



**MAY 21 2015**

Mr. Timothy Alburger  
Seneca Resources  
4800 Corporate Court  
Bakersfield, CA 93311

**Re: Proposed Authorities to Construct/Certificate of Conformity (Minor Mod)  
District Facility # S-1114  
Project # S-1144490**

Dear Mr. Alburger:

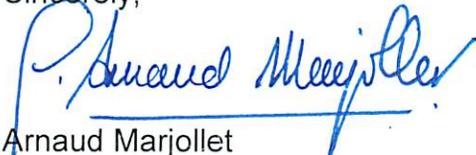
Enclosed for your review is the District's analysis of an application for Authorities to Construct for the facility identified above. You requested that Certificates of Conformity with the procedural requirements of 40 CFR Part 70 be issued with this project. The modification consists of installation of a new 3,000 bbl fixed roof crude oil tank (ATC S-1114-135-0) connected to the existing vapor recovery system listed on permit unit S-1114-78.

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

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

Thank you for your cooperation in this matter.

Sincerely,



Arnaud Marjollet  
Director of Permit Services

Enclosures

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

**Seyed Sadredin**  
Executive Director/Air Pollution Control Officer

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**San Joaquin Valley Air Pollution Control District**  
**Authority to Construct**  
**Application Review**  
**New Fixed Roof Oil Field Production Tank < 5000 BBLs**

Facility Name:	Seneca Resources	Date:	April 15, 2015
Mailing Address:	4800 Corporate Court Bakersfield, CA 93311	Engineer:	Sajjad Ahmad
Contact Person:	Timothy R. Alburger	Lead Engineer:	Brian Clements
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E-Mail:	<a href="mailto:alburgert@srcx.com">alburgert@srcx.com</a>		
Application #s:	S-1114-78-6 and '-135-0		
Project #:	S-1144490		
Deemed Complete:	January 28, 2015		

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## **I. Proposal**

Seneca Resources (Seneca) has requested an Authority to Construct (ATC) permit for the installation of a fixed roof 3,000 bbl crude oil tank. ATC S-1114-135-0 will be issued to install the new tank.

The new tank will be connected to the existing vapor control system listed on Permit to Operate (PTO) S-1114-78 (see Appendix A for current PTO). Per FYI-111, modifying the tank vapor control system to connect a new tank to the system is not an NSR modification. However, this connection will result in an alteration of an existing source operation and requires an ATC pursuant to District Rule 2010. Therefore, ATC S-1114-78-6 will be issued to allow the connection of the new tank to the existing vapor recovery system of PTO '-78.

Since this source is not included in the 28 specific source categories specified in 40 CFR 51.165, the increases in fugitive emissions are not included in calculating emissions for a Federal major Source. All the emissions associated with this project are fugitive; therefore, this project is not a SB 288 Major Modification, a Federal major Modification, or a Rule 2410 Major Modification.

Seneca received their Title V Permit on April 30, 2006. This modification can be classified as a Title V minor 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 Authorities to Construct. Seneca must apply to administratively amend their Title V permit.

## II. Applicable Rules

Rule 2010 Permits Required (12/17/92)  
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)  
Rule 4101 Visible Emissions (2/17/05)  
Rule 4102 Nuisance (12/17/92)  
Rule 4623 Storage of Organic Liquids (5/19/2005)  
CH&SC 41700 Health Risk Assessment  
CH&SC 42301.6 School Notice  
Public Resources Code 21000-21177: California Environmental Quality Act (CEQA)  
California Code of Regulations, Title 14, Division 6, Chapter 3, Sections 15000-15387: CEQA Guidelines

## III. Project Location

The equipment will be located at the North Midway-Sunset Oilfield, within the Section 15, Township 31S, Range 22E in Seneca's Heavy Oil Western stationary source. 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

The tanks and vessels at the tank battery receive production of crude oil prior to custody transfer. The 3,000 bbl tank in this project will operate as a crude oil production multi-purpose storage tank.

VOC emissions from the tank are controlled by a shared vapor control system in accordance with S-1114-78's permit conditions. The vapor control system collects vapors from tanks and routes the uncondensed vapors to a VOC control device that reduces inlet VOC emissions by at least 95% by weight.

The project results in an increase in fugitive VOC emissions from the tank S-1114-135-0 and the additional tie-in fugitive emission components. The plot plan of the new tank is included in Appendix B.

## V. Equipment Listing

### Pre-Project Equipment Description:

S-1114-78-5: 5,000 BBL FIXED ROOF FREE WATER KNOCKOUT TANK T-1 W/VAPOR CONTROL SYSTEM INCLUDING HEAT EXCHANGER, LIQUID KNOCKOUT VESSELS, & VAPOR COMPRESSOR WITH PIPING TO STEAM GENERATOR S-1114-74, HEATER TREATERS S-1114-83 & 84, AND SERVING TANKS S-1114-78, 79, 80, 81, 82, 85, 86, 87, 104, 105 AND 106 (MIDWAY SUNSET FIELD 15A TANK BATTERY)

### ATC Equipment Description:

Since permit '-80 has already been deleted and the tank removed from the facility, the reference of permit unit '-80 will be removed from the equipment description as follows:

S-1114-78-6: MODIFICATION OF 5,000 BBL FIXED ROOF FREE WATER KNOCKOUT TANK T-1 WITH VAPOR CONTROL SYSTEM INCLUDING HEAT EXCHANGER, LIQUID KNOCKOUT VESSELS, & VAPOR COMPRESSOR WITH PIPING TO STEAM GENERATOR S-1114-74, HEATER TREATERS S-1114-83 & 84, AND SERVING TANKS S-1114-78, 79, 81, 82, 85, 86, 87, 104, 105 AND 106 (MIDWAY SUNSET FIELD 15A TANK BATTERY): CONNECT TANK S-1114-135-0 TO THE VAPOR CONTROL SYSTEM

S-1114-135-0: 3,000 BBL (126,000 GALLON) FIXED ROOF PETROLEUM STORAGE TANK #T-3 CONNECTED TO VAPOR CONTROL SYSTEM LISTED ON PERMIT S-1114-78 (MIDWAY SUNSET FIELD 15A TANK BATTERY)

### Post Project Equipment Description:

S-1114-78-6: 5,000 BBL FIXED ROOF FREE WATER KNOCKOUT TANK T-1 WITH VAPOR CONTROL SYSTEM INCLUDING HEAT EXCHANGER, LIQUID KNOCKOUT VESSELS, & VAPOR COMPRESSOR WITH PIPING TO STEAM GENERATOR S-1114-74, HEATER TREATERS S-1114-83 & 84, AND SERVING TANKS S-1114-78, 79, 81, 82, 85, 86, 87, 104, 105, 106, AND 135 (MIDWAY SUNSET FIELD 15A TANK BATTERY)

S-1114-135-0: 3,000 BBL (126,000 GALLON) FIXED ROOF PETROLEUM STORAGE TANK #T-3 CONNECTED TO VAPOR CONTROL SYSTEM LISTED ON PERMIT S-1114-78 (MIDWAY SUNSET FIELD 15A TANK BATTERY)

## VI. Emission Control Technology Evaluation

The tank vapor control system collects vapors from the tanks, removes entrained liquid in knockout vessels and scrubber vessels, condenses gases in heat exchangers and routes the uncondensed vapors to steam generators and heater treaters listed on permit unit '-78. The efficiency of the vapor control system is at least 95%.

## VII. General Calculations

The VOC content of the vapors is less than 10% by weight (see gas analysis, Appendix C). Per SSP-2015, Procedures for Quantifying Fugitive VOC Emissions at Petroleum and SOGMI Facilities, piping and components handling fluid streams with a VOC content of 10% or less by weight (i.e. VOCs as a percentage of the entire gas stream) are not assessed emissions.

### A. Assumptions

- Facility operates 24 hours per day and 365 days year.
- Only fugitive VOCs emitted from components in gas service are calculated.
- Fugitive emissions from heavy oil liquid service components are negligible.
- The percentage of VOCs of the total organic compounds in gas will not exceed 10% (see gas analysis in Appendix C).
- Emissions from S-1114-78 are not changed with connection of tank S-1114-135 to the vapor control system.
- Component counts for S-1114-135 are provided by the applicant as follows:
  - Valves: 3
  - Others: 3
  - Connectors: 18
  - Flanges: 17

### B. Emission Factors

EPA Protocol for Equipment Leak Emissions Estimate Table 2-4. Oil and Gas Production Operations Average Emissions Factors (see Appendix D).

### C. Calculations

Per FYI-111, modifying the tank vapor control system to connect a new tank to the system is not an NSR modification; therefore, emission calculations are not required.

#### 1. Pre-Project Potential to Emit (PE1)

Since this is a new emissions unit, PE1 = 0 for all pollutants.

#### 2. Post Project Potential to Emit (PE2)

Post-project potential to emit is calculated based on the fugitive component counts. The following table summarizes the post-project potential to emit for units included in this project.

Permit Unit	VOC - Daily PE2 (lb/day)	VOC - Annual PE2 (lb/Year)
S-1114-135-0	0.3*	110**

\*see emission calculations in Appendix D.

\*\*Annual PE2 = Daily PE2 (0.3 lb/day) x 365 day/year = 110 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.

Applicant stipulates that the pre-project, facility-wide VOC emissions exceed both the offset threshold for VOCs (20,000 lb VOC/year) and the Major Source threshold for VOCs (20,000 lb VOC/year). No other pollutants are emitted by this project; therefore, SSPE1 calculations for these pollutants are not necessary.

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

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

As noted above, the facility is an existing Major Source for VOC emissions and the facility-wide VOC emissions already exceed the offset threshold for VOC emissions. Therefore, the facility is not becoming a Major Source for VOC as a result of this project. No other pollutants are emitted by this project; therefore, no SSPE2 calculations for other pollutants are necessary.

### **5. Major Source Determination**

#### **Rule 2201 Major Source Determination:**

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

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

This source concedes that it is an existing Major Source for VOC emissions and will remain a Major Source for VOC. No change in other pollutants are proposed or expected as a result of this project.

### **Rule 2410 Major Source Determination:**

Since this source is not included in the 28 specific source categories specified in 40 CFR 51.165, the increases in fugitive emissions are not included in the Rule 2410 Major Source Determination. All post project emissions associated with this project are fugitive emissions; therefore, a Rule 2410 Major source determination is not required.

### **6. Baseline Emissions (BE)**

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

Pursuant to District Rule 2201,  $BE = PE1$  for:

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

otherwise,

$BE = \text{Historic Actual Emissions (HAE)}$ , calculated pursuant to District Rule 2201.

Since this is a new emissions unit,  $BE = PE1 = 0$  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 source is not included in the 28 specific source categories specified in 40 CFR 51.165, the increases in fugitive emissions are not included in the SB 288 Major Modification calculation. This project results in fugitive VOC emissions increase only; therefore, SB 288 Major Modification calculations are not required and no further discussion is required.

### **8. Federal Major Modification**

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

Since this source is not included in the 28 specific source categories specified in 40 CFR 51.165, the increases in fugitive emissions are not included in the Federal Major Modification determination. This project results in a fugitive VOC emissions increase only; therefore, Federal Major Modification calculations are not required and no further discussion is required.

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

Since this source is not included in the 28 specific source categories specified in 40 CFR 51.165, the increases in fugitive emissions are not included in the Rule 2410 Prevention of Significant Deterioration (PSD) Applicability determination. All post project emissions associated with this project are fugitive emissions; therefore, a Rule 2410 Prevention of Significant Deterioration (PSD) Applicability determination is not 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 E.

## **VIII. Compliance**

### **Rule 2010 Permits Required**

The purpose of this rule is to require any person constructing, altering, replacing or operating any source operation which emits, may emit, or may reduce emissions to obtain an Authority to Construct or a Permit to Operate. This rule also explains the posting requirements for a Permit to Operate and the illegality of a person willfully altering, defacing, forging, counterfeiting or falsifying any Permit to Operate.

The provisions of this rule shall apply to any person who plans to or does operate, construct, alter, or replace any source operation which may emit air contaminants or may reduce the emission of air contaminants.

Section 3.0 of this rule states that any person building, altering or replacing any operation, article, machine, equipment, or other contrivance, the use of which may cause the issuance of air contaminants or the use of which may eliminate or reduce or control the issuance of air contaminants, shall first obtain authorization for such construction from the APCO. An Authority to Construct shall remain in effect until the Permit to Operate the source operation for which the application was filed is granted or denied, or the application is canceled as described in Rule 2050 (Cancellation of Application).

The installation of the new curde oil storage tank (unit '-135) and its connection it to the existing vapor recovery system of PTO '-78 will result in an alteration of the existing source operation and will require ATCs. Therefore, ATCs S-1114-78-6 and '-135-0 will be issued under this project.

## Rule 2201 New and Modified Stationary Source Review Rule

### A. Best Available Control Technology (BACT)

#### 1. BACT Applicability

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

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

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

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

As seen in Section VII.C.2 above, the applicant is proposing to install a new tank with a PE2 less than 2 lb/day for VOC emissions. No other pollutants are involved with this project; therefore, BACT is not triggered for this project for new emissions units with PE > 2 lb/day.

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

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

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

As discussed in Section I of this document, the modification of permit unit '-78 to connect the new tank is not a modification for Rule 2201 purpose; therefore, BACT is not triggered.

#### d. SB 288/Federal Major Modification

As discussed in Sections VII.C.7 and VII.C.8 above, this project does not constitute an SB 288 and/or Federal Major Modification for VOC emissions. Therefore BACT is not triggered for any pollutant.

## **B. Offsets**

### **1. Offset Applicability**

Pursuant to District Policy APR 1130, offsets will not be required for this project since the increase in permitted emissions is less than or equal to 0.5 lb/day and is therefore rounded to zero for the purposes of triggering NSR requirements. However, to minimize future rounding errors, the figures are presented in the EE and in the permit without rounding the daily increase in emissions to zero.

## **C. Public Notification**

### **1. Applicability**

Pursuant to Policy APR 1130, public notice will not be triggered for this project since the increase in permitted emissions is less than or equal to 0.5 lb/day and is therefore rounded to zero for the purposes of triggering NSR requirements. However, to minimize future rounding errors, the figures are presented in the EE and in the permit without rounding the daily increase in emissions to zero.

## **D. Daily Emission Limits (DELs)**

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

DELs for the emission units in this project will be included on the ATCs in the form of fugitive component emissions limits in lb VOC/day. The permittee will be required to maintain accurate records of fugitive component counts and resulting emission calculations to validate the DEL.

### **Proposed Rule 2201 (DEL) Conditions:**

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

## **E. Compliance Assurance**

### **1. Source Testing**

Pursuant to District Policy APR 1705, source testing is not required to demonstrate compliance with Rule 2201.

### **2. Monitoring**

No monitoring is required to demonstrate compliance with Rule 2201.

### **3. Recordkeeping**

Recordkeeping is required to demonstrate compliance with the offset, public notification and daily emission limit requirements of Rule 2201. The following condition(s) are listed on the permit to operate:

- 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]
- Operator shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rules 2201 and 4623]

### **4. Reporting**

No reporting is required to demonstrate compliance with Rule 2201.

## **Rule 2520 Federally Mandated Operating Permits**

This facility is subject to this Rule, and has received their Title V Operating Permit. The proposed modification is a Minor Modification to the Title V Permit.

In accordance with Rule 2520, these modifications:

1. Do not violate requirements of any applicable federally enforceable local or federal requirement;
2. Do not relax monitoring, reporting, or recordkeeping requirements in the permit and are not significant changes in existing monitoring permit terms or conditions;
3. Do not require or change a case-by-case determination of an emission limitation or other standard, or a source-specific determination for temporary sources of ambient impacts, or a visibility or increment analysis;
4. Do not seek to establish or change a permit term or condition for which there is no corresponding underlying applicable requirement and that the source has assumed to avoid an applicable requirement to which the source would otherwise be subject. Such terms and conditions include:

- a. A federally enforceable emission cap assumed to avoid classification as a modification under any provisions of Title I of the Federal Clean Air Act; and
  - b. An alternative emissions limit approved pursuant to regulations promulgated under section 112(i)(5) of the Federal Clean Air Act; and
5. Are not Title I modifications as defined in District Rule 2520 or modifications as defined in section 111 or 112 of the Federal Clean Air Act; and
  6. Do not seek to consolidate overlapping applicable requirements.

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. Continued compliance with this rule is expected. The facility may construct/operate under the ATC upon submittal of the Title V administrative amendment. The following conditions are included on ATCs to ensure compliance:

- {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]
- {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]

#### **Rule 4001 New Source Performance Standards (NSPS)**

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.

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  $\leq 1,589.874 \text{ m}^3$  ( $\leq 420,000$  gallons) used for petroleum or condensate stored, processed, or treated prior to custody transfer. The capacity of the tank involved with this project is  $\leq 420,000$  gallons, and it stores crude oil prior to custody transfer; therefore, this subpart does not apply to this tank.

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 vessels, located in the oil and natural gas production segment, natural gas processing segment or natural gas transmission and storage segment. The subject tank is subject to this subpart. However, Subpart OOOO has no standards for tanks with annual VOC emissions less than 6 tons per year. Therefore, the subject tank is not an affected facility and subpart OOOO does not apply.

Therefore, the requirements of this subpart are not applicable to this project.

**Rule 4101 Visible Emissions**

Rule 4101 states 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 as dark as, or darker than, Ringelmann 1 or 20% opacity.

As long as the equipment is properly maintained and operated, compliance with visible emissions limits is expected under normal operating conditions.

**Rule 4102 Nuisance**

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

**California Health & Safety Code 41700 (Health Risk Assessment)**

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

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

The cancer risk for this project is shown below:

<b>RMR Summary</b>			
<b>Categories</b>	<b>3,000 BBL Oil Tank (Unit 135-0)</b>	<b>Project Totals</b>	<b>Facility Totals</b>
<b>Prioritization Score</b>	0.00	0.00	>1
<b>Acute Hazard Index</b>	0.00	0.00	0.13
<b>Chronic Hazard Index</b>	0.00	0.00	0.12
<b>Maximum Individual Cancer Risk</b>	<b>7.83E-10</b>	7.83E-10	4.98E-06
<b>T-BACT Required?</b>	No		
<b>Special Permit Conditions?</b>	No		

## **Discussion of T-BACT**

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

### **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.

The affected tanks are served by a vapor control system that has a control efficiency of at least 95%. This rule also requires the tank and tank vapor control system to be maintained in a leak-free condition. Leak-free is defined in the rule as no readings on a portable VOC detection device greater than 10,000 ppmv above background and no dripping of organic liquid at a rate of more than 3 drops per minute.

The following conditions are included on ATC '-135-0 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. Vapors shall be discharged only to vapor control system listed on permit S-1114-78. Vapor control system shall have a minimum control efficiency of 95%. [District Rules 2201 and 4623]
- {modified 2499} All piping, valves, and fittings shall be constructed and maintained in a leak-free condition. [District Rules 2201 and 4623]
- {modified 2501} 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. [District Rules 2201 and 4623]
- {modified 2502} 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]

- 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]
- 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]
- 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]
- Operator shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rules 2201 and 4623]

Compliance with the requirements of this rule is expected.

#### **California Health & Safety Code 42301.6 (School Notice)**

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

#### **California Environmental Quality Act (CEQA)**

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

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

The tanks is equipped with a 95% efficient vapor controls satisfies the Best Performance Standards (BPS) for Front-line Organic Liquid Storage Tanks, Fixed Roof Tanks < 5,000 bbl. The District therefore concludes that the project would have a less than cumulatively significant impact on global climate change and no other discussion for greenhouse gas emissions is required.

**District CEQA Findings**

The District is the Lead Agency for this project because there is no other agency with broader statutory authority over this project. The District performed an Engineering Evaluation (this document) for the proposed project and determined that the activity will occur at an existing facility and the project involves negligible expansion of the existing use. Furthermore, the District determined that the activity will not have a significant effect on the environment. The District finds that the activity is categorically exempt from the provisions of CEQA pursuant to CEQA Guideline § 15031 (Existing Facilities), and finds that the project is exempt per the general rule that CEQA applies only to projects which have the potential for causing a significant effect on the environment (CEQA Guidelines §15061(b)(3)).

**IX. Recommendation**

Compliance with all applicable rules and regulations is expected. Pending a successful EPA noticing period, issue ATCs S-1114-78-6 and '-135-0 subject to the permit conditions on the attached draft ATCs in Appendix G.

**X. Billing Information**

<b>Annual Permit Fees</b>			
<b>Permit Number</b>	<b>Fee Schedule</b>	<b>Fee Description</b>	<b>Annual Fee</b>
S-1114-78-6	3020-05 E	5,000 bbl (210,000 gal)	\$246
S-1114-135-0	3020-05 E	3,000 bbl (126,000 gal)	\$246

**Appendices**

- A: Current PTO
- B: Plot Plan
- C: Gas Analysis
- D: Emission Factors and Calculations
- E: Quarterly Net Emissions Change
- F: HRA Summary
- G: Draft ATCs
- H: Emission Profiles

# **APPENDIX A**

## **Current PTO**

# San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1114-78-5

EXPIRATION DATE: 02/29/2016

SECTION: 15 TOWNSHIP: 31S RANGE: 22E

## EQUIPMENT DESCRIPTION:

5,000 BBL FIXED ROOF FREE WATER KNOCKOUT TANK T-1 W/VAPOR CONTROL SYSTEM INCLUDING HEAT EXCHANGER, LIQUID KNOCKOUT VESSELS, & VAPOR COMPRESSOR WITH PIPING TO STEAM GENERATOR S-1114-74, HEATER TREATERS S-1114-83 & 84, AND SERVING TANKS S-1114-78,79,80,81,82,85,86,87,104,105 AND 106 (MIDWAY SUNSET FIELD 15A TANK BATTERY)

## PERMIT UNIT REQUIREMENTS

---

1. Vapor space pressure in tanks shall be controlled by gas blanketing system. [District Rule 2201] Federally Enforceable Through Title V Permit
2. PUC-quality, PUC-regulated, inert gas or equivalent shall be used as blanketing gas. [District Rule 2201] Federally Enforceable Through Title V Permit
3. 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 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 6.4.7. [District Rule 4623] Federally Enforceable Through Title V Permit
4. All piping, valves, and fittings shall be constructed and maintained in a leak-free condition. [District Rule 4623] Federally Enforceable Through Title V Permit
5. 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 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. A liquid leak is defined as an organic liquid drip rate of more than three drops per minute and such a rate is a violation of this permit and Rule 4623 and shall be reported as a deviation. [District Rule 4623] Federally Enforceable Through Title V Permit
6. Any tank gauging or sampling device on a tank vented to the vapor control system shall be maintained to be leak-free and the cover shall be closed at all times except during gauging or sampling. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
7. Except as otherwise provided in this permit, the permittee shall ensure that the vapor control system is functional and is operating as designed at all times. [District Rule 2201] Federally Enforceable Through Title V Permit
8. The same component found to be leaking on two consecutive annual inspections is in violation of District Rule 4623, even if it is under the voluntary inspection and maintenance program. [District Rule 4623] Federally Enforceable Through Title V Permit
9. Permittee 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 Rule 2520] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

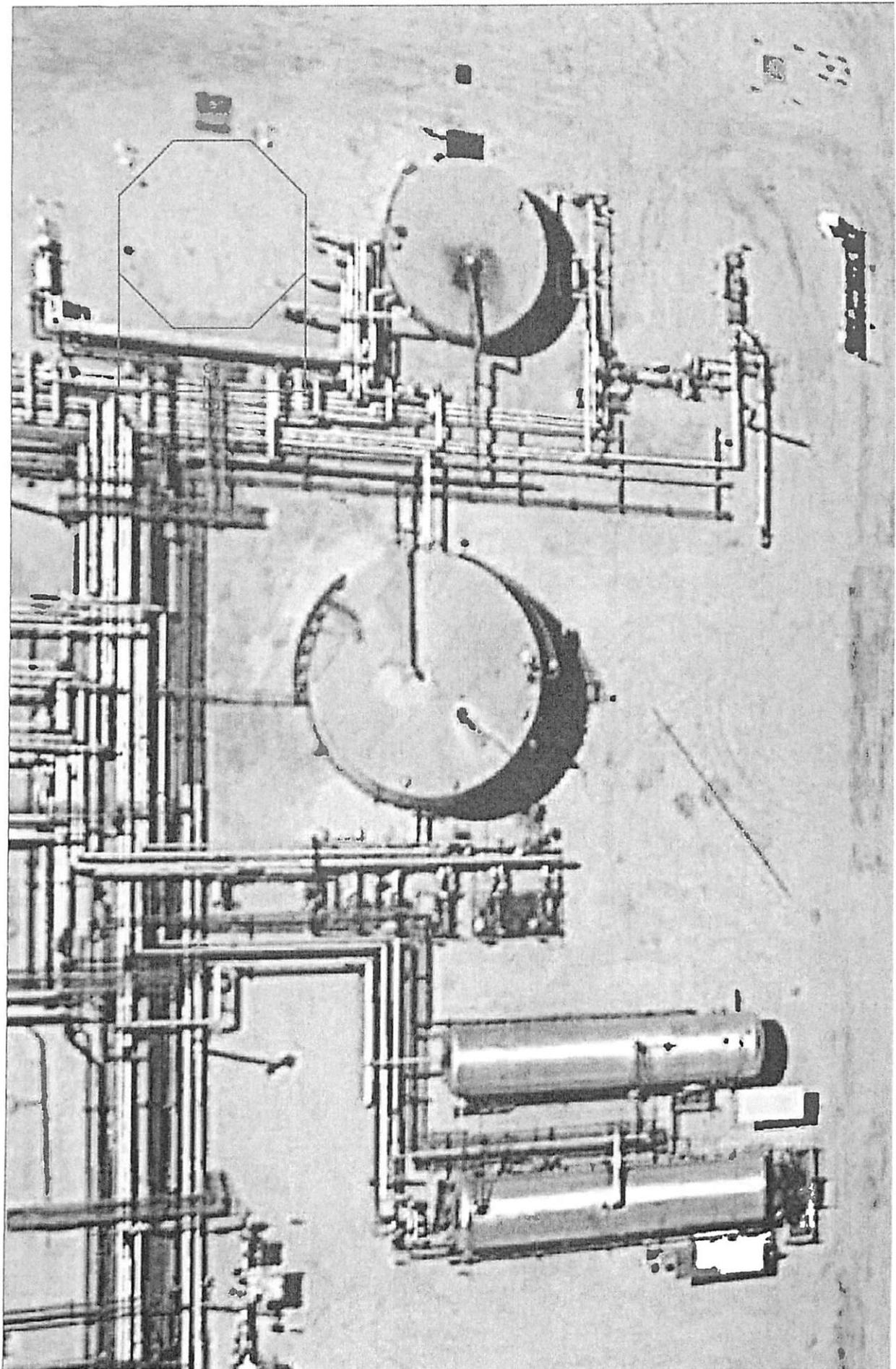
These terms and conditions are part of the Facility-wide Permit to Operate.

10. The VOC content of the gas in the vapor control system shall not exceed 10% by weight. [District Rule 2201] Federally Enforceable Through Title V Permit
11. Permittee shall conduct quarterly gas sampling for gas leaving the tank's vapor space. If the VOC content of the gas sample is equal to or less than 10% VOC by weight for 8 consecutive quarterly samples, sampling frequency shall only be required annually. If the VOC content of the gas sample is greater than 10% VOC content for any sample, the source shall resume fugitive component counts for all components associated with the tank until the VOC content of at least 2 consecutive quarterly gas samples are equal to or less than 10% by weight. [District Rule 2201] Federally Enforceable Through Title V Permit
12. Permittee shall visually inspect tank shell, hatches, seals, seams, cable seals, valves, flanges, connectors, and any other piping components directly affixed to the tank and within five feet of the tank at least once per year for liquid leaks, and with a portable hydrocarbon detection instrument conducted in accordance with EPA Method 21 for gas leaks. Permittee shall also visually or ultrasonically inspect, as appropriate, the external shells and roofs of uninsulated tanks for structural integrity annually. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
13. Upon detection of a liquid leak, with a leak rate of greater than or equal to 30 drops per minute, permittee shall repair the leak within 8 hours. For leaks with a liquid leak rate of between 3 and 30 drops per minute, the leaking component shall be repaired within 24 hours after detection. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
14. Upon detection of a gas leak, defined as a VOC concentration of greater than 10,000 ppmv measured in accordance with EPA Method 21, permittee shall take one of the following actions: 1) eliminate the leak within 8 hours after detection; or 2) if the leak cannot be eliminated, then minimize the leak to the lowest possible level within 8 hours after detection by using best maintenance practices, and eliminate the leak within 48 hours after minimization. In no event shall the total time to minimize and eliminate a leak exceed 56 hours after detection. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
15. Components found to be leaking fluids (liquids or gases) shall be immediately affixed with a tag showing the component to be leaking. Permittee shall maintain records of the liquid or gas leak detection readings, date/time the leak was discovered, and date/time the component was repaired to a leak-free condition. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
16. Leaking components that have been discovered by the permittee that have been immediately tagged and repaired within the timeframes specified in District Rule 4623, Table 3, shall not constitute a violation of this rule. Leaking components, as defined by District Rule 4623, discovered by District staff that were not previously identified and/or tagged by the permittee, and/or any leaks that were not repaired within the timeframes specified in District Rule 4623, Table 3, shall constitute a violation of this rule. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
17. If a component type for a given tank is found to leak during an annual inspection, permittee shall conduct quarterly inspections of that component type on the tank or tank system for four consecutive quarters. If no components of that component type are found to leak after four consecutive quarters, the permittee may revert to annual inspections. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
18. The permittee shall keep accurate records of the date VOC sampling occurred, who performed the sampling and testing, and the results. [District Rule 2520] Federally Enforceable Through Title V Permit
19. All monitoring data, support information and records required to be maintained by this permit shall be maintained for a period of at least five years and shall be made readily available for District inspection upon request. [District Rule 1070] Federally Enforceable Through Title V Permit

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

## **APPENDIX B**

### **Plot Plan**



# **APPENDIX C**

## **Gas Analysis**

**SENECA RESOURCES**  
**PTO S-1114**  
**Gas Analysis**

Sample Date: 06.16.14  
 Facility: Midway-Sunset Tank Battery  
 Stream: Tank Vapor Recovery Gas

Compound	Formula	Mole Weight	Mole Percent	Total Weight	Percent Weight
01. Oxygen	O2	31.999	7.036	225.145	8.213%
02. Nitrogen	N2	28.013	29.669	831.118	30.317%
03. Carbon Dioxide	CO2	44.010	23.919	1,052.675	38.399%
04. Methane	CH4	16.043	35.092	562.981	20.536%
05. Ethane	C2H6	30.070	0.871	26.191	0.955%
06. Propane	C3H8	44.097	0.060	2.646	0.097%
07. Isobutane	C4H10	58.124	0.031	1.802	0.066%
08. n-Butane	C4H10	58.124	0.034	1.976	0.072%
09. Isopentane	C5H12	72.151	0.017	1.227	0.045%
10. n-Pentane	C5H12	72.151	0.012	0.866	0.032%
11. Hexane...	C6+	86.178	0.404	34.816	1.270%
Totals			97.145	2,741.442	100.000%

VOC 1.58%



Seneca Resources Corporation  
Midway Sunset Field

Project 359-8577F  
Laboratory ID 14-218-07

Sample Location: 15A Tank Vapor Recovery Unit  
Sample Description: Vapor Recovery Gas  
Sampled by: Chris Gatlin

Date Sampled: June 16, 2014  
Date Received: June 16, 2014  
Date Analyzed: June 16, 2014

Fuel Gas Analysis Results

CONSTITUENT	MOLE %	Wt.%	LV%	GPM*	CHONS	Wt.%
Oxygen	7.036	7.930	4.233		Carbon	26.98
Nitrogen	29.669	29.278	22.125		Hydrogen	5.63
Carbon Dioxide	23.919	37.081	27.669		Oxygen	34.89
Carbon Monoxide	0.000	0.000	-		Nitrogen	29.28
Hydrogen Sulfide	2.855	3.427	2.616		Sulfur	3.24
Methane	35.092	19.831	40.324	5.946	<b>GPM SUBTOTALS* Gal/1000 ft<sup>3</sup></b>	
Ethane	0.871	0.923	1.579	0.233	C <sub>2</sub> +	0.447
Propane	0.080	0.093	0.112	0.017	C <sub>3</sub> +	0.214
Isobutane	0.031	0.083	0.068	0.010	C <sub>4</sub> +	0.198
N-Butane	0.034	0.071	0.074	0.011	C <sub>5</sub> +	0.177
Isopentane	0.017	0.044	0.043	0.008	<b>SULFUR ppmv gr/100SCF** lb/MMBTU***</b>	
N-Pentane	0.012	0.031	0.030	0.004	H <sub>2</sub> S	28550 1663 11.4844
Hexanes	0.404	1.227	1.127	0.166	TRS	28697 1671 11.5437
Total(s)	100.000	100.000	100.000	6.394		

Calorific Values	Gross		Net		SUPPORTING DATA
	BTU/ft <sup>3</sup>	BTU/lb	BTU/ft <sup>3</sup>	BTU/lb	
Dry, ideal	412 <sup>a</sup>	5509 <sup>b</sup>	372	4976	Specific Gravity (Air = 1) 0.9802
Wet, ideal	405	5412	366	4889	Specific Volume (ft <sup>3</sup> /lb) 13.37
Dry, real*	413	-	373	-	Molar Wt. of Sample 28.39
Wet, real*	406	-	368	-	Compressibility Factor "Z" 0.9979
References: ASTM D1945-03 (2010), D1946-90 (2011), D3588-98 (2011), D6228-10 GPA 2145-09, 2172-09 40 CFR Pt 60 App A Method 19					<b>EPA F-FACTOR</b>
					DSCF/MMBTU @ 68°F 9378
					DSCF/MMBTU @ 60°F 9237

\* Compressibility Corrected

\*\* Reported as Sulfur

\*\*\* Reported SO<sub>x</sub> as SO<sub>2</sub>

<sup>a</sup> Used in EPA Method 19 Volume Flow Calculations

<sup>b</sup> Used in EPA Method 19 F-Factor Calculations

DSCF - Dry Standard Cubic Foot

GPM - Gallons per 1000 ft<sup>3</sup>

LV% - Liquid Volume Percent

TVRU Manometer W.C.: 0.2

SCF - Standard Cubic Foot

TRS - Total Reduced Sulfur

Reviewed By: Tim Brennan, Laboratory Manager

## **APPENDIX D**

### **Emission Factors and Calculations**

**Seneca Resources**  
**S-1114-135-0**

EPA Protocol for Equipment Leak Emission Estimate  
Table 2-4. Oil and Gas Production Operations  
Average Emission Factors

Weight percentage of VOC in the total organic compounds in gas (neglect non-organics)? 10 %  
Weight percentage of VOC in the total organic compounds in oil (neglect non-organics)? 100 %

Equipment Type	Service	Screening Value EF - TOC		Component Count	VOC emissions (lb/day)
		(kg/hr/source)	(lb/day/source)		
Valves	Gas	4.5E-03	2.381E-01	3	0.07
	Heavy Oil	8.4E-06	4.445E-04	0	0.00
	Light Oil	2.5E-03	1.323E-01	0	0.00
	Water/Oil	9.8E-05	5.185E-03	0	0.00
Pump Seals	Gas	2.4E-03	1.270E-01	0	0.00
	Heavy Oil	N/A	N/A	0	N/A
	Light Oil	1.3E-02	6.878E-01	0	0.00
	Water/Oil	2.4E-05	1.270E-03	0	0.00
Others	Gas	8.8E-03	4.656E-01	3	0.14
	Heavy Oil	3.2E-05	1.693E-03	0	0.00
	Light Oil	7.5E-03	3.968E-01	0	0.00
	Water/Oil	1.4E-02	7.408E-01	0	0.00
Connectors	Gas	2.0E-04	1.058E-02	18	0.02
	Heavy Oil	7.5E-06	3.968E-04	0	0.00
	Light Oil	2.1E-04	1.111E-02	0	0.00
	Water/Oil	1.1E-04	5.820E-03	0	0.00
Flanges	Gas	3.9E-04	2.064E-02	17	0.04
	Heavy Oil	3.9E-07	2.064E-05	0	0.00
	Light Oil	1.1E-04	5.820E-03	0	0.00
	Water/Oil	2.9E-06	1.534E-04	0	0.00
Open-ended Lines	Gas	2.0E-03	1.058E-01	0	0.00
	Heavy Oil	1.4E-04	7.408E-03	0	0.00
	Light Oil	1.4E-03	7.408E-02	0	0.00
	Water/Oil	2.5E-04	1.323E-02	0	0.00

**Total VOC Emissions = 0.3 lb/day**

## **APPENDIX E**

### **Quarterly Net Emissions Change (QNEC)**

## Quarterly Net Emissions Change (QNEC)

The Quarterly Net Emissions Change is used to complete the emission profile screen for the District's PAS database. The QNEC shall be calculated as follows:

$QNEC = PE2 - PE1$ , where:

QNEC = Quarterly Net Emissions Change for each emissions unit, lb/qtr.

PE2 = Post Project Potential to Emit for each emissions unit, lb/qtr.

PE1 = Pre-Project Potential to Emit for each emissions unit, lb/qtr.

Using the values in Sections VII.C.2 and VII.C.6 in the evaluation above, quarterly PE2 and quarterly PE1 can be calculated as follows:

$$PE2_{\text{quarterly}} = PE2_{\text{annual}} \div 4 \text{ quarters/year}$$

$$PE1_{\text{quarterly}} = PE1_{\text{annual}} \div 4 \text{ quarters/year}$$

Quarterly NEC [QNEC] S-1114-135-0				
PE2 (lb/yr)	PE2 (lb/qtr)	PE1 ( lb/yr)	PE1 (lb/qtr)	QNEC (lb/qtr)
110	28	0	0	28

## **APPENDIX F**

### **HRA Summary**

# San Joaquin Valley Air Pollution Control District Risk Management Review

To: Sajjad Ahmad – Permit Services  
 From: Kyle Melching – Technical Services  
 Date: April 14, 2015  
 Facility Name: Seneca Resources  
 Location: UTME: 263694.36 UTMN: 3902318.79  
 Application #(s): S-1114-78-6 & 135-0  
 Project #: S-1144490

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## A. RMR SUMMARY

RMR Summary			
Categories	3,000 BBL Oil Tank (Unit 135-0)	Project Totals	Facility Totals
Prioritization Score	0.00	0.00	>1
Acute Hazard Index	0.00	0.00	0.13
Chronic Hazard Index	0.00	0.00	0.12
Maximum Individual Cancer Risk	7.83E-10	7.83E-10	4.98E-06
T-BACT Required?	No		
Special Permit Conditions?	No		

### I. Project Description

Technical Services received a request on April 1, 2015, to perform a Risk Management Review to install a 3,000 bbl crude oil storage tank to be connected to an existing vapor control system (Unit 78-6).

### II. Analysis

Toxic emissions from the project were calculated using a District approved spreadsheet for Oilfield Equipment Fugitive - District, along with increased VOC fugitive emission rates calculated and supplied by the processing engineer. In accordance with the District's *Risk Management Policy for Permitting New and Modified Sources* (APR 1905-1, March 2, 2001), risks from the project were prioritized using the procedures in the 1990 CAPCOA Facility Prioritization Guidelines and incorporated in the District's HEART's database. The prioritization score for the project was less than 1.0 (see RMR Summary Table); however, the facility's combined prioritization scores totaled to greater than one. Therefore, a refined Health Risk Assessment was required and performed for the project. AERMOD was used with area source parameters outlined below and concatenated 5-year meteorological data from Fellows to determine maximum dispersion factors at the nearest residential and business receptors. The dispersion factors were input into the HARP model to calculate the Chronic and Acute Hazard Indices and the Carcinogenic Risk.

The following parameters were used for the review:

<b>Analysis Parameters (Unit 135-0)</b>			
<b>Source Type</b>	Circle Area	<b>Closest Receptor (m)</b>	411
<b>Average Release Height (m)</b>	7.3	<b>Type of Receptor</b>	Business
<b>Average Tank Radius (m)</b>	4.57	<b>Location Type</b>	Rural
<b>VOC Emissions (lb/hr)</b>	0.01	<b>VOC Emissions (lb/yr)</b>	110

### III. Conclusions

The acute and chronic indices are below 1.0; and the maximum individual cancer risk associated with the project is **7.83E-10**; 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).

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.

### IV. Attachments

- A. RMR request from the project engineer
- B. Additional information from the applicant/project engineer
- C. Prioritization score w/ toxic emissions summary
- D. HARP Risk Results
- E. Facility Summary

## **APPENDIX G**

### **Draft ATCs**

San Joaquin Valley  
Air Pollution Control District

**AUTHORITY TO CONSTRUCT**

ISSUANCE DATE: DRAFT  
**DRAFT**

PERMIT NO: S-1114-78-6

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

LOCATION: HEAVY OIL WESTERN  
CA

SECTION: 15 TOWNSHIP: 31S RANGE: 22E

**EQUIPMENT DESCRIPTION:**

MODIFICATION OF 5,000 BBL FIXED ROOF FREE WATER KNOCKOUT TANK T-1 WITH VAPOR CONTROL SYSTEM INCLUDING HEAT EXCHANGER, LIQUID KNOCKOUT VESSELS, & VAPOR COMPRESSOR WITH PIPING TO STEAM GENERATOR S-1114-74, HEATER TREATERS S-1114-83 & 84, AND SERVING TANKS S-1114-78, 79, 81, 82, 85, 86, 87, 104, 105 AND 106 (MIDWAY SUNSET FIELD 15A TANK BATTERY): CONNECT TANK S-1114-135-0 TO THE VAPOR CONTROL SYSTEM

**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. Vapor space pressure in tanks shall be controlled by gas blanketing system. [District Rule 2201] Federally Enforceable Through Title V Permit
4. PUC-quality, PUC-regulated, inert gas or equivalent shall be used as blanketing gas. [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 Marjolle, Director of Permit Services  
S-1114-78-6 Apr 15 2015 3:36PM - AHMADS 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 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 6.4.7. [District Rule 4623] Federally Enforceable Through Title V Permit
6. All piping, valves, and fittings shall be constructed and maintained in a leak-free condition. [District Rule 4623] Federally Enforceable Through Title V Permit
7. 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 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. A liquid leak is defined as an organic liquid drip rate of more than three drops per minute and such a rate is a violation of this permit and Rule 4623 and shall be reported as a deviation. [District Rule 4623] Federally Enforceable Through Title V Permit
8. Any tank gauging or sampling device on a tank vented to the vapor control system shall be maintained to be leak-free and the cover 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 permittee shall ensure that the vapor control system is functional and is operating as designed at all times. [District Rule 2201] Federally Enforceable Through Title V Permit
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14. Permittee shall visually inspect tank shell, hatches, seals, seams, cable seals, valves, flanges, connectors, and any other piping components directly affixed to the tank and within five feet of the tank at least once per year for liquid leaks, and with a portable hydrocarbon detection instrument conducted in accordance with EPA Method 21 for gas leaks. Permittee shall also visually or ultrasonically inspect, as appropriate, the external shells and roofs of uninsulated tanks for structural integrity annually. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
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CONDITIONS CONTINUE ON NEXT PAGE

17. Components found to be leaking fluids (liquids or gases) shall be immediately affixed with a tag showing the component to be leaking. Permittee shall maintain records of the liquid or gas leak detection readings, date/time the leak was discovered, and date/time the component was repaired to a leak-free condition. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
18. Leaking components that have been discovered by the permittee that have been immediately tagged and repaired within the timeframes specified in District Rule 4623, Table 3, shall not constitute a violation of this rule. Leaking components, as defined by District Rule 4623, discovered by District staff that were not previously identified and/or tagged by the permittee, and/or any leaks that were not repaired within the timeframes specified in District Rule 4623, Table 3, shall constitute a violation of this rule. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
19. If a component type for a given tank is found to leak during an annual inspection, permittee shall conduct quarterly inspections of that component type on the tank or tank system for four consecutive quarters. If no components of that component type are found to leak after four consecutive quarters, the permittee may revert to annual inspections. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
20. The permittee shall keep accurate records of the date VOC sampling occurred, who performed the sampling and testing, and the results. [District Rule 2520] Federally Enforceable Through Title V Permit
21. All monitoring data, support information and records required to be maintained by this permit shall be maintained for a period of at least five years and shall be made readily available for District inspection upon request. [District Rule 1070] Federally Enforceable Through Title V Permit

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San Joaquin Valley  
Air Pollution Control District

## AUTHORITY TO CONSTRUCT

ISSUANCE DATE: DRAFT  
**DRAFT**

PERMIT NO: S-1114-135-0

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

LOCATION: HEAVY OIL WESTERN  
CA

SECTION: 15 TOWNSHIP: 31S RANGE: 22E

### EQUIPMENT DESCRIPTION:

3,000 BBL (126,000 GALLON) FIXED ROOF PETROLEUM STORAGE TANK #T-3 CONNECTED TO VAPOR CONTROL SYSTEM LISTED ON PERMIT S-1114-78 (MIDWAY SUNSET FIELD 15A TANK BATTERY)

## 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 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. Vapors shall be discharged only to vapor control system listed on permit S-1114-78. Vapor control system shall have a minimum control efficiency of 95%. [District Rules 2201 and 4623]
4. All piping, valves, and fittings shall be constructed and maintained in a leak-free condition. [District Rules 2201 and 4623]
5. A gas-tight 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. [District Rules 2201 and 4623]

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-1114-135-0 : May 20 2015 11:47AM - AHMADE : Joint Inspection NOT Required

6. 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]
7. The VOC content of the gas shall not exceed 10% by weight. [District Rule 2201]
8. 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]
9. 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]
10. 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]
11. 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]
12. Operator shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rules 2201 and 4623]

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**APPENDIX H**  
**Emission Profiles**

Permit #: S-1114-78-6	<b>Last Updated</b>
Facility: SENECA RESOURCES	04/02/2015 AHMADS

Equipment Pre-Baselined: NO

	<u>NOX</u>	<u>SOX</u>	<u>PM10</u>	<u>CO</u>	<u>VOC</u>
Potential to Emit (lb/Yr):	0.0	0.0	0.0	0.0	0.0
Daily Emis. Limit (lb/Day)	0.0	0.0	0.0	0.0	0.0
Quarterly Net Emissions Change (lb/Qtr)					
Q1:	0.0	0.0	0.0	0.0	0.0
Q2:	0.0	0.0	0.0	0.0	0.0
Q3:	0.0	0.0	0.0	0.0	0.0
Q4:	0.0	0.0	0.0	0.0	0.0
Check if offsets are triggered but exemption applies	N	N	N	N	N
Offset Ratio					
Quarterly Offset Amounts (lb/Qtr)					
Q1:					
Q2:					
Q3:					
Q4:					

Permit #: S-1114-135-0	Last Updated
Facility: SENECA RESOURCES	04/02/2015 AHMADS

Equipment Pre-Baselined: NO

	<u>NOX</u>	<u>SOX</u>	<u>PM10</u>	<u>CO</u>	<u>VOC</u>
Potential to Emit (lb/Yr):	0.0	0.0	0.0	0.0	110.0
Daily Emis. Limit (lb/Day)	0.0	0.0	0.0	0.0	0.3
Quarterly Net Emissions Change (lb/Qtr)					
Q1:	0.0	0.0	0.0	0.0	28.0
Q2:	0.0	0.0	0.0	0.0	28.0
Q3:	0.0	0.0	0.0	0.0	28.0
Q4:	0.0	0.0	0.0	0.0	28.0
Check if offsets are triggered but exemption applies	N	N	N	N	N
Offset Ratio					
Quarterly Offset Amounts (lb/Qtr)					
Q1:					
Q2:					
Q3:					
Q4:					