San Joaquin Valley
Unified Air Pollution Control District

Guideline for Expedited Application Review (GEAR #25a)
Fixed Roof Oil Field Production Tanks/Vessels < 5000 BBLs
Small Producer, Heavy Oil, Non-Major Source, Not Connected to Vapor Control

Approved By:	Signed Arnaud Marjollet Director of Permit Services	Date: Revised:	May 31, 2016 October 12, 2020

PURPOSE:

To outline the procedures for expedited processing of Authority to Construct (ATC) applications for the installation/ modification of fixed roof oil field production tanks/vessels < 5000 BBLs, small producer, heavy oil, non-major source, and not connected to vapor control. These procedures will apply to processing of applications received over the counter or through the mail.

I. APPLICABILITY

This policy applies to applications for Authority to Construct permits for fixed roof oil field production tanks/vessels < 5000 BBLs, small producer, heavy oil, at a non-major source, and not connected to vapor control.

II. PERMIT APPLICATION AND SUPPLEMENTARY FORMS

The applicant must complete a regular ATC Application Form and the Oilfield Production Tank Supplemental Application Form.

III. APPLICATION REVIEW

In order to standardize the application reviews for this source category, the application review found on the AIRNET will be used as a base document. The following pages are hard copies of the standard review for fixed roof oil field production tanks/vessels < 5000 BBLs, small producer, heavy oil, at a non-major source, and not connected to vapor control. Standard emission factors and emission control efficiencies are included. This hard copy version for the GEAR Policy manual includes the ATC application review.

The use of this standard Application Review will ensure that:

1. The proposed project complies with the Best Available Control Technology (BACT) requirements as specified in the District's current BACT Clearinghouse.

2. The ATC has enforceable daily emission limitations (DELs).

3. The proposed project complies with all applicable prohibitory rules.

IV. EQUIPMENT DESCRIPTION

To ensure uniformity, standard descriptions are established and presented in the attached engineer evaluation and will be used in the database:

V. AUTHORITY TO CONSTRUCT CONDITIONS

To ensure uniformity, a standard set of conditions is attached to the engineer evaluation and will be used as a base for all applications

VI. UPDATES

This GEAR will be updated as necessary to accommodate any changes in prohibitory rules or other items affecting the policy. Each update will be posted on the AIRNET by the GEAR coordinator for comments and the coordinator will forward the updates for the Director's approval.

Authority to Construct
Application Review

Installation/Modification of a Fixed Roof Oil Field Production Tank < 5000 BBLs
Small Producer, Heavy Oil, Non-Major Source, Not Connected to Vapor Control

Facility Name:	Facility Name	Date:	Date
Mailing Address:	Mailing Address City, State Zip	Engineer:	Name
		Lead Engineer:	Name
Contact Person:	Contact		
Telephone:	Telephone		
Application #(s):	ATC Number		
Project #:	Project Number		
Deemed Complete:	Date		

PLEASE NOTE: THIS GEAR IS ONLY APLICABLE FOR:

- **INTALLATION / MODIFICATION of TANKS < 5000 BBLS,**
- **LOCATED AT HEAVY OIL FACILITIES,**
- **SMALL PRODUCER**
- **NON-MAJOR SOURCE FOR ANY POLLUTANT, AND**
- **NOT CONNECTED TO VAPOR CONTROL.**

IF THIS IS NOT THE CASE, PLEASE DO NOT USE THIS GEAR AND CONSULT YOUR SUPERVISOR.

I. Proposal

Installation NEW tank

Facility Name is applying for (an) Authority(ies) to Construct (ATC) permit(s) for the [installation] of [# tanks/vessels] (if necessary insert constant level) fixed roof, [XXX] bbl crude oil tank(s) with a tank pressure relief or pressure/vacuum relief device(s).

Modification of EXISTING tank – Throughput change

Facility Name is applying for (an) Authority(ies) to Construct (ATC) permit(s) to modify their [# tanks/vessels] fixed roof [XXX] bbl crude oil tank(s) to [increase/decrease] the throughput to [XXX] bbls/day from [XXX] bbls/day.

Modification of EXISTING tank – TVP Change

Facility Name is applying for (an) Authority(ies) to Construct (ATC) permit(s) to modify their [# tanks/vessels] (if necessary insert constant level) fixed roof [XXX] bbl crude oil tank(s) to [increase/decrease] the true vapor pressure (TVP) to [XXX] psia from [XXX] psia.

If TVP < 0.5 psia:

The oil stored has a TVP less than 0.5 psi by the HOST method analysis of a sample collected [insert date of test], (Appendix XXX).

Modification of EXISTING tank – Tank Cleaning

Facility Name is applying for (an) Authority(ies) to Construct (ATC) permit(s) to modify their [# tanks/vessels] (if necessary insert constant level) fixed roof [XXX] bbl crude oil tank(s) to allow for tank cleaning.

II. Applicable Rules

Rule 2201 New and Modified Stationary Source Review Rule (8/15/19)
Rule 4101 Visible Emissions (04/20/05)
Rule 4102 Nuisance (12/17/92)
Rule 4623 Storage of Organic Liquids (05/19/05) Not applicable tank capacity less than 1,100 gallons. If tank capacity is ≥ 1,100 gallons delete this comment.
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 facility is located at [location and stationary source]. The facility [is/is not] located within 1,000 feet of the outer boundary of any K-12 school, Therefore, pursuant to CH&SC 42301.6, California Health and Safety Code (School Notice), public notification [is/is not] required.

IV. Process Description

The tanks and vessels at [lease/tank battery/designation] receive production from the [oil field or lease name] prior to transport to the [next location the oil will be shipped and the method ex. pipeline, vacuum trucked, tanker truck. etc.].

[insert proposal from above].

V. Equipment Listing

ATC A-XXXX-XXX-XX:

XXX BBL (if necessary insert constant level) FIXED ROOF CRUDE OIL (insert wash/shipping/produced water/other) TANK WITH PV VALVE

VI. Emission Control Technology Evaluation

The tank(s) will be equipped with a pressure-vacuum (PV) relief vent valve set to within 10% of the maximum allowable working pressure of the tank. The PV-valve will reduce VOC wind induced emissions from the tank vent.

VII. Emissions Calculations

A. Assumptions

- Facility will operate 24 hours per day, 7 days per week, and 52 weeks per year.
- The tanks/vessels emit only volatile organic compounds (VOCs), therefore only VOC emissions will be addressed in this evaluation.
- The tank paint conditions are good, the color is gray, and the shade is medium. –customize as needed
- TVP of oil = XX.X psia (Applicant)
- Tank temperature, 120° F (unheated)
- Applicant proposes XXX bbl/day throughput

or if stock tank add:

- Tank temperature, XXX° F (if periodically heated)
- VOCs molecular weight, XXX lb/lbmol (100 is default if not supplied by applicant)

B. Emission Factors

If emissions are calculated based on tank throughput:

Both the daily and annual PE's for each permit unit will be based on the results from the District's Microsoft Excel spreadsheets for Tank Emissions - Fixed Roof Crude Oil less than 26° API located in Attachment XXX. The spreadsheet for tanks/vessels was developed using the equations for fixed-roof tanks from EPA AP-42, Chapter 7.1. See Calculations Attachment XXX.

C. Calculations

1. Pre-Project Potential to Emit, (PE_1)

If new emissions unit:
Since this is a new emissions unit, the $PE_1 = 0$

If existing tank:

The tanks emissions are calculated based on tank and crude oil characteristics, stated in the assumptions section, and District's Microsoft Excel spreadsheets for Tank Emissions - Fixed Roof Crude Oil less than 26° API located in Attachment II.

Permit Unit	VOC - Daily PE1 (lb/day)	VOC - Annual PE1 (lb/year)
A-XXX-XX-X	X.X	XXX
A-XXX-XX-X	X.X	XXX
A-XXX-XX-X	X.X	XXX
A-XXX-XX-X	X.X	XXX
A-XXX-XX-X	X.X	XXX

See appendix XXX for calculation.

2. Post Project Potential to Emit, (PE_2)

The tanks emissions are calculated based on tank and crude oil characteristics, as stated in the assumptions section, and the District's Microsoft Excel spreadsheets for Tank Emissions - Fixed Roof Crude Oil less than 26° API located in Attachment II.

Permit Unit	VOC - Daily PE2 (lb/day)	VOC - Annual PE2 (lb/year)
A-XXX-XX-X	X.X	XXX
A-XXX-XX-X	X.X	XXX
A-XXX-XX-X	X.X	XXX
A-XXX-XX-X	X.X	XXX
A-XXX-XX-X	X.X	XXX

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

Pursuant to Section 4.9 of District Rule 2201, the pre-project stationary source Potential to Emit (SSPE1) is the Potential to Emit (PE) from all units with valid Authorities to Construct (ATC) or Permits to Operate (PTO) at the stationary source and the quantity of emission reduction credits (ERC) which have been banked since September 19, 1991 for Actual Emissions Reductions that have occurred at the source, and which have not been used on-site

For new stationary source:
Since this is a new facility, SSPE1 is equal to zero.

For existing stationary source:
The pre-project stationary source VOC Potential to Emit (SSPE1) is presented in the following table:

SSPE1 (lb/yr)		
Permit #	**VOC**	**Source**
A-xxxx-x-x	[X]	Ex. PTO A-XXXX-X-X
A-xxxx-x-x	[X]	Ex. Project A-XXXXXXX
Total	**[X]**	

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

Pursuant to Section 4.10 of District Rule 2201, the post-project stationary source Potential to Emit (SSPE1) is the Potential to Emit (PE) from all units with valid Authorities to Construct (ATC) or Permits to Operate (PTO) at the stationary source and the quantity of emission reduction credits (ERC) which have been banked since September 19, 1991 for Actual Emissions Reductions that have occurred at the source, and which have not been used on-site. The post-project stationary source Potential to Emit (SSPE2) is presented in the following table:

SSPE2 (lb/yr)		
Permit #	**VOC**	**Source**
A-xxxx-x-x	[X]	Ex. PTO A-XXXX-X-X
A-xxxx-x-x	[X]	Ex. Project A-XXXXXXX
Total	**[X]**	

5. Major Source Determination

A Major Source is a facility where the SSPE2 for any pollutant exceeds the following Major Source threshold value:

Major Source				
Pollutant	**SSPE 1 (lb/yr)**	**SSPE 2 (lb/yr)**	**Major Source Threshold (lb/year)**	**Major Source?**
VOC	[X]	[X]	20,000	No

Since the threshold values in the above table are not exceeded for any criteria pollutant, this facility is not a Major Source.

6. Baseline Emissions (BE)

The annual BE is determined on a pollutant-by-pollutant basis to determine the amount of offsets required, where necessary, when the SSPE1 is greater than the offset threshold. For this project the annual BE will be determined to calculate quarterly Baseline Emissions (QBE)

BE = Pre-project Potential to Emit (PE1) for

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

otherwise,

BE = Historic Actual Emissions (HAE), calculated pursuant to Section 3.23

This facility in not a major source, therefore,

BE = PE1

For a new emissions unit:
Since this is a new emissions unit, the annual BE is equal to zero.

BE = 0

For existing tanks/vessels:
Since tank A-XXXX-XX-X is not located at a major source,
BE = pre-project Potential to Emit (PE1).

Permit unit	Annual PE1 (lb/Year)

Permit unit	Annual PE1 (lb/Year)
A-XXXX-XX-X	XXX

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 not a major source for any of the pollutants addressed in this project, this project does not constitute an SB 288 major modification.

8. Federal Major Modification

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

Since this facility is not a Major Source for any pollutants, this project does not constitute a Federal Major Modification.

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. This project only affects VOC emissions which do not require a PSD evaluation.

10. 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 - BE, where:

QNEC = Quarterly Net Emissions Change for each emissions unit, lb/qtr
PE2 = Post Project Potential to Emit for each emissions unit, lb/qtr
BE = Baseline Emissions (per Rule 2201) 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 BE can be calculated as follows:

$PE2_{quarterly}$ = $PE2_{annual}$ ÷ 4 quarters/year
= X,XXX lb/year ÷ 4 qtr/year
= X,XXX lb PM_{10}/qtr

$BE_{quarterly}$ = BE_{annual} ÷ 4 quarters/year
= X,XXX lb/year ÷ 4 qtr/year
= X,XXX lb PM_{10}/qtr

VIII. Compliance

Rule 2201 - New and Modified Stationary Source Review Rule

A. BACT

1. BACT Applicability

BACT requirements are triggered on a pollutant-by-pollutant basis and on an emissions unit-by-emissions unit basis for the following:

a) Any new emissions unit with a potential to emit 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, and/or
c) Modifications to an existing emissions unit with a valid Permit to Operate resulting in an AIPE exceeding two pounds per day*.
d) When a Major Modification is triggered for a modification project at a facility that is a Major Source.

*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.

If new tank:

The applicant is proposing to install a new emissions unit with a PE of [XX] lb/day for VOC as calculated in section VII.C.2. Since the daily VOC emissions are [greater/less] than 2.0 lbs/day, BACT [will/ will not] be required.

or if modification:

The applicant is proposing to modify its existing emissions unit with an AIPE of [XX] lb/day for VOC as calculated in the following section. Since the daily VOC emissions are [greater/less] than 2.0 lbs/day, BACT [will/will not] be required.

If increase in emissions is less than 0.5 lb/day, state the following and omit AIPE, BACT Guidance, Top-Down BACT analysis, offsets and public notice sections of the application review.

New and Modified Source Review (NSR) addresses requirements such as Best Available Control Technology (BACT), offsets and public notice. This project is an NSR modification under Rule 2201 § 3.25.1. However, District Policy APR 1130 states:

> "*District policy is to consider an IPE of less than 0.5 lb/day to be rounded to zero for the purposes of triggering NSR requirements and therefore the requirements are not triggered.*"

Therefore, Rule 2201 does not require BACT, offsets, and public notice under District Policy APR 1130.

If increase in emissions is 0.5 lb/day or greater, state the following

Adjusted Increase in Permitted Emissions (AIPE)

AIPE = PE2 – HAPE where,

AIPE = Adjusted Increase in Permitted Emissions, lb/day.
PE2 = the emission unit's post project Potential to Emit, lb/day.
HAPE = the emission unit's Historically Adjusted Potential to Emit, lb/day.

Historically Adjusted Potential to Emit (HAPE) Calculations:

HAPE = PE1 x (EF2 / EF1) where,

PE1 = The emission unit's Potential to Emit prior to modification or relocation.
EF2 = The emission 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 emission unit's permitted emission factor for the pollutant before the modification or relocation.

EF1 = [XX] (Taken from project # [A-XXXXXXX]
EF2 = [XX] (This project)

AIPE (lb/day) = PE2 (lb/day) – [PE1 (lb/day) x (EF2 / EF1)]

If BACT is not triggered delete Sections 2 & 3 & Appendix XXX.

2. BACT Guidance

Per District Policy APR 1305, Section IX, "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 for source categories or classes covered in the BACT Clearinghouse, relevant information under each of the following steps may be simply cited from the Clearinghouse without further analysis."

BACT Guideline 7.3.1, applies to Petroleum and Petrochemical Production – Fixed Roof Organic Liquid Storage or Processing Tank, < 5,000 bbl tank capacity (see Attachment XXX).

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 Attachment XXX), BACT has been satisfied with the following:

VOC: pressure and vacuum (PV) relief valve on tank vent set to within 10% of maximum allowable pressure.

If small emitter and PV relief valve proposed:

The applicant is proposing the use of a PV relief valve on the tank vent set to within 10% of maximum allowable pressure. This proposed equipment is the achieved in practice BACT and the facility is a small emitter. Therefore, the proposed equipment satisfies the BACT requirement. (see BACT Guideline 7.3.1).

If not a small emitter and PV relief valve is proposed:

The applicant is proposing to use PV relief valve on the tank vent set to within 10% of maximum allowable pressure. The technologically feasible option of waste gas incinerated in [steam generator, heater treater, or other fired equipment] and inspection and maintenance program at 99% control are not cost effective; the proposed equipment satisfies the BACT requirement. (see BACT Guideline 7.3.1).

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 or exceeds the offset threshold levels in Table 4-1 or Rule 2201.

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

Offset Applicability			
Pollutant	**SSPE2 (lb/yr)**	**Offset Threshold Levels (lb/yr)**	**Offsets Required?**
VOC	[X]	20,000	No

2. Quantity of Offsets Required

As shown in the table above, the SSPE2 is not greater than or equal to the offset threshold levels for VOC (Only criteria pollutant affected by this project). Therefore, offsets will not be required for this project.

C. Public Notification

1. Applicability

Public noticing is required for:

a) A facility which is becoming a new Major Source,
b) Major Modifications of an existing Major Source,
c) Any project which results in the offset thresholds being exceeded,
d) New emission units with an PE of greater than 100 pounds during any one day for any one pollutant, and/or
e) Any project with an SSIPE of greater than 20,000 lb/year for any pollutant.

a) Major Source

The following table compares the pre-project and post-project facility-wide annual emissions in order to determine if this facility is already an existing Major Source or if the facility is becoming a new Major Source as a result of this project.

Major Source Applicability				
Pollutant	**SSPE1 (lb/yr)**	**SSPE2 (lb/yr)**	**Major Source Thresholds (lb/yr)**	**Major Source?**
VOC	[ ]	[ ]	20,000	No

Since the SSPE [exceeds/does not exceed] the major source level, public noticing is [not] required for this project.

b) Major Modification

For a new stationary source:
Since this facility is a new stationary source, and will not be a major source, a Major Modification is not triggered. Therefore public noticing is not required for this project.

For an existing non-major stationary source:
This facility is not becoming a major source as a result of this project. Since for non-major sources, the Major Modification threshold levels are equivalent to the major source threshold levels, a Major Modification is not triggered. Therefore, public noticing is not required for this project.

c) Offset Threshold

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

Offset Threshold				
Pollutant	**SSPE1 (lb/yr)**	**SSPE2 (lb/yr)**	**Offset Threshold (lb/yr)**	**Public Notice Required?**
VOC	[ ]	[ ]	20,000	[Yes or No]

Since the SSPE2 [does/does not] surpass the offset threshold levels, public noticing [is/is not] triggered for this project.

d) PE > 100 lb/day

For a new stationary source:
For new emissions units, public notification is required if the PE exceeds 100 lb/day for any pollutant. As shown in section VII.C.2.a, the daily PE does not exceed 100 lb/day for any criteria pollutant. Therefore, public noticing is not required for this project due to exceedance of the PE public notice threshold.

Or

For new emissions units, public notification is required if the PE exceeds 100 lb/day for any pollutant. As shown in section VII.C.2.a, the daily PE

exceeds 100 lb/day for VOC. Therefore, public noticing is required for this project for exceeding the PE public notice threshold.

e) SSIPE > 20,000 lb/yr

The SSIPE (NEC) is calculated and shown as follows:

SSIPE= SSPE2 – SSPE1

Stationary Source Increase in Permitted Emissions (SSIPE)			
Pollutant	**SSPE2 (lb/yr)**	**SSPE1 (lb/yr)**	**SSIPE (lb/yr)**
VOC	[XX]	[XX]	[XX]

Not triggering Public Notice
As shown in the above table, the SSIPE for this project does not exceed the 20,000 lb/yr public notice threshold.

Therefore, public noticing is not required for SSIPE purposes.

Triggering Public Notice
As shown in the above table, the SSIPE for this project exceeds the 20,000 lb/yr public notice threshold.

Therefore, public noticing will be required for SSIPE purposes.

2. Public Notice Action

Not triggering Public Notice
subject these emission units to any of the noticing requirements listed above. Therefore, public notice will not be required for this project.

Triggering Public Notice
As discussed above, public noticing pursuant to District Rule 2201 is required for this project [specify the reason for the public notice]. 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 Emissions Limits (DEL)

Daily Emission Limits, DELs, are required by Rule 2201 Section 5.7.2.

DELs for the emission units in this project will be included on the ATCs in the form of tanks/vessels' throughput and the tank contents' maximum true vapor pressure (TVP). The permittee will be required to maintain accurate records of tank content TVP and tanks/vessels monthly average daily throughput to validate the DEL.

E. Compliance Assurance

The following measures shall be taken to ensure continued compliance with District Rules:

1. Source Testing

The permittee will be required to perform periodic TVP testing for all tanks/vessels in this project using the latest EPA and CARB approved version of the Lawrence Berkeley National Laboratory "Test Method for Vapor Pressure of Reactive Organic Compounds in Heavy Crude Oil Using Gas Chromatograph" to validate non-applicability of Rule 4623. The testing shall be conducted once every 24 month period or every time when the source of liquid stored is changed.

2. Monitoring

Monitoring is not required.

3. Record Keeping

Record keeping is required to demonstrate compliance with the offset, public notification and daily emission limit requirements of Rule 2201. The following conditions will appear on the permits:

- Permittee shall maintain monthly records of average daily crude oil throughput and shall keep accurate records of each organic liquid stored in the tank, including its storage temperature, TVP, and API gravity. [District Rule 2201] N

- All 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 2201] N

4. Reporting

No reporting is required to demonstrate compliance with Rule 2201.

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 - Public Nuisance

Rule 4102 states that no air contaminant shall be released into the atmosphere which causes a public nuisance. Compliance is expected

CH&SC 41700 - California Health and Safety Code

Discuss whether a Health Risk Assessment is required and/or the results of the HRA, including any special conditions to consider when issuing the ATC(s).

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.

District policy APR 1905 also specifies that the increase in emissions associated with a proposed new source or modification of an existing source shall not result in an increase in cancer risk greater than the District's significance level (20 in a million) and shall not result in acute and/or chronic risk indices greater than 1.

Example (a): (For a project with no increase in emissions.)
As demonstrated above, there are no increases in emissions associated with this project, therefore a health risk assessment is not necessary and no further risk analysis is required.

(Note 1: An HRA is necessary if there is a change in any HRA parameter, i.e. exhaust flow rate changes, stack changes, fuel use and type changes, receptor distances, etc.)

(Note 2: If example (a) is used, delete the following sections, since they don't apply if an HRA was not performed.)

Example (b): (For a project with a Prioritization score ≤ 1.)
This project results in increases in emissions of VOCs.

An HRA is not required for a project with a total facility prioritization score of less than or equal to one. According to the Technical Services Memo for this project, the total facility prioritization score including this project was less than or equal to one.

The resulting prioritization score for this project is shown below.

Health Risk Assessment Summary	
	Worst Case Potential
Prioritization Score	[X]

In accordance with District policy APR 1905, no further analysis is required to determine the impact from this project and compliance with the District's Risk Management Policy is expected.

Compliance with District Rule 4102 requirements is expected.

See Attachment XXX: Health Risk Assessment Summary

Example (c): (For a project with a Prioritization score > 1.)
This project results in increases in emissions of VOCs.

According to the Technical Services Memo for this project, 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 resulting prioritization score, acute hazard index, chronic hazard index, and cancer risk for this project is shown below.

Health Risk Assessment Summary	
	Worst Case Potential
Prioritization Score	[X]
Cancer Risk	[X]
Acute Hazard Index	[X]
Chronic Hazard Index	[X]
T-BACT Required?	Yes/No

Discussion of T-BACT

Discuss whether a T-BACT is or is not triggered and the requirements which satisfy T-BACT (if any).

Example (a): (For a project where T-BACT not triggered.)
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.

In accordance with District policy APR 1905, no further analysis is required, and compliance with District Rule 4102 requirements is expected.

See Attachment XXX: Health Risk Assessment Summary

Example (b): (For a project where T-BACT is triggered
BACT for toxic emission control (T-BACT) is required if the cancer risk exceeds one in one million. As demonstrated above, T-BACT is required for this project because the HRA indicates that the risk is above the District's thresholds for triggering T-BACT requirements.

For this project T-BACT is triggered for VOC. T-BACT is satisfied with BACT for VOC (see Appendix XXX), which is the use of HVLP spay guns, coatings compliant with District Rules, enclosed paint gun cleaners, and a spray booth with exhaust filters; therefore, compliance with the District's Risk Management Policy is expected.

In accordance with District policy APR 1905, no further analysis is required, and compliance with District Rule 4102 requirements is expected.

See Attachment XXX: Health Risk Assessment Summary

List all conditions necessary to ensure that the equipment is operated in the manner assumed when the RMR was performed.

The following permit conditions are required to ensure compliance with the assumptions made for the risk management review:

- [Add HRA Conditions]

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.

If liquid TVP is being limited to less than 0.5 psia:

According to Section 4.4, tanks/vessels exclusively receiving and or storing organic liquids with a TVP less than 0.5 psia are exempt from this Rule except for complying with Sections 6.2, 6.3.6, 6.4 and 7.2. Therefore, the following condition shall be placed on the ATC:

- {2480} This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 4623] N

If small producer, 0.5 psia ≤ liquid TVP <11 psia, 1,100 gallons ≤ tank capacity ≤ 39,600 gallons and equipped with PV valve

Or

If small producer, 0.5 psia ≤ liquid TVP <11 psia, tank capacity ≥ 39,600 gallons, and 50 bbls/day < tank crude oil throughput < 150 bbls/day and equipped with PV valve:

According to the information provided by the applicant, [facility name] produces on average less than 6,000 barrels per day of crude oil from all operations within the county and does not engage in refining, transportation, or marketing of refined petroleum products. Therefore, under Section 3.29 of this rule and District Rule 1020, Section 3.45, this facility is a small producer.

Applicant also states that the crude oil TVP is XXX and the tank has a XXX bbl capacity. If applicable state otherwise delete: Daily throughput is expected to be between 50 bbls and 150 bbls. Therefore the following conditions will apply:

- This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than (insert proposed TVP) XX psia under all storage conditions. [District Rules 2201 & 4623] N

- {2487} This tank shall be in a leak-free condition. 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. [District Rule 4623] N

- {2486} This tank shall be equipped with a pressure-vacuum (PV) relief valve set to within 10% of the maximum allowable working pressure of the tank, permanently labeled with the operating pressure settings, properly maintained in good operating order in accordance with the manufacturer's instructions, and shall remain in leak-free condition except when the operating pressure exceeds the valve's set pressure. [District Rule 4623] N
- {2483} For crude oil with an API gravity of 26 degrees or less, the TVP shall be determined using the latest version of the Lawrence Berkeley National Laboratory "test Method for Vapor pressure of Reactive Organic Compounds in Heavy Crude Oil Using Gas Chromatograph", as approved by ARB and EPA. [District Rule 4623] N
- {2913} The permittee shall keep accurate records of each organic liquid stored in the tank, including its storage temperature, TVP, and API gravity. [District Rules 4623] N
- {2490} All 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 4623] N

If tank throughput is less than 50 bbls/day:

According to the information provided by the applicant, [facility name] produces on average less than 6,000 barrels per day of crude oil from all operations within the county and does not engage in refining, transportation, or marketing of refined petroleum products. Therefore, under Section 3.29 of this rule and District Rule 1020, Section 3.45, this facility is a small producer.

According to Section 4.3, except for complying with Sections 6.3.4 and 7.2, a small producer's tank with a throughput of 50 barrels of crude oil per day or less is exempt from the requirements of this rule.

The proposed tanks/vessels shall contain crude oil contents with TVP less than 0.5 psi and a throughput of less than 50 bbls of crude oil per day. Therefore, the following conditions shall be placed on the permit:

- Crude oil throughput shall not exceed 50 barrels per day based on a monthly average. [District Rules 2201 & 4623] N
- This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than (insert proposed TVP) XX psia under all storage conditions. [District Rules 2201 & 4623] N

- Permittee shall maintain monthly records of average daily crude oil throughput and shall submit such information to the APCO 30 days prior to the expiration date indicated in the Permit to Operate. [District Rules 2201 & 4623] N

- All 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 Rules 2201 & 4623] N

Place in all evaluations:

Compliance with the requirements of this rule is expected.

CH&SC 42301.6 California Health & Safety Code (School Notice)

This facility [is/is not] within 1,000 feet of a K-12 school. Therefore, pursuant to California Health and Safety Code 42301.6, a school notice [is/is not] required.

California Environmental Quality Act (CEQA)

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

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

The District performed an Engineering Evaluation (this document) for the proposed project and determined that the project qualifies for ministerial approval under the District's Guideline for Expedited Application Review (GEAR). Section 21080 of the Public Resources Code exempts from the application of CEQA those projects over which a public agency exercises only

ministerial approval. Therefore, the District finds that this project is exempt from the provisions of CEQA.

Indemnification Agreement/Letter of Credit Determination

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.

As described above, the project requires only ministerial approval, and is exempt from the provisions of CEQA. As such, an Indemnification Agreement or a Letter of Credit will not be required for this project in the absence of expressed public concern.

IX. Recommendations

For a project where public noticing is not required.

Issue Authority to Construct A-XXXX-XX subject to the permit conditions on the attached draft Authority to Construct.

For a project where public noticing is triggered.

Compliance with all applicable rules and regulations is expected. Pending a successful NSR Public Noticing period, issue Authority to Construct X-XXXX-X-X subject to the permit conditions on the attached draft Authority to Construct in Appendix X.

X. Billing Information

Permit Number	Fee Schedule	Fee Description	Annual Fee
S-xxxx-x-x	3020-5S-[X]	XXX gallons	$XXX

Attachments:

ATTACHMENT I:	Current PTO(s)
ATTACHMENT II:	Emissions Calculations
ATTACHMENT III:	BACT Guideline
ATTACHMENT IV:	BACT Analysis
ATTACHMENT V:	Health Risk Assessment
ATTACHMENT VI:	Location Drawings
ATTACHMENT VII:	Draft ATC(s)
ATTACHMENT VIII:	Sample ATC Conditions FOR REFERENCE ONLY, DO NOT INCLUDE ATTACHMENT IN FINAL APPLICATION REVIEW (please note: these conditions do not include any additional required NSR requirements)

ATTACHMENT I

CURRENT PTOS

ATTACHMENT II

EMISSION CALCULATIONS

ATTACHMENT II

BACT GUIDELINE

APPENDIX IX
BACT ANALYSIS

Top Down BACT Analysis

VOC emissions may occur when the produced fluids from the crude oil production wells enter the oil storage tanks/vessels.

Step 1 - Identify All Possible Control Technologies

BACT Guideline 7.3.1 lists the controls that are considered potentially applicable to fixed-roof organic liquid storage or processing tank <5,000 bbl tank capacity. The VOC control measures are summarized below.

Technologically feasible:

99% control (waste gas incinerated in steam generator, heater treater, or other fired equipment and inspection and maintenance program; transfer of uncondensed vapors to gas pipeline or reinjection to formation (if appropriate wells are available).

Achieved in Practice:

PV relief valve set to within 10% of maximum allowable pressure.

Step 2 - Eliminate Technologically Infeasible Options

All of the above identified control options are technologically feasible.

Step 3 - Rank Remaining Control Technologies by Control Effectiveness

1. 99% control (waste gas incinerated in steam generator, heater treater, or other fired equipment and inspection and maintenance program; transfer of uncondensed vapors to gas pipeline or reinjection to formation (if appropriate wells are available).
2. PV relief valve set to within 10% of maximum allowable pressure.

Step 4 - Cost Effectiveness Analysis

If applicant is a small emitter and proposes a PV relief valve:

This facility is a small emitter for VOC emissions since facility-wide VOC emissions are less than 30 lb/day (Need to demonstrate this). Per SJVUAPCD BACT policy, small emitters are only required to use the most effective control technology or equipment that has been achieved-in-practice. Therefore, a cost effectiveness analysis is not required.

If applicant is proposing PV relief valve:

On [Date] the District determined in project A-XXXX, XXXXXXX, the capital cost for a vapor control system to address the technologically feasible control option is $XX,XXX.

The annualized capital cost is

AP = (P) {[(i) (1 + i)^n]/[(1 + i)^n - 1]}, where
AP = Equivalent Annual Capital Cost of Control Equip.
P = Present value of the control equipment, including installation cost. $51,000
i = interest rate (use 10% per policy)
n = equipment life (assume 10 years per policy)

AP= (P) {[(0.1) (1 + 0.1)^{10}]/[(1 + 0.1)^{10} - 1]}
AP= (P) x (0.16274) = ($51,000) (0.1627) = $8,297/year

For calculation of the amount of VOCs removed from each tank (emissions unit) with the vapor control system, 100% control is assumed. The VOCs removed annually are

Tons/yr = [PE] lb/yr/2000 lb/ton = [X.XX] tons/yr

Annualized cost = $[XXXX]/yr/[X.XX] tons/yr
= $[XXXX]/ton

This exceeds the cost effectiveness threshold for VOCs of $5000/ton. Therefore the vapor control system is not cost effective.

or

This is below the cost effectiveness threshold for VOCs of $5000/ton. Therefore the vapor control system is cost effective.

Step 5 - Select BACT

PV relief valve set to within 10% of maximum allowable pressure of the tank, or

99% control (waste gas incinerated in steam generator, heater treater, or other fired equipment and inspection and maintenance program; transfer of uncondensed vapors to gas pipeline or reinjection to formation (if appropriate wells are available).

ATTACHMENT V

HEALTH RISK ASESSMENT

ATTACHMENT VII

DRAFT ATC(S)

ATTACHMENT VIII

SAMPLE ATC CONDITIONS FOR REFERENCE ONLY, DO NOT INCLUDED IN FINAL APPLICATION REVIEW

ATC Conditions

Category: New Installation (or Modification), Small Producer, throughput > 50 BBLS/day, TVP < 0.5 psia, PV Valve

{2491} Permittee's crude oil production shall average less than 6,000 bbl/day from all operations within XXX County and permittee shall not engage in refining, transporting, or marketing of refined petroleum products. [District Rule 4623] N

The tank shall be equipped with a fixed roof with no holes or openings. [District Rule 2201] N

{2480} This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 4623] N

{Modified 2486} This tank shall be equipped with a pressure-vacuum (PV) relief valve set to within 10% of the maximum allowable working pressure of the tank, permanently labeled with the operating pressure settings, properly maintained in good operating order in accordance with the manufacturer's instructions, and shall remain in leak-free condition except when the operating pressure exceeds the valve's set pressure. [District Rule 2201] N

{Modified 2487} This tank shall be in a leak-free condition. 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. [District Rule 2201] N

VOC emission rate from the tank shall not exceed X.X lb/day [District Rule 2201] N

{Modified 2910} Permittee shall conduct true vapor pressure (TVP) testing of the organic liquid stored in this tank at least once every 24 months during summer (July - September), and/or whenever there is a change in the source or type of organic liquid stored in this tank in order to maintain exemption from the rule. [District Rule 2201] N

{Modified 2911} The TVP testing shall be conducted at actual storage temperature of the organic liquid in the tank. The permittee shall also conduct an API gravity testing. [District Rules 2201] N

{Modified 2483} For crude oil with an API gravity of 26 degrees or less, the TVP shall be determined using the latest version of the Lawrence Berkeley National Laboratory "test Method for Vapor pressure of Reactive Organic Compounds in Heavy Crude Oil Using Gas Chromatograph", as approved by ARB and EPA. [District Rule 2201] N

{Modified 2482} The API gravity of crude oil or petroleum distillate shall be determined by using ASTM Method D 287 e1 "Standard Test Method for API Gravity of Crude Petroleum and Petroleum Products (Hydrometer Method). Sampling for API gravity shall be performed in accordance with ASTM Method D 4057 "Standard Practices for Manual Sampling of Petroleum and Petroleum Products." [District Rule 2201] N

{Modified 2912} Permittee shall submit the records of TVP and API gravity testing to the APCO within 45 days after the date of testing. The records shall include the tank identification number, Permit to Operate number, type of stored organic liquid, TVP and API gravity of the organic liquid, test methods used, and a copy of the test results. [District Rules 2201] N

{Modified 2913} The permittee shall keep accurate records of each organic liquid stored in the tank, including its storage temperature, TVP, and API gravity. [District Rules 2201] N

{Modified 2497} Permittee shall maintain monthly records of average daily crude oil throughput and shall keep accurate records of each organic liquid stored in the tank, including its storage temperature, TVP, and API gravity. [District Rule 2201] N

{Modified 2490} All 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] N

Category: New Installation (or Modification), Small Producer, throughput > 50 BBLs/day limitation, TVP > 0.5 psia, PV Valve

{2491} Permittee's crude oil production shall average less than 6,000 bbl/day from all operations within XXX County and permittee shall not engage in refining, transporting, or marketing of refined petroleum products. [District Rule 4623] N

The tank shall be equipped with a fixed roof with no holes or openings. [District Rule 2201] N

{2486} This tank shall be equipped with a pressure-vacuum (PV) relief valve set to within 10% of the maximum allowable working pressure of the tank, permanently labeled with the operating pressure settings, properly maintained in good operating order in accordance with the manufacturer's instructions, and shall remain in leak-free condition except when the operating pressure exceeds the valve's set pressure. [District Rules 2201 and 4623] N

{2487} This tank shall be in a leak-free condition. 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. [District Rules 2201 and 4623] N

VOC emission rate from the tank shall not exceed X.X lb/day [District Rule 2201] N

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 Rule 4623] N

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 Rule 4623, 5.7 (Table 3)] N

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 Rule 2520, 9.3.2] N

{Modified 2910} Permittee shall conduct true vapor pressure (TVP) testing of the organic liquid stored in this tank at least once every 24 months during summer (July - September), and/or whenever there is a change in the source or type of organic liquid stored in this tank in order to maintain exemption from the rule. [District Rules 2201 and 4623] N

{2911} The TVP testing shall be conducted at actual storage temperature of the organic liquid in the tank. The permittee shall also conduct an API gravity testing. [District Rules 2201] N

{2483} For crude oil with an API gravity of 26 degrees or less, the TVP shall be determined using the latest version of the Lawrence Berkeley National Laboratory "test Method for Vapor pressure of Reactive Organic Compounds in Heavy Crude Oil Using Gas Chromatograph", as approved by ARB and EPA. [District Rule 4623] N

{2482} The API gravity of crude oil or petroleum distillate shall be determined by using ASTM Method D 287 e1 "Standard Test Method for API Gravity of Crude Petroleum and Petroleum Products (Hydrometer Method). Sampling for API gravity shall be performed in accordance with ASTM Method D 4057 "Standard Practices for Manual Sampling of Petroleum and Petroleum Products." [District Rule 4623] N

{2912} Permittee shall submit the records of TVP and API gravity testing to the APCO within 45 days after the date of testing. The records shall include the tank identification number, Permit to Operate number, type of stored organic liquid, TVP and API gravity of the organic liquid, test methods used, and a copy of the test results. [District Rules 4623] N

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 Rule 2201] N

{2913} The permittee shall keep accurate records of each organic liquid stored in the tank, including its storage temperature, TVP, and API gravity. [District Rules 4623] N

{2497} Permittee shall maintain monthly records of average daily crude oil throughput and shall keep accurate records of each organic liquid stored in the tank, including its storage temperature, TVP, and API gravity. [District Rule 4623] N

{2490} All 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 4623] N

Category: New Installation (or Modification), Small Producer, tank throughput less than or equal to 50 BBLs/day, PV Valve

{4623} Permittee's crude oil production shall average less than 6,000 bbl/day from all operations within XXX County and permittee shall not engage in refining, transporting, or marketing of refined petroleum products. [District Rule 2080] N

{2495} Crude oil throughput shall not exceed 50 barrels per day based on a monthly average. [District Rule 4623] N

The tank shall be equipped with a fixed roof with no holes or openings. [District Rule 2201] N

{Modified 2486} This tank shall be equipped with a pressure-vacuum (PV) relief valve set to within 10% of the maximum allowable working pressure of the tank, permanently labeled with the operating pressure settings, properly maintained in good operating order in accordance with the manufacturer's instructions, and shall remain in leak-free condition except when the operating pressure exceeds the valve's set pressure. [District Rule 2201] N

{Modified 2487} This tank shall be in a leak-free condition. 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. [District Rule 2201] N

Except as otherwise provided in this permit, all piping, valves, and fittings shall be constructed and maintained in a leak-free condition. [District Rule 2201] N

VOC emission rate from the tank shall not exceed X.X lb/day [District Rule 2201] N

{Modified 2910} Permittee shall conduct true vapor pressure (TVP) testing of the organic liquid stored in this tank at least once every 24 months during summer (July - September), and/or whenever there is a change in the source or type of organic liquid stored in this tank in order to maintain exemption from the rule. [District Rule 2201] N

{Modified 2911} The TVP testing shall be conducted at actual storage temperature of the organic liquid in the tank. The permittee shall also conduct an API gravity testing. [District Rules 2201] N

{Modified 2483} For crude oil with an API gravity of 26 degrees or less, the TVP shall be determined using the latest version of the Lawrence Berkeley National Laboratory "test Method for Vapor pressure of Reactive Organic Compounds in Heavy Crude Oil Using Gas Chromatograph", as approved by ARB and EPA. [District Rule 2201] N

{Modified 2482} The API gravity of crude oil or petroleum distillate shall be determined by using ASTM Method D 287 e1 "Standard Test Method for API Gravity of Crude Petroleum and Petroleum Products (Hydrometer Method). Sampling for API gravity shall be performed in accordance with ASTM Method D 4057 "Standard Practices for Manual Sampling of Petroleum and Petroleum Products." [District Rule 2201] N

{Modified 2912} Permittee shall submit the records of TVP and API gravity testing to the APCO within 45 days after the date of testing. The records shall include the tank identification number, Permit to Operate number, type of stored organic liquid, TVP and API gravity of the organic liquid, test methods used, and a copy of the test results. [District Rules 2201] N

{Modified 2913} The permittee shall keep accurate records of each organic liquid stored in the tank, including its storage temperature, TVP, and API gravity. [District Rules 2201] N

{Modified 2497} Permittee shall maintain monthly records of average daily crude oil throughput and shall keep accurate records of each organic liquid stored in the tank, including its storage temperature, TVP, and API gravity. [District Rule 2201] N

{Modified 2490} All 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] N

Sub Category: Tank Cleaning Option for tanks/vessels with throughput > 50 BBLs/day:

Check draft District Policy SSP 1920, “Organic Liquid Storage Tanks – Cleaning Requirements” & SSP1925, “Organic Liquid Storage Tanks – Voluntary Inspection and Maintenance Program” for updated conditions

As of 11-21-06 draft Policies SSP 1920 & 1925 contains the following conditions. The following conditions should be added to the ATC if the applicant request tank cleaning conditions (please note, if the tank is not subject to the requirements of Rule 4623, the rule references must be changed from Rule 4623 to Rule 2080):

I& M Conditions:

1. Operator 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. Operator 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]

2. Upon detection of a liquid leak, defined as a leak rate of greater than or equal to 30 drops per minute, operator 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]

3. Upon detection of a gas leak, defined as a VOC concentration of greater than 10,000 ppmv measured in accordance with EPA Method 21, operator shall take on 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]

4. Components found to be leaking either liquids or gases shall be immediately affixed with a tag showing the component to be leaking. Operator 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]

5. Leaking components that have been discovered by the operator 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 operator, 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]

6. If a component type for a given tank is found to leak during an annual inspection, operator shall conduct quarterly inspections of that component type on the tank or tank system for four consecutive quarters. If no components are found to leak after four consecutive quarters, the operator may revert to annual inspections. [District Rule 4623, Table 3]

7. Any component found to be leaking on two consecutive annual inspections is in violation of this rule, even if covered under the voluntary inspection and maintenance program. [District Rule 4623, Table 3]

Tank Cleaning Conditions:

While performing tank cleaning activities, operators may only use the following cleaning agents: diesel, solvents with an initial boiling point of greater than 302 degrees F, solvents with a vapor pressure of less than 0.5 psia, or solvents with 50 grams of VOC per liter or less. [District Rule 4623]

Steam cleaning shall only be allowed at locations where wastewater treatment facilities are limited, or during the months of December through March. [District Rule 4623]

Permittee shall inspect the primary and secondary seals for compliance with the requirements of this rule every time a tank is emptied or degassed. Actual gap measurements shall be performed when the liquid level is static but not more than 48 hours after the tank roof is re-floated. [District Rule 4623]

Sludge Handling: if TVP is 1.5 psia or greater

During sludge removal, the operator shall control emissions from the sludge receiving vessel by operating an APCO-approved vapor control device that reduces emissions of organic vapors by at least 95%. [District Rule 4623]

Permittee shall only transport removed sludge in closed, liquid leak-free containers. [District Rule 4623]

Permittee shall store removed sludge, until final disposal, in vapor leak-free containers, or in tanks complying with the vapor control requirements of District Rule 4623. Sludge that is to be used to manufacture roadmix, as defined in District Rule 2020, is not required to be stored in this manner. Roadmix manufacturing operations exempt pursuant to District Rule 2020 shall maintain documentation of their compliance with Rule 2020, and shall readily make said documentation available for District inspection upon request. [District Rules 2020 and 4623]