

Section 5.5.3 requires that an operator shall minimize a component leak in order to stop or reduce leakage to the atmosphere immediately to the extent possible, but not later than one (1) hour after detection of the leak.

Therefore, the following conditions will be listed on ATC S-1114-126-0 to ensure compliance:

- An operator shall affix a readily visible weatherproof tag to a leaking component upon detection of the leak and shall include the following information on the tag: date and time of leak detection, date and time of leak measurement, for a gaseous leak, the leak concentration in ppmv, for a liquid leak, whether it is a major liquid leak or a minor liquid leak, whether the component is an essential component, an unsafe-to-monitor component, or a critical component. [District Rule 4401]
- An operator shall keep the tag affixed to the component until an operator has met all of the following conditions: repaired or replaced the leaking component; re-inspected the component using the test method in Section 6.3.3; and the component is found to be in compliance with the requirements of this rule. [District Rule 4401]

- An operator shall minimize a component leak in order to stop or reduce leakage to the atmosphere immediately to the extent possible, but not later than one (1) hour after detection of the leak. [District Rule 4401]

Section 5.5.4 requires that except for leaking critical components or leaking essential components subject to the requirements of Section 5.5.7, if an operator has minimized a leak but the leak still exceeds the applicable leak limits as defined in Section 3.0, an operator shall comply with at least one of the requirements of Section 5.5.4.1, Section 5.5.4.2, or Section 5.5.4.3 as soon as practicable but not later than the time period specified in Table 3.

5.5.4.1 Repair or replace the leaking component; or
5.5.4.2 Vent the leaking component to a VOC collection and control system as defined in Section 3.0, or
5.5.4.3 Remove the leaking component from operation.

Therefore, the following conditions will be listed on ATC S-1114-126-0 to ensure compliance:

- Except for leaking critical components or leaking essential components subject to the requirements of Section 5.5.7 of Rule 4401, if an operator has minimized a leak but the leak still exceeds the applicable leak limits as defined in Section 3.0 of Rule 4401, an operator shall comply with at least one of the following requirements as soon as practicable but not later than the time period specified in Table 3 of Rule 4401: Repair or replace the leaking component; or vent the leaking component to a VOC collection and control system as defined in Section 3.0 of Rule 4401, or remove the leaking component from operation. [District Rule 4401]
- The repair period in calendar days shall not exceed 14 days for minor gas leaks, 5 days for major gas leaks less than or equal to 50,000 ppmv, 2 days for gas leak greater than 50,000 ppmv, 3 days for minor liquid leaks, 2 days for major liquid leaks. [District Rule 4401]

Section 5.5.5 requires that the leak rate measured after leak minimization has been performed shall be the leak rate used to determine the applicable repair period specified in Table 4.

Section 5.5.6 requires that the time of the initial leak detection shall be the start of the repair period specified in Table 4. Therefore, the following conditions will be listed ATC S-1114-126-0 to ensure compliance:

- The leak rate measured after leak minimization has been performed shall be the leak rate used to determine the applicable repair period specified in Table 3 of Rule 4401. [District Rule 4401]

- The time of the initial leak detection shall be the start of the repair period specified in Table 3 of Rule 4401. [District Rule 4401]

Section 5.5.7 requires that if the leaking component is an essential component or a critical component that cannot be immediately shut down for repairs, and if the leak has

been minimized but the leak still exceeds the applicable leak standard of this rule, the operator shall repair or replace the essential component or critical component to eliminate the leak during the next process unit turnaround, but in no case later than one year from the date of the original leak detection, whichever comes earlier. Therefore, the following condition will be listed ATC S-1114-126-0 to ensure compliance:

- If the leaking component is an essential component or a critical component that cannot be immediately shut down for repairs, and if the leak has been minimized but the leak still exceeds the applicable leak standard of this rule, the operator shall repair or replace the essential component or critical component to eliminate the leak during the next process unit turnaround, but in no case later than one year from the date of the original leak detection, whichever comes earlier. [District Rule 4401]

Section 6.1, Recordkeeping and Submissions

Section 6.1 requires that an operator shall maintain the records required by Sections 6.1 and 6.2 for a period of five (5) years. These records shall be made available to the APCO upon request. Therefore, the following condition will be listed ATC S-1114-126-0 to ensure compliance:

- All records required by this permit shall be maintained and retained on-site for a minimum of five (5) years and made available for District, ARB, and EPA inspection upon request. [District Rule 4401]

Section 6.1.1 requires that the operator of any steam-enhanced crude oil production well shall maintain records of the date and well identification where steam injection or well stimulation occurs. Therefore, the following condition will be listed ATC S-1114-126-0 to ensure compliance:

- The operator of any steam-enhanced crude oil production well shall maintain records of the date and well identification where steam injection or well stimulation occurs. [District Rule 4401]

Section 6.1.2 states a small producer shall maintain monthly records of county-specific crude oil production. For the purpose of this rule, the monthly crude oil production records required by the California Division of Oil, Gas, and Geothermal Resources may be used to satisfy Section 6.1.2. This facility is not a "Small Producer"; therefore the requirements of this section do not apply.

Section 6.1.3 states that the operator of any steam enhanced crude oil production well shall keep source test records which demonstrate compliance with the control efficiency requirements of the VOC collection and control system as defined in Section 3.0. Therefore, the following condition will be listed ATC S-1114-126-0 to ensure compliance:

- An operator of any steam-enhanced crude oil production well shall keep source test records which demonstrate compliance with the control efficiency requirements of the VOC collection and control system as defined in Section 3.0 of Rule 4401. [District Rule 4401]

Section 6.1.4 states the inspection log shall be maintained pursuant to Section 6.4. The following condition will be listed ATC S-1114-126-0 to ensure compliance:

- Operator of any steam-enhanced crude oil production well shall keep an inspection log maintained pursuant to Section 6.4 of Rule 4401. [District Rule 4401]

Section 6.1.5 states records of each calibration of the portable hydrocarbon detection instrument utilized for inspecting components, including a copy of current calibration gas certification from the vendor of said calibration gas cylinder, the date of calibration, concentration of calibration gas, instrument reading of calibration gas before adjustment, instrument reading of calibration gas after adjustment, calibration gas expiration date, and calibration gas cylinder pressure at the time of calibration. Therefore, the following condition will be listed ATC S-1114-126-0 to ensure compliance:

- Records of each calibration of the portable hydrocarbon detection instrument utilized for inspecting components, including a copy of current calibration gas certification from the vendor of said calibration gas cylinder, the date of calibration, concentration of calibration gas, instrument reading of calibration gas before adjustment, instrument reading of calibration gas after adjustment, calibration gas expiration date, and calibration gas cylinder pressure at the time of calibration shall be maintained. [District Rule 4401]

Section 6.1.6 states that an operator shall maintain copies at the facility of the training records of the training program operated pursuant to Section 6.5. Therefore, the following condition will be listed ATC S-1114-126-0 to ensure compliance:

- An operator shall maintain copies at the facility of the training records of the training program operated pursuant to Section 6.5 of Rule 4401. [District Rule 4401]

Section 6.1.7 states that an operator shall keep a copy of the APCO-approved Operator Management Plan at the facility. Therefore, the following condition will be listed ATC S-1114-126-0 to ensure compliance:

- Operator shall keep a copy of the APCO-approved Operator Management Plan at the facility. [District Rule 4401]

Sections 6.1.8, 6.1.9, and 6.1.10 specify recordkeeping and submission requirements for gauge tanks. This permit covers thermally enhanced oil recovery wells and does not include any gauge tanks. Therefore, the requirements of these sections are not applicable to this operation and no further discussion is required.

Section 6.2, Compliance Source Testing

Section 6.2.1 requires that an operator shall source test annually all vapor collection and control systems used to control emissions from steam-enhanced crude oil production well vents to determine control efficiency of the device(s) used for destruction or removal of VOC. Compliance testing shall be performed annually by source testers certified by ARB. Testing shall be performed during June, July, August, or September of each year if the system's control efficiency is dependent upon ambient air temperature.

Section 6.2.2 states that the APCO may waive the annual testing requirement of Section 6.2.1 if all uncondensed VOC emissions collected by a vapor collection and control system are incinerated in fuel burning equipment, an internal combustion engine or in a flare.

Therefore, the following conditions will be listed ATC S-1114-126-0 to ensure compliance:

- An operator shall source test annually all vapor collection and control systems used to control emissions from steam-enhanced crude oil production well vents to determine the control efficiency of the device(s) used for destruction or removal of VOC. Compliance testing shall be performed annually by source testers certified by ARB. Testing shall be performed during June, July, August, or September of each year if the system's control efficiency is dependent upon ambient air temperature. [District Rule 4401]
- If approved by EPA, ARB, and the APCO, an operator need not comply with the annual testing requirement of Section 6.2.1 if all uncondensed VOC emissions collected by a vapor collection and control system are incinerated in fuel burning equipment, an internal combustion engine or in a smokeless flare. [District Rule 4401]

Section 6.2.3 specifies compliance testing requirements for gauge tanks. This permit covers thermally enhanced oil recovery wells and does not include any gauge tanks. Therefore, the requirements of this section are not applicable to this operation and no further discussion is required.

Section 6.3, Test Methods

Section 6.3.1 specifies that the control efficiency of any VOC control device, measured and calculated as carbon, shall be determined by EPA Method 25, except when the outlet concentration must be below 50 ppm in order to meet the standard, in which case EPA Method 25a may be used. EPA Method 18 may be used in lieu of EPA Method 25 or EPA Method 25a provided the identity and approximate concentrations of the analytes/compounds in the sample gas stream are known before analysis with the gas chromatograph and the gas chromatograph is calibrated for each of those known analyte/compound to ensure that the VOC concentrations are neither under- or over-reported.

Therefore, the following condition will be listed ATC S-1114-126-0 to ensure compliance:

- The control efficiency of any VOC control device, measured and calculated as carbon, shall be determined by EPA Method 25, except when the outlet concentration must be below 50 ppm in order to meet the standard, in which case EPA Method 25a may be used. EPA Method 18 may be used in lieu of EPA Method 25 or EPA Method 25a provided the identity and approximate concentrations of the analytes/compounds in the sample gas stream are known before analysis with the gas chromatograph and the gas chromatograph is calibrated for each of those known analyte/compound to ensure that the VOC concentrations are neither under- or over-reported. [District Rule 4401]

Section 6.3.2 requires that the VOC content shall be shall be analyzed by using the latest revision of ASTM Method E168, E169, or E260 as applicable. Analysis of halogenated exempt compounds shall be analyzed by CARB Method 432. Therefore, the following condition will be listed ATC S-1114-126-0 to ensure compliance:

- VOC content shall be analyzed by using the latest revision of ASTM Method E168, E169, or E260 as applicable. Analysis of halogenated exempt compounds shall be performed by using ARB Method 432. [District Rule 4401]

Section 6.3.3 specifies that leak detection shall be performed with a portable hydrocarbon detection instrument in accordance with EPA Method 21. Where safety is a concern, such as measuring leaks from compressor seals or pump seals when the shaft is rotating, a person shall measure leaks by placing the instrument probe inlet at a distance of one (1) centimeter or less from the surface of the component interface. Therefore, the following condition will be listed ATC S-1114-126-0 to ensure compliance:

- Leak inspection, other than audio-visual, and measurements of gaseous leak concentrations shall be conducted according to EPA Method 21 using an appropriate portable hydrocarbon detection instrument calibrated with methane. The instrument shall be calibrated in accordance with the procedures specified in EPA Method 21 or the manufacturer's instruction, as appropriate, not more than 30 days prior to its use. The operator shall record the calibration date of the instrument. Where safety is a concern, such as measuring leaks from compressor seals or pump seals when the shaft is rotating, a person shall measure leaks by placing the instrument probe inlet at a distance of one (1) centimeter or less from the surface of the component interface. [District Rule 4401]

Section 6.3.4 requires that the VOC content by weight percent (wt.%) shall be determined using American Society of Testing and Materials (ASTM) D1945 for gases and South Coast Air Quality Management District (SCAQMD) Method 304-91 or the latest revision of ASTM Method E168, E169 or E260 for liquids. Therefore, the following condition will be listed ATC S-1114-126-0 to ensure compliance:

- The VOC content by weight percent (wt.%) shall be determined using American Society of Testing and Materials (ASTM) D1945 for gases and South Coast Air Quality Management District (SCAQMD) Method 304-91 or the latest revision of ASTM Method E168, E169 or E260 for liquids. [District Rule 4401]

Section 6.4, Inspection Log

Section 6.4 states an operator shall maintain an inspection log in which an operator records, at a minimum, all of the following information for each inspection performed:

6.4.1 The total number of components inspected, and the total number and percentage of leaking components found by component type.
6.4.2 The location, type, and name or description of each leaking component and description of any unit where the leaking component is found.
6.4.3 The date of leak detection and the method of leak detection.

6.4.4 For gaseous leaks, the leak concentration in ppmv, and for liquid leaks record whether the leak is a major liquid leak or a minor liquid leak.

6.4.5 The date of repair, replacement, or removal from operation of leaking components.

6.4.6 The identify and location of essential components and critical components found leaking that cannot be repaired until the next process unit turnaround or not later than one year after leak detection, whichever comes earlier.

6.4.7 The methods used to minimize the leak from essential components and critical components found leaking that cannot be repaired until the next process unit turnaround or not later than one year after leak detection, whichever comes earlier.

6.4.8 The date of re-inspection and the leak concentration in ppmv after the component is repaired or is replaced.

6.4.9 The inspector's name, business mailing address, and business telephone number.

6.4.10 The date and signature of the facility operator responsible for the inspection and repair program certifying the accuracy of the information recorded in the log.

Therefore, the following condition will be listed ATC S-1114-126-0 to ensure compliance:

- Operator shall maintain an inspection log in which an operator records, at a minimum, all of the following information for each inspection performed: The total number of components inspected, total number and percentage of leaking components found by component type, location, type, and name or description of each leaking component and description of any unit where the leaking component is found, date of leak detection and the method of leak detection. For gaseous leaks, the leak concentration in ppmv, and for liquid leaks record whether the leak is a major liquid leak or a minor liquid leak. the date of repair, replacement, or removal from operation of leaking components, identify and location of essential components and critical components found leaking that cannot be repaired until the next process unit turnaround or not later than one year after leak detection, whichever comes earlier, methods used to minimize the leak from essential components and critical components found leaking that cannot be repaired until the next process unit turnaround or not later than one year after leak detection, whichever comes earlier, the date of re-inspection and the leak concentration in ppmv after the component is repaired or is replaced, the inspector's name, business mailing address, and business telephone number, date and signature of the facility operator responsible for the inspection and repair program certifying the accuracy of the information recorded in the log. [District Rule 4401]

Section 6.5, Employee Training Program

An operator shall establish and implement an employee training program for inspecting and repairing components and recordkeeping procedures, as necessary. Therefore, the following condition will be listed ATC S-1114-126-0 to ensure compliance:

- An operator shall establish and implement an employee training program for inspecting and repairing components and recordkeeping procedures, as necessary. [District Rule 4401]

Section 6.6, Operator Management Plan

Section 6.6 states that by June 30, 2008, an operator whose existing wells are subject to this rule or whose existing wells are exempt pursuant to Section 4.0 of this rule on or before December 14, 2006 shall prepare and submit an Operator Management Plan for approval by the APCO. An operator may use diagrams, charts, spreadsheets, or other methods approved by the APCO to describe the information required by Section 6.6.4 through Section 6.6.7 below. The Operator Management Plan shall include, at a minimum, all of the following information:

6.6.1 A description of all wells and all associated VOC collection and control systems subject to this rule, and all wells and all associated VOC collection and control systems that are exempt pursuant to Section 4.0 of this rule.

6.6.2 Identification and description of any known hazard that might affect the safety of an inspector.

6.6.3 Except for pipes, the number of components that are subject to this rule by component type.

6.6.4 Except for pipes, the number and types of major components, inaccessible components, unsafe-to-monitor components, critical components, and essential components that are subject to this rule and the reason(s) for such designation.

6.6.5 Except for pipes, the location of components subject to the rule (components may be grouped together functionally by process unit or facility description).

6.6.6 Except for pipes, components exempt pursuant to Section 4.8 (except for components buried below ground) may be described in the Operator Management Plan by grouping them functionally by process unit or facility description. The results of any laboratory testing or other pertinent information to demonstrate compliance with the applicable exemption criteria for components for which an exemption is being claimed pursuant to Sections 4.8 shall be submitted with the Operator Management Plan.

6.6.7 A detailed schedule of an operator's inspections of components to be conducted as required by this rule and whether the operator inspections of components required by this rule will be performed by a qualified contractor or by an in-house team.

6.6.8 A description of the training standards for personnel that inspect and repair components.

6.6.9 A description of the leak detection training for conducting the test method specified in Section 6.3.3 for new operators, and for experienced operators, as necessary.

Section 6.7 states that by January 30 of each year after 2008, an operator shall submit to the APCO for approval, in writing, an annual report indicating any changes to an existing Operator Management Plan.

Section 6.8 states that the APCO shall provide written notice to the operator of the approval or incompleteness of a new or revised Operator Management Plan within 60 days of receiving such Operator Management Plan. If the APCO fails to respond in writing within 60 days after the date of receiving the Operator Management Plan, it shall be deemed approved. No provision of the Operator Management Plan, approved or not, shall conflict with or take precedence over any provision of this rule.

Therefore, the following conditions will be listed ATC S-1114-126-0 to ensure compliance:

- Permittee shall maintain a copy of the latest APCO-approved Operator Management Plan (OMP) at the facility and make it available to the APCO, ARB, and US EPA upon request. [District Rule 4401]
- By January 30 of each year, permittee shall submit to the APCO for approval, in writing, an annual report indicating any changes to the existing, approved OMP. [District Rule 4401]
- In accordance with the approved OMP, permittee shall meet all applicable operating, leak standards, inspection and re-inspection, leak repair, record keeping, and notification requirements of Rule 4401. [District Rule 4401]

Section 7.0, Compliance Schedule

Section 7.0 establishes the compliance schedule requirements for existing and new steam-enhanced crude oil production wells. These are similar to existing steam-enhanced crude oil production wells and will be operating in compliance with the requirements of this rule. Therefore, no further discussion is required.

Rule 4407 In-Situ Combustion Well Vents

The purpose of this rule is to implement federally enforceable emission limitations for in-situ combustion well vents. This rule is applicable to all crude oil production wells where production has been enhanced by in-situ combustion.

This facility does not have in-situ combustion well vents. In addition, in order to not have the wells associated with these TEOR operations subject to Rule 4407, the wells associated with these permit units shall not lie within 1,000 feet of an air injection well used for in-situ combustion. Therefore, the following condition will be listed ATC S-1114-126-0 to ensure compliance:

- The crude oil production from wells associated with this permit unit shall not lie within 1,000 feet of an air injection well used for in-situ combustion. [District Rule 4407]

Rule 4623 Storage of Organic Liquids

This Rule applies to any tank with a capacity of 1,100 gallons or greater in which any organic liquid is placed, held, or stored.

Section 5.1.1 specifies the VOC control system requirements. An operator shall not place, hold, or store organic liquid in any tank unless such tank is equipped with a VOC control system identified in Table 1. The specifications for the VOC control system are described in Sections 5.2, 5.3, 5.4, 5.5, and 5.6.

Tank Capacity (Gallons)	TVP and Crude Oil Throughput		
	0.5 psia to < 1.5 psia	1.5 psia to < 11 psia	≥11.0 psia
(Group C) >39,600	Internal floating roof, or external floating roof, or vapor recovery system	Internal floating roof, or external floating roof, or vapor recovery system	Pressure vessel or vapor recovery system

The emissions from the tanks (ATCs S-1114-127-0, -128-0, -129-0, -130-0, -130-1 and -132-0) will be controlled with a vapor recovery system listed on permit unit S-1114-127-0 with a control efficiency of at least 95%.

Section 5.6.1 requires fixed roof tanks with vapor recovery systems to be fully enclosed and maintained in a leak-free condition. The vapor recovery system shall consist of a closed system that collects all VOCs from the storage tank(s), and a VOC control device. The vapor recovery system shall be maintained in a leak-free condition. The VOC control device shall be one of the options listed in Sections 5.6.1.1 and 5.6.1.2. The following condition will be included on ATCs S-1114-127-0, -128-0, -129-0, -130-0, -131-0 and -132-0 to ensure compliance:

- The tank shall be equipped with a vapor recovery system consisting of a closed vent system that collects all VOCs from the storage tank, and a VOC control device. The vapor recovery system shall be APCO-approved and maintained in leak-free condition. The VOC control device shall be either of the following: a vapor return or condensation system that connects to a gas pipeline distribution system, or an approved VOC destruction device that reduces the inlet VOC emissions by at least 95% by weight as determined by the test method specified in Section 6.4.6. [District Rules 4623]
- A leak-free condition is defined as a condition without a gas leak or a liquid leak. A gas leak is defined as a reading in excess of 10,000 parts per million by volume (ppmv), as methane, above background on a portable hydrocarbon detection instrument that is calibrated with methane in accordance with EPA Method 21. A liquid leak is defined as the dripping of organic liquid at a rate of more than 3 drops per minute. [District Rules 4623]

Section 5.6.2 requires any tank gauging or sampling device on a tank vented to the vapor recovery system to be equipped with a leak-free cover that shall be closed at all times

except during gauging or sampling. Therefore, the following condition will be included on ATCs S-1114-127-0, -128-0, -129-0, -130-0, -130-1 and -132-0 to ensure compliance:

- Any tank gauging or sampling device on a tank vented to the vapor recovery system shall be equipped with a leak-free cover which shall be closed at all times except during gauging or sampling. [District Rules 2201 and 4623]

Section 5.6.3 requires all piping, valves, and fitting to be constructed and maintained in a leak-free condition. Therefore, the following condition will be included on ATCs S-1114-127-0, -128-0, -129-0, -130-0, -130-1 and -132-0 to ensure compliance:

- All piping, valves, and fittings shall be constructed and maintained in leak-free condition. [District Rules 2201 and 4623]

Section 6.0 specifies the administrative requirements of this rule, including inspection and recordkeeping requirements.

Compliance with the requirements of this rule is expected.

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 SO_2, 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:

Volume $SO_2 = \frac{n\,RT}{P}$

With:

N = moles SO_2

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

P (Standard Pressure) = 14.7 psi

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

$$\frac{0.0143lb - SOx}{MMBtu} \times \frac{MMBtu}{8{,}578\,dscf} \times \frac{1lb \cdot mol}{64\,lb} \times \frac{10.73\,psi \cdot ft^3}{lb \cdot mol \cdot °R} \times \frac{520°R}{14.7\,psi} \times \frac{1{,}000{,}000 \cdot parts}{million} = 9.9\frac{parts}{million}$$

$$SulfurConcentration = 9.9\frac{parts}{million} < 2{,}000 \text{ ppmv (or 0.2\%)}$$

Compliance for permit units S-1114-9-18 and -133-0 have been demonstrated above. Therefore, continued compliance with District Rule 4801 requirements is expected.

California Health & Safety Code 42301.6 (School Notice)

This site is not located within 1,000 feet of a school. Therefore, pursuant to California Health and Safety Code 42301.6, a school notice is not required.

California Environmental Quality Act (CEQA)

The proposed project is located in Kern County and is thus, subject to the *Kern County Zoning Ordinance – 2015 (C) Focused on Oil and Gas Local Permitting.* The *Kern County Zoning Ordinance* was developed by the Kern County Planning Agency as a comprehensive set of goals, objectives, policies, and standards to guide development, expansion, and operation of oil and gas exploration within Kern County. In 2015, Kern County revised their *Kern County Zoning Ordinance* in regards to exploration, drilling and production of hydrocarbon resources projects The revised Kern County Zoning Ordinance establishes a written process (Conformity Review permit process or Minor Activity permit) by which oil and gas exploration projects involving site-specific operations can be evaluated to determine whether the environmental effects of the operation were covered in the *Kern County Zoning Ordinance – 2015 (C) Focused on Oil and Gas Local Permitting* Environmental Impact Report (EIR). This EIR was certified by the Kern County Board of Supervisors on November 9, 2015.

As a responsible agency the District complies with CEQA by considering the EIR prepared by the Lead Agency, and by reaching its own conclusion on whether and how to approve the project involved (CCR §15096). The District has reviewed the EIR prepared by the Lead Agency for the project and finds it to be adequate. To reduce project related impacts on air quality, the District requires air pollutant emission controls on the project as required by Best Available Control Technology (BACT) under District Rule 2201 (New and Modified Stationary Source Review). In addition, the District is requiring the applicant to surrender emission reduction credits (ERC) for stationary source emissions above the offset threshold. For stationary source emissions that are below the offset threshold, i.e. not required to surrender ERCs, and for non-stationary source emissions, Kern County will enter into an Oil and Gas Emission Reduction Agreement (OG-ERA) with the District. Pursuant to the OG-ERA, the applicant shall pay fees or reduce emissions from other sources to fully offset project emissions that are not required to be offset by District permit rules and regulations.

Thus, the District concludes that through a combination of project design elements, permit conditions, and the OG-ERA, the project will be fully mitigated to result in no net increase in emissions. Pursuant to CCR §15096, prior to project approval and issuance of ATCs the District will prepare findings. Upon project approval the District will file a Notice of Determination with Kern County.

Indemnification Agreement and Letter of Credit

According to District Policy APR 2010 (CEQA Implementation Policy), when the District is the Lead or Responsible Agency for CEQA purposes, an indemnification agreement and/or a letter of credit may be required. The decision to require an indemnity agreement and/or a letter of credit is based on a case-by-case analysis of a particular project's potential for litigation risk, which in turn may be based on a project's potential to generate

public concern, its potential for significant impacts, and the project proponent's ability to pay for the costs of litigation without a letter of credit, among other factors.

The proposed project is a potential operation of public concern in the Valley (Oil and Gas) and triggers Best Available Control Technology (BACT). The District has determined that an Indemnification Agreement and Letter of Credit are required.

Greenhouse Gas (GHG) Significance Determination

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

On December 17, 2009, the District's Governing Board adopted a policy, APR 2005, *Addressing GHG Emission Impacts for Stationary Source Projects Under CEQA When Serving as the Lead Agency,* for addressing GHG emission impacts when the District is Lead Agency under CEQA and approved the District's guidance document for use by other agencies when addressing GHG impacts as lead agencies under CEQA. Under this policy, the District's determination of significance of project-specific GHG emissions is founded on the principal that projects with GHG emission reductions consistent with AB 32 emission reduction targets are considered to have a less than significant impact on global climate change. Consistent with District Policy 2005, projects complying with an approved GHG emission reduction plan or GHG mitigation program, which avoids or substantially reduces GHG emissions within the geographic area in which the project is located, would be determined to have a less than significant individual and cumulative impact for GHG emission.

The California Air Resources Board (ARB) adopted a Cap-and-Trade regulation as part one of the strategies identified for AB 32. This Cap-and-Trade regulation is a statewide plan, supported by a CEQA compliant environmental review document, aimed at reducing or mitigating GHG emissions from targeted industries. Facilities subject to the Cap-and-Trade regulation are subject to an industry-wide cap on overall GHG emissions. Any growth in emissions must be accounted for under that cap such that a corresponding and equivalent reduction in emissions must occur to allow any increase. Further, the cap decreases over time, resulting in an overall decrease in GHG emissions.

Under District policy APR 2025, *CEQA Determinations of Significance for Projects Subject to ARB's GHG Cap-and-Trade Regulation*, the District finds that the Cap-and-Trade is a regulation plan approved by ARB, consistent with AB32 emission reduction targets, and supported by a CEQA compliant environmental review document. As such, consistent with District Policy 2005, projects complying project complying with Cap-and-Trade requirements are determined to have a less than significant individual and cumulative impact for GHG emissions.

The GHG emissions increases associated with this project result from the combustion of fossil fuel(s), other than jet fuel, delivered from suppliers subject to the Cap-and-Trade regulation. Therefore, as discussed above, consistent with District Policies APR 2005 and APR 2025, the District concludes that the GHG emissions increases associated with this project would have a less than significant individual and cumulative impact on global climate change.

IX. Recommendation

Compliance with all applicable rules and regulations is expected. Issue Authorities to Construct S-1114-9-18, -126-0, -127-0, -128-0, -129-0, -130-0, -131-0, -132-0, and -133-0 subject to the permit conditions on the attached draft Authorities to Construct in Appendix H.

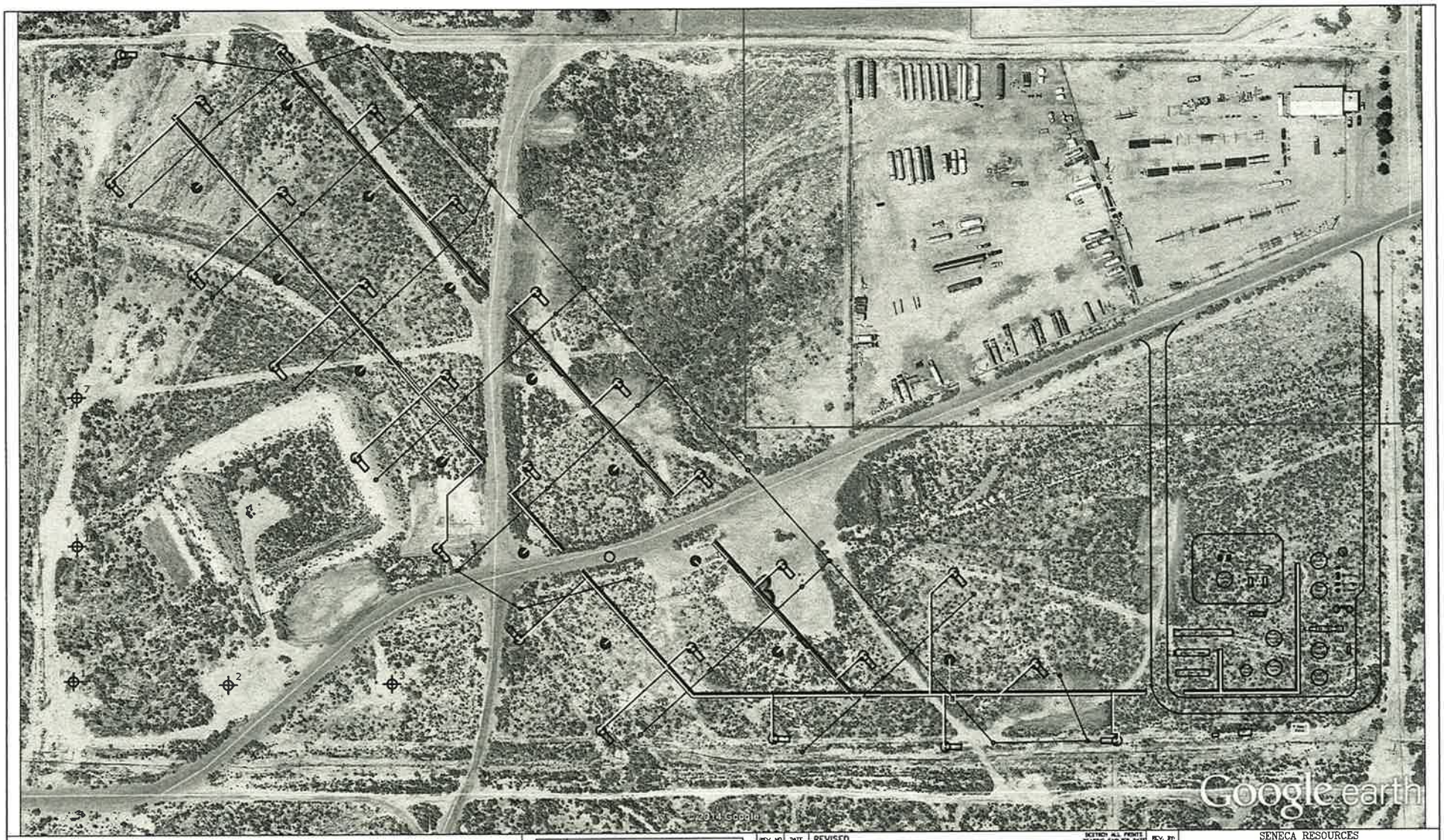
X. Billing Information

Annual Permit Fees			
Permit Number	Fee Schedule	Fee Description	Annual Fee
S-1114-9-18	3020-02-G	10.0 MMBtu/hr	$855
S-1114-126-0	3020-09-A	50 Wells	$467
S-1114-127-0	3020-05-E	126,000 Gal	$246
S-1114-128-0	3020-05-E	126,000 Gal	$246
S-1114-129-0	3020-05-D	84,000 Gal	$185
S-1114-130-0	3020-05-D	84,000 Gal	$185
S-1114-131-0	3020-05-C	42,000 Gal	$135
S-1114-132-0	3020-06	Misc.	$105
S-1114-133-0	3020-02-F	4.9 MMBtu/hr	$637

Appendices

A: Project location drawing
B. BACT Analysis
C: RMR/AAQA
D: Statewide Compliance Form
E: Title V Compliance Certification Form
F: Quarterly Net Emissions Change
G Current PTO S-1114-9-16
H Draft ATCs

APPENDIX A
Project location drawing



Draft

SENECA RESOURCES

REV. NO.	DATE	REVISED	DESTROY ALL PRINTS BEARING EARLIER DATE	REV. BY

SENECA RESOURCES
VISALIA LEASE PLOT PLAN – DESIGN D
FELLOWS, CA.
KERN COUNTY

SCALE: NONE
PLOT AT: ANSI B
ENGINEER:
DATE STARTED: 5/29/2014

FILE:
LAYER(S):
CHANGED BY:
LAST CHANGED: 10/28/2017

REVISION: D
SHEET: 1/1

APPENDIX B
BACT Analysis For S-1114-133-0

BACT Analysis for NOx Emissions:

Step 1 - Identify All Possible Control Technologies

The District adopted District Rule 4320 on October 16, 2008. The NO_X emission limit requirements in District Rule 4320 are lower than the current BACT limits; therefore a project specific BACT analysis will be performed to determine BACT for this project. District Rule 4320 includes a compliance option that limits units greater than 5 MMBtu/hr and less than 20 MMBtu/hr to 9 ppm @ 3% O_2. This emission limit is Achieved in Practice control technology for the BACT analysis. District Rule 4320 also contains an enhanced schedule option that allows applicants additional time to meet the requirements of the rule. The enhanced schedule NO_X emission limit requirement is 6 ppmv @ 3% O_2. Since this is an enhanced option in the rule, it will be considered the Technologically Feasible control technology for the BACT analysis.

The following are possible control technologies:

1. 9 ppmvd @ 3% O_2 - Achieved in Practice.
2. 6 ppmvd @ 3% O_2 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. 9 ppmvd @ 3% O_2 - Achieved in Practice.
2. 6 ppmvd @ 3% O_2 with SCR – Technologically Feasible

Step 4 - Cost Effectiveness Analysis

A cost effective analysis is required for technologically feasible control options that are not proposed. EPA is currently at work updating the EPA Air Pollution Control Cost Manual. Chapter 2 of this manual covers SCR is in draft form and under public comment since June, 2015. This draft chapter lists average capital cost for process heater of 10 MMBtu/hr at $19,200/MMBtu. Emission unit for S-1114-133-0 is 4.9 MMBtu/hr. Since analysis is for $/MMBtu, anyone of burner rating would produce same cost effective numbers.

Capital cost = $19,200/MMBtu x 4.9 MMBtu = $94,080

Annualized Capital Cost

Equivalent Annual Capital Cost (Capital Recovery)

$$A = P \frac{i(1+i)^n}{(1+i)^n - 1} \quad \text{where;}$$

A = Equivalent Annual Control Equipment Capital Cost
P = Present value of the control equipment, including installation cost
i = interest rate (use 10%, or demonstrate why alternate is more representative of the specific operation).
n = equipment life (assume 10 years or demonstrate why alternate is more representative of the specific operation)

Where

P = $115,200
I = 10%,
N = 10 years
A = $15,307/yr

Industrial Standard NO_X Emissions = 4.9 MMBtu/hr x 0.018 lb/MMBtu x 8760 hrs/year
= 773 lb/year

Tech. Feasible NO_X Emissions = 4.9 MMBtu/hr x 0.007 lb/MMBtu x 8760 hrs/year
= 300 lb/year

NOx reduction due to SCR:

Total reduction = Emissions $_{(15\ ppmv)}$ – Emissions $_{(6\ ppmv)}$
Total reduction = (773 lb/yr – 300 lb/yr)/2000 lb/ton
Total reduction = 0.24 ton/yr

Cost effectiveness

Cost effectiveness = $15,307/yr/ 0.24 ton/yr
Cost effectiveness = $62,654/ ton NOx

The cost effectiveness is greater than the $24,500/ton NOx cost effectiveness threshold of the District BACT policy. Therefore the use of SCR with ammonia injection is not cost effective and is not required as BACT for NOx.

Step 5 - Select BACT

BACT is satisfied by the applicant's proposal to meet a NOx limit of 9 ppmvd @ 3% O_2 to be achieved with a Ultra Low NO_x burner.

BACT Analysis for CO Emissions:

a. Step 1 - Identify all control technologies

The SJVUAPCD BACT Clearinghouse Guideline 1.8.5 has been rescinded for NO_X: however, Guideline 1.8.5 would still apply for CO. The following are possible control technologies:

1) Natural gas with LPG backup or Propane fired

b. Step 2 - Eliminate technologically infeasible options

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

c. Step 3 - Rank remaining options by control effectiveness

1) Natural gas with LPG backup or Propane fired

d. Step 4 - Cost Effectiveness Analysis

There are no other technologically feasible control options; therefore, a cost effective analysis is not required.

e. Step 5 - Select BACT

BACT for CO emissions is that unit being fired on natural gas

1. BACT Analysis for VOC Emissions:

a. Step 1 - Identify all control technologies

The SJVUAPCD BACT Clearinghouse Guideline 1.8.5 has been rescinded for NO_X: however, Guideline 1.8.5 would still apply for VOC. The following are possible control technologies:

1) Natural gas with LPG backup or Propane fired

b. Step 2 - Eliminate technologically infeasible options

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

c. Step 3 - Rank remaining options by control effectiveness

1) Natural gas with LPG backup or Propane fired

d. Step 4 - Cost Effectiveness Analysis

There are no other technologically feasible control options; therefore, a cost effective analysis is not required.

e. Step 5 - Select BACT

BACT for VOC emissions is that unit being fired on natural gas.

APPENDIX C
RMR/AAQA Memo

San Joaquin Valley Air Pollution Control District
Risk Management Review
REVISED

To:	Kamaljit Sran – Permit Services
From:	Cheryl Lawler – Technical Services
Date:	August 24, 2015
Facility Name:	Seneca Resources
Location:	Sec 25, T31S, R22E
Application #(s):	S-1114-126-0 thru 133-0, & 9-18
Project #:	S-1143503

A. RMR SUMMARY

RMR Summary			
Categories	**Tanks, Wells, Heater, & Heater Treater (Units 126-0 thru 133-0, & 9-18)**	**Project Totals**	**Facility Totals**
Prioritization Score	2.39	2.39	>1
Acute Hazard Index	0.02	0.02	0.15
Chronic Hazard Index	0.00	0.00	0.12
Maximum Individual Cancer Risk	**7.22E-07**	7.22E-07	10.7E-06
T-BACT Required?	**No**		
Special Permit Conditions?	**Yes**		

Proposed Permit Conditions

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

Units 133-0 & 133-0, & 9-18

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

I. Project Description

Technical Services received a request on August 11, 2015, to re-run an Ambient Air Quality Analysis (AAQA) and Risk Management Review (RMR) for 50 TEOR wells, 5 oilfield tanks, a WEMCO unit, a natural gas heater, and a natural gas heater treater. Because of a request from District CEQA staff and the processing engineer, the project was re-run using the District's new risk thresholds.

II. Analysis

For the wells and tanks, the processing engineer calculated and supplied VOC fugitive emission rates. For the heater and heater treater, emissions were calculated using 2001 Ventura County Air Pollution Control District emission factors for natural gas fired external combustion. In accordance with the District's *Risk Management Policy for Permitting New and Modified Sources* (APR 1905-1, March 2, 2001), risks from the proposed project were prioritized using the procedures in the 1990 CAPCOA Facility Prioritization Guidelines. The prioritization score for the proposed project was greater than 1.0 (see RMR Summary Table). Therefore, a refined Health Risk Assessment was required and performed for the project. AERMOD was used with area and point source parameters outlined below and concatenated 5-year meteorological data from Fellows to determine maximum dispersion factors at the nearest residential and business receptors. These dispersion factors were input into the San Joaquin Valley APCD's Hazard Assessment and Reporting Program (SHARP) and the Air Dispersion Modeling and Risk Tool (ADMRT) of the Hot Spots Analysis and Reporting Program Version 2 (HARP 2) to calculate the chronic and acute hazard indices and the carcinogenic risk for the project.

The following parameters were used for the review:

Analysis Parameters			
Units 133-0 & 9-18 Source Type	Point	**Unit 126-0 Source Type**	Area
Stack Height (m)	5.2 & 6.1	**Area Size (m^2)**	65.7[1]
Stack Diameter (m)	0.46 & 0.76	**Area Release Height (m)**	1
Stack Gas Temperature (K)	433 & 522	**Units 127-0 thru 132-0 Source Type**	Circular Area
Stack Gas Velocity (m/sec)	5.69 & 1.14	**Area Size (m^2)**	151.7[2]
Closest Receptor (m)	213.36	**Area Release Height**	6
Type of Receptor	Business	**Location Type**	Rural

[1]For modeling purposes, assigned all VOC emissions to worst case location well.
[2]For modeling purposes, assigned all VOC emissions to worst case location tank.

For the heater and heater treater, Technical Services also performed modeling for criteria pollutants NOx, CO, SOx, and PM_{10}; as well as the RMR. The emission rates used for criteria pollutant modeling were 420 & 1146 lbs/yr NOx, 1425 & 3889 lbs/yr CO, 110 & 300 lbs/yr SOx, and 270 & 736 lbs/yr PM_{10}.

The results from the Criteria Pollutant Modeling are as follows:

Criteria Pollutant Modeling Results*

Natural Gas Combustion	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[1]	Pass[1]

*Results were taken from the attached PSD spreadsheet.
[1]The criteria pollutants are below EPA's level of significance as found in 40 CFR Part 51.165 (b)(2).

III. Conclusions

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

The Acute and Chronic Indices are below 1.0; and the maximum individual Cancer Risk associated with the project is **7.22E-07**, which is less than the 1 in a million threshold. In accordance with the District's Risk Management Policy, the project is approved **without** Toxic Best Available Control Technology (T-BACT).

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

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

Attachments

RMR Request
Emissions Speciation Worksheets
Prioritization
AAQA Results
Facility Summary
AERMOD Non-Regulatory Option Checklist

APPENDIX D
Statewide Compliance Form

San Joaquin Valley

Unified Air Pollution Control District

DETERMINATION OF COMPLIANCE STATEMENT

Company Name: Seneca Resources	Facility ID: S-1114; S-3007; S-3755

All major Stationary Source(s) owned or operated by Seneca Resources in California that are subject to emission limitations are in compliance or on a schedule for compliance with all applicable emission limitations and standards.

Brad Elliott August 25, 2014

Signature of Responsible Official Date

Brad Elliott

Name of Responsible Official (please print)

Vice President – West Division

Title of Responsible Official (please print)

Deliver to:

San Joaquin Valley Unified
Air Pollution Control District
34946 Flyover Court
Bakersfield, CA 93308

APPENDIX E
Title V Compliance Form

San Joaquin Valley
Unified Air Pollution Control District

TITLE V MODIFICATION - COMPLIANCE CERTIFICATION FORM

I. TYPE OF PERMIT ACTION (Check appropriate box)

[X] SIGNIFICANT PERMIT MODIFICATION
[ ] MINOR PERMIT MODIFICATION
[ ] ADMINISTRATIVE AMENDMENT

COMPANY NAME: **Seneca Resources**	FACILITY ID: **S– 1114**
1. Type of Organization:[X] Corporation [ ] Sole Ownership [ ] Government [ ] Partnership [ ] Utility	
2. Owner's Name:	
3. Agent to the Owner:	

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

(BE) 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).

(BE) 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.

(BE) Corrected information will be provided to the District when I become aware that incorrect or incomplete information has been submitted.

(BE) Based on information and belief formed after reasonable inquiry, information and statements in the submitted application package, including all accompanying reports, and required certifications are true accurate and complete.

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

Brad Elliott — August 25, 2014

Signature of Responsible Official — Date

Brad Elliott

Name of Responsible Official (please print)

Vice President – West Division

Title of Responsible Official (please print)

APPENDIX F
Quarterly Net Emissions Change

Quarterly Net Emissions Change (QNEC)

The QNEC is used to complete the emissions profile for the District's PAS database. It is assumed that the unit's annual emissions are evenly distributed throughout the year. Therefore, for the proposed project the QNEC is calculated as follows:

QNEC = [Annual PE2 (lb/year) – Annual PE1 (lb/year)] ÷ 4 Quarters/year

Using the values in Sections VII.C.1 and VII.C.2 in the evaluation above, the QNEC is calculated in the following table:

QNEC for ATC S-1114-9-18			
Pollutant	Annual PE2 (lb/year)	Annual PE1 (lb/year)	QNEC (lb/qtr)
NOx	964	3,241	-569
SOx	254	88	41
PM_{10}	613	438	43
CO	3,241	7,358	-1,029
VOC	175	263	-22

QNEC for ATCs S-1114-1260-0 thru -132-0			
Pollutant	Annual PE2 (lb/year)	Annual PE1 (lb/year)	QNEC (lb/qtr)
NOx	--	--	--
SOx	--	--	--
PM_{10}	--	--	--
CO	--	--	--
VOC	0	0	0.0

QNEC for ATC S-1114-133-0			
Pollutant	Annual PE2 (lb/year)	Annual PE1 (lb/year)	QNEC (lb/qtr)
NOx	472	0	118
SOx	124	0	31
PM_{10}	300	0	75
CO	1,587	0	397
VOC	86	0	22

APPENDIX G
Current PTO S-1114-9-16

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1114-9-16 **EXPIRATION DATE:** 02/29/2016

SECTION: SE15 **TOWNSHIP:** 31S **RANGE:** 22E

EQUIPMENT DESCRIPTION:
10 MMBTU/HR GAS-FIRED C.E. NATCO M&M HEATER TREATER #3: DORMANT EMISSIONS UNIT

PERMIT UNIT REQUIREMENTS

1. This equipment shall not be operated for any reason until an Authority to Construct permit is issued approving all necessary retrofits required to comply with the applicable requirements of District Rule 4306 and all other applicable District regulations [District Rule 4306] Federally Enforceable Through Title V Permit
2. No modification to this unit shall be performed without an Authority to Construct for such modification(s), except for changes specified in conditions below. [District Rule 2010] Federally Enforceable Through Title V Permit
3. The fuel supply line shall be physically disconnected from this unit, or an alternate method approved by the APCO shall be instituted to ensure this unit is not operated. [District Rule 4306] Federally Enforceable Through Title V Permit
4. Unit shall be equipped with a permanently affixed mechanical stop on the positioner that shall used to control the inlet air butterfly valve and the natural gas supply valve to limit the quantity of natural gas to 4762 scf/hr (equivalent to 5 MMBtu/hr) for each independent burner. [District NSR Rule] Federally Enforceable Through Title V Permit
5. Maximum heat input of each burner shall be less than or equal to 5 million Btu per hour. [District NSR Rule] Federally Enforceable Through Title V Permit
6. Each burner's products of combustion shall not come into contact with the products of combustion of any other burner. [District NSR Rule] Federally Enforceable Through Title V Permit
7. Maximum emissions shall not exceed any of the following: PM10 - 0.005 lb/MMBtu, SOx (as SO2) - 0.001 lb/MMBtu, NOx (as NO2) - 30 ppmv @ 3% O2, VOC - 0.003 lb/MMBtu, or CO - 113 ppmv @ 3% O2. [District Rules 2201 and 4306] Federally Enforceable Through Title V Permit
8. Permittee shall demonstrate compliance with the sulfur oxide emissions limit by analysis of the fuel gas sulfur content at least annually. Records of fuel gas sulfur content analysis shall be kept for a period of five years and made available for District inspection upon request. [District NSR Rule] Federally Enforceable Through Title V Permit
9. Particulate matter emissions shall not exceed 0.1 grain/dscf at operating conditions, nor 0.1 grain/dscf calculated to 12% CO2, nor 10 lb/hr. [District Rule 4201 and District Rule 4301, 5.1 and 5.2.3] Federally Enforceable Through Title V Permit
10. Emissions of sulfur compounds from this unit shall not exceed 200 lb per hour, calculated as SO2. Compliance with this requirement may be demonstrated by testing the sulfur content of each fuel and determining the maximum hourly emissions of sulfur compounds by multiplying the sulfur content of each fuel in lb/MMBtu by the maximum heat input rating of the unit. [District Rule 2520, 9.3.2 and District Rule 4301, 5.2.1] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

11. If 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 D1072, D3031, D4084, D3246 or grab sample analysis by GC-FPD/TCD performed in the laboratory. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
12. 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 D1826 or D1945 in conjunction with ASTM D3588 for gaseous fuels. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
13. The concentration of sulfur compounds in the exhaust from this unit shall not exceed 0.2% by volume as measured on a dry basis over a 15 minute period. To demonstrate compliance with this requirement the operator shall test the sulfur content of each fuel source and demonstrate the sulfur content does not exceed 3.3% by weight for gaseous fuels. [District Rule 2520, 9.3.2, Kern County Rule 407] Federally Enforceable Through Title V Permit
14. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following requirements: SJVUAPCD Rules 4201, and 4301. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
15. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following requirements: Kern County Rules 407. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
16. The owner or operator of a boiler, steam generator, or process heater subject to the requirement of District Rule 4306 shall comply with all applicable deadlines in Table 2, Section 7.0 of the Rule. [District Rule 4306] Federally Enforceable Through Title V Permit

APPENDIX H
Draft ATCs

San Joaquin Valley
Air Pollution Control District

AUTHORITY TO CONSTRUCT

DRAFT

PERMIT NO: S-1114-9-18 **ISSUANCE DATE:** DRAFT

LEGAL OWNER OR OPERATOR: SENECA RESOURCES
MAILING ADDRESS: 4800 CORPORATE COURT
BAKERSFIELD, CA 93311

LOCATION: HEAVY OIL WESTERN
CA

SECTION: 25 **TOWNSHIP:** 31S **RANGE:** 22E

EQUIPMENT DESCRIPTION:
MODIFICATION OF 10 MMBTU/HR GAS-FIRED C.E. NATCO M&M HEATER TREATER #3 DORMANT EMISSIONS UNIT: REPLACE EXISTING BURNERS WITH TWO LESS THAN OR EQUAL TO 5.0 ULTRA LOW-NOX MMBTU/HR BURNERS

CONDITIONS

1. {1830} This Authority to Construct serves as a written certificate of conformity with the procedural requirements of 40 CFR 70.7 and 70.8 and with the compliance requirements of 40 CFR 70.6(c). [District Rule 2201] Federally Enforceable Through Title V Permit
2. {1831} Prior to operating with modifications authorized by this Authority to Construct, the facility shall submit an application to modify the Title V permit with an administrative amendment in accordance with District Rule 2520 Section 5.3.4. [District Rule 2520, 5.3.4] Federally Enforceable Through Title V Permit
3. The exhaust stacks 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]
4. 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
5. 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 2201] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

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

Seyed Sadredin, Executive Director / APCO

DRAFT

Arnaud Marjollet, Director of Permit Services
S-1114-9-18 Aug 4 2016 11:46AM – SRANK : Joint Inspection NOT Required

6. 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

7. 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

8. Heater treater shall only be fired on produced gas, PUC-quality gas, or PUC-regulated gas with a sulfur content not exceeding 1.0 gr S/100 scf. [District Rules 2201] Federally Enforceable Through Title V Permit

9. Valid purchase contracts, supplier certifications, tariff sheets, or transportation contracts may be used to satisfy the fuel sulfur content analysis, provided they establish the fuel sulfur concentration and higher heating value. [District Rule 4320] Federally Enforceable Through Title V Permit

10. Emissions shall not exceed any of the following limits: NOx; 9 ppmvd @ 3% O2 or 0.011 lb-NOx/MMBtu, 0.007 lb-PM10/MMBtu, CO; 50 ppmvd @ 3% O2 or 0.037 lb-CO/MMBtu, or VOC: 5 ppmv @ 3% O2 as methane or 0.002 lb-VOC/MMBtu. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit

11. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit

12. A source test to demonstrate compliance with NOx and CO emission limits shall be performed within 60 days of startup. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit

13. Source testing to measure natural gas-combustion NOx and CO emissions from this unit shall be conducted at least once every twelve (12) months (no more than 30 days before or after the required annual source test date). After demonstrating compliance on two (2) consecutive annual source tests, the unit shall be tested not less than once every thirty-six (36) months (no more than 30 days before or after the required 36-month source test date). 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

14. 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

15. 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 2201, 4305, 4306 and 4320] Federally Enforceable Through Title V Permit

16. The following test methods shall be used: NOX (ppmv) - EPA Method 7E or ARB Method 100, NOx (lb/MMBtu) - EPA Method 19; CO (ppmv) - EPA Method 10 or ARB Method 100; Stack gas oxygen (O2) - EPA Method 3 or 3A or ARB Method 100; stack gas velocities - EPA Method 2; Stack gas moisture content - EPA Method 4; and fuel hhv (MMBtu) - ASTM D 1826 or D 1945 in conjunction with ASTM D 3588. [District Rules 2201, 4305, 4306 and 4320] Federally Enforceable Through Title V Permit

17. The source test plan shall identify which basis (ppmv or lb/MMBtu) will be used to demonstrate compliance. [District Rules 2201, 4305, 4306 and 4320] Federally Enforceable Through Title V Permit

18. 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

19. 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 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] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

20. If the NOx or CO concentrations corrected to 3%, as measured by the portable analyzer, exceed the applicable emission limit, 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, 4306 and 4320] Federally Enforceable Through Title V Permit

21. All NOx, CO, and O2 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 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. Emission readings taken shall be averaged over a 15 consecutive-minute sample 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] Federally Enforceable Through Title V Permit

22. 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] Federally Enforceable Through Title V Permit

23. The permittee shall maintain records of: (1) the date and time of NOx, CO and O2 measurements, (2) the O2 concentration in percent by volume and the measured NOx 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] Federally Enforceable Through Title V Permit

24. 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. Unless otherwise specified in the PTO, 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 4320. For the purposes of permittee-performed alternate monitoring, emissions measurements may be performed at any time after the unit reaches conditions representative of normal operation. [District Rules 4305, 4306 and 4320] Federally Enforceable Through Title V Permit

25. Permittee shall demonstrate compliance with fuel gas sulfur content at least annually or whenever there is change in fuel gas source. [District Rules 1081and 4320] Federally Enforceable Through Title V Permit

26. Fuel gas sulfur content shall be determined using ASTM D1072, D3031, D4084, D3246 or grab sample analysis by GC-FPD/TCD performed in the laboratory. [District Rule 2201] Federally Enforceable Through Title V Permit

27. Permittee shall maintain accurate records of valid purchase contracts, supplier certifications, tariff sheets, or transportation contracts used to satisfy the fuel sulfur content analysis of fuel gas source, provided they establish the fuel sulfur concentration and higher heating value. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit

28. 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] Federally Enforceable Through Title V Permit

29. Prior to operating equipment under this Authority to Construct, permittee shall surrender NOx emission reduction credits for the following quantity of emissions: 1st quarter - 361 lb, 2nd quarter - 361 lb, 3rd quarter - 362 lb, and fourth quarter - 362 lb. These amounts include the applicable offset ratio specified in Rule 2201 Section 4.8 (as amended 4/21/11) for the ERC specified below. [District Rule 2201] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

30. ERC Certificate Number N-1338-2 (or certificates split from this certificate) 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. [Rule 2201] Federally Enforceable Through Title V Permit

31. Prior to operating equipment under this Authority to Construct, permittee shall surrender SOx emission reduction credits for the following quantity of emissions: 1st quarter - 95 lb, 2nd quarter - 95 lb, 3rd quarter - 95 lb, and fourth quarter - 96 lb. These amounts include the applicable offset ratio specified in Rule 2201 Section 4.8 (as amended 4/21/11) for the ERC specified below. [District Rule 2201] Federally Enforceable Through Title V Permit

32. ERC Certificate Number S-4590-5 (or a certificate split from this certificate) 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

33. Prior to operating equipment under this Authority to Construct, permittee shall surrender PM10 emission reduction credits for the following quantity of emissions: fourth quarter - 920 lb. This amount include the applicable offset ratio specified in Rule 2201 Section 4.8 (as amended 4/21/11) for the ERC specified below. [District Rule 2201] Federally Enforceable Through Title V Permit

34. ERC Certificate Number C-1360-4 (or a certificate split from this certificate) 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

35. Prior to operating equipment under this Authority to Construct, permittee shall surrender VOC emission reduction credits for the following quantity of emissions: 1st quarter - 65 lb, 2nd quarter - 66 lb, 3rd quarter - 66 lb, and fourth quarter - 66 lb. These amounts include the applicable offset ratio specified in Rule 2201 Section 4.8 (as amended 4/21/11) for the ERC specified below. [District Rule 2201] Federally Enforceable Through Title V Permit

36. ERC Certificate Number N-1336-1 (or a certificate split from this certificate) 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

San Joaquin Valley
Air Pollution Control District

AUTHORITY TO CONSTRUCT

DRAFT

PERMIT NO: S-1114-126-0 **ISSUANCE DATE:** DRAFT

LEGAL OWNER OR OPERATOR: SENECA RESOURCES
MAILING ADDRESS: 4800 CORPORATE COURT
BAKERSFIELD, CA 93311

LOCATION: HEAVY OIL WESTERN
CA

SECTION: 25 **TOWNSHIP:** 31S **RANGE:** 22E

EQUIPMENT DESCRIPTION:
UP TO 50 TEOR WELLS WITH CASING VENTS CONNECTED TO VAPOR RECOVERY SYSTEM INCLUDING FINFAN HEAT EXCHANGER, INLET SCRUBER, VAPOR COMPRESSOR, SULFATREAT UNIT WITH PIPING TO AUTHORIZED STEAM GENERATOR

CONDITIONS

1. {1830} This Authority to Construct serves as a written certificate of conformity with the procedural requirements of 40 CFR 70.7 and 70.8 and with the compliance requirements of 40 CFR 70.6(c). [District Rule 2201] Federally Enforceable Through Title V Permit
2. {1831} Prior to operating with modifications authorized by this Authority to Construct, the facility shall submit an application to modify the Title V permit with an administrative amendment in accordance with District Rule 2520 Section 5.3.4. [District Rule 2520, 5.3.4] Federally Enforceable Through Title V Permit
3. The VOC content of the well vent gas shall not exceed 10% by weight. [District Rules 2201 and 4401] Federally Enforceable Through Title V Permit
4. Operator shall conduct quarterly gas sampling for gas exiting the separator pressure vessel to qualify for exemption from fugitive component counts for components handling fluids with VOC content equal to or less than 10% by weight. If gas samples are equal to or less than 10% VOC by weight for 8 consecutive quarterly samplings, sampling frequency shall only be required annually. [District Rules 2201 and 4401] Federally Enforceable Through Title V Permit
5. All piping, valves, and fittings shall be constructed and maintained in a leak-free condition. [District Rules 2201 and 4401] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

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

Seyed Sadredin, Executive Director / APCO

DRAFT

Arnaud Marjollet, Director of Permit Services

S-1114-126-0 : Aug 2 2016 3:00PM -- SRANK : Joint Inspection NOT Required

6. A leak-free condition is defined as a condition without a gas leak. A gas leak is defined as a reading in excess of 10,000 ppmv, above background, as measured by a portable hydrocarbon detection instrument in accordance with the procedures specified in EPA Test Method 21. A reading in excess of 10,000 ppmv above background is a violation of this permit and shall be reported as a deviation. [District Rule 2201] Federally Enforceable Through Title V Permit

7. The inspection requirements of Section 5.4.1 through Section 5.4.6 of Rule 4401 shall not apply to components exclusively handling gas/vapor or liquid with a VOC content of ten percent by weight (10 wt %) or less, as determined by the test methods in Section 6.3.4 of Rule 4401. [District Rule 4401] Federally Enforceable Through Title V Permit

8. Gas and liquid leaks are as defined in Section 3.20 of Rule 4401. [District Rule 4401] Federally Enforceable Through Title V Permit

9. During the time any steam-enhanced crude oil production well is undergoing service or repair while the well is not producing, it shall be exempt from the emission control requirements of District Rule 4401, 5.0. [District Rule 4401] Federally Enforceable Through Title V Permit

10. An operator shall not operate a steam-enhanced crude oil production well unless the operator complies with either of the following requirements: The steam-enhanced crude oil production well vent is closed and the front line production equipment downstream of the wells that carry produced fluids (crude oil or mixture of crude oil and water) is connected to a VOC collection and control system as defined in Section 3.0 of Rule 4401, the well vent may be temporarily opened during periods of attended service or repair of the well provided such activity is done as expeditiously as possible with minimal spillage of material and VOC emissions to the atmosphere, or the steam-enhanced crude oil production well vent is open and the well vent is connected to a VOC collection and control system as defined in Section 3.0 of Rule 4401. [District Rule 4401] Federally Enforceable Through Title V Permit

11. An operator shall be in violation of this rule if any District inspection demonstrates or if any operator inspection conducted pursuant to Section 5.4 of Rule 4401 demonstrates the existence of an open-ended line or a valve located at the end of the line that is not sealed with a blind flange, plug, cap, or a second closed valve that is not closed at all times, except during attended operations as defined by Section 5.2.2.1 of Rule 4401 requiring process fluid flow through the open-ended lines, a component with a major liquid leak, or a component with a gas leak greater than 50,000 ppmv. [District Rule 4401] Federally Enforceable Through Title V Permit

12. An operator shall be in violation of this rule if any District inspection demonstrates or if any operator inspection conducted pursuant to Section 5.4 of Rule 4401 demonstrates the existence of any combination of components with minor liquid leaks, minor gas leaks, or a gas leaks greater than 10,000 ppmv up to 50,000 ppmv that totals more than number of leaks allowed by Table 2 of Rule 4401. [District Rule 4401] Federally Enforceable Through Title V Permit

13. An operator shall not use any component with a leak as defined in Section 3.0 of Rule 4401, or that is found to be in violation of the provisions of Section 5.2.2 of Rule 4401. However, components that were found leaking may be used provided such leaking components have been identified with a tag for repair, are repaired, or awaiting re-inspection after being repaired within the applicable time frame specified in Section 5.5 of Rule 4401. [District Rule 4401] Federally Enforceable Through Title V Permit

14. Each hatch shall be closed at all times except during sampling or adding of process material through the hatch, or during attended repair, replacement, or maintenance operations, provided such activities are done as expeditiously as possible with minimal spillage of material and VOC emissions to the atmosphere. [District Rule 4401] Federally Enforceable Through Title V Permit

15. An operator shall comply with the requirements of Section 6.7 of Rule 4401 if there is any change in the description of major components or critical components. [District Rule 4401] Federally Enforceable Through Title V Permit

16. Except for pipes and unsafe-to-monitor components, an operator shall inspect all other components pursuant to the requirements of Section 6.3.3 of Rule 4401 at least once every year. [District Rule 4401] Federally Enforceable Through Title V Permit

17. An operator shall visually inspect all pipes at least once every year. Any visual inspection of pipes that indicates a leak that cannot be immediately repaired to meet the leak standards of this rule shall be inspected within 24 hours after detecting the leak. If a leak is found, the leak shall be repaired as soon as practicable but not later than the time frame specified in Table 3 of Rule 4401. [District Rule 4401] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

18. In addition to the inspections required by Section 5.4.1 of Rule 4401, an operator shall inspect for leaks all accessible operating pumps, compressors, and PRDs in service as follows: An operator shall audio-visually (by hearing and by sight) inspect for leaks all accessible operating pumps, compressors, and PRDs in service at least once each calendar week. Any audio-visual inspection of an accessible operating pump, compressor, and PRD performed by an operator that indicates a leak that cannot be immediately repaired to meet the leak standards of this rule shall be inspected not later than 24 hours after conducting the audio-visual inspection. If a leak is found, the leak shall be repaired as soon as practicable but not later than the time frame specified in Table 3 of Rule 4401. [District Rule 4401] Federally Enforceable Through Title V Permit

19. In addition to the inspections required by Sections 5.4.1, 5.4.2 and 5.4.3 of Rule 4401, operator shall perform the following: initially inspect a PRD that releases to the atmosphere as soon as practicable but not later than 24 hours after the discovery of the release, re-inspect the PRD not earlier than 24 hours after the initial inspection but not later than 15 calendar days after the initial inspection, inspect all new, replaced, or repaired fittings, flanges, and threaded connections within 72 hours of placing the component in service. Except for PRDs subject to the requirements of Section 5.4.4.1 of Rule 4401, an operator shall inspect a component that has been repaired or replaced not later than 15 calendar days after the component was repaired or replaced. [District Rule 4401] Federally Enforceable Through Title V Permit

20. An operator shall inspect all unsafe-to-monitor components during each turnaround. [District Rule 4401] Federally Enforceable Through Title V Permit

21. District inspection in no way fulfills any of the mandatory inspection requirements that are placed upon operators and cannot be used or counted as an inspection required of an operator. [District Rule 4401] Federally Enforceable Through Title V Permit

22. An operator shall affix a readily visible weatherproof tag to a leaking component upon detection of the leak and shall include the following information on the tag: date and time of leak detection, date and time of leak measurement, for a gaseous leak, the leak concentration in ppmv, for a liquid leak, whether it is a major liquid leak or a minor liquid leak, whether the component is an essential component, an unsafe-to monitor component, or a critical component. [District Rule 4401] Federally Enforceable Through Title V Permit

23. An operator shall keep the tag affixed to the component until an operator has met all of the following conditions: repaired or replaced the leaking component, re-inspected the component using the test method in Section 6.3.3, and the component is found to be in compliance with the requirements of this rule. [District Rule 4401] Federally Enforceable Through Title V Permit

24. An operator shall minimize a component leak in order to stop or reduce leakage to the atmosphere immediately to the extent possible, but not later than one (1) hour after detection of the leak. [District Rule 4401] Federally Enforceable Through Title V Permit

25. Except for leaking critical components or leaking essential components subject to the requirements of Section 5.5.7 of Rule 4401, if an operator has minimized a leak but the leak still exceeds the applicable leak limits as defined in Section 3.0 of Rule 4401, an operator shall comply with at least one of the following requirements as soon as practicable but not later than the time period specified in Table 3 of Rule 4401: Repair or replace the leaking component; or vent the leaking component to a VOC collection and control system as defined in Section 3.0 of Rule 4401, or remove the leaking component from operation. [District Rule 4401] Federally Enforceable Through Title V Permit

26. The repair period in calendar days shall not exceed 14 days for minor gas leaks, 5 days for major gas leaks less than or equal to 50,000 ppmv, 2 days for gas leak greater than 50,000 ppmv, 3 days for minor liquid leaks, 2 days for major liquid leaks. [District Rule 4401] Federally Enforceable Through Title V Permit

27. The leak rate measured after leak minimization has been performed shall be the leak rate used to determine the applicable repair period specified in Table 3 of Rule 4401. [District Rule 4401] Federally Enforceable Through Title V Permit

28. The time of the initial leak detection shall be the start of the repair period specified in Table 2 of Rule 4401. [District Rule 4401] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

29. If the leaking component is an essential component or a critical component that cannot be immediately shut down for repairs, and if the leak has been minimized but the leak still exceeds the applicable leak standard of this rule, the operator shall repair or replace the essential component or critical component to eliminate the leak during the next process unit turnaround, but in no case later than one year from the date of the original leak detection, whichever comes earlier. [District Rule 4401] Federally Enforceable Through Title V Permit

30. The operator of any steam-enhanced crude oil production well shall maintain records of the date and well identification where steam injection or well stimulation occurs. [District Rule 4401] Federally Enforceable Through Title V Permit

31. An operator of any steam-enhanced crude oil production well shall keep source test records which demonstrate compliance with the control efficiency requirements of the VOC collection and control system as defined in Section 3.0 of Rule 4401. [District Rule 4401] Federally Enforceable Through Title V Permit

32. Operator of any steam-enhanced crude oil production well shall keep an inspection log maintained pursuant to Section 6.4 of Rule 4401. [District Rule 4401] Federally Enforceable Through Title V Permit

33. Records of each calibration of the portable hydrocarbon detection instrument utilized for inspecting components, including a copy of current calibration gas certification from the vendor of said calibration gas cylinder, the date of calibration, concentration of calibration gas, instrument reading of calibration gas before adjustment, instrument reading of calibration gas after adjustment, calibration gas expiration date, and calibration gas cylinder pressure at the time of calibration shall be maintained. [District Rule 4401] Federally Enforceable Through Title V Permit

34. An operator shall maintain copies at the facility of the training records of the training program operated pursuant to Section 6.5 of Rule 4401. [District Rule 4401] Federally Enforceable Through Title V Permit

35. Operator shall keep a copy of the APCO-approved Operator Management Plan at the facility. [District Rule 4401] Federally Enforceable Through Title V Permit

36. An operator shall source test annually all vapor collection and control systems used to control emissions from steam-enhanced crude oil production well vents to determine the control efficiency of the device(s) used for destruction or removal of VOC. Compliance testing shall be performed annually by source testers certified by ARB. Testing shall be performed during June, July, August, or September of each year if the system's control efficiency is dependent upon ambient air temperature. [District Rule 4401] Federally Enforceable Through Title V Permit

37. If approved by EPA, ARB, and the APCO, an operator need not comply with the annual testing requirement of Section 6.2.1 if all uncondensed VOC emissions collected by a vapor collection and control system are incinerated in fuel burning equipment, an internal combustion engine or in a smokeless flare. [District Rule 4401] Federally Enforceable Through Title V Permit

38. The control efficiency of any VOC control device, measured and calculated as carbon, shall be determined by EPA Method 25, except when the outlet concentration must be below 50 ppm in order to meet the standard, in which case EPA Method 25a may be used. EPA Method 18 may be used in lieu of EPA Method 25 or EPA Method 25a provided the identity and approximate concentrations of the analytes/compounds in the sample gas stream are known before analysis with the gas chromatograph and the gas chromatograph is calibrated for each of those known analyte/compound to ensure that the VOC concentrations are neither under- or over-reported. [District Rule 4401] Federally Enforceable Through Title V Permit

39. VOC content shall be analyzed by using the latest revision of ASTM Method E168, E169, or E260 as applicable. Analysis of halogenated exempt compounds shall be performed by using ARB Method 432. [District Rule 4401] Federally Enforceable Through Title V Permit

40. Leak inspection, other than audio-visual, and measurements of gaseous leak concentrations shall be conducted according to EPA Method 21 using an appropriate portable hydrocarbon detection instrument calibrated with methane. The instrument shall be calibrated in accordance with the procedures specified in EPA Method 21 or the manufacturer's instruction, as appropriate, not more than 30 days prior to its use. The operator shall record the calibration date of the instrument. Where safety is a concern, such as measuring leaks from compressor seals or pump seals when the shaft is rotating, a person shall measure leaks by placing the instrument probe inlet at a distance of one (1) centimeter or less from the surface of the component interface. [District Rule 4401] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

41. The VOC content by weight percent (wt.%) shall be determined using American Society of Testing and Materials (ASTM) D1945 for gases and South Coast Air Quality Management District (SCAQMD) Method 304-91 or the latest revision of ASTM Method E168, E169 or E260 for liquids. [District Rule 4401] Federally Enforceable Through Title V Permit

42. Operator shall maintain an inspection log in which an operator records, at a minimum, all of the following information for each inspection performed: The total number of components inspected, total number and percentage of leaking components found by component type, location, type, and name or description of each leaking component and description of any unit where the leaking component is found, date of leak detection and the method of leak detection. For gaseous leaks, the leak concentration in ppmv, and for liquid leaks record whether the leak is a major liquid leak or a minor liquid leak, the date of repair, replacement, or removal from operation of leaking components, identify and location of essential components and critical components found leaking that cannot be repaired until the next process unit turnaround or not later than one year after leak detection, whichever comes earlier, methods used to minimize the leak from essential components and critical components found leaking that cannot be repaired until the next process unit turnaround or not later than one year after leak detection, whichever comes earlier, the date of re-inspection and the leak concentration in ppmv after the component is repaired or is replaced, the inspector's name, business mailing address, and business telephone number, date and signature of the facility operator responsible for the inspection and repair program certifying the accuracy of the information recorded in the log. [District Rule 4401] Federally Enforceable Through Title V Permit

43. Permittee shall establish and implement an employee training program for inspecting and repairing components and recordkeeping procedures, as necessary. Permittee shall maintain at the facility the copies of the training records of the training program. [District Rule 4401] Federally Enforceable Through Title V Permit

44. Permittee shall maintain a copy of the latest APCO-approved Operator Management Plan (OMP) at the facility and make it available to the APCO, ARB, and US EPA upon request. [District Rule 4401] Federally Enforceable Through Title V Permit

45. By January 30 of each year, permittee shall submit to the APCO for approval, in writing, an annual report indicating any changes to the existing, approved OMP. [District Rule 4401] Federally Enforceable Through Title V Permit

46. In accordance with the approved OMP, permittee shall meet all applicable operating, leak standards, inspection and re-inspection, leak repair, record keeping, and notification requirements of Rule 4401. [District Rule 4401] Federally Enforceable Through Title V Permit

47. 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 Rule 1070] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

AUTHORITY TO CONSTRUCT

PERMIT NO: S-1114-127-0 **ISSUANCE DATE:** DRAFT

LEGAL OWNER OR OPERATOR: SENECA RESOURCES
MAILING ADDRESS: 4800 CORPORATE COURT
BAKERSFIELD, CA 93311

LOCATION: HEAVY OIL WESTERN
CA

SECTION: 25 **TOWNSHIP:** 31S **RANGE:** 22E

EQUIPMENT DESCRIPTION:
3,000 BBL FIXED ROOF WASH TANK WITH VAPOR CONTROL SYSTEM INCLUDING INLET SCRUBBER, VAPOR COMPRESSOR, SULFATREAT UNIT WITH PIPING TO AUTHORIZED STEAM GENERATOR AND SERVING TANKS S-1114-128, 129, 130, 131, AND 132

CONDITIONS

1. {1830} This Authority to Construct serves as a written certificate of conformity with the procedural requirements of 40 CFR 70.7 and 70.8 and with the compliance requirements of 40 CFR 70.6(c). [District Rule 2201] Federally Enforceable Through Title V Permit
2. {1831} Prior to operating with modifications authorized by this Authority to Construct, the facility shall submit an application to modify the Title V permit with an administrative amendment in accordance with District Rule 2520 Section 5.3.4. [District Rule 2520, 5.3.4] Federally Enforceable Through Title V Permit
3. The VOC content of the gas shall not exceed 10% by weight. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
4. Operator shall conduct quarterly gas sampling for gas exiting the separator pressure vessel to qualify for exemption from fugitive component counts for components handling fluids with VOC content equal to or less than 10% by weight. If gas samples are equal to or less than 10% VOC by weight for 8 consecutive quarterly samplings, sampling frequency shall only be required annually. [District Rule 2201] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

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

Seyed Sadredin, Executive Director / APCO

Arnaud Marjollet, Director of Permit Services
S-1114-127-0 : Aug 2 2016 3:00PM -- SRANK : Joint Inspection NOT Required

5. The tank shall be equipped with a vapor control system consisting of a closed vent system that collects all VOCs from the storage tank, and a VOC control device. The vapor control system shall be APCO-approved and maintained in leak-free condition. The efficiency of the vapor control system shall be at least 95%. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
6. All piping, valves, and fittings shall be constructed and maintained in a leak-free condition. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
7. A leak-free condition is defined as a condition without a gas leak. A gas leak is defined as a reading in excess of 10,000 ppmv, above background, as measured by a portable hydrocarbon detection instrument in accordance with the procedures specified in EPA Test Method 21. A reading in excess of 10,000 ppmv above background is a violation of this permit and Rule 4623 and shall be reported as a deviation. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
8. Any tank gauging or sampling device on a tank vented to the vapor recovery system shall be equipped with a leak-free cover which shall be closed at all times except during gauging or sampling. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
9. Except as otherwise provided in this permit, the operator shall ensure that the vapor recovery system is functional and is operating as designed at all times. [District Rule 2201] Federally Enforceable Through Title V Permit
10. All piping, fittings, and valves on this tank shall be inspected annually by the facility operator in accordance with EPA Method 21, with the instrument calibrated with methane, to ensure compliance with the leaking provisions of this permit. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
11. Any component found to be leaking on two consecutive annual inspections is in violation of the District Rule 4623, even if it is under the voluntary inspection and maintenance program. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
12. VOC content of vapor shall be determined by ASTM D1945, ASTM D1946, EPA Method 18 referenced as methane, or equivalent test method with prior District approval. [District Rule 2201] Federally Enforceable Through Title V Permit
13. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date and time of leak detection, and method of detection; 3) Date and time of leak repair, and emission level of recheck after leak is repaired; 4) Method used to minimize the leak to lowest possible level within 8 hours after detection [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
14. Operator shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 1070] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

AUTHORITY TO CONSTRUCT

DRAFT

PERMIT NO: S-1114-128-0 **ISSUANCE DATE:** DRAFT

LEGAL OWNER OR OPERATOR: SENECA RESOURCES
MAILING ADDRESS: 4800 CORPORATE COURT
BAKERSFIELD, CA 93311

LOCATION: HEAVY OIL WESTERN
CA

SECTION: 25 **TOWNSHIP:** 31S **RANGE:** 22E

EQUIPMENT DESCRIPTION:
3,000 BBL FIXED ROOF MULTI-PURPOSE TANK WITH VAPOR RECOVERY SYSTEM LISTED ON PERMIT UNIT S-1114-127

CONDITIONS

1. {1830} This Authority to Construct serves as a written certificate of conformity with the procedural requirements of 40 CFR 70.7 and 70.8 and with the compliance requirements of 40 CFR 70.6(c). [District Rule 2201] Federally Enforceable Through Title V Permit
2. {1831} Prior to operating with modifications authorized by this Authority to Construct, the facility shall submit an application to modify the Title V permit with an administrative amendment in accordance with District Rule 2520 Section 5.3.4. [District Rule 2520, 5.3.4] Federally Enforceable Through Title V Permit
3. The VOC content of the gas shall not exceed 10% by weight. [District Rule 2201] Federally Enforceable Through Title V Permit
4. Operator shall conduct quarterly gas sampling for gas exiting the separator pressure vessel to qualify for exemption from fugitive component counts for components handling fluids with VOC content equal to or less than 10% by weight. If gas samples are equal to or less than 10% VOC by weight for 8 consecutive quarterly samplings, sampling frequency shall only be required annually. [District Rule 2201] Federally Enforceable Through Title V Permit
5. The tank shall be equipped with a vapor control system consisting of a closed vent system that collects all VOCs from the storage tank, and a VOC control device. The vapor control system shall be APCO-approved and maintained in leak-free condition. The efficiency of the vapor control system shall be at least 95%. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

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

Seyed Sadredin, Executive Director / APCO

DRAFT

Arnaud Marjollet, Director of Permit Services
S-1114-128-0 Aug 2 2016 3:00PM – SRANK Joint Inspection NOT Required

6. All piping, valves, and fittings shall be constructed and maintained in a leak-free condition. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
7. A leak-free condition is defined as a condition without a gas leak. A gas leak is defined as a reading in excess of 10,000 ppmv, above background, as measured by a portable hydrocarbon detection instrument in accordance with the procedures specified in EPA Test Method 21. A reading in excess of 10,000 ppmv above background is a violation of this permit and Rule 4623 and shall be reported as a deviation. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
8. Any tank gauging or sampling device on a tank vented to the vapor recovery system shall be equipped with a leak-free cover which shall be closed at all times except during gauging or sampling. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
9. Except as otherwise provided in this permit, the operator shall ensure that the vapor recovery system is functional and is operating as designed at all times. [District Rule 2201] Federally Enforceable Through Title V Permit
10. All piping, fittings, and valves on this tank shall be inspected annually by the facility operator in accordance with EPA Method 21, with the instrument calibrated with methane, to ensure compliance with the leaking provisions of this permit. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
11. Any component found to be leaking on two consecutive annual inspections is in violation of the District Rule 4623, even if it is under the voluntary inspection and maintenance program. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
12. VOC content of vapor shall be determined by ASTM D1945, ASTM D1946, EPA Method 18 referenced as methane, or equivalent test method with prior District approval. [District Rule 2201] Federally Enforceable Through Title V Permit
13. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date and time of leak detection, and method of detection; 3) Date and time of leak repair, and emission level of recheck after leak is repaired; 4) Method used to minimize the leak to lowest possible level within 8 hours after detection [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
14. Operator shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 1070] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

AUTHORITY TO CONSTRUCT

PERMIT NO: S-1114-129-0 **ISSUANCE DATE:** DRAFT

LEGAL OWNER OR OPERATOR: SENECA RESOURCES
MAILING ADDRESS: 4800 CORPORATE COURT
BAKERSFIELD, CA 93311

LOCATION: HEAVY OIL WESTERN
CA

SECTION: 25 **TOWNSHIP:** 31S **RANGE:** 22E

EQUIPMENT DESCRIPTION:
2,000 BBL FIXED ROOF LACT TANK WITH VAPOR RECOVERY SYSTEM LISTED ON PERMIT UNIT S-1114-127

CONDITIONS

1. {1830} This Authority to Construct serves as a written certificate of conformity with the procedural requirements of 40 CFR 70.7 and 70.8 and with the compliance requirements of 40 CFR 70.6(c). [District Rule 2201] Federally Enforceable Through Title V Permit
2. {1831} Prior to operating with modifications authorized by this Authority to Construct, the facility shall submit an application to modify the Title V permit with an administrative amendment in accordance with District Rule 2520 Section 5.3.4. [District Rule 2520, 5.3.4] Federally Enforceable Through Title V Permit
3. The VOC content of the gas shall not exceed 10% by weight. [District Rule 2201] Federally Enforceable Through Title V Permit
4. Operator shall conduct quarterly gas sampling for gas exiting the separator pressure vessel to qualify for exemption from fugitive component counts for components handling fluids with VOC content equal to or less than 10% by weight. If gas samples are equal to or less than 10% VOC by weight for 8 consecutive quarterly samplings, sampling frequency shall only be required annually. [District Rule 2201] Federally Enforceable Through Title V Permit
5. The tank shall be equipped with a vapor control system consisting of a closed vent system that collects all VOCs from the storage tank, and a VOC control device. The vapor control system shall be APCO-approved and maintained in leak-free condition. The efficiency of the vapor control system shall be at least 95%. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

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

Seyed Sadredin, Executive Director / APCO

Arnaud Marjollet, Director of Permit Services
S-1114-129-0 Aug 2 2016 3:00PM -- SRANK : Joint Inspection NOT Required

6. All piping, valves, and fittings shall be constructed and maintained in a leak-free condition. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit

7. A leak-free condition is defined as a condition without a gas leak. A gas leak is defined as a reading in excess of 10,000 ppmv, above background, as measured by a portable hydrocarbon detection instrument in accordance with the procedures specified in EPA Test Method 21. A reading in excess of 10,000 ppmv above background is a violation of this permit and Rule 4623 and shall be reported as a deviation. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit

8. Any tank gauging or sampling device on a tank vented to the vapor recovery system shall be equipped with a leak-free cover which shall be closed at all times except during gauging or sampling. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit

9. Except as otherwise provided in this permit, the operator shall ensure that the vapor recovery system is functional and is operating as designed at all times. [District Rule 2201] Federally Enforceable Through Title V Permit

10. All piping, fittings, and valves on this tank shall be inspected annually by the facility operator in accordance with EPA Method 21, with the instrument calibrated with methane, to ensure compliance with the leaking provisions of this permit. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit

11. Any component found to be leaking on two consecutive annual inspections is in violation of the District Rule 4623, even if it is under the voluntary inspection and maintenance program. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit

12. VOC content of vapor shall be determined by ASTM D1945, ASTM D1946, EPA Method 18 referenced as methane, or equivalent test method with prior District approval. [District Rule 2201] Federally Enforceable Through Title V Permit

13. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date and time of leak detection, and method of detection; 3) Date and time of leak repair, and emission level of recheck after leak is repaired; 4) Method used to minimize the leak to lowest possible level within 8 hours after detection [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit

14. Operator shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 1070] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

AUTHORITY TO CONSTRUCT

DRAFT

PERMIT NO: S-1114-130-0 **ISSUANCE DATE:** DRAFT

LEGAL OWNER OR OPERATOR: SENECA RESOURCES
MAILING ADDRESS: 4800 CORPORATE COURT
BAKERSFIELD, CA 93311

LOCATION: HEAVY OIL WESTERN
CA

SECTION: 25 **TOWNSHIP:** 31S **RANGE:** 22E

EQUIPMENT DESCRIPTION:
2,000 BBL FIXED ROOF LACT TANK WITH VAPOR RECOVERY SYSTEM LISTED ON PERMIT UNIT S-1114-127

CONDITIONS

1. {1830} This Authority to Construct serves as a written certificate of conformity with the procedural requirements of 40 CFR 70.7 and 70.8 and with the compliance requirements of 40 CFR 70.6(c). [District Rule 2201] Federally Enforceable Through Title V Permit
2. {1831} Prior to operating with modifications authorized by this Authority to Construct, the facility shall submit an application to modify the Title V permit with an administrative amendment in accordance with District Rule 2520 Section 5.3.4. [District Rule 2520, 5.3.4] Federally Enforceable Through Title V Permit
3. The VOC content of the gas shall not exceed 10% by weight. [District Rule 2201] Federally Enforceable Through Title V Permit
4. Operator shall conduct quarterly gas sampling for gas exiting the separator pressure vessel to qualify for exemption from fugitive component counts for components handling fluids with VOC content equal to or less than 10% by weight. If gas samples are equal to or less than 10% VOC by weight for 8 consecutive quarterly samplings, sampling frequency shall only be required annually. [District Rule 2201] Federally Enforceable Through Title V Permit
5. The tank shall be equipped with a vapor control system consisting of a closed vent system that collects all VOCs from the storage tank, and a VOC control device. The vapor control system shall be APCO-approved and maintained in leak-free condition. The efficiency of the vapor control system shall be at least 95%. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

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

Seyed Sadredin, Executive Director / APCO

DRAFT

Arnaud Marjollet, Director of Permit Services
S-1114-130-0 : Aug 2 2016 3:00PM – SRANK : Joint Inspection NOT Required

6. All piping, valves, and fittings shall be constructed and maintained in a leak-free condition. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit

7. A leak-free condition is defined as a condition without a gas leak. A gas leak is defined as a reading in excess of 10,000 ppmv, above background, as measured by a portable hydrocarbon detection instrument in accordance with the procedures specified in EPA Test Method 21. A reading in excess of 10,000 ppmv above background is a violation of this permit and Rule 4623 and shall be reported as a deviation. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit

8. Any tank gauging or sampling device on a tank vented to the vapor recovery system shall be equipped with a leak-free cover which shall be closed at all times except during gauging or sampling. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit

9. Except as otherwise provided in this permit, the operator shall ensure that the vapor recovery system is functional and is operating as designed at all times. [District Rule 2201] Federally Enforceable Through Title V Permit

10. All piping, fittings, and valves on this tank shall be inspected annually by the facility operator in accordance with EPA Method 21, with the instrument calibrated with methane, to ensure compliance with the leaking provisions of this permit. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit

11. Any component found to be leaking on two consecutive annual inspections is in violation of the District Rule 4623, even if it is under the voluntary inspection and maintenance program. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit

12. VOC content of vapor shall be determined by ASTM D1945, ASTM D1946, EPA Method 18 referenced as methane, or equivalent test method with prior District approval. [District Rule 2201] Federally Enforceable Through Title V Permit

13. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date and time of leak detection, and method of detection; 3) Date and time of leak repair, and emission level of recheck after leak is repaired; 4) Method used to minimize the leak to lowest possible level within 8 hours after detection [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit

14. Operator shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 1070] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

AUTHORITY TO CONSTRUCT

DRAFT

PERMIT NO: S-1114-131-0 **ISSUANCE DATE:** DRAFT

LEGAL OWNER OR OPERATOR: SENECA RESOURCES
MAILING ADDRESS: 4800 CORPORATE COURT
BAKERSFIELD, CA 93311

LOCATION: HEAVY OIL WESTERN
CA

SECTION: 25 **TOWNSHIP:** 31S **RANGE:** 22E

EQUIPMENT DESCRIPTION:
1,000 BBL FIXED ROOF SKIM/SAND DUMP TANK WITH VAPOR RECOVERY SYSTEM LISTED ON PERMIT UNIT S-1114-127

CONDITIONS

1. {1830} This Authority to Construct serves as a written certificate of conformity with the procedural requirements of 40 CFR 70.7 and 70.8 and with the compliance requirements of 40 CFR 70.6(c). [District Rule 2201] Federally Enforceable Through Title V Permit
2. {1831} Prior to operating with modifications authorized by this Authority to Construct, the facility shall submit an application to modify the Title V permit with an administrative amendment in accordance with District Rule 2520 Section 5.3.4. [District Rule 2520, 5.3.4] Federally Enforceable Through Title V Permit
3. The VOC content of the gas shall not exceed 10% by weight. [District Rule 2201] Federally Enforceable Through Title V Permit
4. Operator shall conduct quarterly gas sampling for gas exiting the separator pressure vessel to qualify for exemption from fugitive component counts for components handling fluids with VOC content equal to or less than 10% by weight. If gas samples are equal to or less than 10% VOC by weight for 8 consecutive quarterly samplings, sampling frequency shall only be required annually. [District Rule 2201] Federally Enforceable Through Title V Permit
5. The tank shall be equipped with a vapor control system consisting of a closed vent system that collects all VOCs from the storage tank, and a VOC control device. The vapor control system shall be APCO-approved and maintained in leak-free condition. The efficiency of the vapor control system shall be at least 95%. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

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Seyed Sadredin, Executive Director / APCO

DRAFT

Arnaud Marjollet, Director of Permit Services
S-1114-131-0 Aug 2 2016 3:00PM -- SRANK : Joint Inspection NOT Required

6. All piping, valves, and fittings shall be constructed and maintained in a leak-free condition. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit

7. A leak-free condition is defined as a condition without a gas leak. A gas leak is defined as a reading in excess of 10,000 ppmv, above background, as measured by a portable hydrocarbon detection instrument in accordance with the procedures specified in EPA Test Method 21. A reading in excess of 10,000 ppmv above background is a violation of this permit and Rule 4623 and shall be reported as a deviation. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit

8. Any tank gauging or sampling device on a tank vented to the vapor recovery system shall be equipped with a leak-free cover which shall be closed at all times except during gauging or sampling. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit

9. Except as otherwise provided in this permit, the operator shall ensure that the vapor recovery system is functional and is operating as designed at all times. [District Rule 2201] Federally Enforceable Through Title V Permit

10. All piping, fittings, and valves on this tank shall be inspected annually by the facility operator in accordance with EPA Method 21, with the instrument calibrated with methane, to ensure compliance with the leaking provisions of this permit. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit

11. Any component found to be leaking on two consecutive annual inspections is in violation of the District Rule 4623, even if it is under the voluntary inspection and maintenance program. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit

12. VOC content of vapor shall be determined by ASTM D1945, ASTM D1946, EPA Method 18 referenced as methane, or equivalent test method with prior District approval. [District Rule 2201] Federally Enforceable Through Title V Permit

13. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date and time of leak detection, and method of detection; 3) Date and time of leak repair, and emission level of recheck after leak is repaired; 4) Method used to minimize the leak to lowest possible level within 8 hours after detection [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit

14. Operator shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 1070] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

AUTHORITY TO CONSTRUCT

PERMIT NO: S-1114-132-0 **ISSUANCE DATE:** DRAFT

LEGAL OWNER OR OPERATOR: SENECA RESOURCES
MAILING ADDRESS: 4800 CORPORATE COURT
BAKERSFIELD, CA 93311

LOCATION: HEAVY OIL WESTERN
CA

SECTION: 25 **TOWNSHIP:** 31S **RANGE:** 22E

EQUIPMENT DESCRIPTION:
WEMCO UNIT WITH VAPOR RECOVERY SYSTEM LISTED ON PERMIT UNIT S-1114-127

CONDITIONS

1. {1830} This Authority to Construct serves as a written certificate of conformity with the procedural requirements of 40 CFR 70.7 and 70.8 and with the compliance requirements of 40 CFR 70.6(c). [District Rule 2201] Federally Enforceable Through Title V Permit
2. {1831} Prior to operating with modifications authorized by this Authority to Construct, the facility shall submit an application to modify the Title V permit with an administrative amendment in accordance with District Rule 2520 Section 5.3.4. [District Rule 2520, 5.3.4] Federally Enforceable Through Title V Permit
3. The VOC content of the gas shall not exceed 10% by weight. [District Rule 2201] Federally Enforceable Through Title V Permit
4. Operator shall conduct quarterly gas sampling for gas exiting the separator pressure vessel to qualify for exemption from fugitive component counts for components handling fluids with VOC content equal to or less than 10% by weight. If gas samples are equal to or less than 10% VOC by weight for 8 consecutive quarterly samplings, sampling frequency shall only be required annually. [District Rule 2201] Federally Enforceable Through Title V Permit
5. The tank shall be equipped with a vapor control system consisting of a closed vent system that collects all VOCs from the storage tank, and a VOC control device. The vapor control system shall be APCO-approved and maintained in leak-free condition. The efficiency of the vapor control system shall be at least 95%. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

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Seyed Sadredin, Executive Director / APCO

Arnaud Marjollet, Director of Permit Services
S-1114-132-0 Aug 2 2016 3:00PM – SRANK Joint Inspection NOT Required

6. All piping, valves, and fittings shall be constructed and maintained in a leak-free condition. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
7. A leak-free condition is defined as a condition without a gas leak. A gas leak is defined as a reading in excess of 10,000 ppmv, above background, as measured by a portable hydrocarbon detection instrument in accordance with the procedures specified in EPA Test Method 21. A reading in excess of 10,000 ppmv above background is a violation of this permit and Rule 4623 and shall be reported as a deviation. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
8. Any tank gauging or sampling device on a tank vented to the vapor recovery system shall be equipped with a leak-free cover which shall be closed at all times except during gauging or sampling. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
9. Except as otherwise provided in this permit, the operator shall ensure that the vapor recovery system is functional and is operating as designed at all times. [District Rule 2201] Federally Enforceable Through Title V Permit
10. All piping, fittings, and valves on this tank shall be inspected annually by the facility operator in accordance with EPA Method 21, with the instrument calibrated with methane, to ensure compliance with the leaking provisions of this permit. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
11. Any component found to be leaking on two consecutive annual inspections is in violation of the District Rule 4623, even if it is under the voluntary inspection and maintenance program. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
12. VOC content of vapor shall be determined by ASTM D1945, ASTM D1946, EPA Method 18 referenced as methane, or equivalent test method with prior District approval. [District Rule 2201] Federally Enforceable Through Title V Permit
13. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date and time of leak detection, and method of detection; 3) Date and time of leak repair, and emission level of recheck after leak is repaired; 4) Method used to minimize the leak to lowest possible level within 8 hours after detection [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
14. Operator shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 1070] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

AUTHORITY TO CONSTRUCT

PERMIT NO: S-1114-133-0 **ISSUANCE DATE:** DRAFT

LEGAL OWNER OR OPERATOR: SENECA RESOURCES
MAILING ADDRESS: 4800 CORPORATE COURT
BAKERSFIELD, CA 93311

LOCATION: HEAVY OIL WESTERN
CA

SECTION: 25 **TOWNSHIP:** 31S **RANGE:** 22E

EQUIPMENT DESCRIPTION:
4.9 MMBTU/HR TANK HEATER WITH ULTRA LOW NOX BURNER (NOXMATIC NM125A5V OR EQUIVALENT) SERVING LACT TANKS

CONDITIONS

1. {1830} This Authority to Construct serves as a written certificate of conformity with the procedural requirements of 40 CFR 70.7 and 70.8 and with the compliance requirements of 40 CFR 70.6(c). [District Rule 2201] Federally Enforceable Through Title V Permit
2. {1831} Prior to operating with modifications authorized by this Authority to Construct, the facility shall submit an application to modify the Title V permit with an administrative amendment in accordance with District Rule 2520 Section 5.3.4. [District Rule 2520, 5.3.4] Federally Enforceable Through Title V Permit
3. The exhaust stacks 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]
4. 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
5. 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 2201] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

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Seyed Sadredin, Executive Director / APCO

Arnaud Marjollet, Director of Permit Services
S-1114-133-0 Aug 2 2016 3:00PM -- SRANK Joint Inspection NOT Required

6. 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
7. 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
8. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
9. The owner/operator shall monitor, at least once a month, the operational characteristics recommended by the manufacturer and approved by the APCO. [District Rule 4307] Federally Enforceable Through Title V Permit
10. The permittee shall tune the unit at least twice per calendar year, (from four to eight months apart) using a qualified technician in accordance with the procedure described in Rule 4304. If the unit does not operate throughout a continuous six-month period within a calendar year, only one tune-up is required for a calendar year. No tune-up is required if the unit is not operated during that calendar year. The unit may be test fired to verify availability of the unit for its intended use, but once the test firing is complete the unit shall be shutdown. [District Rule 4307] Federally Enforceable Through Title V Permit
11. In lieu of tuning the unit twice each calendar year, the owner/operator shall monitor the emissions with a portable NOx analyzer at least twice each calendar year and adjust the unit's operating parameters accordingly to assure compliance with the emission limits of this rule. [District Rule 4307] Federally Enforceable Through Title V Permit
12. Tank Heater shall only be fired on produced gas, PUC-quality gas, or PUC-regulated gas with a sulfur content not exceeding 1.0 gr S/100 scf. [District Rules 2201 and 4307] Federally Enforceable Through Title V Permit
13. Emissions shall not exceed any of the following limits: NOx; 9 ppmvd @ 3% O2 or 0.011 lb-NOx/MMBtu, 0.007 lb-PM10/MMBtu, CO; 50 ppmvd @ 3% O2 or 0.037 lb-CO/MMBtu, or VOC: 5 ppmv @ 3% O2 as methane or 0.002 lb-VOC/MMBtu. [District Rules 2201 and 4307] Federally Enforceable Through Title V Permit
14. Source testing to measure NOx and CO emissions from this unit shall be conducted no later than 60 days after the start-up. [District Rules 2201 and 4307] Federally Enforceable Through Title V Permit
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] Federally Enforceable Through Title V Permit
16. NOx 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 Rule 4307] Federally Enforceable Through Title V Permit
17. CO emissions for source test purposes shall be determined using EPA Method 10 or ARB Method 100. [District Rule 4307] Federally Enforceable Through Title V Permit
18. Stack gas oxygen (O2) shall be determined using EPA Method 3 or 3A or ARB Method 100. [District Rule 4307] Federally Enforceable Through Title V Permit
19. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 4307] Federally Enforceable Through Title V Permit
20. The owner/operator shall maintain records to verify that the required monitoring of the operational characteristics, and tune-ups or portable NOx analyzing has been performed. [District Rule 4307] Federally Enforceable Through Title V Permit
21. Tune-up records shall include: 1) date of tune-up, 2) name of technician performing tune-up, and 3) reason that they are qualified. [District Rule 4307] Federally Enforceable Through Title V Permit
22. Portable analyzer records shall include: 1) date of emissions analyzing, 2) results of emissions analyzing, 3) name of technician performing analyzing, 4) make and model of analyzer, 5) date of last calibration of the analyzer, and 6) a description of any adjustments made to the unit's operating parameters for the purposes of assuring compliance. [District Rule 4307] Federally Enforceable Through Title V Permit
23. 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 Rules 4307] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

24. Permittee shall demonstrate compliance with fuel gas sulfur content at least annually or whenever there is change in fuel gas source. [District Rules 2201 and 4307] Federally Enforceable Through Title V Permit

25. Fuel gas sulfur content shall be determined using ASTM D1072, D3031, D4084, D3246 or grab sample analysis by GC-FPD/TCD performed in the laboratory. [District Rule 2201] Federally Enforceable Through Title V Permit

26. Prior to operating equipment under this Authority to Construct, permittee shall surrender NOx emission reduction credits for the following quantity of emissions: 1st quarter - 177 lb, 2nd quarter - 177 lb, 3rd quarter - 177 lb, and fourth quarter - 177 lb. These amounts include the applicable offset ratio specified in Rule 2201 Section 4.8 (as amended 4/21/11) for the ERC specified below. [District Rule 2201] Federally Enforceable Through Title V Permit

27. ERC Certificate Number N-1338-2 (or certificates split from this certificate) 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. [Rule 2201] Federally Enforceable Through Title V Permit

28. Prior to operating equipment under this Authority to Construct, permittee shall surrender SOx emission reduction credits for the following quantity of emissions: 1st quarter - 46 lb, 2nd quarter - 46 lb, 3rd quarter - 47 lb, and fourth quarter - 47 lb. These amounts include the applicable offset ratio specified in Rule 2201 Section 4.8 (as amended 4/21/11) for the ERC specified below. [District Rule 2201] Federally Enforceable Through Title V Permit

29. ERC Certificate Number S-4590-5 (or a certificate split from this certificate) 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

30. Prior to operating equipment under this Authority to Construct, permittee shall surrender PM10 emission reduction credits for the following quantity of emissions: fourth quarter - 450 lb. This amount include the applicable offset ratio specified in Rule 2201 Section 4.8 (as amended 4/21/11) for the ERC specified below. [District Rule 2201] Federally Enforceable Through Title V Permit

31. ERC Certificate Number C-1360-4 (or a certificate split from this certificate) 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

32. Prior to operating equipment under this Authority to Construct, permittee shall surrender VOC emission reduction credits for the following quantity of emissions: 1st quarter - 32 lb, 2nd quarter - 32 lb, 3rd quarter - 32 lb, and fourth quarter - 33 lb. These amounts include the applicable offset ratio specified in Rule 2201 Section 4.8 (as amended 4/21/11) for the ERC specified below. [District Rule 2201] Federally Enforceable Through Title V Permit

33. ERC Certificate Number N-1336-1 (or a certificate split from this certificate) 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