



San Joaquin Valley
AIR POLLUTION CONTROL DISTRICT



NOV 03 2015

Norbert Buss
The Termo Company
PO Box 2767
Long Beach, CA 93801-2767

Re: Notice of Preliminary Decision - Authority to Construct
Facility Number: C-8578
Project Number: C-1152548

Dear Mr. Buss:

Enclosed for your review and comment is the District's analysis of The Termo Company's application for an Authority to Construct for three flares and six storage tanks, in Fresno County.

The notice of preliminary decision for this project will be published approximately three days from the date of this letter. After addressing all comments made during the 30-day public notice period, the District intends to issue the Authority to Construct. Please submit your written comments on this project within the 30-day public comment period, as specified in the enclosed public notice.

Thank you for your cooperation in this matter. If you have any questions regarding this matter, please contact Mr. David Torii of Permit Services at (661) 392-5620.

Sincerely,

Arnaud Marjollet
Director of Permit Services

AM:dbt/ya

Enclosures

cc: Mike Tollstrup, CARB (w/ enclosure) via email

Seyed Sadredin
Executive Director/Air Pollution Control Officer

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4800 Enterprise Way
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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

Wiggins lease units C-8578-2, '3, '4, '5 and '6 are located within the NW/4 of Section 4, Township 16S, Range 18E.

Torres lease units C-8578-8, '9, '10, '11 and '12 are located within the SW/4 of Section 18, Township 17S, Range 19E.

Proposed Walrond lease tanks C-8578-15-0, '16-0 and '17-0 will be located within the SE/4 of Section 5, Township 16S, Range 18E.

Proposed Peters lease tanks C-8578-18-0, '19-0 and '20-0 will be located within the SE/4 of Section 32, Township 16S, Range 1E.

Facility C-8578 comprises Termo's Fresno County Light Oil 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 prior to custody transfer.

VOC emissions from Wiggins lease tanks C-8578-2 through '6 and Walrond lease tanks C-8578-15, '16 and '17 are served by the vapor control system listed on C-8578-2. Torres lease tanks C-8578-8 through '11 are served by the vapor control system listed on C-8578-8. Peters lease tanks C-8578-18 through '20 are served by the vapor control system listed on C-8578-18.

Vapor control systems C-8578-2, '8 and '18 will route their uncondensed vapors to the proposed flares which are expected to reduce inlet VOC emissions by at least 99% by weight.

V. Equipment Listing

Pre-Project Equipment Description (see permits in Appendix B):

C-8578-1-0: CRUDE OIL EXPLORATION AND PRODUCTION OPERATION INCLUDING CASING GAS VAPOR RECOVERY SYSTEM, TWO-PHASE SEPARATORS, GAS TRAP, AND ALL FUGITIVE EMISSIONS COMPONENTS NOT ASSOCIATED WITH PERMIT UNITS C-8578-2 THROUGH C-8578-5 (WIGGINS LEASE)

C-8578-2-0: 400 BBL FIXED ROOF CRUDE OIL STORAGE TANK #1 SERVED BY VAPOR RECOVERY SYSTEM LISTED UNDER C-8578-1 (WIGGINS LEASE)

- C-8578-3-0: 400 BBL FIXED ROOF CRUDE OIL STORAGE TANK #2 SERVED BY VAPOR RECOVERY SYSTEM LISTED UNDER C-8578-1 (WIGGINS LEASE)
- C-8578-4-0: 500 BBL FIXED ROOF WASH TANK SERVED BY VAPOR RECOVERY SYSTEM LISTED UNDER C-8578-1 (WIGGINS LEASE)
- C-8578-5-0: 400 BBL FIXED ROOF WASTEWATER STORAGE TANK SERVED BY VAPOR RECOVERY SYSTEM LISTED UNDER C-8578-1 (WIGGINS LEASE)
- C-8578-6-0: 3.4 MMBTU/HR BEKAERT MODEL CEB 100 PREMIXED SURFACE COMBUSTION FLARE SERVING VAPOR RECOVERY SYSTEM LISTED UNDER PERMIT UNITS C-8578-1 (WIGGINS LEASE)
- C-8578-7-0: CRUDE OIL EXPLORATION AND PRODUCTION OPERATION INCLUDING CASING GAS VAPOR RECOVERY SYSTEM, TWO-PHASE SEPARATORS, GAS TRAP, AND ALL FUGITIVE EMISSIONS COMPONENTS NOT ASSOCIATED WITH PERMIT UNITS C-8578-8 THROUGH C-8578-11 (TORRES LEASE)
- C-8578-8-0: 400 BBL FIXED ROOF CRUDE OIL STORAGE TANK #1 SERVED BY VAPOR RECOVERY SYSTEM LISTED UNDER C-8578-7 (TORRES LEASE)
- C-8578-9-0: 400 BBL FIXED ROOF CRUDE OIL STORAGE TANK #2 SERVED BY VAPOR RECOVERY SYSTEM LISTED UNDER C-8578-7 (TORRES LEASE)
- C-8578-10-0: 500 BBL FIXED ROOF WASH TANK SERVED BY VAPOR RECOVERY SYSTEM LISTED UNDER C-8578-7 (TORRES LEASE)
- C-8578-12-0: 3.4 MMBTU/HR BEKAERT MODEL CEB 100 PREMIXED SURFACE COMBUSTION FLARE SERVING VAPOR RECOVERY SYSTEM LISTED UNDER PERMIT UNIT C-8578-7 (TORRES LEASE)

Proposed ATCs:

- C-8578-2-1: MODIFICATION OF 400 BBL FIXED ROOF CRUDE OIL STORAGE TANK #1 SERVED BY VAPOR RECOVERY SYSTEM LISTED UNDER C-8578-1 (WIGGINS LEASE): **ADD ONE 4.9 MMBTU/HR COANDA-EFFECT FLARE SERVING VAPOR CONTROL SYSTEM, ADD TANK CLEANING CONDITIONS AND LIST C-8578-1'S EQUIPMEMNT ON THIS PERMIT**
- C-8578-3-1: MODIFICATION OF 400 BBL FIXED ROOF CRUDE OIL STORAGE TANK #2 SERVED BY VAPOR RECOVERY SYSTEM LISTED UNDER C-8578-1 (WIGGINS LEASE): **ADD TANK CLEANING CONDITIONS AND CHANGE NUMBER OF THE PERMIT LISTING THE VAPOR CONTROL SYSTEM TO C-8578-2**
- C-8578-4-1: MODIFICATION OF 500 BBL FIXED ROOF WASH TANK SERVED BY VAPOR RECOVERY SYSTEM LISTED UNDER C-8578-1 (WIGGINS LEASE): **ADD TANK CLEANING CONDITIONS AND CHANGE NUMBER OF THE PERMIT LISTING THE VAPOR CONTROL SYSTEM TO C-8578-2**

- C-8578-8-1: MODIFICATION OF 400 BBL FIXED ROOF CRUDE OIL STORAGE TANK #1 SERVED BY VAPOR RECOVERY SYSTEM LISTED UNDER C-8578-7 (TORRES LEASE): **ADD ONE 4.9 MMBTU/HR COANDA-EFFECT FLARE SERVING VAPOR CONTROL SYSTEM, ADD TANK CLEANING CONDITIONS AND LIST C-8578-7'S VAPOR CONTROL SYSTEM EQUIPMENT ON THIS PERMIT**
- C-8578-9-1: MODIFICATION OF 400 BBL FIXED ROOF CRUDE OIL STORAGE TANK #2 SERVED BY VAPOR RECOVERY SYSTEM LISTED UNDER C-8579-1 (TORRES LEASE): **ADD TANK CLEANING CONDITIONS AND CHANGE NUMBER OF THE PERMIT LISTING THE VAPOR CONTROL SYSTEM TO C-8578-8**
- C-8578-10-1: MODIFICATION OF 500 BBL FIXED ROOF WASH TANK SERVED BY VAPOR RECOVERY SYSTEM LISTED UNDER C-8578-8 (TORRES LEASE): **ADD TANK CLEANING CONDITIONS AND CHANGE NUMBER OF THE PERMIT LISTING THE VAPOR CONTROL SYSTEM TO C-8578-8**
- C-8578-15-0: 750 BBL TANK FIXED ROOF WASH TANK SERVED BY VAPOR RECOVERY SYSTEM LISTED ON C-8578-2 (WALROND LEASE)
- C-8578-16-0: 500 BBL TANK FIXED ROOF CRUDE OIL STORAGE TANK SERVED BY VAPOR RECOVERY SYSTEM LISTED ON C-8578-2 (WALROND LEASE)
- C-8578-17-0: 500 BBL TANK FIXED ROOF CRUDE OIL STORAGE TANK SERVED BY VAPOR RECOVERY SYSTEM LISTED ON C-8578-2 (WALROND LEASE)
- C-8578-18-0: 500 BBL TANK FIXED ROOF WASH TANK SERVED BY 4.9 MMBTU/HR COANDA-EFFECT FLARE (PETERS LEASE)
- C-8578-19-0: 400 BBL TANK FIXED ROOF CRUDE OIL STORAGE TANK SERVED BY VAPOR RECOVERY SYSTEM LISTED ON C-8578-18 (PETERS LEASE)
- C-8578-20-0: 400 BBL TANK FIXED ROOF CRUDE OIL STORAGE TANK SERVED BY VAPOR RECOVERY SYSTEM LISTED ON C-8578-18 (PETERS LEASE)

Post Project Equipment Description:

- C-8578-2-1: 400 BBL FIXED ROOF CRUDE OIL STORAGE TANK #1 WITH VAPOR CONTROL SYSTEM SERVED BY 4.9 MMBTU/HR COANDA-EFFECT FLARE (WIGGINS LEASE)
- C-8578-3-1: 400 BBL FIXED ROOF CRUDE OIL STORAGE TANK #2 SERVED BY VAPOR RECOVERY SYSTEM LISTED ON C-8578-2 (WIGGINS LEASE)
- C-8578-4-1: 500 BBL FIXED ROOF WASH TANK SERVED BY VAPOR RECOVERY SYSTEM LISTED ON C-8578-2 (WIGGINS LEASE)

- C-8578-8-1: 400 BBL FIXED ROOF CRUDE OIL STORAGE TANK #1 WITH VAPOR CONTROL SYSTEM SERVED BY 4.9 MMBTU/HR COANDA-EFFECT FLARE (TORRES LEASE)
- C-8578-9-1: 400 BBL FIXED ROOF CRUDE OIL STORAGE TANK #2 SERVED BY VAPOR RECOVERY SYSTEM LISTED ON C-8578-8 (TORRES LEASE)
- C-8578-10-1: 500 BBL FIXED ROOF WASH TANK SERVED BY VAPOR RECOVERY SYSTEM LISTED ON C-8578-8 (TORRES LEASE)
- C-8578-15-0: 750 BBL TANK FIXED ROOF WASH TANK SERVED BY VAPOR RECOVERY SYSTEM LISTED ON C-8578-2 (WALROND LEASE)
- C-8578-16-0: 500 BBL TANK FIXED ROOF CRUDE OIL STORAGE TANK SERVED BY VAPOR RECOVERY SYSTEM LISTED ON C-8578-2 (WALROND LEASE)
- C-8578-17-0: 500 BBL TANK FIXED ROOF CRUDE OIL STORAGE TANK SERVED BY VAPOR RECOVERY SYSTEM LISTED ON C-8578-2 (WALROND LEASE)
- C-8578-18-0: 500 BBL TANK FIXED ROOF WASH TANK SERVED BY 4.9 MMBTU/HR COANDA-EFFECT FLARE (PETERS LEASE)
- C-8578-19-0: 400 BBL TANK FIXED ROOF CRUDE OIL STORAGE TANK SERVED BY VAPOR RECOVERY SYSTEM LISTED ON C-8578-18 (PETERS LEASE)
- C-8578-20-0: 400 BBL TANK FIXED ROOF CRUDE OIL STORAGE TANK SERVED BY VAPOR RECOVERY SYSTEM LISTED ON C-8578-18 (PETERS LEASE)

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 flares. The efficiency of the vapor control system is at least 99%.

The new flares will have a coanda-effect type burner and operate in a smokeless manner. The sulfur content of the flared gas will be restricted to 5 gr/100 scf by permit condition. An automatic flow-sensing pilot will be used.

VII. General Calculations

A. Assumptions

- Facility will operate 24 hours per day, 7 days per week, and 52 weeks per year.

Tanks:

- The fugitive emissions for all tanks are calculated using California Implementation Guidelines for Estimating Mass Emissions of fugitive Hydrocarbon Leaks at Petroleum Facilities, CAPCOA/CARB, February 1999 "revised screening" emissions factors.
- The percentage of VOCs of the total hydrocarbons is 100%.

Pursuant to District FYI SSP2210, adding tank cleaning conditions to a permit is not an NSR modification and do not require calculations.

Flares:

- Sulfur content of the flared gas will not exceed 5 gr/100 scf.
- Emissions from combustion of pilot gas are negligible
- Burner combustion rate: 4.9 MMBtu/hr

B. Emission Factors

Pursuant to California Implementation Guidelines for Estimating Mass Emissions of fugitive Hydrocarbon Leaks at Petroleum Facilities, CAPCOA/CARB, February 1999, the tank emissions in this project are calculated using the revised screening emissions factors.

Flares		
Pollutant	Emission Factor (lb/MMBtu)	Source
NOx	0.068	FYI-83
SOx*	5 gr-S/100 scf (0.0143 lb/MMBtu)	applicant
PM10	0.008	FYI-83/BACT
CO	0.37	FYI-83
VOC	0.0063	FYI-83

* $(5.0 \text{ gr S}/100\text{scf})(1 \text{ scf}/1000 \text{ Btu})(1 \text{ lb}/7000 \text{ gr})(2 \text{ lb SO}_2/\text{lb S})(10\text{E}6/\text{MM}) = 0.0143 \text{ lb-SO}_x/\text{MMBtu}$

C. Calculations

1. Pre-Project Potential to Emit (PE1)

For the new emissions units, PE1 = 0 for all pollutants.

Pre Project Potential to Emit (PE1)			
	Daily Emissions (lb/day)	Annual Emissions (lb/year)	Source
C-8578-1	1.9	694	C-8578-1-0
C-8578-2	0.3	110	C-8578-2-0
C-8578-7	1.9	694	C-8578-7-0
C-8578-8	0.3	110	C-8578-2-8

2. Post Project Potential to Emit (PE2)

Addition of VCS Emissions to C-8578-2 and '8 Post Project Potential to Emit (PE2)		
Tanks Listing VCS	Daily Emissions (lb/day)	Annual Emissions (lb/year)
C-8578-2-1	1.9 + 0.3 = 2.2	694 + 110 = 804
C-8578-8-1	1.9 + 0.3 = 2.2	694 + 110 = 804
C-8578-18-0	0.8	281

Post Project Potential to Emit (PE2)		
Tanks	Daily Emissions (lb-VOC/day)	Annual Emissions (lb-VOC/year)
C-8578-15-0	0.2	88
C-8578-16-0	0.2	88
C-8578-17-0	0.2	88
C-8578-19-0	0.2	88
C-8578-20-0	0.2	88

See tank emission calculations in Appendix C

The potential to emit for the flares is calculated as follows, and summarized in the table below:

$$(0.068 \text{ lb-NO}_x/\text{MMBtu})(4.9 \text{ MMBtu/hr})(24\text{hr/day}) = 8.0 \text{ lb-NO}_x/\text{day}$$

$$(0.068 \text{ lb-NO}_x/\text{MMBtu})(4.9 \text{ MMBtu/hr})(8760 \text{ hr/yr}) = 2919 \text{ lb-NO}_x/\text{yr}$$

C-8578-2-1 Flare and Fugitive VOCs Post Project Potential to Emit (PE2)		
	Daily Emissions (lb/day)	Annual Emissions (lb/year)
NO _x	8.0	2,919
SO _x	1.7	614
PM ₁₀	0.9	343
CO	43.5	15,882
VOC	0.7 + 2.2* = 2.9	270 + 804* = 1074

*fugitive emissions

C-8578-8-1		
Flare and Fugitive VOCs		
Post Project Potential to Emit (PE2)		
	Daily Emissions (lb/day)	Annual Emissions (lb/year)
NO _x	8.0	2,919
SO _x	1.7	614
PM ₁₀	0.9	343
CO	43.5	15,882
VOC	0.7 + 2.2* = 2.9	270 + 804* = 1074

*fugitive emissions

C-8578-18-0		
Flare and Fugitive VOCs		
Post Project Potential to Emit (PE2)		
	Daily Emissions (lb/day)	Annual Emissions (lb/year)
NO _x	8.0	2,919
SO _x	1.7	614
PM ₁₀	0.9	343
CO	43.5	15,882
VOC	0.7 + 0.8* = 1.5	270 + 281* = 551

*fugitive emissions

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.

SSPE1 (lb/year)					
Permit Unit	NO _x	SO _x	PM ₁₀	CO	VOC
C-8578-1-0	0	0	0	0	694
C-8578-2-0	0	0	0	0	117
C-8578-3-0	0	0	0	0	117
C-8578-4-0	0	0	0	0	117
C-8578-5-0	0	0	0	0	117
C-8578-6-0	685	426	238	698	149
C-8578-7-0	0	0	0	0	694
C-8578-8-0	0	0	0	0	117
C-8578-9-0	0	0	0	0	117
C-8578-10-0	0	0	0	0	117
C-8578-11-0	0	0	0	0	117
C-8578-12-0	685	426	238	698	149
SSPE1	1,370	852	476	1,396	2,622

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.

SSPE2 (lb/year)					
Permit Unit	NO _x	SO _x	PM ₁₀	CO	VOC
C-8578-1-0**	0	0	0	0	0
C-8578-2-1	2,919	614	343	15,882	1,074
C-8578-3-1	0	0	0	0	117
C-8578-4-1	0	0	0	0	117
C-8578-5-0*	0	0	0	0	0
C-8578-6-0*	0	0	0	0	0
C-8578-7-0***	0	0	0	0	0
C-8578-8-1	2,919	614	343	15,882	1,074
C-8578-9-1	0	0	0	0	117
C-8578-10-1	0	0	0	0	117
C-8578-11-0*	0	0	0	0	0
C-8578-12-0*	0	0	0	0	0
C-8578-15-0	0	0	0	0	88
C-8578-16-0	0	0	0	0	88
C-8578-17-0	0	0	0	0	88
C-8578-18-0	2,919	614	343	15,882	551
C-8578-19-0	0	0	0	0	88
C-8578-20-0	0	0	0	0	88
SSPE2	8,757	1842	1029	47,646	3,607

* permit surrendered

**permit's equipment included on C-8578-2

***permit's equipment included on C-8578-8

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

Rule 2201 Major Source Determination (lb/year)						
	NO _x	SO _x	PM ₁₀	PM _{2.5}	CO	VOC
SSPE1	1,370	852	476	476	1,396	2,622
SSPE2	8,757	1842	1029	1029	47,646	3,607
Major Source Threshold	20,000	140,000	140,000	200,000	200,000	20,000
Major Source?	No	No	No	No	No	No

Note: PM2.5 assumed to be equal to PM10

As seen in the table above, the facility is not an existing Major Source and is not becoming a Major Source as a result of this project.

Rule 2410 Major Source Determination:

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

PSD Major Source Determination (tons/year)						
	NO2	VOC	SO2	CO	PM	PM10
Estimated Facility PE before Project Increase	0.7	1.3	0.4	0.7	0.2	0.2
PSD Major Source Thresholds	250	250	250	250	250	250
PSD Major Source ? (Y/N)	n	n	n	n	n	n

As shown above, the facility is not an existing PSD major source for any regulated NSR pollutant expected to be emitted at this facility.

6. Baseline Emissions (BE)

The BE calculation (in lb/year) is performed pollutant-by-pollutant for each unit within the project 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 = Historic Actual Emissions (HAE), calculated pursuant to District Rule 2201.

As shown in Section VII.C.5 above, the facility is not a Major Source for any pollutant.

Therefore BE=PE1.

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. Additionally, since the facility is not a major source for PM₁₀ (140,000 lb/year), it is not a major source for PM_{2.5} (200,000 lb/year).

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

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

I. Project Emissions Increase - New Major Source Determination

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

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

PSD Major Source Determination: Potential to Emit (tons/year)						
	NO2	VOC	SO2	CO	PM	PM10
Total PE from New and Modified Units	<<250	<<250	<<250	<<250	<<250	<<250
PSD Major Source threshold	250	250	250	250	250	250
New PSD Major Source?	n	n	n	n	n	n

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

10. Quarterly Net Emissions Change (QNEC)

The QNEC is calculated solely to establish emissions that are used to complete the District's PAS emissions profile screen. Detailed QNEC calculations are included in Appendix A.

VIII. Compliance

Rule 2201 New and Modified Stationary Source Review Rule

A. Best Available Control Technology (BACT)

1. BACT Applicability

BACT requirements are triggered on a pollutant-by-pollutant basis and on an emissions unit-by-emissions unit basis. Unless 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 two new flares each with a PE greater than 2 lb/day for NO_x, and CO. BACT is triggered for NO_x, only since the PE is greater than 2 lb/day. However BACT is not triggered for CO since the SSPE2 for CO is not greater than 200,000 lb/year, as demonstrated in Section VII.C.5 above.

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

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

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

The permits being modified in this project do not constitute NSR modifications. 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 NO_x emissions. Therefore BACT is not triggered for any pollutant.

2. BACT Guideline

BACT Guideline 1.4.1, applies to the flares. [Waste Gas Flare - 15.3 MMBtu/hr, Serving a Tank Vapor Control System] (See Appendix D)

3. Top-Down BACT Analysis

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

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

NO_x: A Coanda-effect type burner, therefore, BACT is satisfied

B. Offsets

1. Offset Applicability

Offset requirements shall be triggered on a pollutant by pollutant basis and shall be required if the SSPE2 equals to or exceeds the offset threshold levels in Table 4-1 of Rule 2201.

The SSPE2 is compared to the offset thresholds in the following table.

Offset Determination (lb/year)					
	NO _x	SO _x	PM ₁₀	CO	VOC
SSPE2	8,757	1842	1029	47,646	3,607
Offset Thresholds	20,000	54,750	29,200	200,000	20,000
Offsets triggered?	No	No	No	No	No

2. Quantity of Offsets Required

As seen above, the SSPE2 is not greater than the offset thresholds for all the pollutants; therefore offset calculations are not necessary and offsets will not be required for this project.

C. Public Notification

1. Applicability

Public noticing is required for:

- a. New Major Sources, Federal Major Modifications, and SB 288 Major Modifications,
- b. Any new emissions unit with a Potential to Emit greater than 100 pounds during any one day for any one pollutant,
- c. Any project which results in the offset thresholds being surpassed, and/or
- d. Any project with an SSIPE of greater than 20,000 lb/year for any pollutant.
- e. Any project which results in a Title V significant permit modification

a. New Major Sources, Federal Major Modifications, and SB 288 Major Modifications

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

As demonstrated in Sections VII.C.7 and VII.C.8, this project does not constitute an SB 288 or Federal Major Modification; therefore, public noticing for SB 288 or Federal Major Modification purposes is not required.

b. PE > 100 lb/day

Applications which include a new emissions unit with a PE greater than 100 pounds during any one day for any pollutant will trigger public noticing requirements. As seen in Section VII.C.2 above, this project does not include a new emissions unit which has daily emissions greater than 100 lb/day for any pollutant, therefore public noticing for PE > 100 lb/day purposes is not required.

c. Offset Threshold

The SSPE1 and SSPE2 are compared to the offset thresholds in the following table.

Offset Thresholds				
Pollutant	SSPE1 (lb/year)	SSPE2 (lb/year)	Offset Threshold	Public Notice Required?
NO _x	1,370	8,757	20,000 lb/year	No
SO _x	852	1,842	54,750 lb/year	No
PM ₁₀	476	1,029	29,200 lb/year	No
CO	1,396	47,646	200,000 lb/year	No
VOC	2,622	3,607	20,000 lb/year	No

As detailed above, there were no thresholds surpassed with this project; therefore public noticing is not required for offset purposes.

d. SSIPE > 20,000 lb/year

Public notification is required for any permitting action that results in a SSIPE of more than 20,000 lb/year of any affected pollutant. According to District policy, the SSIPE = SSPE2 – SSPE1. The SSIPE is compared to the SSIPE Public Notice thresholds in the following table.

SSIPE Public Notice Thresholds					
Pollutant	SSPE1 (lb/year)	SSPE2 (lb/year)	SSIPE (lb/year)	SSIPE Public Notice Threshold	Public Notice Required?
NO _x	1,370	8,757	7,387	20,000 lb/year	No
SO _x	852	1,842	990	20,000 lb/year	No
PM ₁₀	476	1,029	553	20,000 lb/year	No
CO	1,396	47,646	46,250	20,000 lb/year	Yes
VOC	2,622	3,607	985	20,000 lb/year	No

As demonstrated above, the SSIPE for CO was greater than 20,000 lb/year; therefore public noticing for SSIPE purposes is required.

e. Title V Significant Permit Modification

Since this facility does not have a Title V operating, this change is not a Title V significant Modification, and therefore public noticing is not required.

2. Public Notice Action

As discussed above, this project will result in CO SSIPE which subject the project to the noticing requirements listed above. Therefore, public notice will be required for this project.

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.

Proposed Rule 2201 (DEL) Conditions:

C-8578-2-1 and '8-1

- The sulfur compound concentration of gas combusted shall not exceed 5 gr S/100 scf. [District Rule 2201]
- Emissions from the flare shall not exceed any of the following limits (based on total gas combusted): NO_x: 0.068 lb/MMBtu; PM₁₀: 0.008 lb/MMBtu; CO: 0.37 lb/MMBtu; or VOC: 0.063 lb/MMBtu. [District Rule 2201]
- VOC fugitive emissions from this tank and tank vapor control system including vapor control system trunk line not exceed 2.2 lb/day. [District Rule 2201]

C-8578-'18-0:

- The sulfur compound concentration of gas combusted shall not exceed 5 gr S/100 scf. [District Rule 2201]
- Emissions from the flare shall not exceed any of the following limits (based on total gas combusted): NOx: 0.068 lb/MMBtu; PM10: 0.008 lb/MMBtu; CO: 0.37 lb/MMBtu; or VOC: 0.063 lb/MMBtu. [District Rule 2201]
- VOC fugitive emissions from this tank and tank vapor control system including vapor control system trunk line not exceed 0.8 lb/day. [District Rule 2201]

Tanks C-8578-15-0, '16-0 '17-0, '19-0 and '20-0:

- VOC emissions from the components associated with this tank up to the vapor recovery system trunk line shall not exceed 0.2 lb/day. [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.

Flares C-8578-2-1, '8-1 and '18-0:

- The permittee shall measure sulfur content of gas incinerated in flare within 60 days of startup. [District Rules 2201 and 4801]
- The permittee shall conduct quarterly sampling of the sulfur content of the gas flared. If 8 consecutive quarterly samplings show compliance, then sampling frequency shall only be required annually. [District 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:

Flares C-8578-2-1, '8-1 and '18-0:

- Permittee shall keep accurate daily records of flare gas volumes and sulfur content of flared gas and such records shall be retained for a period of 5 years and be made readily available for District inspection upon request. [District Rule 2201]
- All records shall be retained for a period of at least 5 years and shall be made available for District inspection upon request. [District Rule 1070] N

4. Reporting

No reporting is required to demonstrate compliance with Rule 2201.

F. Ambient Air Quality Analysis (AAQA)

An AAQA shall be conducted for the purpose of determining whether a new or modified Stationary Source will cause or make worse a violation of an air quality standard. The District's Technical Services Division conducted the required analysis. Refer to **Appendix F** of this document for the AAQA summary sheet.

The proposed location is in an attainment area for NO_x, CO, and SO_x. As shown by the AAQA summary sheet the proposed equipment will not cause a violation of an air quality standard for NO_x, CO, or SO_x.

The proposed location is in a non-attainment area for the state's PM₁₀ as well as federal and state PM_{2.5} thresholds. As shown by the AAQA summary sheet the proposed equipment will not cause a violation of an air quality standard for PM₁₀ and PM_{2.5}.

Rule 2410 Prevention of Significant Deterioration

As shown in Section VII. C. 9. above, this project does not result in a new PSD major source or

Rule 2520 Federally Mandated Operating Permits

Since this facility's potential emissions do not exceed any major source thresholds of Rule 2201, this facility is not a major source, and Rule 2520 does not apply.

Rule 4001 New Source Performance Standards

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

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

40 CFR Part 60, Subpart OOOO—Standards of Performance for Crude Oil and Natural Gas Production, Transmission and Distribution (constructed, reconstructed, or modified after 8/23/11) applies to single storage vessel, located in the oil and natural gas production segment, natural gas processing segment or natural gas transmission and storage segment. The subject tanks are subject to this subpart. However, Subpart OOOO has no standards for tanks with annual VOC emissions less than 6 tons per year. Therefore, the subject tanks are 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)

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.

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 F**), 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:

RMR Summary						
Categories	Flare (Unit 2-1)	Flare (Unit 8-1)	Tanks (Unit 15-0 thru 17-0)	(Unit 18-0 thru 20-0)	Project Totals	Facility Totals
Prioritization Score	1.49	1.49	0.00	1.51	>1.0	>1.0
Acute Hazard Index	0.00	0.01	0.00	0.00	0.02	0.02
Chronic Hazard Index	0.12	0.00	0.00	0.00	0.00	0.00
Maximum Individual Cancer Risk	7.95E-07	3.09E-06	1.35E-09	3.96E-07	4.28E-06	4.28E-06
T-BACT Required?	No	Yes-VOC's	No	No		
Special Permit Conditions?	Yes	Yes	No	Yes		

Discussion of T-BACT

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

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 E), which is the use of Coanda-effect flares; therefore, compliance with the District's Risk Management Policy is expected.

Rule 4201 Particulate Matter Concentration

Section 3.1 prohibits discharge of dust, fumes, or total particulate matter into the atmosphere from any single source operation in excess of 0.1 grain per dry standard cubic foot. It is assumed that all particulate emissions from gas combustion in the flares is PM₁₀.

$$0.008 \frac{lb}{MMBtu} \times \frac{MMBtu}{8,578 dscf} \times \frac{7,000 grain}{lb} = 0.007 \frac{grain}{dscf}$$

Since 0.007 grain/dscf is less than 0.1 grain/dscf, compliance with this rule is expected.

Rule 4301 Fuel Burning Equipment

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

The following table compares the highest emitting flare's emissions with Rule 4301 limits.

Rule 4301 Limits			
Pollutant	Flare Emissions (lb/hr)	Rule 4301 Limits (lb/hr)	Compliant?
NO ₂	0.3	140	Yes
SO ₂	0.07	200	Yes
Total PM	0.04	200	Yes

Since none of the Rule 4301 limits are exceeded, compliance with Rule 4301 is expected. Since the proposed emission limits already placed on the flare permit are much more stringent, no additional conditions will be listed.

Rule 4311 Flares

This rule limits VOC and NOx emissions from flares. This facility has a potential to emit less than 10 tons/yr NOx and 10 tons/yr VOCs and is therefore exempt from all requirements of the rule except the record-keeping requirements of Section 6.2.4. Section 6.2.4 requires that, facilities claiming an exemption pursuant to Section 4.3 shall record annual throughput, material usage, or other information necessary to demonstrate an exemption. The facility will keep records of annual volumes of gas flared to ensure that NOx and VOC emissions remain below 10 tons/yr. Therefore compliance is expected.

Rule 4409 Component at Light Crude Oil Production Facilities, Natural Gas Production Facilities, and Natural Gas Processing Facilities

New fugitive emissions components not associated with the tanks and vapor control system unit will be subject to this rule except for 1) those components containing or contacting liquids having a VOC content no greater than 10% w/w evaporation at 150°C as determined by the test method specified in Section 6.3.3; 2) components exclusively handling gas/vapor with a VOC content less than 1% by weight as determined by the test method specified in Section 6.3.2; 3) components exclusively in vacuum service; 4) Components handling commercial quality natural gas exclusively; 5) Pressure relief devices, pumps, and compressors equipped with a closed vent systems defined in Section 3.0; 6) components buried below ground; 6) 1/2 inch nominal or less stainless steel tube fittings which have been demonstrated to the APCO to be leak-free based on initial inspection using the test method specified in Section 6.3.1 where record-keeping requirements only will apply. Such components will be identified in the Rule 4409 Operator Management Plan submitted as well as those components subject to the Rule.

The following conditions are included on the ATC:

- {3468} The operator shall maintain a copy of the latest APCO-approved Operator Management Plan (OMP) at the facility and make it available to the APCO, ARB, and US EPA upon request. [District Rule 4409] N
- {3469} By January 30 of each year, the operator shall submit to the APCO for approval, in writing, an annual report indicating any changes to the existing, approved OMP. [District Rule 4409] N
- {3470} In accordance with the approved OMP, the operator shall meet all applicable operating, inspection and re-inspection, maintenance, process pressure relief device (PRD), component identification, record keeping, and notification requirements of Rule 4409 for all components containing or contacting VOC's at this facility except for those components specifically exempted in Sections 4.1 and 4.2 of Rule 4409. [District Rule 4409] N
- {3472} The operator shall maintain an inspection log that has been signed and dated by the facility operator responsible for the inspection, certifying the accuracy of the information recorded in the log. The inspection log shall contain, at a minimum, all of the following information: 1) The total number of components inspected, and the total number and percentage of leaking components found by component types; 2) The location, type, name or description of each leaking component and the description of any unit where the leaking component is found; 3) Date of the leak detection and

method of the leak detection; 4) For gaseous leaks, record the leak concentration in ppmv, and for liquid leaks record whether the leak is a major liquid leak or a minor liquid leak; 5) The date of repair, replacement, or removal from operation of the leaking component(s); 6) The identification and location of essential components and critical components found leaking that cannot be repaired until the next process unit turnaround or not later than one year after leak detection, whichever comes first; 7) The method(s) used to minimize the leak from essential components and critical components found leaking that cannot be repaired until the next process unit turnaround or not later than one year after leak detection, whichever comes earlier; 8) The date of re-inspection and the leak concentration in ppmv after the component is repaired or is replaced; 9) The inspector's name, business mailing address, and business telephone number. [District Rule 4409, 6.2.1] N

- {3473} Records of leaks detected during quarterly or annual operator inspections, and each subsequent repair and re-inspection, shall be submitted to the District, ARB, and EPA upon request. [District Rule 4409, 6.2.2] N
- {3474} Records shall be maintained of each calibration of the portable hydrocarbon detection instrument utilized for inspecting components. The records shall include a copy of the current calibration gas certification from the vendor of the calibration gas cylinder, the date of calibration, the concentration of calibration gas, the instrument reading of calibration gas before adjustment, the instrument reading of calibration gas after adjustment, the calibration gas expiration date, and the calibration gas cylinder pressure at the time of calibration. [District Rule 4409, 6.2.3] N

Compliance with this rule is expected.

Rule 4623 - Storage of Organic Liquids

The tanks are equipped with a vapor control system with a VOC control efficiency of 95%. No records are required to be kept for fixed-roof tanks equipped with vapor control. The following conditions are applicable to the tank and vapor control system:

- This tank shall be equipped with a vapor control system consisting of a closed vent system that collects all VOCs from the tank and a VOC control device. The vapor recovery system shall be APCO-approved and maintained in gas-tight condition. Collected vapors shall be directed to a gas pipeline or flare with a destruction efficiency of at least 95% by weight, as determined by the test method specified in Section 6.4.6 of District Rule 4623. [District Rules 2201 and 4623]
- Any tank gauging or sampling device on a tank vented to the vapor control system shall be equipped with a leak free cover which shall be closed at all times except during gauging or sampling. [District Rule 4623]
- Except as otherwise provided in this permit, operator shall ensure that the vapor control system is functional and is operating as designed at all times. [District Rules 2201 and 4623]
- Except as otherwise provided in this permit, all piping, valves, and fittings shall be constructed and maintained in a leak free condition. [District Rules 2201 and 4623]

- A leak-free condition is defined as a condition without a gas leak or 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 liquid leak is defined as the dripping of organic liquid at a rate of more than 3 drops per minute. [District Rule 4623]

The applicant has elected to participate in the voluntary tank preventative inspection, maintenance and tank cleaning program. Therefore the following conditions will be place on the permits:

Compliance with the 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.

Greenhouse Gas (GHG) Significance Determination

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

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

located, would be determined to have a less than significant individual and cumulative impact for GHG emission.

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

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

Industries covered by Cap-and-Trade are identified in the regulation under section 95811, Covered Entities:

1. Group 1: Large industrial facilities

These types of facilities are subject to Cap and Trade, and the specific companies covered are listed at <http://www.arb.ca.gov/cc/capandtrade/capandtrade.htm>, Section 95811 (a), under the "Publically Available Market Information" section (list maintained by the California Air Resources Board).

2. Group 2: Electricity generation facilities located in California, or electricity importers

These types of facilities are subject to Cap and Trade (section 95811, b).

3. Group 3: Suppliers of Natural Gas, Suppliers of Reformulated Gasoline Blendstock for Oxygenate Blending and Distillate Fuel Oil, Suppliers of Liquefied Petroleum Gas, and Suppliers of Blended Fuels

These entities are subject to Cap and Trade compliance obligations which must cover all fuels (except jet fuels) identified in section 95811 (c) through (f) of the Cap-and-Trade regulation delivered to end users in California, less the fuel delivered to covered entities (group 1 above).

This facility is subject to the Cap-and-Trade regulation. Therefore, as discussed above, consistent with District Policies APR 2005 and APR 2025, the District concludes that the GHG emissions increases associated with this project would have a less than significant individual and cumulative impact on global climate change.

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 § 15301 (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 NSR Public Noticing period, issue ATCs C-8578-2-1, '3-1, '4-1, 8-1, '9-1, '10-1, '15-0, '16-0, '17-0, '18-0, '19-0 and '20-0 subject to the permit conditions on the attached draft ATC in **Appendix G**.

X. Billing Information

Annual Permit Fees			
Permit Number	Fee Schedule	Fee Description	Annual Fee
C-8578-2-1	3020-02 F	4.9 MMBtu/hr	\$637
C-8578-3-1	3020-05S B	16,800 gal	\$47
C-8578-4-1	3020-05S C	21,000 gal	\$67
C-8578-8-1	3020-02 F	4.9 MMBtu/hr	\$637
C-8578-9-1	3020-05S B	16,800 gal	\$47
C-8578-10-1	3020-05S C	21,000 gal	\$67
C-8578-15-0	3020-05S C	31,500 gal	\$67
C-8578-16-0	3020-05S C	21,000 gal	\$67
C-8578-17-0	3020-05S C	21,000 gal	\$67
C-8578-18-0	3020-02 F	3.7 MMBtu/hr	\$637
C-8578-19-0	3020-05S B	16,800 gal	\$47
C-8578-20-0	3020-05S B	16,800 gal	\$47

Appendixes

- A: Quarterly Net Emissions Change
- B: Current Permits(s)
- C: Tank Emission Calculations
- D: BACT Guideline BACT Analysis
- E: T-BACT Analysis
- F: AAQA and HRA Summary
- G: Draft ATC

APPENDIX A
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.

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

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

C-8578-2-1 and '8-1 Quarterly NEC [QNEC]					
	PE2 (lb/yr)	PE2 (lb/qtr)	PE1 (lb/yr)	PE1 (lb/qtr)	QNEC (lb/qtr)
NO _x	2,919	730	0	0	730
SO _x	614	154	0	0	154
PM ₁₀	343	86	0	0	86
CO	15,882	3,971	0	0	3,971
VOC	1074	269	0	0	269

C-8578-18-0 Quarterly NEC [QNEC]					
	PE2 (lb/yr)	PE2 (lb/qtr)	PE1 (lb/yr)	PE1 (lb/qtr)	QNEC (lb/qtr)
NO _x	2,919	730	0	0	551
SO _x	614	154	0	0	116
PM ₁₀	343	86	0	0	65
CO	15,882	3,971	0	0	2,998
VOC	551	138	0	0	138

Tanks C-8578-15-0, '16-0, '17-0, '19-0 and '20-0 Quarterly NEC [QNEC] (VOC)					
	PE2 (lb/yr)	PE2 (lb/qtr)	PE1 (lb/yr)	PE1 (lb/qtr)	QNEC (lb/qtr)
	88	22	0	0	22



AUTHORITY TO CONSTRUCT

PERMIT NO: C-8578-2-0

ISSUANCE DATE: 03/31/2014

LEGAL OWNER OR OPERATOR: THE TERMO COMPANY
MAILING ADDRESS: PO BOX 2767
LONG BEACH, CA 90801

LOCATION: LIGHT OIL PRODUCTION
FRESNO COUNTY, CA

EQUIPMENT DESCRIPTION:
400 BBL FIXED ROOF CRUDE OIL STORAGE TANK #1 SERVED BY VAPOR RECOVERY SYSTEM LISTED UNDER C-8578-1 (WIGGINS LEASE)

CONDITIONS

1. The permittee's crude oil production shall average less than 6,000 bbl/day from all operations within Fresno County and permittee shall not engage in refining, transporting, or marketing of refined petroleum products. [District Rule 4623]
2. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
3. This tank shall be equipped with a fixed roof with no holes or openings. [District Rules 2201 and 4623]
4. This tank shall be equipped with a vapor control system consisting of a closed vent system that collects all VOCs from the tank and a VOC control device. The vapor recovery system shall be APCO-approved and maintained in gas-tight condition. Collected vapors shall be directed to a gas pipeline or flare with a destruction efficiency of at least 95% by weight, as determined by the test method specified in Section 6.4.6 of District Rule 4623. [District Rules 2201 and 4623]
5. Any tank gauging or sampling device on a tank vented to the vapor control system shall be equipped with a leak free cover which shall be closed at all times except during gauging or sampling. [District Rule 4623]
6. Except as otherwise provided in this permit, the operator shall ensure that the vapor control system is functional and is operating as designed at all times. [District Rule 2201]
7. Except during tank cleaning, tank roof appurtenances shall be maintained leak free. [District Rule 4623]

CONDITIONS CONTINUE ON NEXT PAGE

YOU MUST NOTIFY THE DISTRICT COMPLIANCE DIVISION AT (559) 230-5950 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

8. Except as otherwise provided in this permit, all piping, valves, and fittings shall be constructed and maintained in a leak free condition. [District Rule 4623]
9. A leak-free condition is defined as a condition without a gas leak or 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 liquid leak is defined as the dripping of organic liquid at a rate of more than 3 drops per minute. [District Rule 4623]
10. VOC emissions from the components associated with this tank up to the vapor recovery system trunk line shall not exceed 0.3 lb/day. [District Rule 2201]
11. There shall be no leaks exceeding 10,000 ppmv from fugitive emissions components associated with this tank. [District Rule 2201]
12. The permittee shall maintain with the permit accurate fugitive component counts and resulting emissions from this tank and vapor control system, calculated using California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities Table IV-2C: Oil and Gas Production Screening Value Ranges (<10,000 ppmv) Emission Factors with 100% VOC content in components. [District Rules 1070 and 2201]
13. The operator shall maintain a copy of the latest APCO-approved Operator Management Plan (OMP) at the facility and make it available to the APCO, ARB, and US EPA upon request. [District Rule 4409]
14. By January 30 of each year, the operator shall submit to the APCO for approval, in writing, an annual report indicating any changes to the existing, approved OMP. [District Rule 4409]
15. In accordance with the approved OMP, the operator shall meet all applicable operating, inspection and re-inspection, maintenance, process pressure relief device (PRD), component identification, recordkeeping, and notification requirements of Rule 4409 for all components containing or contacting VOCs at this facility except for those components specifically exempted in Sections 4.1 and 4.2 of Rule 4409. [District Rule 4409]
16. The operator shall maintain an inspection log that has been signed and dated by the facility operator responsible for the inspection, certifying the accuracy of the information recorded in the log. The inspection log shall contain, at a minimum, all of the following information: 1) The total number of components inspected, and the total number and percentage of leaking components found by component types; 2) The location, type, name or description of each leaking component and the description of any unit where the leaking component is found; 3) Date of the leak detection and method of the leak detection; 4) For gaseous leaks, record the leak concentration in ppmv, and for liquid leaks record whether the leak is a major liquid leak or a minor liquid leak; 5) The date of repair, replacement, or removal from operation of the leaking component(s); 6) The identification and location of essential components and critical components found leaking that cannot be repaired until the next process unit turnaround or not later than one year after leak detection, whichever comes first; 7) The method(s) used to minimize the leak from essential components and critical components found leaking that cannot be repaired until the next process unit turnaround or not later than one year after leak detection, whichever comes earlier; 8) The date of re-inspection and the leak concentration in ppmv after the component is repaired or is replaced; 9) The inspector's name, business mailing address, and business telephone number. [District Rule 4409, 6.2.1]
17. Records of leaks detected during quarterly or annual operator inspections, and each subsequent repair and re-inspection, shall be submitted to the District, ARB, and EPA upon request. [District Rule 4409, 6.2.2]
18. Records shall be maintained of each calibration of the portable hydrocarbon detection instrument utilized for inspecting components. The records shall include a copy of the current calibration gas certification from the vendor of the calibration gas cylinder, the date of calibration, the concentration of calibration gas, the instrument reading of calibration gas before adjustment, the instrument reading of calibration gas after adjustment, the calibration gas expiration date, and the calibration gas cylinder pressure at the time of calibration. [District Rule 4409, 6.2.3]
19. The permittee shall maintain monthly records of average daily crude oil throughput. [District Rule 4623]
20. If applicable, the permittee shall retain at the facility, at all times, a copy of the letter sent to the APCO requesting participation in the Rule 4623 Fixed Roof Tank Preventive Inspection and Maintenance Program, and Tank Interior Cleaning Program; and shall maintain the records of annual tank inspections, maintenance, and cleaning to document the participation in the program. [District Rule 4623]

CONDITIONS CONTINUE ON NEXT PAGE

21. 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 4409 and 4623]



AUTHORITY TO CONSTRUCT

PERMIT NO: C-8578-1-0

ISSUANCE DATE: 03/31/2014

LEGAL OWNER OR OPERATOR: THE TERMO COMPANY
MAILING ADDRESS: PO BOX 2767
LONG BEACH, CA 90801

LOCATION: LIGHT OIL PRODUCTION
FRESNO COUNTY, CA

EQUIPMENT DESCRIPTION:

CRUDE OIL EXPLORATION AND PRODUCTION OPERATION INCLUDING CASING GAS VAPOR RECOVERY SYSTEM, TWO-PHASE SEPARATORS, GAS TRAP, AND ALL FUGITIVE EMISSIONS COMPONENTS NOT ASSOCIATED WITH PERMIT UNITS C-8578-2 THROUGH C-8578-5 (WIGGINS LEASE)

CONDITIONS

1. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
2. VOC emissions from the components associated with this permit unit shall not exceed 1.9 lb/day. [District Rule 2201]
3. The permittee shall maintain with the permit accurate fugitive component counts and resulting emissions, calculated using California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities Table IV-2C: Oil and Gas Production Screening Value Ranges (<10,000 ppmv) Emission Factors with 100% VOC content in components. [District Rules 1070 and 2201]
4. This operation shall be equipped with a vapor control system consisting of a closed vent system and a VOC control device. The vapor recovery system shall be APCO-approved and maintained in gas-tight condition. Collected vapors shall be directed to a gas pipeline or flare with a destruction efficiency of at least 95% by weight, as determined by the test method specified in Section 6.4.6 of District Rule 4623. [District Rules 2201]
5. Except as otherwise provided in this permit, the operator shall ensure that the vapor control system is functional and is operating as designed at all times. [District Rule 2201]
6. The operator shall maintain a copy of the latest APCO-approved Operator Management Plan (OMP) at the facility and make it available to the APCO, ARB, and US EPA upon request. [District Rule 4409]
7. By January 30 of each year, the operator shall submit to the APCO for approval, in writing, an annual report indicating any changes to the existing, approved OMP. [District Rule 4409]

CONDITIONS CONTINUE ON NEXT PAGE

YOU **MUST** NOTIFY THE DISTRICT COMPLIANCE DIVISION AT (559) 230-5950 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



AUTHORITY TO CONSTRUCT

PERMIT NO: C-8578-3-0

ISSUANCE DATE: 03/31/2014

LEGAL OWNER OR OPERATOR: THE TERMO COMPANY
MAILING ADDRESS: PO BOX 2767
LONG BEACH, CA 90801

LOCATION: LIGHT OIL PRODUCTION
FRESNO COUNTY, CA

EQUIPMENT DESCRIPTION:
400 BBL FIXED ROOF CRUDE OIL STORAGE TANK #2 SERVED BY VAPOR RECOVERY SYSTEM LISTED UNDER C-8578-1 (WIGGINS LEASE)

CONDITIONS

1. The permittee's crude oil production shall average less than 6,000 bbl/day from all operations within Fresno County and permittee shall not engage in refining, transporting, or marketing of refined petroleum products. [District Rule 4623]
2. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
3. This tank shall be equipped with a fixed roof with no holes or openings. [District Rules 2201 and 4623]
4. This tank shall be equipped with a vapor control system consisting of a closed vent system that collects all VOCs from the tank and a VOC control device. The vapor recovery system shall be APCO-approved and maintained in gas-tight condition. Collected vapors shall be directed to a gas pipeline or flare with a destruction efficiency of at least 95% by weight, as determined by the test method specified in Section 6.4.6 of District Rule 4623. [District Rules 2201 and 4623]
5. Any tank gauging or sampling device on a tank vented to the vapor control system shall be equipped with a leak free cover which shall be closed at all times except during gauging or sampling. [District Rule 4623]
6. Except as otherwise provided in this permit, the operator shall ensure that the vapor control system is functional and is operating as designed at all times. [District Rule 2201]
7. Except during tank cleaning, tank roof appurtenances shall be maintained leak free. [District Rule 4623]

CONDITIONS CONTINUE ON NEXT PAGE

YOU **MUST NOTIFY THE DISTRICT COMPLIANCE DIVISION AT (559) 230-5950 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

8. Except as otherwise provided in this permit, all piping, valves, and fittings shall be constructed and maintained in a leak free condition. [District Rule 4623]
9. A leak-free condition is defined as a condition without a gas leak or 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 liquid leak is defined as the dripping of organic liquid at a rate of more than 3 drops per minute. [District Rule 4623]
10. VOC emissions from the components associated with this tank up to the vapor recovery system trunk line shall not exceed 0.3 lb/day. [District Rule 2201]
11. There shall be no leaks exceeding 10,000 ppmv from fugitive emissions components associated with this tank. [District Rule 2201]
12. The permittee shall maintain with the permit accurate fugitive component counts and resulting emissions from this tank and vapor control system, calculated using California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities Table IV-2C: Oil and Gas Production Screening Value Ranges (<10,000 ppmv) Emission Factors with 100% VOC content in components. [District Rules 1070 and 2201]
13. The operator shall maintain a copy of the latest APCO-approved Operator Management Plan (OMP) at the facility and make it available to the APCO, ARB, and US EPA upon request. [District Rule 4409]
14. By January 30 of each year, the operator shall submit to the APCO for approval, in writing, an annual report indicating any changes to the existing, approved OMP. [District Rule 4409]
15. In accordance with the approved OMP, the operator shall meet all applicable operating, inspection and re-inspection, maintenance, process pressure relief device (PRD), component identification, recordkeeping, and notification requirements of Rule 4409 for all components containing or contacting VOCs at this facility except for those components specifically exempted in Sections 4.1 and 4.2 of Rule 4409. [District Rule 4409]
16. The operator shall maintain an inspection log that has been signed and dated by the facility operator responsible for the inspection, certifying the accuracy of the information recorded in the log. The inspection log shall contain, at a minimum, all of the following information: 1) The total number of components inspected, and the total number and percentage of leaking components found by component types; 2) The location, type, name or description of each leaking component and the description of any unit where the leaking component is found; 3) Date of the leak detection and method of the leak detection; 4) For gaseous leaks, record the leak concentration in ppmv, and for liquid leaks record whether the leak is a major liquid leak or a minor liquid leak; 5) The date of repair, replacement, or removal from operation of the leaking component(s); 6) The identification and location of essential components and critical components found leaking that cannot be repaired until the next process unit turnaround or not later than one year after leak detection, whichever comes first; 7) The method(s) used to minimize the leak from essential components and critical components found leaking that cannot be repaired until the next process unit turnaround or not later than one year after leak detection, whichever comes earlier; 8) The date of re-inspection and the leak concentration in ppmv after the component is repaired or is replaced; 9) The inspector's name, business mailing address, and business telephone number. [District Rule 4409, 6.2.1]
17. Records of leaks detected during quarterly or annual operator inspections, and each subsequent repair and re-inspection, shall be submitted to the District, ARB, and EPA upon request. [District Rule 4409, 6.2.2]
18. Records shall be maintained of each calibration of the portable hydrocarbon detection instrument utilized for inspecting components. The records shall include a copy of the current calibration gas certification from the vendor of the calibration gas cylinder, the date of calibration, the concentration of calibration gas, the instrument reading of calibration gas before adjustment, the instrument reading of calibration gas after adjustment, the calibration gas expiration date, and the calibration gas cylinder pressure at the time of calibration. [District Rule 4409, 6.2.3]
19. The permittee shall maintain monthly records of average daily crude oil throughput. [District Rule 4623]
20. If applicable, the permittee shall retain at the facility, at all times, a copy of the letter sent to the APCO requesting participation in the Rule 4623 Fixed Roof Tank Preventive Inspection and Maintenance Program, and Tank Interior Cleaning Program; and shall maintain the records of annual tank inspections, maintenance, and cleaning to document the participation in the program. [District Rule 4623]

CONDITIONS CONTINUE ON NEXT PAGE

21. 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 4409 and 4623]



AUTHORITY TO CONSTRUCT

PERMIT NO: C-8578-4-0

ISSUANCE DATE: 03/31/2014

LEGAL OWNER OR OPERATOR: THE TERMO COMPANY

MAILING ADDRESS: PO BOX 2767
LONG BEACH, CA 90801

LOCATION: LIGHT OIL PRODUCTION
FRESNO COUNTY, CA

EQUIPMENT DESCRIPTION:

500 BBL FIXED ROOF WASH TANK SERVED BY VAPOR RECOVERY SYSTEM LISTED UNDER C-8578-1 (WIGGINS LEASE)

CONDITIONS

1. The permittee's crude oil production shall average less than 6,000 bbl/day from all operations within Fresno County and permittee shall not engage in refining, transporting, or marketing of refined petroleum products. [District Rule 4623]
2. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
3. This tank shall be equipped with a fixed roof with no holes or openings. [District Rules 2201 and 4623]
4. This tank shall be equipped with a vapor control system consisting of a closed vent system that collects all VOCs from the tank and a VOC control device. The vapor recovery system shall be APCO-approved and maintained in gas-tight condition. Collected vapors shall be directed to a gas pipeline or flare with a destruction efficiency of at least 95% by weight, as determined by the test method specified in Section 6.4.6 of District Rule 4623. [District Rules 2201 and 4623]
5. Any tank gauging or sampling device on a tank vented to the vapor control system shall be equipped with a leak free cover which shall be closed at all times except during gauging or sampling. [District Rule 4623]
6. Except as otherwise provided in this permit, the operator shall ensure that the vapor control system is functional and is operating as designed at all times. [District Rule 2201]
7. Except during tank cleaning, tank roof appurtenances shall be maintained leak free. [District Rule 4623]

CONDITIONS CONTINUE ON NEXT PAGE

YOU **MUST** NOTIFY THE DISTRICT COMPLIANCE DIVISION AT (559) 230-5950 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

8. Except as otherwise provided in this permit, all piping, valves, and fittings shall be constructed and maintained in a leak free condition. [District Rule 4623]
9. A leak-free condition is defined as a condition without a gas leak or 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 liquid leak is defined as the dripping of organic liquid at a rate of more than 3 drops per minute. [District Rule 4623]
10. VOC emissions from the components associated with this tank up to the vapor recovery system trunk line shall not exceed 0.3 lb/day. [District Rule 2201]
11. There shall be no leaks exceeding 10,000 ppmv from fugitive emissions components associated with this tank. [District Rule 2201]
12. The permittee shall maintain with the permit accurate fugitive component counts and resulting emissions from this tank and vapor control system, calculated using California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities Table IV-2C: Oil and Gas Production Screening Value Ranges (<10,000 ppmv) Emission Factors with 100% VOC content in components. [District Rules 1070 and 2201]
13. The operator shall maintain a copy of the latest APCO-approved Operator Management Plan (OMP) at the facility and make it available to the APCO, ARB, and US EPA upon request. [District Rule 4409]
14. By January 30 of each year, the operator shall submit to the APCO for approval, in writing, an annual report indicating any changes to the existing, approved OMP. [District Rule 4409]
15. In accordance with the approved OMP, the operator shall meet all applicable operating, inspection and re-inspection, maintenance, process pressure relief device (PRD), component identification, recordkeeping, and notification requirements of Rule 4409 for all components containing or contacting VOCs at this facility except for those components specifically exempted in Sections 4.1 and 4.2 of Rule 4409. [District Rule 4409]
16. The operator shall maintain an inspection log that has been signed and dated by the facility operator responsible for the inspection, certifying the accuracy of the information recorded in the log. The inspection log shall contain, at a minimum, all of the following information: 1) The total number of components inspected, and the total number and percentage of leaking components found by component types; 2) The location, type, name or description of each leaking component and the description of any unit where the leaking component is found; 3) Date of the leak detection and method of the leak detection; 4) For gaseous leaks, record the leak concentration in ppmv, and for liquid leaks record whether the leak is a major liquid leak or a minor liquid leak; 5) The date of repair, replacement, or removal from operation of the leaking component(s); 6) The identification and location of essential components and critical components found leaking that cannot be repaired until the next process unit turnaround or not later than one year after leak detection, whichever comes first; 7) The method(s) used to minimize the leak from essential components and critical components found leaking that cannot be repaired until the next process unit turnaround or not later than one year after leak detection, whichever comes earlier; 8) The date of re-inspection and the leak concentration in ppmv after the component is repaired or is replaced; 9) The inspector's name, business mailing address, and business telephone number. [District Rule 4409, 6.2.1]
17. Records of leaks detected during quarterly or annual operator inspections, and each subsequent repair and re-inspection, shall be submitted to the District, ARB, and EPA upon request. [District Rule 4409, 6.2.2]
18. Records shall be maintained of each calibration of the portable hydrocarbon detection instrument utilized for inspecting components. The records shall include a copy of the current calibration gas certification from the vendor of the calibration gas cylinder, the date of calibration, the concentration of calibration gas, the instrument reading of calibration gas before adjustment, the instrument reading of calibration gas after adjustment, the calibration gas expiration date, and the calibration gas cylinder pressure at the time of calibration. [District Rule 4409, 6.2.3]
19. The permittee shall maintain monthly records of average daily crude oil throughput. [District Rule 4623]
20. If applicable, the permittee shall retain at the facility, at all times, a copy of the letter sent to the APCO requesting participation in the Rule 4623 Fixed Roof Tank Preventive Inspection and Maintenance Program, and Tank Interior Cleaning Program; and shall maintain the records of annual tank inspections, maintenance, and cleaning to document the participation in the program. [District Rule 4623]

CONDITIONS CONTINUE ON NEXT PAGE

21. 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 4409 and 4623]



AUTHORITY TO CONSTRUCT

PERMIT NO: C-8578-5-0

ISSUANCE DATE: 03/31/2014

LEGAL OWNER OR OPERATOR: THE TERMO COMPANY
MAILING ADDRESS: PO BOX 2767
LONG BEACH, CA 90801

LOCATION: LIGHT OIL PRODUCTION
FRESNO COUNTY, CA

EQUIPMENT DESCRIPTION:
400 BBL FIXED ROOF WASTEWATER STORAGE TANK SERVED BY VAPOR RECOVERY SYSTEM LISTED UNDER C-8578-1 (WIGGINS LEASE)

CONDITIONS

1. The permittee's crude oil production shall average less than 6,000 bbl/day from all operations within Fresno County and permittee shall not engage in refining, transporting, or marketing of refined petroleum products. [District Rule 4623]
2. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
3. This tank shall be equipped with a fixed roof with no holes or openings. [District Rules 2201 and 4623]
4. This tank shall be equipped with a vapor control system consisting of a closed vent system that collects all VOCs from the tank and a VOC control device. The vapor recovery system shall be APCO-approved and maintained in gas-tight condition. Collected vapors shall be directed to a gas pipeline or flare with a destruction efficiency of at least 95% by weight, as determined by the test method specified in Section 6.4.6 of District Rule 4623. [District Rules 2201 and 4623]
5. Any tank gauging or sampling device on a tank vented to the vapor control system shall be equipped with a leak free cover which shall be closed at all times except during gauging or sampling. [District Rule 4623]
6. Except as otherwise provided in this permit, the operator shall ensure that the vapor control system is functional and is operating as designed at all times. [District Rule 2201]
7. Except during tank cleaning, tank roof appurtenances shall be maintained leak free. [District Rule 4623]

CONDITIONS CONTINUE ON NEXT PAGE

YOU MUST NOTIFY THE DISTRICT COMPLIANCE DIVISION AT (559) 230-5950 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

C-8578-5-0; Oct 13 2015 7:32AM -- TORID : Joint Inspection Required with AIYABEU

8. Except as otherwise provided in this permit, all piping, valves, and fittings shall be constructed and maintained in a leak free condition. [District Rule 4623]
9. A leak-free condition is defined as a condition without a gas leak or 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 liquid leak is defined as the dripping of organic liquid at a rate of more than 3 drops per minute. [District Rule 4623]
10. VOC emissions from the components associated with this tank up to the vapor recovery system trunk line shall not exceed 0.3 lb/day. [District Rule 2201]
11. There shall be no leaks exceeding 10,000 ppmv from fugitive emissions components associated with this tank. [District Rule 2201]
12. The permittee shall maintain with the permit accurate fugitive component counts and resulting emissions from this tank and vapor control system, calculated using California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities Table IV-2C: Oil and Gas Production Screening Value Ranges (<10,000 ppmv) Emission Factors with 100% VOC content in components. [District Rules 1070 and 2201]
13. The operator shall maintain a copy of the latest APCO-approved Operator Management Plan (OMP) at the facility and make it available to the APCO, ARB, and US EPA upon request. [District Rule 4409]
14. By January 30 of each year, the operator shall submit to the APCO for approval, in writing, an annual report indicating any changes to the existing, approved OMP. [District Rule 4409]
15. In accordance with the approved OMP, the operator shall meet all applicable operating, inspection and re-inspection, maintenance, process pressure relief device (PRD), component identification, recordkeeping, and notification requirements of Rule 4409 for all components containing or contacting VOCs at this facility except for those components specifically exempted in Sections 4.1 and 4.2 of Rule 4409. [District Rule 4409]
16. The operator shall maintain an inspection log that has been signed and dated by the facility operator responsible for the inspection, certifying the accuracy of the information recorded in the log. The inspection log shall contain, at a minimum, all of the following information: 1) The total number of components inspected, and the total number and percentage of leaking components found by component types; 2) The location, type, name or description of each leaking component and the description of any unit where the leaking component is found; 3) Date of the leak detection and method of the leak detection; 4) For gaseous leaks, record the leak concentration in ppmv, and for liquid leaks record whether the leak is a major liquid leak or a minor liquid leak; 5) The date of repair, replacement, or removal from operation of the leaking component(s); 6) The identification and location of essential components and critical components found leaking that cannot be repaired until the next process unit turnaround or not later than one year after leak detection, whichever comes first; 7) The method(s) used to minimize the leak from essential components and critical components found leaking that cannot be repaired until the next process unit turnaround or not later than one year after leak detection, whichever comes earlier; 8) The date of re-inspection and the leak concentration in ppmv after the component is repaired or is replaced; 9) The inspector's name, business mailing address, and business telephone number. [District Rule 4409, 6.2.1]
17. Records of leaks detected during quarterly or annual operator inspections, and each subsequent repair and re-inspection, shall be submitted to the District, ARB, and EPA upon request. [District Rule 4409, 6.2.2]
18. Records shall be maintained of each calibration of the portable hydrocarbon detection instrument utilized for inspecting components. The records shall include a copy of the current calibration gas certification from the vendor of the calibration gas cylinder, the date of calibration, the concentration of calibration gas, the instrument reading of calibration gas before adjustment, the instrument reading of calibration gas after adjustment, the calibration gas expiration date, and the calibration gas cylinder pressure at the time of calibration. [District Rule 4409, 6.2.3]
19. The permittee shall maintain monthly records of average daily crude oil throughput. [District Rule 4623]
20. If applicable, the permittee shall retain at the facility, at all times, a copy of the letter sent to the APCO requesting participation in the Rule 4623 Fixed Roof Tank Preventive Inspection and Maintenance Program, and Tank Interior Cleaning Program; and shall maintain the records of annual tank inspections, maintenance, and cleaning to document the participation in the program. [District Rule 4623]

CONDITIONS CONTINUE ON NEXT PAGE

21. 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 4409 and 4623]



AUTHORITY TO CONSTRUCT

PERMIT NO: C-8578-6-0

ISSUANCE DATE: 03/31/2014

LEGAL OWNER OR OPERATOR: THE TERMO COMPANY

MAILING ADDRESS: PO BOX 2767
LONG BEACH, CA 90801

LOCATION: LIGHT OIL PRODUCTION
FRESNO COUNTY, CA

EQUIPMENT DESCRIPTION:

3.4 MMBTU/HR BEKAERT MODEL CEB 100 PREMIXED SURFACE COMBUSTION FLARE SERVING VAPOR RECOVERY SYSTEM LISTED UNDER PERMIT UNITS C-8578-1 (WIGGINS LEASE)

CONDITIONS

1. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
2. The flare outlet shall be equipped with an automatic ignition system, or shall operate with a pilot flame present at all times when combustible gases are vented through the flare, except during purge periods for automatic-ignition equipped flares. [District Rule 2201]
3. The sulfur compound concentration of gas combusted shall not exceed 5 gr S/100 scf. [District Rule 2201]
4. 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 ¼ or 5% opacity. [District Rules 2201 and 4101]
5. Emissions from the flare shall not exceed any of the following limits (based on total gas combusted): NOx: 0.023 lb/MMBtu; PM10: 0.008 lb/MMBtu; CO: 0.01 lb/MMBtu; or VOC: 0.005 lb/MMBtu. [District Rule 2201]
6. The permittee shall measure sulfur content of gas incinerated in flare within 60 days of startup. [District Rules 2201 and 4801]
7. The permittee shall conduct quarterly sampling of the sulfur content of the gas flared. If 8 consecutive quarterly samplings show compliance, then sampling frequency shall only be required annually. [District Rule 2201]

CONDITIONS CONTINUE ON NEXT PAGE

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Seyed Sadredin, Executive Director / APCO

Arnaud Marjollet, Director of Permit Services

C-8578-6-0: Oct 13 2015 7:32AM -- TORID : Joint Inspection Required with A1YABE1J

8. The sulfur content of the gas being combusted shall be determined using ASTM methods D1072, D3031, D4084, D3246 or grab sample analysis by GC-FPD/TCD performed in the laboratory. The sulfur content of flared gas shall be measured within one day of restarting the unit if the unit has not been in use for more than 7 days. [District Rules 1081 and 2201]
9. Source testing to measure NOx, CO and VOC emissions from the produced gas-fired flare shall be conducted within 60 days of initial start-up. [District Rule 2201]
10. NOx emissions shall be determined using EPA Method 19 on a heat input basis, or EPA Method 3A, EPA Method 7E, or ARB Method 100 on a ppmv basis. [District Rule 2201]
11. CO emissions shall be determined using EPA Method 10 or 10B, ARB Methods 1 through 5 with 10, or ARB Method 100. [District Rule 2201]
12. VOC emissions shall be determined using EPA Method 25 or 25a. [District Rule 2201]
13. Stack gas oxygen (O2) shall be determined using EPA Method 3A, EPA Method 7E, or ARB Method 100. [District Rule 2201]
14. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081]
15. For emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. If two of three runs are above an applicable limit the test cannot be used to demonstrate compliance with an applicable limit. [District Rule 1081]
16. The results of each source test shall be submitted to the District within 60 days of completion of the source test. [District Rule 1081]
17. The permittee shall maintain records of flared gas sulfur content measurement results and all source test results. [District Rules 1070 and 2201]
18. All records shall be retained for a period of at least 5 years and shall be made available for District inspection upon request. [District Rule 1070]



AUTHORITY TO CONSTRUCT

PERMIT NO: C-8578-7-0

ISSUANCE DATE: 03/31/2014

LEGAL OWNER OR OPERATOR: THE TERMO COMPANY

MAILING ADDRESS: PO BOX 2767
LONG BEACH, CA 90801

LOCATION: LIGHT OIL PRODUCTION
FRESNO COUNTY, CA

EQUIPMENT DESCRIPTION:

CRUDE OIL EXPLORATION AND PRODUCTION OPERATION INCLUDING CASING GAS VAPOR RECOVERY SYSTEM, TWO-PHASE SEPARATORS, GAS TRAP, AND ALL FUGITIVE EMISSIONS COMPONENTS NOT ASSOCIATED WITH PERMIT UNITS C-8578-8 THROUGH C-8578-11 (TORRES LEASE)

CONDITIONS

1. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
2. VOC emissions from the components associated with this permit unit shall not exceed 1.9 lb/day. [District Rule 2201]
3. The permittee shall maintain with the permit accurate fugitive component counts and resulting emissions, calculated using California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities Table IV-2C: Oil and Gas Production Screening Value Ranges (<10,000 ppmv) Emission Factors with 100% VOC content in components. [District Rules 1070 and 2201]
4. This operation shall be equipped with a vapor control system consisting of a closed vent system and a VOC control device. The vapor recovery system shall be APCO-approved and maintained in gas-tight condition. Collected vapors shall be directed to a gas pipeline or flare with a destruction efficiency of at least 95% by weight, as determined by the test method specified in Section 6.4.6 of District Rule 4623. [District Rules 2201]
5. Except as otherwise provided in this permit, the operator shall ensure that the vapor control system is functional and is operating as designed at all times. [District Rule 2201]
6. The operator shall maintain a copy of the latest APCO-approved Operator Management Plan (OMP) at the facility and make it available to the APCO, ARB, and US EPA upon request. [District Rule 4409]
7. By January 30 of each year, the operator shall submit to the APCO for approval, in writing, an annual report indicating any changes to the existing, approved OMP. [District Rule 4409]

CONDITIONS CONTINUE ON NEXT PAGE

YOU MUST NOTIFY THE DISTRICT COMPLIANCE DIVISION AT (559) 230-5950 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

8. In accordance with the approved OMP, the operator shall meet all applicable operating, inspection and re-inspection, maintenance, process pressure relief device (PRD), component identification, recordkeeping, and notification requirements of Rule 4409 for all components containing or contacting VOCs at this facility except for those components specifically exempted in Sections 4.1 and 4.2 of Rule 4409. [District Rule 4409]
9. The operator shall maintain an inspection log that has been signed and dated by the facility operator responsible for the inspection, certifying the accuracy of the information recorded in the log. The inspection log shall contain, at a minimum, all of the following information: 1) The total number of components inspected, and the total number and percentage of leaking components found by component types; 2) The location, type, name or description of each leaking component and the description of any unit where the leaking component is found; 3) Date of the leak detection and method of the leak detection; 4) For gaseous leaks, record the leak concentration in ppmv, and for liquid leaks record whether the leak is a major liquid leak or a minor liquid leak; 5) The date of repair, replacement, or removal from operation of the leaking component(s); 6) The identification and location of essential components and critical components found leaking that cannot be repaired until the next process unit turnaround or not later than one year after leak detection, whichever comes first; 7) The method(s) used to minimize the leak from essential components and critical components found leaking that cannot be repaired until the next process unit turnaround or not later than one year after leak detection, whichever comes earlier; 8) The date of re-inspection and the leak concentration in ppmv after the component is repaired or is replaced; 9) The inspector's name, business mailing address, and business telephone number. [District Rule 4409, 6.2.1]
10. Records of leaks detected during quarterly or annual operator inspections, and each subsequent repair and re-inspection, shall be submitted to the District, ARB, and EPA upon request. [District Rule 4409, 6.2.2]
11. Records shall be maintained of each calibration of the portable hydrocarbon detection instrument utilized for inspecting components. The records shall include a copy of the current calibration gas certification from the vendor of the calibration gas cylinder, the date of calibration, the concentration of calibration gas, the instrument reading of calibration gas before adjustment, the instrument reading of calibration gas after adjustment, the calibration gas expiration date, and the calibration gas cylinder pressure at the time of calibration. [District Rule 4409, 6.2.3]
12. All records required by this permit shall be maintained and retained on-site for a minimum of five (5) years and made available for District, ARB, and EPA inspection upon request. [District Rule 4409, 6.2.4]



AUTHORITY TO CONSTRUCT

PERMIT NO: C-8578-8-0

ISSUANCE DATE: 03/31/2014

LEGAL OWNER OR OPERATOR: THE TERMO COMPANY
MAILING ADDRESS: PO BOX 2767
LONG BEACH, CA 90801

LOCATION: LIGHT OIL PRODUCTION
FRESNO COUNTY, CA

EQUIPMENT DESCRIPTION:
400 BBL FIXED ROOF CRUDE OIL STORAGE TANK #1 SERVED BY VAPOR RECOVERY SYSTEM LISTED UNDER C-8578-7 (TORRES LEASE)

CONDITIONS

1. The permittee's crude oil production shall average less than 6,000 bbl/day from all operations within Fresno County and permittee shall not engage in refining, transporting, or marketing of refined petroleum products. [District Rule 4623]
2. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
3. This tank shall be equipped with a fixed roof with no holes or openings. [District Rules 2201 and 4623]
4. This tank shall be equipped with a vapor control system consisting of a closed vent system that collects all VOCs from the tank and a VOC control device. The vapor recovery system shall be APCO-approved and maintained in gas-tight condition. Collected vapors shall be directed to a gas pipeline or flare with a destruction efficiency of at least 95% by weight, as determined by the test method specified in Section 6.4.6 of District Rule 4623. [District Rules 2201 and 4623]
5. Any tank gauging or sampling device on a tank vented to the vapor control system shall be equipped with a leak free cover which shall be closed at all times except during gauging or sampling. [District Rule 4623]
6. Except as otherwise provided in this permit, the operator shall ensure that the vapor control system is functional and is operating as designed at all times. [District Rule 2201]
7. Except during tank cleaning, tank roof appurtenances shall be maintained leak free. [District Rule 4623]

CONDITIONS CONTINUE ON NEXT PAGE

YOU MUST NOTIFY THE DISTRICT COMPLIANCE DIVISION AT (559) 230-5950 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

8. Except as otherwise provided in this permit, all piping, valves, and fittings shall be constructed and maintained in a leak free condition. [District Rule 4623]
9. A leak-free condition is defined as a condition without a gas leak or 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 liquid leak is defined as the dripping of organic liquid at a rate of more than 3 drops per minute. [District Rule 4623]
10. VOC emissions from the components associated with this tank up to the vapor recovery system trunk line shall not exceed 0.3 lb/day. [District Rule 2201]
11. There shall be no leaks exceeding 10,000 ppmv from fugitive emissions components associated with this tank. [District Rule 2201]
12. The permittee shall maintain with the permit accurate fugitive component counts and resulting emissions from this tank and vapor control system, calculated using California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities Table IV-2C: Oil and Gas Production Screening Value Ranges (<10,000 ppmv) Emission Factors with 100% VOC content in components. [District Rules 1070 and 2201]
13. The operator shall maintain a copy of the latest APCO-approved Operator Management Plan (OMP) at the facility and make it available to the APCO, ARB, and US EPA upon request. [District Rule 4409]
14. By January 30 of each year, the operator shall submit to the APCO for approval, in writing, an annual report indicating any changes to the existing, approved OMP. [District Rule 4409]
15. In accordance with the approved OMP, the operator shall meet all applicable operating, inspection and re-inspection, maintenance, process pressure relief device (PRD), component identification, recordkeeping, and notification requirements of Rule 4409 for all components containing or contacting VOCs at this facility except for those components specifically exempted in Sections 4.1 and 4.2 of Rule 4409. [District Rule 4409]
16. The operator shall maintain an inspection log that has been signed and dated by the facility operator responsible for the inspection, certifying the accuracy of the information recorded in the log. The inspection log shall contain, at a minimum, all of the following information: 1) The total number of components inspected, and the total number and percentage of leaking components found by component types; 2) The location, type, name or description of each leaking component and the description of any unit where the leaking component is found; 3) Date of the leak detection and method of the leak detection; 4) For gaseous leaks, record the leak concentration in ppmv, and for liquid leaks record whether the leak is a major liquid leak or a minor liquid leak; 5) The date of repair, replacement, or removal from operation of the leaking component(s); 6) The identification and location of essential components and critical components found leaking that cannot be repaired until the next process unit turnaround or not later than one year after leak detection, whichever comes first; 7) The method(s) used to minimize the leak from essential components and critical components found leaking that cannot be repaired until the next process unit turnaround or not later than one year after leak detection, whichever comes earlier; 8) The date of re-inspection and the leak concentration in ppmv after the component is repaired or is replaced; 9) The inspector's name, business mailing address, and business telephone number. [District Rule 4409, 6.2.1]
17. Records of leaks detected during quarterly or annual operator inspections, and each subsequent repair and re-inspection, shall be submitted to the District, ARB, and EPA upon request. [District Rule 4409, 6.2.2]
18. Records shall be maintained of each calibration of the portable hydrocarbon detection instrument utilized for inspecting components. The records shall include a copy of the current calibration gas certification from the vendor of the calibration gas cylinder, the date of calibration, the concentration of calibration gas, the instrument reading of calibration gas before adjustment, the instrument reading of calibration gas after adjustment, the calibration gas expiration date, and the calibration gas cylinder pressure at the time of calibration. [District Rule 4409, 6.2.3]
19. The permittee shall maintain monthly records of average daily crude oil throughput. [District Rule 4623]
20. If applicable, the permittee shall retain at the facility, at all times, a copy of the letter sent to the APCO requesting participation in the Rule 4623 Fixed Roof Tank Preventive Inspection and Maintenance Program, and Tank Interior Cleaning Program; and shall maintain the records of annual tank inspections, maintenance, and cleaning to document the participation in the program. [District Rule 4623]

CONDITIONS CONTINUE ON NEXT PAGE

21. 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 4409 and 4623]



AUTHORITY TO CONSTRUCT

PERMIT NO: C-8578-9-0

ISSUANCE DATE: 03/31/2014

LEGAL OWNER OR OPERATOR: THE TERMO COMPANY
MAILING ADDRESS: PO BOX 2767
LONG BEACH, CA 90801

LOCATION: LIGHT OIL PRODUCTION
FRESNO COUNTY, CA

EQUIPMENT DESCRIPTION:

400 BBL FIXED ROOF CRUDE OIL STORAGE TANK #2 SERVED BY VAPOR RECOVERY SYSTEM LISTED UNDER C-8578-7 (TORRES LEASE)

CONDITIONS

1. The permittee's crude oil production shall average less than 6,000 bbl/day from all operations within Fresno County and permittee shall not engage in refining, transporting, or marketing of refined petroleum products. [District Rule 4623]
2. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
3. This tank shall be equipped with a fixed roof with no holes or openings. [District Rules 2201 and 4623]
4. This tank shall be equipped with a vapor control system consisting of a closed vent system that collects all VOCs from the tank and a VOC control device. The vapor recovery system shall be APCO-approved and maintained in gas-tight condition. Collected vapors shall be directed to a gas pipeline or flare with a destruction efficiency of at least 95% by weight, as determined by the test method specified in Section 6.4.6 of District Rule 4623. [District Rules 2201 and 4623]
5. Any tank gauging or sampling device on a tank vented to the vapor control system shall be equipped with a leak free cover which shall be closed at all times except during gauging or sampling. [District Rule 4623]
6. Except as otherwise provided in this permit, the operator shall ensure that the vapor control system is functional and is operating as designed at all times. [District Rule 2201]
7. Except during tank cleaning, tank roof appurtenances shall be maintained leak free. [District Rule 4623]

CONDITIONS CONTINUE ON NEXT PAGE

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Seyed Sadredin, Executive Director / APCO

8. Except as otherwise provided in this permit, all piping, valves, and fittings shall be constructed and maintained in a leak free condition. [District Rule 4623]
9. A leak-free condition is defined as a condition without a gas leak or 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 liquid leak is defined as the dripping of organic liquid at a rate of more than 3 drops per minute. [District Rule 4623]
10. VOC emissions from the components associated with this tank up to the vapor recovery system trunk line shall not exceed 0.3 lb/day. [District Rule 2201]
11. There shall be no leaks exceeding 10,000 ppmv from fugitive emissions components associated with this tank. [District Rule 2201]
12. The permittee shall maintain with the permit accurate fugitive component counts and resulting emissions from this tank and vapor control system, calculated using California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities Table IV-2C: Oil and Gas Production Screening Value Ranges (<10,000 ppmv) Emission Factors with 100% VOC content in components. [District Rules 1070 and 2201]
13. The operator shall maintain a copy of the latest APCO-approved Operator Management Plan (OMP) at the facility and make it available to the APCO, ARB, and US EPA upon request. [District Rule 4409]
14. By January 30 of each year, the operator shall submit to the APCO for approval, in writing, an annual report indicating any changes to the existing, approved OMP. [District Rule 4409]
15. In accordance with the approved OMP, the operator shall meet all applicable operating, inspection and re-inspection, maintenance, process pressure relief device (PRD), component identification, recordkeeping, and notification requirements of Rule 4409 for all components containing or contacting VOCs at this facility except for those components specifically exempted in Sections 4.1 and 4.2 of Rule 4409. [District Rule 4409]
16. The operator shall maintain an inspection log that has been signed and dated by the facility operator responsible for the inspection, certifying the accuracy of the information recorded in the log. The inspection log shall contain, at a minimum, all of the following information: 1) The total number of components inspected, and the total number and percentage of leaking components found by component types; 2) The location, type, name or description of each leaking component and the description of any unit where the leaking component is found; 3) Date of the leak detection and method of the leak detection; 4) For gaseous leaks, record the leak concentration in ppmv, and for liquid leaks record whether the leak is a major liquid leak or a minor liquid leak; 5) The date of repair, replacement, or removal from operation of the leaking component(s); 6) The identification and location of essential components and critical components found leaking that cannot be repaired until the next process unit turnaround or not later than one year after leak detection, whichever comes first; 7) The method(s) used to minimize the leak from essential components and critical components found leaking that cannot be repaired until the next process unit turnaround or not later than one year after leak detection, whichever comes earlier; 8) The date of re-inspection and the leak concentration in ppmv after the component is repaired or is replaced; 9) The inspector's name, business mailing address, and business telephone number. [District Rule 4409, 6.2.1]
17. Records of leaks detected during quarterly or annual operator inspections, and each subsequent repair and re-inspection, shall be submitted to the District, ARB, and EPA upon request. [District Rule 4409, 6.2.2]
18. Records shall be maintained of each calibration of the portable hydrocarbon detection instrument utilized for inspecting components. The records shall include a copy of the current calibration gas certification from the vendor of the calibration gas cylinder, the date of calibration, the concentration of calibration gas, the instrument reading of calibration gas before adjustment, the instrument reading of calibration gas after adjustment, the calibration gas expiration date, and the calibration gas cylinder pressure at the time of calibration. [District Rule 4409, 6.2.3]
19. The permittee shall maintain monthly records of average daily crude oil throughput. [District Rule 4623]
20. If applicable, the permittee shall retain at the facility, at all times, a copy of the letter sent to the APCO requesting participation in the Rule 4623 Fixed Roof Tank Preventive Inspection and Maintenance Program, and Tank Interior Cleaning Program; and shall maintain the records of annual tank inspections, maintenance, and cleaning to document the participation in the program. [District Rule 4623]

CONDITIONS CONTINUE ON NEXT PAGE

21. 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 4409 and 4623]



AUTHORITY TO CONSTRUCT

PERMIT NO: C-8578-10-0

ISSUANCE DATE: 03/31/2014

LEGAL OWNER OR OPERATOR: THE TERMO COMPANY
MAILING ADDRESS: PO BOX 2767
LONG BEACH, CA 90801

LOCATION: LIGHT OIL PRODUCTION
FRESNO COUNTY, CA

EQUIPMENT DESCRIPTION:

500 BBL FIXED ROOF WASH TANK SERVED BY VAPOR RECOVERY SYSTEM LISTED UNDER C-8578-7 (TORRES LEASE)

CONDITIONS

1. The permittee's crude oil production shall average less than 6,000 bbl/day from all operations within Fresno County and permittee shall not engage in refining, transporting, or marketing of refined petroleum products. [District Rule 4623]
2. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
3. This tank shall be equipped with a fixed roof with no holes or openings. [District Rules 2201 and 4623]
4. This tank shall be equipped with a vapor control system consisting of a closed vent system that collects all VOCs from the tank and a VOC control device. The vapor recovery system shall be APCO-approved and maintained in gas-tight condition. Collected vapors shall be directed to a gas pipeline or flare with a destruction efficiency of at least 95% by weight, as determined by the test method specified in Section 6.4.6 of District Rule 4623. [District Rules 2201 and 4623]
5. Any tank gauging or sampling device on a tank vented to the vapor control system shall be equipped with a leak free cover which shall be closed at all times except during gauging or sampling. [District Rule 4623]
6. Except as otherwise provided in this permit, the operator shall ensure that the vapor control system is functional and is operating as designed at all times. [District Rule 2201]
7. Except during tank cleaning, tank roof appurtenances shall be maintained leak free. [District Rule 4623]

CONDITIONS CONTINUE ON NEXT PAGE

YOU MUST NOTIFY THE DISTRICT COMPLIANCE DIVISION AT (559) 230-5950 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

C-8578-10-0; Oct 13 2015 7:32AM -- TORID -- Joint Inspection NOT Required

8. Except as otherwise provided in this permit, all piping, valves, and fittings shall be constructed and maintained in a leak free condition. [District Rule 4623]
9. A leak-free condition is defined as a condition without a gas leak or 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 liquid leak is defined as the dripping of organic liquid at a rate of more than 3 drops per minute. [District Rule 4623]
10. VOC emissions from the components associated with this tank up to the vapor recovery system trunk line shall not exceed 0.3 lb/day. [District Rule 2201]
11. There shall be no leaks exceeding 10,000 ppmv from fugitive emissions components associated with this tank. [District Rule 2201]
12. The permittee shall maintain with the permit accurate fugitive component counts and resulting emissions from this tank and vapor control system, calculated using California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities Table IV-2C: Oil and Gas Production Screening Value Ranges (<10,000 ppmv) Emission Factors with 100% VOC content in components. [District Rules 1070 and 2201]
13. The operator shall maintain a copy of the latest APCO-approved Operator Management Plan (OMP) at the facility and make it available to the APCO, ARB, and US EPA upon request. [District Rule 4409]
14. By January 30 of each year, the operator shall submit to the APCO for approval, in writing, an annual report indicating any changes to the existing, approved OMP. [District Rule 4409]
15. In accordance with the approved OMP, the operator shall meet all applicable operating, inspection and re-inspection, maintenance, process pressure relief device (PRD), component identification, recordkeeping, and notification requirements of Rule 4409 for all components containing or contacting VOCs at this facility except for those components specifically exempted in Sections 4.1 and 4.2 of Rule 4409. [District Rule 4409]
16. The operator shall maintain an inspection log that has been signed and dated by the facility operator responsible for the inspection, certifying the accuracy of the information recorded in the log. The inspection log shall contain, at a minimum, all of the following information: 1) The total number of components inspected, and the total number and percentage of leaking components found by component types; 2) The location, type, name or description of each leaking component and the description of any unit where the leaking component is found; 3) Date of the leak detection and method of the leak detection; 4) For gaseous leaks, record the leak concentration in ppmv, and for liquid leaks record whether the leak is a major liquid leak or a minor liquid leak; 5) The date of repair, replacement, or removal from operation of the leaking component(s); 6) The identification and location of essential components and critical components found leaking that cannot be repaired until the next process unit turnaround or not later than one year after leak detection, whichever comes first; 7) The method(s) used to minimize the leak from essential components and critical components found leaking that cannot be repaired until the next process unit turnaround or not later than one year after leak detection, whichever comes earlier; 8) The date of re-inspection and the leak concentration in ppmv after the component is repaired or is replaced; 9) The inspector's name, business mailing address, and business telephone number. [District Rule 4409, 6.2.1]
17. Records of leaks detected during quarterly or annual operator inspections, and each subsequent repair and re-inspection, shall be submitted to the District, ARB, and EPA upon request. [District Rule 4409, 6.2.2]
18. Records shall be maintained of each calibration of the portable hydrocarbon detection instrument utilized for inspecting components. The records shall include a copy of the current calibration gas certification from the vendor of the calibration gas cylinder, the date of calibration, the concentration of calibration gas, the instrument reading of calibration gas before adjustment, the instrument reading of calibration gas after adjustment, the calibration gas expiration date, and the calibration gas cylinder pressure at the time of calibration. [District Rule 4409, 6.2.3]
19. The permittee shall maintain monthly records of average daily crude oil throughput. [District Rule 4623]
20. If applicable, the permittee shall retain at the facility, at all times, a copy of the letter sent to the APCO requesting participation in the Rule 4623 Fixed Roof Tank Preventive Inspection and Maintenance Program, and Tank Interior Cleaning Program; and shall maintain the records of annual tank inspections, maintenance, and cleaning to document the participation in the program. [District Rule 4623]

CONDITIONS CONTINUE ON NEXT PAGE

21. 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 4409 and 4623]



AUTHORITY TO CONSTRUCT

PERMIT NO: C-8578-12-0

ISSUANCE DATE: 03/31/2014

LEGAL OWNER OR OPERATOR: THE TERMO COMPANY
MAILING ADDRESS: PO BOX 2767
LONG BEACH, CA 90801

LOCATION: LIGHT OIL PRODUCTION
FRESNO COUNTY, CA

EQUIPMENT DESCRIPTION:

3.4 MMBTU/HR BEKAERT MODEL CEB 100 PREMIXED SURFACE COMBUSTION FLARE SERVING VAPOR RECOVERY SYSTEM LISTED UNDER PERMIT UNIT C-8578-7 (TORRES LEASE)

CONDITIONS

1. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
2. The flare outlet shall be equipped with an automatic ignition system, or shall operate with a pilot flame present at all times when combustible gases are vented through the flare, except during purge periods for automatic-ignition equipped flares. [District Rule 2201]
3. The sulfur compound concentration of gas combusted shall not exceed 5 gr S/100 scf. [District Rule 2201]
4. 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 ¼ or 5% opacity. [District Rules 2201 and 4101]
5. Emissions from the flare shall not exceed any of the following limits (based on total gas combusted): NOx: 0.023 lb/MMBtu; PM10: 0.008 lb/MMBtu; CO: 0.01 lb/MMBtu; or VOC: 0.005 lb/MMBtu. [District Rule 2201]
6. The permittee shall measure sulfur content of gas incinerated in flare within 60 days of startup. [District Rules 2201 and 4801]
7. The permittee shall conduct quarterly sampling of the sulfur content of the gas flared. If 8 consecutive quarterly samplings show compliance, then sampling frequency shall only be required annually. [District Rule 2201]

CONDITIONS CONTINUE ON NEXT PAGE

YOU MUST NOTIFY THE DISTRICT COMPLIANCE DIVISION AT (559) 230-5950 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

8. The sulfur content of the gas being combusted shall be determined using ASTM methods D1072, D3031, D4084, D3246 or grab sample analysis by GC-FPD/TCD performed in the laboratory. The sulfur content of flared gas shall be measured within one day of restarting the unit if the unit has not been in use for more than 7 days. [District Rules 1081 and 2201]
9. Source testing to measure NO_x, CO and VOC emissions from the produced gas-fired flare shall be conducted within 60 days of initial start-up. [District Rule 2201]
10. NO_x emissions shall be determined using EPA Method 19 on a heat input basis, or EPA Method 3A, EPA Method 7E, or ARB Method 100 on a ppmv basis. [District Rule 2201]
11. CO emissions shall be determined using EPA Method 10 or 10B, ARB Methods 1 through 5 with 10, or ARB Method 100. [District Rule 2201]
12. VOC emissions shall be determined using EPA Method 25 or 25a. [District Rule 2201]
13. Stack gas oxygen (O₂) shall be determined using EPA Method 3A, EPA Method 7E, or ARB Method 100. [District Rule 2201]
14. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081]
15. For emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. If two of three runs are above an applicable limit the test cannot be used to demonstrate compliance with an applicable limit. [District Rule 1081]
16. The results of each source test shall be submitted to the District within 60 days of completion of the source test. [District Rule 1081]
17. The permittee shall maintain records of flared gas sulfur content measurement results and all source test results. [District Rules 1070 and 2201]
18. All records shall be retained for a period of at least 5 years and shall be made available for District inspection upon request. [District Rule 1070]

APPENDIX C
Tank Emission Calculations

The Termo Company
Tanks

Fugitive Emissions Using Screening Emission Factors

California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities

*Table IV-2c. Oil and Gas Production
Screening Value Ranges Emission Factors*

Percentage of components in vapor service with $\geq 10,000$ ppmv leaks allowed? 0 %
 Percentage of components in liquid service with $\geq 10,000$ ppmv leaks allowed? 0 %
 Weight percentage of VOC in the total organic compounds in gas? 100 %
 Weight percentage of VOC in the total organic compounds in oil? 100 %

Equipment Type	Service	Component Count	Total allowable leaking components	Screening Value $\leq 10,000$ ppmv (lb/day/source)	Screening Value $> 10,000$ ppmv (lb/day/source)	VOC emissions (lb/day)
Valves	Gas/Light Liquid	16	0	1.852E-03	7.333E+00	0.03
	Light Crude Oil	0	0	1.005E-03	3.741E+00	0.00
	Heavy Crude Oil	0	0	7.408E-04	N/A*	0.00
Pump Seals	Gas/Light Liquid	0	0	5.270E-02	4.709E+00	0.00
	Light Crude Oil	0	0	1.402E-02	4.709E+00	0.00
	Heavy Crude Oil	0	0	N/A	N/A	N/A
Others	Gas/Light Liquid	15	0	7.778E-03	7.281E+00	0.12
	Light Crude Oil	0	0	6.931E-03	3.757E-01	0.00
	Heavy Crude Oil	0	0	3.016E-03	N/A*	0.00
Connectors	Gas/Light Liquid	90	0	6.349E-04	1.370E+00	0.06
	Light Crude Oil	0	0	5.291E-04	1.238E+00	0.00
	Heavy Crude Oil	0	0	4.233E-04	4.233E-04	0.00
Flanges	Gas/Light Liquid	22	0	1.482E-03	3.228E+00	0.03
	Light Crude Oil	0	0	1.270E-03	1.376E+01	0.00
	Heavy Crude Oil	0	0	1.217E-03	N/A*	0.00
Open-ended Lines	Gas/Light Liquid	0	0	1.270E-03	2.905E+00	0.00
	Light Crude Oil	0	0	9.524E-04	1.175E+00	0.00
	Heavy Crude Oil	0	0	7.937E-04	3.762E+00	0.00

* Emission factor not available. All components from equipment type and service will be assessed as $< 10,000$ ppmv

Total VOC Emissions = 0.24 lb/day

C-8578-18-0 VCS

The Termo Company
Separator/Knockout

Fugitive Emissions Using Screening Emission Factors

California Implementation Guidelines for Estimating Mass Emissions
of Fugitive Hydrocarbon Leaks at Petroleum Facilities

Table IV-2c. Oil and Gas Production
Screening Value Ranges Emission Factors

Percentage of components in vapor service with $\geq 10,000$ ppmv leaks allowed? 0 %
 Percentage of components in liquid service with $\geq 10,000$ ppmv leaks allowed? 0 %
 Weight percentage of VOC in the total organic compounds in gas? 100 %
 Weight percentage of VOC in the total organic compounds in oil? 100 %

Equipment Type	Service	Component Count	Total allowable leaking components	Screening Value EF - VOC < 10,000 ppmv (lb/day/source)	Screening Value EF - VOC $\geq 10,000$ ppmv (lb/day/source)	VOC emissions (lb/day)
Valves	Gas/Light Liquid	6	0	1.852E-03	7.338E+00	0.01
	Light Crude Oil	0	0	1.005E-03	3.741E+00	0.00
	Heavy Crude Oil	8	0	7.408E-04	N/A*	0.01
Pump Seals	Gas/Light Liquid	0	0	5.270E-02	4.709E+00	0.00
	Light Crude Oil	0	0	1.402E-02	4.709E+00	0.00
	Heavy Crude Oil	0	0	N/A	N/A	N/A
Others	Gas/Light Liquid	6	0	7.778E-03	7.281E+00	0.05
	Light Crude Oil	0	0	6.931E-03	3.757E-01	0.00
	Heavy Crude Oil	2	0	3.016E-03	N/A*	0.01
Connectors	Gas/Light Liquid	12	0	6.349E-04	1.370E+00	0.01
	Light Crude Oil	0	0	5.291E-04	1.238E+00	0.00
	Heavy Crude Oil	8	0	4.233E-04	4.233E-04	0.00
Flanges	Gas/Light Liquid	8	0	1.482E-03	3.228E+00	0.01
	Light Crude Oil	0	0	1.270E-03	1.376E+01	0.00
	Heavy Crude Oil	8	0	1.217E-03	N/A*	0.01
Open-ended Lines	Gas/Light Liquid	0	0	1.270E-03	2.905E+00	0.00
	Light Crude Oil	0	0	9.524E-04	1.175E+00	0.00
	Heavy Crude Oil	0	0	7.937E-04	3.762E+00	0.00

* Emission factor not available. All components from equipment type and service will be assessed as < 10,000 ppmv

Total VOC Emissions = 0.10 lb/day

C-8578-13-0 VCS

The Termo Company
Flare

Fugitive Emissions Using Screening Emission Factors

California Implementation Guidelines for Estimating Mass Emissions
of Fugitive Hydrocarbon Leaks at Petroleum Facilities
Table IV-2c. Oil and Gas Production
Screening Value Ranges Emission Factors

Percentage of components in vapor service with $\geq 10,000$ ppmv leaks allowed? 0 %
 Percentage of components in liquid service with $\geq 10,000$ ppmv leaks allowed? 0 %
 Weight percentage of VOC in the total organic compounds in gas? 100 %
 Weight percentage of VOC in the total organic compounds in oil? 100 %

Equipment Type	Service	Component Count	Total allowable leaking components	Screening Value EF $< 10,000$ ppmv (lb/day/source)	Screening Value EF $\geq 10,000$ ppmv (lb/day/source)	VOC emissions (lb/day)
Valves	Gas/Light Liquid	6	0	1.852E-03	7.333E+00	0.01
	Light Crude Oil	0	0	1.005E-03	3.741E+00	0.00
	Heavy Crude Oil	0	0	7.408E-04	N/A*	0.00
Pump Seals	Gas/Light Liquid	0	0	5.270E-02	4.709E+00	0.00
	Light Crude Oil	0	0	1.402E-02	4.709E+00	0.00
	Heavy Crude Oil	0	0	N/A	N/A	N/A
Others	Gas/Light Liquid	4	0	7.778E-03	7.281E+00	0.03
	Light Crude Oil	0	0	6.931E-03	3.757E-01	0.00
	Heavy Crude Oil	0	0	3.016E-03	N/A*	0.00
Connectors	Gas/Light Liquid	100	0	6.349E-04	1.370E+00	0.06
	Light Crude Oil	0	0	5.291E-04	1.238E+00	0.00
	Heavy Crude Oil	0	0	4.233E-04	4.233E-04	0.00
Flanges	Gas/Light Liquid	8	0	1.482E-03	3.228E+00	0.01
	Light Crude Oil	0	0	1.270E-03	1.376E+01	0.00
	Heavy Crude Oil	0	0	1.217E-03	N/A*	0.00
Open-ended Lines	Gas/Light Liquid	0	0	1.270E-03	2.905E+00	0.00
	Light Crude Oil	0	0	9.524E-04	1.175E+00	0.00
	Heavy Crude Oil	0	0	7.937E-04	3.762E+00	0.00

* Emission factor not available. All components from equipment type and service will be assessed as $< 10,000$ ppmv

Total VOC Emissions = 0.12 lb/day

The Termo Company
VRU
C-8578-10-0 VCS

Fugitive Emissions Using Screening Emission Factors

California Implementation Guidelines for Estimating Mass Emissions
of Fugitive Hydrocarbon Leaks at Petroleum Facilities

Table IV-2c. Oil and Gas Production

Screening Value Ranges Emission Factors

Percentage of components in vapor service with $\geq 10,000$ ppmv leaks allowed? 0 %
 Percentage of components in liquid service with $\geq 10,000$ ppmv leaks allowed? 0 %
 Weight percentage of VOC in the total organic compounds in gas? 100 %
 Weight percentage of VOC in the total organic compounds in oil? 100 %

Equipment Type	Service	Component Count	Total allowable leaking components	Screening Value EF < 10,000 ppmv (lb/day/source)	Screening Value EF $\geq 10,000$ ppmv (lb/day/source)	VOC emissions (lb/day)
Valves	Gas/Light Liquid	4	0	1.852E-03	7.333E+00	0.01
	Light Crude Oil	0	0	1.005E-03	3.741E+00	0.00
	Heavy Crude Oil	0	0	7.408E-04	N/A*	0.00
Pump Seals	Gas/Light Liquid	4	0	5.270E-02	4.709E+00	0.21
	Light Crude Oil	0	0	1.402E-02	4.709E+00	0.00
	Heavy Crude Oil	0	0	N/A	N/A	N/A
Others	Gas/Light Liquid	5	0	7.778E-03	7.281E+00	0.04
	Light Crude Oil	0	0	6.931E-03	3.757E-01	0.00
	Heavy Crude Oil	0	0	3.016E-03	N/A*	0.00
Connectors	Gas/Light Liquid	50	0	6.349E-04	1.370E+00	0.03
	Light Crude Oil	0	0	5.291E-04	1.238E+00	0.00
	Heavy Crude Oil	0	0	4.233E-04	4.233E-04	0.00
Flanges	Gas/Light Liquid	12	0	1.482E-03	3.228E+00	0.02
	Light Crude Oil	0	0	1.270E-03	1.376E+01	0.00
	Heavy Crude Oil	0	0	1.217E-03	N/A*	0.00
Open-ended Lines	Gas/Light Liquid	0	0	1.270E-03	2.905E+00	0.00
	Light Crude Oil	0	0	9.524E-04	1.175E+00	0.00
	Heavy Crude Oil	0	0	7.937E-04	3.762E+00	0.00

* Emission factor not available. All components from equipment type and service will be assessed as < 10,000 ppmv

Total VOC Emissions = 0.31 lb/day

APPENDIX D
BACT Guideline BACT Analysis

Best Available Control Technology (BACT) Guideline 1.4.1
Last Update: 11/9/1995

Waste Gas Flare - 15.3 MMBtu/hr, Serving a Tank Vapor Control System

Pollutant	Achieved in Practice or in the SIP	Technologically Feasible	Alternate Basic Equipment
CO	Steam-assisted or air-assisted when steam unavailable		
NOx	Steam-assisted or air-assisted when steam unavailable		
PM10	Steam-assisted with smokeless combustion or Air-assisted flare with smokeless combustion when steam unavailable. Pilot Light Fired Solely on LPG or Natural Gas		
SOx	Pilot Light Fired Solely on LPG or Natural Gas		
VOC	Steam-assisted or air-assisted when steam unavailable		

BACT is the most stringent control technique for the emissions unit and class of source. Control techniques that are not achieved in practice or contained in a state implementation plan must be cost effective as well as feasible. Economic analysis to demonstrate cost effectiveness is required for all determinations that are not achieved in practice or contained in an EPA approved State Implementation Plan.

Top Down BACT Analysis for NOx:

Step 1 - Identify All Control Technologies

Steam-assisted or air-assisted when steam unavailable (Achieved in Practice)

Step 2 - Eliminate Technologically Infeasible Options

None eliminated.

Step 3 - Rank Remaining Control Technologies by Control Effectiveness

Steam-assisted or air-assisted when steam unavailable (Achieved in Practice)

Step 4 - Cost Effectiveness Analysis

Applicant has proposed flares with Coanda effect burners which are equivalent to the identified controls. Therefore, a cost analysis is not required.

Step 5 - Select BACT

A Coanda effect burner, therefore, BACT is satisfied.

APPENDIX E
T-BACT Analysis

Top Down T-BACT Analysis for VOC:

Step 1 - Identify All Control Technologies

Steam-assisted or air-assisted when steam unavailable (Achieved in Practice)

Step 2 - Eliminate Technologically Infeasible Options

None eliminated.

Step 3 - Rank Remaining Control Technologies by Control Effectiveness

Steam-assisted or air-assisted when steam unavailable (Achieved in Practice)

Step 4 - Cost Effectiveness Analysis

Applicant has proposed flares with Coanda effect burners which are equivalent to the identified controls. Therefore, a cost analysis is not required.

Step 5 - Select T-BACT

A Coanda effect burner, therefore, BACT is satisfied.

APPENDIX F
AAQA and HRA Summary

San Joaquin Valley Air Pollution Control District Risk Management Review

To: David Torii– Permit Services
 From: Kyle Melching– Technical Services
 Date: October 23, 2015
 Facility Name: The Termo Company
 Location: UTME: 766331.08 UTMN: 4050989.9
 UTME: 235193.83 UTMN: 4038186.21
 UTME: 235193.83 UTMN: 4038186.21
 Application #(s): C-8578-2-1, 8-1, & 15-0 thru 20-0
 Project #: C-1152548

A. RMR SUMMARY

RMR Summary						
Categories	Flare (Unit 2-1)	Flare (Unit 8-1)	Tanks (Unit 15-0 thru 17-0)	(Unit 18-0 thru 20-0)	Project Totals	Facility Totals
Prioritization Score	1.49	1.49	0.00	1.51	>1.0	>1.0
Acute Hazard Index	0.00	0.01	0.00	0.00	0.02	0.02
Chronic Hazard Index	0.12	0.00	0.00	0.00	0.00	0.00
Maximum Individual Cancer Risk	7.95E-07	3.09E-06	1.35E-09	3.96E-07	4.28E-06	4.28E-06
T-BACT Required?	No	Yes-VOC's	No	No		
Special Permit Conditions?	Yes	Yes	No	Yes		

Proposed Permit Conditions

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

Flares: Units # 2-1, 8-1, & 18-0

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

T-BACT is required for unit -8 because of emissions of PAH's which is a VOC. In accordance with District policy, BACT for this unit will be considered to be T-BACT.

B. RMR REPORT

I. Project Description

Technical Services received a request on September 29, 2015, to perform a Risk Management Review and Ambient Air Quality Analysis for a proposed installation of a three 4.9 MMBtu/hr field gas-fired flares and six crude oil storage tanks. The RMR requests states the two flares are listed as -13 & -14; however, the engineer has determined that these units should be placed under units -2 & -8 where they will be part of the vapor control system. Unit -18 consists of a tank and a flare which is part of the vapor control system for units -19 & -20.

II. Analysis

Technical Services performed a prioritization using the District's HEARTs database. Since the total facility prioritization score was greater than one, a refined health risk assessment was required. Toxic emissions for this proposed unit were calculated using 2001 Ventura County's Air Pollution Control District's emission factors for Natural Gas Fired external combustion and from a refinery gas composition analysis from the 2005 report *FINAL REPORT Test of TDA's Direct Oxidation Process for Sulfur Recovery* and from District approved spreadsheet for Oilfield Equipment Fugitive – District. The emissions were input into the HEARTs database. The AERMOD model was used, with the parameters outlined below and meteorological data for 2009-2013 from Hanford to determine the dispersion factors (i.e., the predicted concentration or X divided by the normalized source strength or Q) for a receptor grid. These dispersion factors were input into the San Joaquin Valley APCD's Hazard Assessment and Reporting Program (SHARP) and the Air Dispersion Modeling and Risk Tool (ADMRT) of the Hot Spots Analysis and Reporting Program Version 2 (HARP 2) to calculate the chronic and acute hazard indices and the carcinogenic risk for the project. Units -2, -15 thru -17 are all modeled together under the same modeling domain. Unit -8 is modeled as a separate modeling domain. Units -18 thru -20 are also modeled in their own separate domain.

The following parameters were used for the review:

Analysis Parameters Unit 2-1, 8-1, & 18-0 (Flare)			
Source Type	Point	Location Type	Rural
Stack Height (m)	6.25	Closest Receptor (m)	305
Stack Diameter. (m)	0.4	Type of Receptor	Residential
Stack Exit Velocity (m/s)	3.73	Fuel Usage (MMscf/hr)	0.005
Stack Exit Temp. (°K)	699	Fuel Usage (MMscf/yr)	42.9

Analysis Parameters Unit 15-0 thru 17-0, 19-0, & 20-0 (Tanks)			
Source Type	Circle Area	Location Type	Rural
Radius (m)	2.29	Closest Receptor (m)	305
Release Height (m)	5.49	Type of Receptor	Residential
VOC Emissions (lb/hr)	0.01	VOC Emissions (lb/yr)	88

Analysis Parameters Unit 18-0 (Tank)			
Source Type	Circle Area	Location Type	Rural
Radius (m)	2.29	Closest Receptor (m)	305
Release Height (m)	5.49	Type of Receptor	Residential
VOC Emissions (lb/hr)	0.008	VOC Emissions (lb/yr)	281

Technical Services also performed modeling for criteria pollutants CO, NO_x, SO_x, and PM₁₀, for flare units -2, -8- and -18. Emission rates used for criteria pollutant modeling were 1.81 lb/hr and 15,882 lb/yr CO, 0.33 lb/hr and 2,919 lb/yr NO_x, 0.07 lb/hr and 614 lb/yr SO_x, 0.04 lb/hr and 343 lb/yr PM₁₀.

The results from the Criteria Pollutant Modeling are as follows:

Criteria Pollutant Modeling Results*
Values are in µg/m³

Flares	1 Hour	3 Hours	8 Hours	24 Hours	Annual
CO	Pass	X	Pass	X	X
NO _x	Pass ¹	X	X	X	Pass
SO _x	Pass	Pass	X	Pass	Pass
PM ₁₀	X	X	X	Pass ²	Pass ²
PM _{2.5}	X	X	X	Pass ²	Pass ²

*Results were taken from the attached PSD spreadsheet.

¹The project was compared to the 1-hour NO₂ National Ambient Air Quality Standard that became effective on April 12, 2010, using the District's approved procedures.

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

III. Conclusion

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

The acute and chronic indices are below 1.0 and the cancer risk associated with the project is greater than 1.0 in a million, but less than 20 in a million. **In accordance with the District's Risk Management Policy, the project is approved with Toxic Best Available Control Technology (T-BACT).**

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

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

IV. Attachments

- A. RMR request from the project engineer
- B. Additional information from the applicant/project engineer
- C. Toxic emissions summary
- D. Prioritization score
- E. Facility Summary

APPENDIX G
Draft ATCs

San Joaquin Valley
Air Pollution Control District

AUTHORITY TO CONSTRUCT

ISSUANCE DATE: DRAFT

PERMIT NO: C-8578-2-1

LEGAL OWNER OR OPERATOR: THE TERMO COMPANY
MAILING ADDRESS: PO BOX 2767
LONG BEACH, CA 90801

LOCATION: LIGHT OIL PRODUCTION
FRESNO COUNTY, CA

SECTION: NW4 TOWNSHIP: 16S RANGE: 18E

EQUIPMENT DESCRIPTION:

MODIFICATION OF 400 BBL FIXED ROOF CRUDE OIL STORAGE TANK #1 SERVED BY VAPOR RECOVERY SYSTEM LISTED UNDER C-8578-1 (WIGGINS LEASE); ADD ONE 4.9 MMBTU/HR COANDA-EFFECT FLARE SERVING VAPOR CONTROL SYSTEM, ADD TANK CLEANING CONDITIONS AND LIST C-8578-1'S VAPOR CONTROL SYSTEM EQUIPMENT ON THIS PERMIT

CONDITIONS

1. ATCs C-8578-1-0, '5-0 and '6-0 shall be canceled upon implementation of this ATC. [District Rule 2201]
2. The permittee's crude oil production shall average less than 6,000 bbl/day from all operations within Fresno County and permittee shall not engage in refining, transporting, or marketing of refined petroleum products. [District Rule 4623]
3. {98} No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
4. 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 1/4 or 5% opacity, [District Rules 2201 and 4101]
5. The following permit units shall be tied into the shared vapor recovery system C-8578-2, '3, '4, '5, '6, '15, '16 and '17. [District Rule 2201]
6. Flare shall be equipped with operational produced gas volume flow meter. [District Rule 2201]
7. Measured heating value and quantity of flared gas shall be used to determine compliance with heat input limit. [District Rule 2201]

CONDITIONS CONTINUE ON NEXT PAGE

YOU MUST NOTIFY THE DISTRICT COMPLIANCE DIVISION AT (559) 230-5950 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 Marjolle, Director of Permit Services

C-8578-2-1 Oct 22 2016 3:08 PM - TORID - Joint Inspection NOT Required

8. The flare outlet shall be equipped with an automatic ignition system, or shall operate with a pilot flame present at all times when combustible gases are vented through the flare, except during purge periods for automatic-ignition equipped flares. [District Rule 2201]
9. The sulfur compound concentration of gas combusted shall not exceed 5 gr S/100 scf. [District Rule 2201]
10. Emissions from the flare shall not exceed any of the following limits (based on total gas combusted): NOx: 0,068 lb/MMBtu; PM10: 0.003 lb/MMBtu; CO: 0.37 lb/MMBtu; or VOC: 0.063 lb/MMBtu. [District Rule 2201]
11. The permittee shall measure sulfur content of gas incinerated in flare within 60 days of startup. [District Rules 2201 and 4801]
12. The permittee shall conduct quarterly sampling of the sulfur content of the gas flared. If 8 consecutive quarterly samplings show compliance, then sampling frequency shall only be required annually. [District Rule 2201]
13. The sulfur content of the gas being combusted shall be determined using ASTM methods D1072, D3031, D4084, D3246 or grab sample analysis by GC-FPD/TCD performed in the laboratory. The sulfur content of flared gas shall be measured within one day of restarting the unit if the unit has not been in use for more than 7 days. [District Rules 1081 and 2201]
14. Permittee shall keep accurate records of annual throughput, material usage, or other information necessary to demonstrate that facility emissions are less than 10 tons NOx/yr and 10 tons VOC/yr for exemption from Rule 431 I. [District Rule 4311]
15. Permittee shall keep accurate daily records of flare gas volumes and sulfur content of flared gas and such records shall be retained for a period of 5 years and be made readily available for District inspection upon request. [District Rules 2201 and 4311]
16. This tank shall be equipped with a fixed roof with no holes or openings. [District Rules 2201 and 4623]
17. This tank shall be equipped with a vapor control system consisting of a closed vent system that collects all VOCs from the tank and a VOC control device. The vapor recovery system shall be APCO-approved and maintained in gas-tight condition. Collected vapors shall be directed to a gas pipeline or flare with a destruction efficiency of at least 95% by weight, as determined by the test method specified in Section 6.4.6 of District Rule 4623. [District Rules 2201 and 4623]
18. Any tank gauging or sampling device on a tank vented to the vapor control system shall be equipped with a leak free cover which shall be closed at all times except during gauging or sampling. [District Rule 4623]
19. Except as otherwise provided in this permit, the operator shall ensure that the vapor control system is functional and is operating as designed at all times. [District Rule 2201]
20. Except during tank cleaning, tank roof appurtenances shall be maintained leak free. [District Rule 4623]
21. Except as otherwise provided in this permit, all piping, valves, and fittings shall be constructed and maintained in a leak free condition. [District Rule 4623]
22. A leak-free condition is defined as a condition without a gas leak or 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 liquid leak is defined as the dripping of organic liquid at a rate of more than 3 drops per minute. [District Rule 4623]
23. VOC fugitive emissions from this tank and tank vapor control system including vapor control system trunk line not exceed 2.2 lb/day. [District Rule 2201]
24. There shall be no leaks exceeding 10,000 ppmv from fugitive emissions components associated with this tank. [District Rule 2201]
25. The permittee shall maintain with the permit accurate fugitive component counts and resulting emissions from this tank and vapor control system, calculated using California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities Table IV-2C: Oil and Gas Production Screening Value Ranges (<10,000 ppmv) Emission Factors with 100% VOC content in components. [District Rules 1070 and 2201]

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CONDITIONS CONTINUE ON NEXT PAGE

26. {3468} The operator shall maintain a copy of the latest APCO-approved Operator Management Plan (OMP) at the facility and make it available to the APCO, ARB, and US EPA upon request. [District Rule 4409]
27. {3469} By January 30 of each year, the operator shall submit to the APCO for approval, in writing, an annual report indicating any changes to the existing, approved OMP. [District Rule 4409]
28. {3470} In accordance with the approved OMP, the operator shall meet all applicable operating, inspection and re-inspection, maintenance, process pressure relief device (PRD), component identification, recordkeeping, and notification requirements of Rule 4409 for all components containing or contacting VOCs at this facility except for those components specifically exempted in Sections 4.1 and 4.2 of Rule 4409. [District Rule 4409]
29. {3472} The operator shall maintain an inspection log that has been signed and dated by the facility operator responsible for the inspection, certifying the accuracy of the information recorded in the log. The inspection log shall contain, at a minimum, all of the following information: 1) The total number of components inspected, and the total number and percentage of leaking components found by component types; 2) The location, type, name or description of each leaking component and the description of any unit where the leaking component is found; 3) Date of the leak detection and method of the leak detection; 4) For gaseous leaks, record the leak concentration in ppmv, and for liquid leaks record whether the leak is a major liquid leak or a minor liquid leak; 5) The date of repair, replacement, or removal from operation of the leaking component(s); 6) The identification and location of essential components and critical components found leaking that cannot be repaired until the next process unit turnaround or not later than one year after leak detection, whichever comes first; 7) The method(s) used to minimize the leak from essential components and critical components found leaking that cannot be repaired until the next process unit turnaround or not later than one year after leak detection, whichever comes earlier; 8) The date of re-inspection and the leak concentration in ppmv after the component is repaired or is replaced; 9) The inspector's name, business mailing address, and business telephone number. [District Rule 4409, 6.2.1]
30. {3473} Records of leaks detected during quarterly or annual operator inspections, and each subsequent repair and re-inspection, shall be submitted to the District, ARB, and EPA upon request. [District Rule 4409, 6.2.2]
31. {3474} Records shall be maintained of each calibration of the portable hydrocarbon detection instrument utilized for inspecting components. The records shall include a copy of the current calibration gas certification from the vendor of the calibration gas cylinder, the date of calibration, the concentration of calibration gas, the instrument reading of calibration gas before adjustment, the instrument reading of calibration gas after adjustment, the calibration gas expiration date, and the calibration gas cylinder pressure at the time of calibration. [District Rule 4409, 6.2.3]
32. The permittee shall maintain monthly records of average daily crude oil throughput. [District Rule 4623]
33. This permit authorizes tank cleaning that is not the result of breakdowns or poor maintenance as a routine maintenance activity. [District Rule 2020]
34. Permittee shall notify the APCO in writing at least three (3) days prior to performing tank degassing and interior tank cleaning activities. Written notification shall include the following: 1) the Permit to Operate number and physical location of the tank being degassed, 2) the date and time the tank degassing and cleaning activities will begin, 3) the degassing method, as allowed in this permit, to be used, 4) the method to be used to clean the tank, including any solvents to be used, and 5) the method to be used to dispose of any removed sludge, including methods that will be used to control emissions from the receiving vessel and emissions during transport. [District Rule 4623]
35. Tank degassing shall be accomplished by emptying the tank of organic liquid having a TVP of 0.5 psia or greater, and minimizing organic vapors in the tank vapor space by one of the following methods: 1) tank shall be degassed before commencing interior cleaning by exhausting VOCs contained in the tank vapor space to an APCO-approved vapor recovery system until the organic vapor concentration is 5,000 ppmv or less, or is 10 percent or less of the lower explosion limit (LEL), whichever is less, or 2) tank shall be degassed before commencing interior cleaning by displacing VOCs contained in the tank vapor space to an APCO-approved vapor recovery system by filling the tank with a suitable liquid until 90 percent or more of the maximum operating level of the tank is filled. Suitable liquids are organic liquids having a TVP of less than 0.5 psia, water, clean produced water, or produced water derived from crude oil having a TVP less than 0.5 psia, or 3) tank shall be degassed before commencing interior cleaning by displacing VOCs contained in the tank vapor space to an APCO-approved vapor recovery system by filling the tank with a suitable gas. Degassing shall continue until the operator has achieved a vapor displacement equivalent to at least 2.3 times the tank capacity. Suitable gases are air, nitrogen, carbon dioxide, or natural gas containing less than 10 percent VOC by weight. [District Rule 4623]

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CONDITIONS CONTINUE ON NEXT PAGE

36. During tank degassing, the operator shall discharge or displace organic vapors contained in the tank vapor space to an APCO-approved vapor recovery system. [District Rule 4623]
37. To facilitate connection to an external APCO-approved recovery system, a suitable tank fitting, such as a manway, may be temporarily removed for a period of time not to exceed 1 hour. [District Rule 4623]
38. This tank shall be in compliance with the applicable requirements of District Rule 4623 at all times during draining, degassing, and refilling the tank with an organic liquid having a TVP of 0.5 psia or greater. [District Rule 4623]
39. After a tank has been degassed pursuant to the requirements of this permit, vapor control requirements are not applicable until an organic liquid having a TVP of 0.5 psia or greater is placed, held, or stored in this tank. [District Rule 4623]
40. 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]
41. 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]
42. During sludge removal from a tank containing an organic liquid with a TVP of 1.5 psia or greater, 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]
43. Permittee shall only transport removed sludge from a tank containing an organic liquid with a TVP of 1.5 psia or greater in closed, liquid leak-free containers. [District Rule 4623]
44. Permittee shall store removed sludge from a tank containing an organic liquid with a TVP of 1.5 psia or greater, 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. Intermediate storage of sludge from a tank containing an organic liquid with a TVP of 1.5 psia or greater while determining suitability for use as roadmix must be in vapor leak free containers or in tanks complying with the vapor control requirements of Rule 4623. 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]
45. 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 4409 and 4623]

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San Joaquin Valley
Air Pollution Control District

AUTHORITY TO CONSTRUCT

ISSUANCE DATE: DRAFT
DRAFT

PERMIT NO: C-8578-3-1

LEGAL OWNER OR OPERATOR: THE TERMO COMPANY
MAILING ADDRESS: PO BOX 2767
LONG BEACH, CA 90801

LOCATION: LIGHT OIL PRODUCTION
FRESNO COUNTY, CA

SECTION: NW4 TOWNSHIP: 16S RANGE: 18E

EQUIPMENT DESCRIPTION:

MODIFICATION OF 400 BBL FIXED ROOF CRUDE OIL STORAGE TANK #2 SERVED BY VAPOR RECOVERY SYSTEM LISTED UNDER C-8578-1 (WIGGINS LEASE): ADD TANK CLEANING CONDITIONS AND CHANGE NUMBER OF THE PERMIT LISTING THE VAPOR CONTROL SYSTEM TO C-8578-2

CONDITIONS

1. The permittee's crude oil production shall average less than 6,000 bbl/day from all operations within Fresno County and permittee shall not engage in refining, transporting, or marketing of refined petroleum products. [District Rule 4623]
2. {98} No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
3. This tank shall be equipped with a fixed roof with no holes or openings. [District Rules 2201 and 4623]
4. This tank shall be equipped with a vapor control system consisting of a closed vent system that collects all VOCs from the tank and a VOC control device. The vapor recovery system shall be APCO-approved and maintained in gas-tight condition. Collected vapors shall be directed to a gas pipeline or flare with a destruction efficiency of at least 95% by weight, as determined by the test method specified in Section 6.4.6 of District Rule 4623. [District Rules 2201 and 4623]
5. Any tank gauging or sampling device on a tank vented to the vapor control system shall be equipped with a leak free cover which shall be closed at all times except during gauging or sampling. [District Rule 4623]
6. Except as otherwise provided in this permit, the operator shall ensure that the vapor control system is functional and is operating as designed at all times. [District Rule 2201]

CONDITIONS CONTINUE ON NEXT PAGE

YOU MUST NOTIFY THE DISTRICT COMPLIANCE DIVISION AT (559) 230-5950 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

C-6578-3-1: Oct 23 2015 3:08PM -- TORID : Joint Inspection NOT Required

7. Except during tank cleaning, tank roof appurtenances shall be maintained leak free. [District Rule 4623]
8. Except as otherwise provided in this permit, all piping, valves, and fittings shall be constructed and maintained in a leak free condition. [District Rule 4623]
9. A leak-free condition is defined as a condition without a gas leak or 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 liquid leak is defined as the dripping of organic liquid at a rate of more than 3 drops per minute. [District Rule 4623]
10. VOC emissions from the components associated with this tank up to the vapor recovery system trunk line shall not exceed 0.3 lb/day. [District Rule 2201]
11. There shall be no leaks exceeding 10,000 ppmv from fugitive emissions components associated with this tank. [District Rule 2201]
12. The permittee shall maintain with the permit accurate fugitive component counts and resulting emissions from this tank and vapor control system, calculated using California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities Table IV-2C: Oil and Gas Production Screening Value Ranges (<10,000 ppmv) Emission Factors with 100% VOC content in components. [District Rules 1070 and 2201]
13. {3468} The operator shall maintain a copy of the latest APCO-approved Operator Management Plan (OMP) at the facility and make it available to the APCO, ARB, and US EPA upon request. [District Rule 4409]
14. {3469} By January 30 of each year, the operator shall submit to the APCO for approval, in writing, an annual report indicating any changes to the existing, approved OMP. [District Rule 4409]
15. {3470} In accordance with the approved OMP, the operator shall meet all applicable operating, inspection and re-inspection, maintenance, process pressure relief device (PRD), component identification, recordkeeping, and notification requirements of Rule 4409 for all components containing or contacting VOCs at this facility except for those components specifically exempted in Sections 4.1 and 4.2 of Rule 4409. [District Rule 4409]
16. {3472} The operator shall maintain an inspection log that has been signed and dated by the facility operator responsible for the inspection, certifying the accuracy of the information recorded in the log. The inspection log shall contain, at a minimum, all of the following information: 1) The total number of components inspected, and the total number and percentage of leaking components found by component types; 2) The location, type, name or description of each leaking component and the description of any unit where the leaking component is found; 3) Date of the leak detection and method of the leak detection; 4) For gaseous leaks, record the leak concentration in ppmv, and for liquid leaks record whether the leak is a major liquid leak or a minor liquid leak; 5) The date of repair, replacement, or removal from operation of the leaking component(s); 6) The identification and location of essential components and critical components found leaking that cannot be repaired until the next process unit turnaround or not later than one year after leak detection, whichever comes first; 7) The method(s) used to minimize the leak from essential components and critical components found leaking that cannot be repaired until the next process unit turnaround or not later than one year after leak detection, whichever comes earlier; 8) The date of re-inspection and the leak concentration in ppmv after the component is repaired or is replaced; 9) The inspector's name, business mailing address, and business telephone number. [District Rule 4409, 6.2.1]
17. {3473} Records of leaks detected during quarterly or annual operator inspections, and each subsequent repair and re-inspection, shall be submitted to the District, ARB, and EPA upon request. [District Rule 4409, 6.2.2]
18. {3474} Records shall be maintained of each calibration of the portable hydrocarbon detection instrument utilized for inspecting components. The records shall include a copy of the current calibration gas certification from the vendor of the calibration gas cylinder, the date of calibration, the concentration of calibration gas, the instrument reading of calibration gas before adjustment, the instrument reading of calibration gas after adjustment, the calibration gas expiration date, and the calibration gas cylinder pressure at the time of calibration. [District Rule 4409, 6.2.3]
19. The permittee shall maintain monthly records of average daily crude oil throughput. [District Rule 4623]
20. This permit authorizes tank cleaning that is not the result of breakdowns or poor maintenance as a routine maintenance activity. [District Rule 2020]

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CONDITIONS CONTINUE ON NEXT PAGE

21. Permittee shall notify the APCO in writing at least three (3) days prior to performing tank degassing and interior tank cleaning activities. Written notification shall include the following: 1) the Permit to Operate number and physical location of the tank being degassed, 2) the date and time the tank degassing and cleaning activities will begin, 3) the degassing method, as allowed in this permit, to be used, 4) the method to be used to clean the tank, including any solvents to be used, and 5) the method to be used to dispose of any removed sludge, including methods that will be used to control emissions from the receiving vessel and emissions during transport. [District Rule 4623]
22. Tank degassing shall be accomplished by emptying the tank of organic liquid having a TVP of 0.5 psia or greater, and minimizing organic vapors in the tank vapor space by one of the following methods: 1) tank shall be degassed before commencing interior cleaning by exhausting VOCs contained in the tank vapor space to an APCO-approved vapor recovery system until the organic vapor concentration is 5,000 ppmv or less, or is 10 percent or less of the lower explosion limit (LEL), whichever is less, or 2) tank shall be degassed before commencing interior cleaning by displacing VOCs contained in the tank vapor space to an APCO-approved vapor recovery system by filling the tank with a suitable liquid until 90 percent or more of the maximum operating level of the tank is filled. Suitable liquids are organic liquids having a TVP of less than 0.5 psia, water, clean produced water, or produced water derived from crude oil having a TVP less than 0.5 psia, or 3) tank shall be degassed before commencing interior cleaning by displacing VOCs contained in the tank vapor space to an APCO-approved vapor recovery system by filling the tank with a suitable gas. Degassing shall continue until the operator has achieved a vapor displacement equivalent to at least 2.3 times the tank capacity. Suitable gases are air, nitrogen, carbon dioxide, or natural gas containing less than 10 percent VOC by weight. [District Rule 4623]
23. During tank degassing, the operator shall discharge or displace organic vapors contained in the tank vapor space to an APCO-approved vapor recovery system. [District Rule 4623]
24. To facilitate connection to an external APCO-approved recovery system, a suitable tank fitting, such as a manway, may be temporarily removed for a period of time not to exceed 1 hour. [District Rule 4623]
25. This tank shall be in compliance with the applicable requirements of District Rule 4623 at all times during draining, degassing, and refilling the tank with an organic liquid having a TVP of 0.5 psia or greater. [District Rule 4623]
26. After a tank has been degassed pursuant to the requirements of this permit, vapor control requirements are not applicable until an organic liquid having a TVP of 0.5 psia or greater is placed, held, or stored in this tank. [District Rule 4623]
27. 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]
28. 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]
29. During sludge removal from a tank containing an organic liquid with a TVP of 1.5 psia or greater, 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]
30. Permittee shall only transport removed sludge from a tank containing an organic liquid with a TVP of 1.5 psia or greater in closed, liquid leak-free containers. [District Rule 4623]
31. Permittee shall store removed sludge from a tank containing an organic liquid with a TVP of 1.5 psia or greater, 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. Intermediate storage of sludge from a tank containing an organic liquid with a TVP of 1.5 psia or greater while determining suitability for use as roadmix must be in vapor leak free containers or in tanks complying with the vapor control requirements of Rule 4623. 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]
32. 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 4409 and 4623]

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San Joaquin Valley
Air Pollution Control District

AUTHORITY TO CONSTRUCT

ISSUANCE DATE: DRAFT
DRAFT

PERMIT NO: C-8578-4-1

LEGAL OWNER OR OPERATOR: THE TERMO COMPANY
MAILING ADDRESS: PO BOX 2767
LONG BEACH, CA 90801

LOCATION: LIGHT OIL PRODUCTION
FRESNO COUNTY, CA

SECTION: NW4 TOWNSHIP: 16S RANGE: 18E

EQUIPMENT DESCRIPTION:

MODIFICATION OF 500 BBL FIXED ROOF WASH TANK SERVED BY VAPOR RECOVERY SYSTEM LISTED UNDER C-8578-1 (WIGGINS LEASE); ADD TANK CLEANING CONDITIONS AND CHANGE NUMBER OF THE PERMIT LISTING THE VAPOR CONTROL SYSTEM TO C-8578-2

CONDITIONS

1. The permittee's crude oil production shall average less than 6,000 bbl/day from all operations within Fresno County and permittee shall not engage in refining, transporting, or marketing of refined petroleum products. [District Rule 4623]
2. {98} No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
3. This tank shall be equipped with a fixed roof with no holes or openings. [District Rules 2201 and 4623]
4. This tank shall be equipped with a vapor control system consisting of a closed vent system that collects all VOCs from the tank and a VOC control device. The vapor recovery system shall be APCO-approved and maintained in gas-tight condition. Collected vapors shall be directed to a gas pipeline or flare with a destruction efficiency of at least 95% by weight, as determined by the test method specified in Section 6.4.6 of District Rule 4623. [District Rules 2201 and 4623]
5. Any tank gauging or sampling device on a tank vented to the vapor control system shall be equipped with a leak free cover which shall be closed at all times except during gauging or sampling. [District Rule 4623]
6. Except as otherwise provided in this permit, the operator shall ensure that the vapor control system is functional and is operating as designed at all times. [District Rule 2201]

CONDITIONS CONTINUE ON NEXT PAGE

YOU MUST NOTIFY THE DISTRICT COMPLIANCE DIVISION AT (559) 230-5950 WHEN CONSTRUCTION IS COMPLETED AND PRIOR TO OPERATING THE EQUIPMENT OR MODIFICATIONS AUTHORIZED BY THIS AUTHORITY TO CONSTRUCT. This is NOT a PERMIT TO OPERATE. Approval or denial of a PERMIT TO OPERATE will be made after an inspection to verify that the equipment has been constructed in accordance with the approved plans, specifications and conditions of this Authority to Construct, and to determine if the equipment can be operated in compliance with all Rules and Regulations of the San Joaquin Valley Unified Air Pollution Control District. Unless construction has commenced pursuant to Rule 2050, this Authority to Construct shall expire and application shall be cancelled two years from the date of issuance. The applicant is responsible for complying with all laws, ordinances and regulations of all other governmental agencies which may pertain to the above equipment.

Seyed Sadredin, Executive Director, APCO

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Arnaud Marjollet, Director of Permit Services

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7. Except during tank cleaning, tank roof appurtenances shall be maintained leak free. [District Rule 4623]
8. Except as otherwise provided in this permit, all piping, valves, and fittings shall be constructed and maintained in a leak free condition. [District Rule 4623]
9. A leak-free condition is defined as a condition without a gas leak or 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 liquid leak is defined as the dripping of organic liquid at a rate of more than 3 drops per minute. [District Rule 4623]
10. VOC emissions from the components associated with this tank up to the vapor recovery system trunk line shall not exceed 0.3 lb/day. [District Rule 2201]
11. There shall be no leaks exceeding 10,000 ppmv from fugitive emissions components associated with this tank. [District Rule 2201]
12. The permittee shall maintain with the permit accurate fugitive component counts and resulting emissions from this tank and vapor control system, calculated using California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities Table IV-2C: Oil and Gas Production Screening Value Ranges (<10,000 ppmv) Emission Factors with 100% VOC content in components. [District Rules 1070 and 2201]
13. {3468} The operator shall maintain a copy of the latest APCO-approved Operator Management Plan (OMP) at the facility and make it available to the APCO, ARB, and US EPA upon request. [District Rule 4409]
14. {3469} By January 30 of each year, the operator shall submit to the APCO for approval, in writing, an annual report indicating any changes to the existing, approved OMP. [District Rule 4409]
15. {3470} In accordance with the approved OMP, the operator shall meet all applicable operating, inspection and re-inspection, maintenance, process pressure relief device (PRD), component identification, recordkeeping, and notification requirements of Rule 4409 for all components containing or contacting VOCs at this facility except for those components specifically exempted in Sections 4.1 and 4.2 of Rule 4409. [District Rule 4409]
16. {3472} The operator shall maintain an inspection log that has been signed and dated by the facility operator responsible for the inspection, certifying the accuracy of the information recorded in the log. The inspection log shall contain, at a minimum, all of the following information: 1) The total number of components inspected, and the total number and percentage of leaking components found by component types; 2) The location, type, name or description of each leaking component and the description of any unit where the leaking component is found; 3) Date of the leak detection and method of the leak detection; 4) For gaseous leaks, record the leak concentration in ppmv, and for liquid leaks record whether the leak is a major liquid leak or a minor liquid leak; 5) The date of repair, replacement, or removal from operation of the leaking component(s); 6) The identification and location of essential components and critical components found leaking that cannot be repaired until the next process unit turnaround or not later than one year after leak detection, whichever comes first; 7) The method(s) used to minimize the leak from essential components and critical components found leaking that cannot be repaired until the next process unit turnaround or not later than one year after leak detection, whichever comes earlier; 8) The date of re-inspection and the leak concentration in ppmv after the component is repaired or is replaced; 9) The inspector's name, business mailing address, and business telephone number. [District Rule 4409, 6.2.1]
17. {3473} Records of leaks detected during quarterly or annual operator inspections, and each subsequent repair and re-inspection, shall be submitted to the District, ARB, and EPA upon request. [District Rule 4409, 6.2.2]
18. {3474} Records shall be maintained of each calibration of the portable hydrocarbon detection instrument utilized for inspecting components. The records shall include a copy of the current calibration gas certification from the vendor of the calibration gas cylinder, the date of calibration, the concentration of calibration gas, the instrument reading of calibration gas before adjustment, the instrument reading of calibration gas after adjustment, the calibration gas expiration date, and the calibration gas cylinder pressure at the time of calibration. [District Rule 4409, 6.2.3]
19. The permittee shall maintain monthly records of average daily crude oil throughput. [District Rule 4623]
20. This permit authorizes tank cleaning that is not the result of breakdowns or poor maintenance as a routine maintenance activity. [District Rule 2020]

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CONDITIONS CONTINUE ON NEXT PAGE

21. Permittee shall notify the APCO in writing at least three (3) days prior to performing tank degassing and interior tank cleaning activities. Written notification shall include the following: 1) the Permit to Operate number and physical location of the tank being degassed, 2) the date and time the tank degassing and cleaning activities will begin, 3) the degassing method, as allowed in this permit, to be used, 4) the method to be used to clean the tank, including any solvents to be used, and 5) the method to be used to dispose of any removed sludge, including methods that will be used to control emissions from the receiving vessel and emissions during transport. [District Rule 4623]
22. Tank degassing shall be accomplished by emptying the tank of organic liquid having a TVP of 0.5 psia or greater, and minimizing organic vapors in the tank vapor space by one of the following methods: 1) tank shall be degassed before commencing interior cleaning by exhausting VOCs contained in the tank vapor space to an APCO-approved vapor recovery system until the organic vapor concentration is 5,000 ppmv or less, or is 10 percent or less of the lower explosion limit (LEL), whichever is less, or 2) tank shall be degassed before commencing interior cleaning by displacing VOCs contained in the tank vapor space to an APCO-approved vapor recovery system by filling the tank with a suitable liquid until 90 percent or more of the maximum operating level of the tank is filled. Suitable liquids are organic liquids having a TVP of less than 0.5 psia, water, clean produced water, or produced water derived from crude oil having a TVP less than 0.5 psia, or 3) tank shall be degassed before commencing interior cleaning by displacing VOCs contained in the tank vapor space to an APCO-approved vapor recovery system by filling the tank with a suitable gas. Degassing shall continue until the operator has achieved a vapor displacement equivalent to at least 2.3 times the tank capacity. Suitable gases are air, nitrogen, carbon dioxide, or natural gas containing less than 10 percent VOC by weight. [District Rule 4623]
23. During tank degassing, the operator shall discharge or displace organic vapors contained in the tank vapor space to an APCO-approved vapor recovery system. [District Rule 4623]
24. To facilitate connection to an external APCO-approved recovery system, a suitable tank fitting, such as a manway, may be temporarily removed for a period of time not to exceed 1 hour. [District Rule 4623]
25. This tank shall be in compliance with the applicable requirements of District Rule 4623 at all times during draining, degassing, and refilling the tank with an organic liquid having a TVP of 0.5 psia or greater. [District Rule 4623]
26. After a tank has been degassed pursuant to the requirements of this permit, vapor control requirements are not applicable until an organic liquid having a TVP of 0.5 psia or greater is placed, held, or stored in this tank. [District Rule 4623]
27. 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]
28. 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]
29. During sludge removal from a tank containing an organic liquid with a TVP of 1.5 psia or greater, 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]
30. Permittee shall only transport removed sludge from a tank containing an organic liquid with a TVP of 1.5 psia or greater in closed, liquid leak-free containers. [District Rule 4623]
31. Permittee shall store removed sludge from a tank containing an organic liquid with a TVP of 1.5 psia or greater, 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. Intermediate storage of sludge from a tank containing an organic liquid with a TVP of 1.5 psia or greater while determining suitability for use as roadmix must be in vapor leak free containers or in tanks complying with the vapor control requirements of Rule 4623. 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]
32. 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 4409 and 4623]

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San Joaquin Valley
Air Pollution Control District

AUTHORITY TO CONSTRUCT

ISSUANCE DATE: DRAFT
DRAFT

PERMIT NO: C-8578-8-1

LEGAL OWNER OR OPERATOR: THE TERMO COMPANY
MAILING ADDRESS: PO BOX 2767
LONG BEACH, CA 90801

LOCATION: LIGHT OIL PRODUCTION
FRESNO COUNTY, CA

SECTION: SW18 TOWNSHIP: 17S RANGE: 19E

EQUIPMENT DESCRIPTION:

MODIFICATION OF 400 BBL FIXED ROOF CRUDE OIL STORAGE TANK #1 SERVED BY VAPOR RECOVERY SYSTEM LISTED UNDER C-8578-7 (TORRES LEASE): ADD ONE 4.9 MMBTU/HR COANDA-EFFECT FLARE SERVING VAPOR CONTROL SYSTEM, ADD TANK CLEANING CONDITIONS AND LIST C-8578-7'S VAPOR CONTROL SYSTEM EQUIPMENT ON THIS PERMIT

CONDITIONS

1. ATCs C-8578-7-0, '11-0 and '12-0 shall be canceled upon implementation of this ATC. [District Rule 2201]
2. The permittee's crude oil production shall average less than 6,000 bbl/day from all operations within Fresno County and permittee shall not engage in refining, transporting, or marketing of refined petroleum products. [District Rule 4623]
3. {98} No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
4. 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 1/4 or 5% opacity, [District Rules 2201 and 4101]
5. The following permit units shall be tied into the shared vapor recovery system C-8578-8, '9, '10 and '11. [District Rule 2201]
6. Flare shall be equipped with operational produced gas volume flow meter. [District Rule 2201]
7. Measured heating value and quantity of flared gas shall be used to determine compliance with heat input limit. [District Rule 2201]

CONDITIONS CONTINUE ON NEXT PAGE

YOU MUST NOTIFY THE DISTRICT COMPLIANCE DIVISION AT (559) 230-5950 WHEN CONSTRUCTION IS COMPLETED AND PRIOR TO OPERATING THE EQUIPMENT OR MODIFICATIONS AUTHORIZED BY THIS AUTHORITY TO CONSTRUCT. This is NOT a PERMIT TO OPERATE. Approval or denial of a PERMIT TO OPERATE will be made after an inspection to verify that the equipment has been constructed in accordance with the approved plans, specifications and conditions of this Authority to Construct, and to determine if the equipment can be operated in compliance with all Rules and Regulations of the San Joaquin Valley Unified Air Pollution Control District. Unless construction has commenced pursuant to Rule 2050, this Authority to Construct shall expire and application shall be cancelled two years from the date of issuance. The applicant is responsible for complying with all laws, ordinances and regulations of all other governmental agencies which may pertain to the above equipment.

Seyed Sadredin, Executive Director, APCO

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Arnaud Marjolle, Director of Permit Services

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8. The flare outlet shall be equipped with an automatic ignition system, or shall operate with a pilot flame present at all times when combustible gases are vented through the flare, except during purge periods for automatic-ignition equipped flares. [District Rule 2201]
9. The sulfur compound concentration of gas combusted shall not exceed 5 gr S/100 scf. [District Rule 2201]
10. Emissions from the flare shall not exceed any of the following limits (based on total gas combusted): NOx: 0,068 lb/MMBtu; PM10: 0.003 lb/MMBtu; CO: 0.37 lb/MMBtu; or VOC: 0.063 lb/MMBtu. [District Rule 2201]
11. The permittee shall measure sulfur content of gas incinerated in flare within 60 days of startup. [District Rules 2201 and 4801]
12. The permittee shall conduct quarterly sampling of the sulfur content of the gas flared. If 8 consecutive quarterly samplings show compliance, then sampling frequency shall only be required annually. [District Rule 2201]
13. The sulfur content of the gas being combusted shall be determined using ASTM methods D1072, D3031, D4084, D3246 or grab sample analysis by GC-FPD/TCD performed in the laboratory. The sulfur content of flared gas shall be measured within one day of restarting the unit if the unit has not been in use for more than 7 days. [District Rules 1081 and 2201]
14. Permittee shall keep accurate records of annual throughput, material usage, or other information necessary to demonstrate that facility emissions are less than 10 tons NOx/yr and 10 tons VOC/yr for exemption from Rule 431 1. [District Rule 4311]
15. Permittee shall keep accurate daily records of flare gas volumes and sulfur content of flared gas and such records shall be retained for a period of 5 years and be made readily available for District inspection upon request. [District Rules 2201 and 4311]
16. This tank shall be equipped with a fixed roof with no holes or openings. [District Rules 2201 and 4623]
17. This tank shall be equipped with a vapor control system consisting of a closed vent system that collects all VOCs from the tank and a VOC control device. The vapor recovery system shall be APCO-approved and maintained in gas-tight condition. Collected vapors shall be directed to a gas pipeline or flare with a destruction efficiency of at least 95% by weight, as determined by the test method specified in Section 6.4.6 of District Rule 4623. [District Rules 2201 and 4623]
18. Any tank gauging or sampling device on a tank vented to the vapor control system shall be equipped with a leak free cover which shall be closed at all times except during gauging or sampling. [District Rule 4623]
19. Except as otherwise provided in this permit, the operator shall ensure that the vapor control system is functional and is operating as designed at all times. [District Rule 2201]
20. Except during tank cleaning, tank roof appurtenances shall be maintained leak free. [District Rule 4623]
21. Except as otherwise provided in this permit, all piping, valves, and fittings shall be constructed and maintained in a leak free condition. [District Rule 4623]
22. A leak-free condition is defined as a condition without a gas leak or 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 liquid leak is defined as the dripping of organic liquid at a rate of more than 3 drops per minute. [District Rule 4623]
23. VOC fugitive emissions from this tank and tank vapor control system including vapor control system trunk line not exceed 2.2 lb/day. [District Rule 2201]
24. There shall be no leaks exceeding 10,000 ppmv from fugitive emissions components associated with this tank. [District Rule 2201]
25. The permittee shall maintain with the permit accurate fugitive component counts and resulting emissions from this tank and vapor control system, calculated using California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities Table IV-2C: Oil and Gas Production Screening Value Ranges (<10,000 ppmv) Emission Factors with 100% VOC content in components. [District Rules 1070 and 2201]

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CONDITIONS CONTINUE ON NEXT PAGE

26. {3468} The operator shall maintain a copy of the latest APCO-approved Operator Management Plan (OMP) at the facility and make it available to the APCO, ARB, and US EPA upon request. [District Rule 4409]
27. {3469} By January 30 of each year, the operator shall submit to the APCO for approval, in writing, an annual report indicating any changes to the existing, approved OMP. [District Rule 4409]
28. {3470} In accordance with the approved OMP, the operator shall meet all applicable operating, inspection and re-inspection, maintenance, process pressure relief device (PRD), component identification, recordkeeping, and notification requirements of Rule 4409 for all components containing or contacting VOCs at this facility except for those components specifically exempted in Sections 4.1 and 4.2 of Rule 4409. [District Rule 4409]
29. {3472} The operator shall maintain an inspection log that has been signed and dated by the facility operator responsible for the inspection, certifying the accuracy of the information recorded in the log. The inspection log shall contain, at a minimum, all of the following information: 1) The total number of components inspected, and the total number and percentage of leaking components found by component types; 2) The location, type, name or description of each leaking component and the description of any unit where the leaking component is found; 3) Date of the leak detection and method of the leak detection; 4) For gaseous leaks, record the leak concentration in ppmv, and for liquid leaks record whether the leak is a major liquid leak or a minor liquid leak; 5) The date of repair, replacement, or removal from operation of the leaking component(s); 6) The identification and location of essential components and critical components found leaking that cannot be repaired until the next process unit turnaround or not later than one year after leak detection, whichever comes first; 7) The method(s) used to minimize the leak from essential components and critical components found leaking that cannot be repaired until the next process unit turnaround or not later than one year after leak detection, whichever comes earlier; 8) The date of re-inspection and the leak concentration in ppmv after the component is repaired or is replaced; 9) The inspector's name, business mailing address, and business telephone number. [District Rule 4409, 6.2.1]
30. {3473} Records of leaks detected during quarterly or annual operator inspections, and each subsequent repair and re-inspection, shall be submitted to the District, ARB, and EPA upon request. [District Rule 4409, 6.2.2]
31. {3474} Records shall be maintained of each calibration of the portable hydrocarbon detection instrument utilized for inspecting components. The records shall include a copy of the current calibration gas certification from the vendor of the calibration gas cylinder, the date of calibration, the concentration of calibration gas, the instrument reading of calibration gas before adjustment, the instrument reading of calibration gas after adjustment, the calibration gas expiration date, and the calibration gas cylinder pressure at the time of calibration. [District Rule 4409, 6.2.3]
32. The permittee shall maintain monthly records of average daily crude oil throughput. [District Rule 4623]
33. This permit authorizes tank cleaning that is not the result of breakdowns or poor maintenance as a routine maintenance activity. [District Rule 2020]
34. Permittee shall notify the APCO in writing at least three (3) days prior to performing tank degassing and interior tank cleaning activities. Written notification shall include the following: 1) the Permit to Operate number and physical location of the tank being degassed, 2) the date and time the tank degassing and cleaning activities will begin, 3) the degassing method, as allowed in this permit, to be used, 4) the method to be used to clean the tank, including any solvents to be used, and 5) the method to be used to dispose of any removed sludge, including methods that will be used to control emissions from the receiving vessel and emissions during transport. [District Rule 4623]
35. Tank degassing shall be accomplished by emptying the tank of organic liquid having a TVP of 0.5 psia or greater, and minimizing organic vapors in the tank vapor space by one of the following methods: 1) tank shall be degassed before commencing interior cleaning by exhausting VOCs contained in the tank vapor space to an APCO-approved vapor recovery system until the organic vapor concentration is 5,000 ppmv or less, or is 10 percent or less of the lower explosion limit (LEL), whichever is less, or 2) tank shall be degassed before commencing interior cleaning by displacing VOCs contained in the tank vapor space to an APCO-approved vapor recovery system by filling the tank with a suitable liquid until 90 percent or more of the maximum operating level of the tank is filled. Suitable liquids are organic liquids having a TVP of less than 0.5 psia, water, clean produced water, or produced water derived from crude oil having a TVP less than 0.5 psia, or 3) tank shall be degassed before commencing interior cleaning by displacing VOCs contained in the tank vapor space to an APCO-approved vapor recovery system by filling the tank with a suitable gas. Degassing shall continue until the operator has achieved a vapor displacement equivalent to at least 2.3 times the tank capacity. Suitable gases are air, nitrogen, carbon dioxide, or natural gas containing less than 10 percent VOC by weight. [District Rule 4623]

CONDITIONS CONTINUE ON NEXT PAGE

36. During tank degassing, the operator shall discharge or displace organic vapors contained in the tank vapor space to an APCO-approved vapor recovery system. [District Rule 4623]
37. To facilitate connection to an external APCO-approved recovery system, a suitable tank fitting, such as a manway, may be temporarily removed for a period of time not to exceed 1 hour. [District Rule 4623]
38. This tank shall be in compliance with the applicable requirements of District Rule 4623 at all times during draining, degassing, and refilling the tank with an organic liquid having a TVP of 0.5 psia or greater. [District Rule 4623]
39. After a tank has been degassed pursuant to the requirements of this permit, vapor control requirements are not applicable until an organic liquid having a TVP of 0.5 psia or greater is placed, held, or stored in this tank. [District Rule 4623]
40. 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]
41. 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]
42. During sludge removal from a tank containing an organic liquid with a TVP of 1.5 psia or greater, 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]
43. Permittee shall only transport removed sludge from a tank containing an organic liquid with a TVP of 1.5 psia or greater in closed, liquid leak-free containers. [District Rule 4623]
44. Permittee shall store removed sludge from a tank containing an organic liquid with a TVP of 1.5 psia or greater, 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. Intermediate storage of sludge from a tank containing an organic liquid with a TVP of 1.5 psia or greater while determining suitability for use as roadmix must be in vapor leak free containers or in tanks complying with the vapor control requirements of Rule 4623. 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]
45. 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 4409 and 4623]

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San Joaquin Valley
Air Pollution Control District

AUTHORITY TO CONSTRUCT

ISSUANCE DATE: DRAFT
DRAFT

PERMIT NO: C-8578-9-1

LEGAL OWNER OR OPERATOR: THE TERMO COMPANY
MAILING ADDRESS: PO BOX 2767
LONG BEACH, CA 90801

LOCATION: LIGHT OIL PRODUCTION
FRESNO COUNTY, CA

SECTION: SW18 TOWNSHIP: 17S RANGE: 19E

EQUIPMENT DESCRIPTION:

MODIFICATION OF 400 BBL FIXED ROOF CRUDE OIL STORAGE TANK #2 SERVED BY VAPOR RECOVERY SYSTEM LISTED UNDER C-8578-8 (TORRES LEASE): ADD TANK CLEANING CONDITIONS AND CHANGE NUMBER OF THE PERMIT LISTING THE VAPOR CONTROL SYSTEM TO C-8578-8

CONDITIONS

1. The permittee's crude oil production shall average less than 6,000 bbl/day from all operations within Fresno County and permittee shall not engage in refining, transporting, or marketing of refined petroleum products. [District Rule 4623]
2. {98} No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
3. This tank shall be equipped with a fixed roof with no holes or openings. [District Rules 2201 and 4623]
4. This tank shall be equipped with a vapor control system consisting of a closed vent system that collects all VOCs from the tank and a VOC control device. The vapor recovery system shall be APCO-approved and maintained in gas-tight condition. Collected vapors shall be directed to a gas pipeline or flare with a destruction efficiency of at least 95% by weight, as determined by the test method specified in Section 6.4.6 of District Rule 4623. [District Rules 2201 and 4623]
5. Any tank gauging or sampling device on a tank vented to the vapor control system shall be equipped with a leak free cover which shall be closed at all times except during gauging or sampling. [District Rule 4623]
6. Except as otherwise provided in this permit, the operator shall ensure that the vapor control system is functional and is operating as designed at all times. [District Rule 2201]

CONDITIONS CONTINUE ON NEXT PAGE

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Seyed Sadredin, Executive Director, APCO

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Arnaud Marjolle, Director of Permit Services

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7. Except during tank cleaning, tank roof appurtenances shall be maintained leak free. [District Rule 4623]
8. Except as otherwise provided in this permit, all piping, valves, and fittings shall be constructed and maintained in a leak free condition. [District Rule 4623]
9. A leak-free condition is defined as a condition without a gas leak or 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 liquid leak is defined as the dripping of organic liquid at a rate of more than 3 drops per minute. [District Rule 4623]
10. VOC emissions from the components associated with this tank up to the vapor recovery system trunk line shall not exceed 0.3 lb/day. [District Rule 2201]
11. There shall be no leaks exceeding 10,000 ppmv from fugitive emissions components associated with this tank. [District Rule 2201]
12. The permittee shall maintain with the permit accurate fugitive component counts and resulting emissions from this tank and vapor control system, calculated using California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities Table IV-2C: Oil and Gas Production Screening Value Ranges (<10,000 ppmv) Emission Factors with 100% VOC content in components. [District Rules 1070 and 2201]
13. {3468} The operator shall maintain a copy of the latest APCO-approved Operator Management Plan (OMP) at the facility and make it available to the APCO, ARB, and US EPA upon request. [District Rule 4409]
14. {3469} By January 30 of each year, the operator shall submit to the APCO for approval, in writing, an annual report indicating any changes to the existing, approved OMP. [District Rule 4409]
15. {3470} In accordance with the approved OMP, the operator shall meet all applicable operating, inspection and re-inspection, maintenance, process pressure relief device (PRD), component identification, recordkeeping, and notification requirements of Rule 4409 for all components containing or contacting VOCs at this facility except for those components specifically exempted in Sections 4.1 and 4.2 of Rule 4409. [District Rule 4409]
16. {3472} The operator shall maintain an inspection log that has been signed and dated by the facility operator responsible for the inspection, certifying the accuracy of the information recorded in the log. The inspection log shall contain, at a minimum, all of the following information: 1) The total number of components inspected, and the total number and percentage of leaking components found by component types; 2) The location, type, name or description of each leaking component and the description of any unit where the leaking component is found; 3) Date of the leak detection and method of the leak detection; 4) For gaseous leaks, record the leak concentration in ppmv, and for liquid leaks record whether the leak is a major liquid leak or a minor liquid leak; 5) The date of repair, replacement, or removal from operation of the leaking component(s); 6) The identification and location of essential components and critical components found leaking that cannot be repaired until the next process unit turnaround or not later than one year after leak detection, whichever comes first; 7) The method(s) used to minimize the leak from essential components and critical components found leaking that cannot be repaired until the next process unit turnaround or not later than one year after leak detection, whichever comes earlier; 8) The date of re-inspection and the leak concentration in ppmv after the component is repaired or is replaced; 9) The inspector's name, business mailing address, and business telephone number. [District Rule 4409, 6.2.1]
17. {3473} Records of leaks detected during quarterly or annual operator inspections, and each subsequent repair and re-inspection, shall be submitted to the District, ARB, and EPA upon request. [District Rule 4409, 6.2.2]
18. {3474} Records shall be maintained of each calibration of the portable hydrocarbon detection instrument utilized for inspecting components. The records shall include a copy of the current calibration gas certification from the vendor of the calibration gas cylinder, the date of calibration, the concentration of calibration gas, the instrument reading of calibration gas before adjustment, the instrument reading of calibration gas after adjustment, the calibration gas expiration date, and the calibration gas cylinder pressure at the time of calibration. [District Rule 4409, 6.2.3]
19. The permittee shall maintain monthly records of average daily crude oil throughput. [District Rule 4623]
20. This permit authorizes tank cleaning that is not the result of breakdowns or poor maintenance as a routine maintenance activity. [District Rule 2020]

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CONDITIONS CONTINUE ON NEXT PAGE

21. Permittee shall notify the APCO in writing at least three (3) days prior to performing tank degassing and interior tank cleaning activities. Written notification shall include the following: 1) the Permit to Operate number and physical location of the tank being degassed, 2) the date and time the tank degassing and cleaning activities will begin, 3) the degassing method, as allowed in this permit, to be used, 4) the method to be used to clean the tank, including any solvents to be used, and 5) the method to be used to dispose of any removed sludge, including methods that will be used to control emissions from the receiving vessel and emissions during transport. [District Rule 4623]
22. Tank degassing shall be accomplished by emptying the tank of organic liquid having a TVP of 0.5 psia or greater, and minimizing organic vapors in the tank vapor space by one of the following methods: 1) tank shall be degassed before commencing interior cleaning by exhausting VOCs contained in the tank vapor space to an APCO-approved vapor recovery system until the organic vapor concentration is 5,000 ppmv or less, or is 10 percent or less of the lower explosion limit (LEL), whichever is less, or 2) tank shall be degassed before commencing interior cleaning by displacing VOCs contained in the tank vapor space to an APCO-approved vapor recovery system by filling the tank with a suitable liquid until 90 percent or more of the maximum operating level of the tank is filled. Suitable liquids are organic liquids having a TVP of less than 0.5 psia, water, clean produced water, or produced water derived from crude oil having a TVP less than 0.5 psia, or 3) tank shall be degassed before commencing interior cleaning by displacing VOCs contained in the tank vapor space to an APCO-approved vapor recovery system by filling the tank with a suitable gas. Degassing shall continue until the operator has achieved a vapor displacement equivalent to at least 2.3 times the tank capacity. Suitable gases are air, nitrogen, carbon dioxide, or natural gas containing less than 10 percent VOC by weight. [District Rule 4623]
23. During tank degassing, the operator shall discharge or displace organic vapors contained in the tank vapor space to an APCO-approved vapor recovery system. [District Rule 4623]
24. To facilitate connection to an external APCO-approved recovery system, a suitable tank fitting, such as a manway, may be temporarily removed for a period of time not to exceed 1 hour. [District Rule 4623]
25. This tank shall be in compliance with the applicable requirements of District Rule 4623 at all times during draining, degassing, and refilling the tank with an organic liquid having a TVP of 0.5 psia or greater. [District Rule 4623]
26. After a tank has been degassed pursuant to the requirements of this permit, vapor control requirements are not applicable until an organic liquid having a TVP of 0.5 psia or greater is placed, held, or stored in this tank. [District Rule 4623]
27. 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]
28. 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]
29. During sludge removal from a tank containing an organic liquid with a TVP of 1.5 psia or greater, 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]
30. Permittee shall only transport removed sludge from a tank containing an organic liquid with a TVP of 1.5 psia or greater in closed, liquid leak-free containers. [District Rule 4623]
31. Permittee shall store removed sludge from a tank containing an organic liquid with a TVP of 1.5 psia or greater, 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. Intermediate storage of sludge from a tank containing an organic liquid with a TVP of 1.5 psia or greater while determining suitability for use as roadmix must be in vapor leak free containers or in tanks complying with the vapor control requirements of Rule 4623. 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]
32. 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 4409 and 4623]

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San Joaquin Valley
Air Pollution Control District

AUTHORITY TO CONSTRUCT

ISSUANCE DATE: DRAFT

PERMIT NO: C-8578-10-1

LEGAL OWNER OR OPERATOR: THE TERMO COMPANY
MAILING ADDRESS: PO BOX 2767
LONG BEACH, CA 90801

LOCATION: LIGHT OIL PRODUCTION
FRESNO COUNTY, CA

SECTION: SW18 TOWNSHIP: 17S RANGE: 19E

EQUIPMENT DESCRIPTION:

MODIFICATION OF 500 BBL FIXED ROOF WASH TANK SERVED BY VAPOR RECOVERY SYSTEM LISTED UNDER C-8578-8 (TORRES LEASE): ADD TANK CLEANING CONDITIONS AND CHANGE NUMBER OF THE PERMIT LISTING THE VAPOR CONTROL SYSTEM TO C-8578-8

CONDITIONS

1. The permittee's crude oil production shall average less than 6,000 bbl/day from all operations within Fresno County and permittee shall not engage in refining, transporting, or marketing of refined petroleum products. [District Rule 4623]
2. {98} No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
3. This tank shall be equipped with a fixed roof with no holes or openings. [District Rules 2201 and 4623]
4. This tank shall be equipped with a vapor control system consisting of a closed vent system that collects all VOCs from the tank and a VOC control device. The vapor recovery system shall be APCO-approved and maintained in gas-tight condition. Collected vapors shall be directed to a gas pipeline or flare with a destruction efficiency of at least 95% by weight, as determined by the test method specified in Section 6.4.6 of District Rule 4623. [District Rules 2201 and 4623]
5. Any tank gauging or sampling device on a tank vented to the vapor control system shall be equipped with a leak free cover which shall be closed at all times except during gauging or sampling. [District Rule 4623]
6. Except as otherwise provided in this permit, the operator shall ensure that the vapor control system is functional and is operating as designed at all times. [District Rule 2201]

CONDITIONS CONTINUE ON NEXT PAGE

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Seyed Sadredin, Executive Director, APCO

Arnaud Marjolle, Director of Permit Services

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7. Except during tank cleaning, tank roof appurtenances shall be maintained leak free. [District Rule 4623]
8. Except as otherwise provided in this permit, all piping, valves, and fittings shall be constructed and maintained in a leak free condition. [District Rule 4623]
9. A leak-free condition is defined as a condition without a gas leak or 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 liquid leak is defined as the dripping of organic liquid at a rate of more than 3 drops per minute. [District Rule 4623]
10. VOC emissions from the components associated with this tank up to the vapor recovery system trunk line shall not exceed 0.3 lb/day. [District Rule 2201]
11. There shall be no leaks exceeding 10,000 ppmv from fugitive emissions components associated with this tank. [District Rule 2201]
12. The permittee shall maintain with the permit accurate fugitive component counts and resulting emissions from this tank and vapor control system, calculated using California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities Table IV-2C: Oil and Gas Production Screening Value Ranges (<10,000 ppmv) Emission Factors with 100% VOC content in components. [District Rules 1070 and 2201]
13. {3468} The operator shall maintain a copy of the latest APCO-approved Operator Management Plan (OMP) at the facility and make it available to the APCO, ARB, and US EPA upon request. [District Rule 4409]
14. {3469} By January 30 of each year, the operator shall submit to the APCO for approval, in writing, an annual report indicating any changes to the existing, approved OMP. [District Rule 4409]
15. {3470} In accordance with the approved OMP, the operator shall meet all applicable operating, inspection and re-inspection, maintenance, process pressure relief device (PRD), component identification, recordkeeping, and notification requirements of Rule 4409 for all components containing or contacting VOCs at this facility except for those components specifically exempted in Sections 4.1 and 4.2 of Rule 4409. [District Rule 4409]
16. {3472} The operator shall maintain an inspection log that has been signed and dated by the facility operator responsible for the inspection, certifying the accuracy of the information recorded in the log. The inspection log shall contain, at a minimum, all of the following information: 1) The total number of components inspected, and the total number and percentage of leaking components found by component types; 2) The location, type, name or description of each leaking component and the description of any unit where the leaking component is found; 3) Date of the leak detection and method of the leak detection; 4) For gaseous leaks, record the leak concentration in ppmv, and for liquid leaks record whether the leak is a major liquid leak or a minor liquid leak; 5) The date of repair, replacement, or removal from operation of the leaking component(s); 6) The identification and location of essential components and critical components found leaking that cannot be repaired until the next process unit turnaround or not later than one year after leak detection, whichever comes first; 7) The method(s) used to minimize the leak from essential components and critical components found leaking that cannot be repaired until the next process unit turnaround or not later than one year after leak detection, whichever comes earlier; 8) The date of re-inspection and the leak concentration in ppmv after the component is repaired or is replaced; 9) The inspector's name, business mailing address, and business telephone number. [District Rule 4409, 6.2.1]
17. {3473} Records of leaks detected during quarterly or annual operator inspections, and each subsequent repair and re-inspection, shall be submitted to the District, ARB, and EPA upon request. [District Rule 4409, 6.2.2]
18. {3474} Records shall be maintained of each calibration of the portable hydrocarbon detection instrument utilized for inspecting components. The records shall include a copy of the current calibration gas certification from the vendor of the calibration gas cylinder, the date of calibration, the concentration of calibration gas, the instrument reading of calibration gas before adjustment, the instrument reading of calibration gas after adjustment, the calibration gas expiration date, and the calibration gas cylinder pressure at the time of calibration. [District Rule 4409, 6.2.3]
19. The permittee shall maintain monthly records of average daily crude oil throughput. [District Rule 4623]
20. If applicable, the permittee shall retain at the facility, at all times, a copy of the letter sent to the APCO requesting participation in the Rule 4623 Fixed Roof Tank Preventive Inspection and Maintenance Program, and Tank Interior Cleaning Program; and shall maintain the records of annual tank inspections, maintenance, and cleaning to document the participation in the program. [District Rule 4623]

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CONDITIONS CONTINUE ON NEXT PAGE

21. 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 4409 and 4623]

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San Joaquin Valley
Air Pollution Control District

AUTHORITY TO CONSTRUCT

ISSUANCE DATE: DRAFT
DRAFT

PERMIT NO: C-8578-15-0

LEGAL OWNER OR OPERATOR: THE TERMO COMPANY
MAILING ADDRESS: PO BOX 2767
LONG BEACH, CA 90801

LOCATION: LIGHT OIL PRODUCTION
FRESNO COUNTY, CA

SECTION: SE5 TOWNSHIP: 16S RANGE: 18E

EQUIPMENT DESCRIPTION:

750 BBL TANK FIXED ROOF WASH TANK SERVED BY VAPOR RECOVERY SYSTEM LISTED ON C-8578-2
(WALROND LEASE)

CONDITIONS

1. The permittee's crude oil production shall average less than 6,000 bbl/day from all operations within Fresno County and permittee shall not engage in refining, transporting, or marketing of refined petroleum products. [District Rule 4623]
2. {98} No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
3. This tank shall be equipped with a fixed roof with no holes or openings. [District Rules 2201 and 4623]
4. This tank shall be equipped with a vapor control system consisting of a closed vent system that collects all VOCs from the tank and a VOC control device. The vapor recovery system shall be APCO-approved and maintained in gas-tight condition. Collected vapors shall be directed to a gas pipeline or flare with a destruction efficiency of at least 95% by weight, as determined by the test method specified in Section 6.4.6 of District Rule 4623. [District Rules 2201 and 4623]
5. Any tank gauging or sampling device on a tank vented to the vapor control system shall be equipped with a leak free cover which shall be closed at all times except during gauging or sampling. [District Rule 4623]
6. Except as otherwise provided in this permit, the operator shall ensure that the vapor control system is functional and is operating as designed at all times. [District Rule 2201]
7. Except during tank cleaning, tank roof appurtenances shall be maintained leak free. [District Rule 4623]

CONDITIONS CONTINUE ON NEXT PAGE

YOU **MUST** NOTIFY THE DISTRICT COMPLIANCE DIVISION AT (559) 230-5950 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

C-8578-15-0 : Oct 23 2019 9:58PM - TDRIID : Joint Inspection NOT Required

8. Except as otherwise provided in this permit, all piping, valves, and fittings shall be constructed and maintained in a leak free condition. [District Rule 4623]
9. A leak-free condition is defined as a condition without a gas leak or 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 liquid leak is defined as the dripping of organic liquid at a rate of more than 3 drops per minute. [District Rule 4623]
10. VOC emissions from the components associated with this tank up to the vapor recovery system trunk line shall not exceed 0.2 lb/day. [District Rule 2201]
11. There shall be no leaks exceeding 10,000 ppmv from fugitive emissions components associated with this tank. [District Rule 2201]
12. The permittee shall maintain with the permit accurate fugitive component counts and resulting emissions from this tank and vapor control system, calculated using California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities Table IV-2C: Oil and Gas Production Screening Value Ranges (<10,000 ppmv) Emission Factors with 100% VOC content in components. [District Rules 1070 and 2201]
13. {3468} The operator shall maintain a copy of the latest APCO-approved Operator Management Plan (OMP) at the facility and make it available to the APCO, ARB, and US EPA upon request. [District Rule 4409]
14. {3469} By January 30 of each year, the operator shall submit to the APCO for approval, in writing, an annual report indicating any changes to the existing, approved OMP. [District Rule 4409]
15. {3470} In accordance with the approved OMP, the operator shall meet all applicable operating, inspection and re-inspection, maintenance, process pressure relief device (PRD), component identification, recordkeeping, and notification requirements of Rule 4409 for all components containing or contacting VOCs at this facility except for those components specifically exempted in Sections 4.1 and 4.2 of Rule 4409. [District Rule 4409]
16. {3472} The operator shall maintain an inspection log that has been signed and dated by the facility operator responsible for the inspection, certifying the accuracy of the information recorded in the log. The inspection log shall contain, at a minimum, all of the following information: 1) The total number of components inspected, and the total number and percentage of leaking components found by component types; 2) The location, type, name or description of each leaking component and the description of any unit where the leaking component is found; 3) Date of the leak detection and method of the leak detection; 4) For gaseous leaks, record the leak concentration in ppmv, and for liquid leaks record whether the leak is a major liquid leak or a minor liquid leak; 5) The date of repair, replacement, or removal from operation of the leaking component(s); 6) The identification and location of essential components and critical components found leaking that cannot be repaired until the next process unit turnaround or not later than one year after leak detection, whichever comes first; 7) The method(s) used to minimize the leak from essential components and critical components found leaking that cannot be repaired until the next process unit turnaround or not later than one year after leak detection, whichever comes earlier; 8) The date of re-inspection and the leak concentration in ppmv after the component is repaired or is replaced; 9) The inspector's name, business mailing address, and business telephone number. [District Rule 4409, 6.2.1]
17. {3473} Records of leaks detected during quarterly or annual operator inspections, and each subsequent repair and re-inspection, shall be submitted to the District, ARB, and EPA upon request. [District Rule 4409, 6.2.2]
18. {3474} Records shall be maintained of each calibration of the portable hydrocarbon detection instrument utilized for inspecting components. The records shall include a copy of the current calibration gas certification from the vendor of the calibration gas cylinder, the date of calibration, the concentration of calibration gas, the instrument reading of calibration gas before adjustment, the instrument reading of calibration gas after adjustment, the calibration gas expiration date, and the calibration gas cylinder pressure at the time of calibration. [District Rule 4409, 6.2.3]
19. The permittee shall maintain monthly records of average daily crude oil throughput. [District Rule 4623]
20. This permit authorizes tank cleaning that is not the result of breakdowns or poor maintenance as a routine maintenance activity. [District Rule 2020]

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CONDITIONS CONTINUE ON NEXT PAGE

21. Permittee shall notify the APCO in writing at least three (3) days prior to performing tank degassing and interior tank cleaning activities. Written notification shall include the following: 1) the Permit to Operate number and physical location of the tank being degassed, 2) the date and time the tank degassing and cleaning activities will begin, 3) the degassing method, as allowed in this permit, to be used, 4) the method to be used to clean the tank, including any solvents to be used, and 5) the method to be used to dispose of any removed sludge, including methods that will be used to control emissions from the receiving vessel and emissions during transport. [District Rule 4623]
22. Tank degassing shall be accomplished by emptying the tank of organic liquid having a TVP of 0.5 psia or greater, and minimizing organic vapors in the tank vapor space by one of the following methods: 1) tank shall be degassed before commencing interior cleaning by exhausting VOCs contained in the tank vapor space to an APCO-approved vapor recovery system until the organic vapor concentration is 5,000 ppmv or less, or is 10 percent or less of the lower explosion limit (LEL), whichever is less, or 2) tank shall be degassed before commencing interior cleaning by displacing VOCs contained in the tank vapor space to an APCO-approved vapor recovery system by filling the tank with a suitable liquid until 90 percent or more of the maximum operating level of the tank is filled. Suitable liquids are organic liquids having a TVP of less than 0.5 psia, water, clean produced water, or produced water derived from crude oil having a TVP less than 0.5 psia, or 3) tank shall be degassed before commencing interior cleaning by displacing VOCs contained in the tank vapor space to an APCO-approved vapor recovery system by filling the tank with a suitable gas. Degassing shall continue until the operator has achieved a vapor displacement equivalent to at least 2.3 times the tank capacity. Suitable gases are air, nitrogen, carbon dioxide, or natural gas containing less than 10 percent VOC by weight. [District Rule 4623]
23. During tank degassing, the operator shall discharge or displace organic vapors contained in the tank vapor space to an APCO-approved vapor recovery system. [District Rule 4623]
24. To facilitate connection to an external APCO-approved recovery system, a suitable tank fitting, such as a manway, may be temporarily removed for a period of time not to exceed 1 hour. [District Rule 4623]
25. This tank shall be in compliance with the applicable requirements of District Rule 4623 at all times during draining, degassing, and refilling the tank with an organic liquid having a TVP of 0.5 psia or greater. [District Rule 4623]
26. After a tank has been degassed pursuant to the requirements of this permit, vapor control requirements are not applicable until an organic liquid having a TVP of 0.5 psia or greater is placed, held, or stored in this tank. [District Rule 4623]
27. 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]
28. 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]
29. During sludge removal from a tank containing an organic liquid with a TVP of 1.5 psia or greater, 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]
30. Permittee shall only transport removed sludge from a tank containing an organic liquid with a TVP of 1.5 psia or greater in closed, liquid leak-free containers. [District Rule 4623]
31. Permittee shall store removed sludge from a tank containing an organic liquid with a TVP of 1.5 psia or greater, 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. Intermediate storage of sludge from a tank containing an organic liquid with a TVP of 1.5 psia or greater while determining suitability for use as roadmix must be in vapor leak free containers or in tanks complying with the vapor control requirements of Rule 4623. 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]
32. 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 4409 and 4623]

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San Joaquin Valley
Air Pollution Control District

AUTHORITY TO CONSTRUCT

ISSUANCE DATE: DRAFT
DRAFT

PERMIT NO: C-8578-16-0

LEGAL OWNER OR OPERATOR: THE TERMO COMPANY
MAILING ADDRESS: PO BOX 2767
LONG BEACH, CA 90801

LOCATION: LIGHT OIL PRODUCTION
FRESNO COUNTY, CA

SECTION: SE5 TOWNSHIP: 16S RANGE: 18E

EQUIPMENT DESCRIPTION:

500 BBL TANK FIXED ROOF CRUDE OIL STORAGE TANK SERVED BY VAPOR RECOVERY SYSTEM LISTED ON C-8578-2 (WALROND LEASE)

CONDITIONS

1. The permittee's crude oil production shall average less than 6,000 bbl/day from all operations within Fresno County and permittee shall not engage in refining, transporting, or marketing of refined petroleum products. [District Rule 4623]
2. {98} No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
3. This tank shall be equipped with a fixed roof with no holes or openings. [District Rules 2201 and 4623]
4. This tank shall be equipped with a vapor control system consisting of a closed vent system that collects all VOCs from the tank and a VOC control device. The vapor recovery system shall be APCO-approved and maintained in gas-tight condition. Collected vapors shall be directed to a gas pipeline or flare with a destruction efficiency of at least 95% by weight, as determined by the test method specified in Section 6.4.6 of District Rule 4623. [District Rules 2201 and 4623]
5. Any tank gauging or sampling device on a tank vented to the vapor control system shall be equipped with a leak free cover which shall be closed at all times except during gauging or sampling. [District Rule 4623]
6. Except as otherwise provided in this permit, the operator shall ensure that the vapor control system is functional and is operating as designed at all times. [District Rule 2201]
7. Except during tank cleaning, tank roof appurtenances shall be maintained leak free. [District Rule 4623]

CONDITIONS CONTINUE ON NEXT PAGE

YOU MUST NOTIFY THE DISTRICT COMPLIANCE DIVISION AT (559) 230-5950 WHEN CONSTRUCTION IS COMPLETED AND PRIOR TO OPERATING THE EQUIPMENT OR MODIFICATIONS AUTHORIZED BY THIS AUTHORITY TO CONSTRUCT. This is NOT a PERMIT TO OPERATE. Approval or denial of a PERMIT TO OPERATE will be made after an inspection to verify that the equipment has been constructed in accordance with the approved plans, specifications and conditions of this Authority to Construct, and to determine if the equipment can be operated in compliance with all Rules and Regulations of the San Joaquin Valley Unified Air Pollution Control District. Unless construction has commenced pursuant to Rule 2050, this Authority to Construct shall expire and application shall be cancelled two years from the date of issuance. The applicant is responsible for complying with all laws, ordinances and regulations of all other governmental agencies which may pertain to the above equipment.

Seyed Sadredin, Executive Director, APCO

DRAFT
Arnaud Marjollet, Director of Permit Services

C-8578-16-0 | Oct 23 2015 3:07PM - TORID : Joint Inspection NOT Required

8. Except as otherwise provided in this permit, all piping, valves, and fittings shall be constructed and maintained in a leak free condition. [District Rule 4623]
9. A leak-free condition is defined as a condition without a gas leak or 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 liquid leak is defined as the dripping of organic liquid at a rate of more than 3 drops per minute. [District Rule 4623]
10. VOC emissions from the components associated with this tank up to the vapor recovery system trunk line shall not exceed 0.2 lb/day. [District Rule 2201]
11. There shall be no leaks exceeding 10,000 ppmv from fugitive emissions components associated with this tank. [District Rule 2201]
12. The permittee shall maintain with the permit accurate fugitive component counts and resulting emissions from this tank and vapor control system, calculated using California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities Table IV-2C: Oil and Gas Production Screening Value Ranges (<10,000 ppmv) Emission Factors with 100% VOC content in components. [District Rules 1070 and 2201]
13. {3468} The operator shall maintain a copy of the latest APCO-approved Operator Management Plan (OMP) at the facility and make it available to the APCO, ARB, and US EPA upon request. [District Rule 4409]
14. {3469} By January 30 of each year, the operator shall submit to the APCO for approval, in writing, an annual report indicating any changes to the existing, approved OMP. [District Rule 4409]
15. {3470} In accordance with the approved OMP, the operator shall meet all applicable operating, inspection and re-inspection, maintenance, process pressure relief device (PRD), component identification, recordkeeping, and notification requirements of Rule 4409 for all components containing or contacting VOCs at this facility except for those components specifically exempted in Sections 4.1 and 4.2 of Rule 4409. [District Rule 4409]
16. {3472} The operator shall maintain an inspection log that has been signed and dated by the facility operator responsible for the inspection, certifying the accuracy of the information recorded in the log. The inspection log shall contain, at a minimum, all of the following information: 1) The total number of components inspected, and the total number and percentage of leaking components found by component types; 2) The location, type, name or description of each leaking component and the description of any unit where the leaking component is found; 3) Date of the leak detection and method of the leak detection; 4) For gaseous leaks, record the leak concentration in ppmv, and for liquid leaks record whether the leak is a major liquid leak or a minor liquid leak; 5) The date of repair, replacement, or removal from operation of the leaking component(s); 6) The identification and location of essential components and critical components found leaking that cannot be repaired until the next process unit turnaround or not later than one year after leak detection, whichever comes first; 7) The method(s) used to minimize the leak from essential components and critical components found leaking that cannot be repaired until the next process unit turnaround or not later than one year after leak detection, whichever comes earlier; 8) The date of re-inspection and the leak concentration in ppmv after the component is repaired or is replaced; 9) The inspector's name; business mailing address, and business telephone number. [District Rule 4409, 6.2.1]
17. {3473} Records of leaks detected during quarterly or annual operator inspections, and each subsequent repair and re-inspection, shall be submitted to the District, ARB, and EPA upon request. [District Rule 4409, 6.2.2]
18. {3474} Records shall be maintained of each calibration of the portable hydrocarbon detection instrument utilized for inspecting components. The records shall include a copy of the current calibration gas certification from the vendor of the calibration gas cylinder, the date of calibration, the concentration of calibration gas, the instrument reading of calibration gas before adjustment, the instrument reading of calibration gas after adjustment, the calibration gas expiration date, and the calibration gas cylinder pressure at the time of calibration. [District Rule 4409, 6.2.3]
19. The permittee shall maintain monthly records of average daily crude oil throughput. [District Rule 4623]
20. This permit authorizes tank cleaning that is not the result of breakdowns or poor maintenance as a routine maintenance activity. [District Rule 2020]

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CONDITIONS CONTINUE ON NEXT PAGE

21. Permittee shall notify the APCO in writing at least three (3) days prior to performing tank degassing and interior tank cleaning activities. Written notification shall include the following: 1) the Permit to Operate number and physical location of the tank being degassed, 2) the date and time the tank degassing and cleaning activities will begin, 3) the degassing method, as allowed in this permit, to be used, 4) the method to be used to clean the tank, including any solvents to be used, and 5) the method to be used to dispose of any removed sludge, including methods that will be used to control emissions from the receiving vessel and emissions during transport. [District Rule 4623]
22. Tank degassing shall be accomplished by emptying the tank of organic liquid having a TVP of 0.5 psia or greater, and minimizing organic vapors in the tank vapor space by one of the following methods: 1) tank shall be degassed before commencing interior cleaning by exhausting VOCs contained in the tank vapor space to an APCO-approved vapor recovery system until the organic vapor concentration is 5,000 ppmv or less, or is 10 percent or less of the lower explosion limit (LEL), whichever is less, or 2) tank shall be degassed before commencing interior cleaning by displacing VOCs contained in the tank vapor space to an APCO-approved vapor recovery system by filling the tank with a suitable liquid until 90 percent or more of the maximum operating level of the tank is filled. Suitable liquids are organic liquids having a TVP of less than 0.5 psia, water, clean produced water, or produced water derived from crude oil having a TVP less than 0.5 psia, or 3) tank shall be degassed before commencing interior cleaning by displacing VOCs contained in the tank vapor space to an APCO-approved vapor recovery system by filling the tank with a suitable gas. Degassing shall continue until the operator has achieved a vapor displacement equivalent to at least 2.3 times the tank capacity. Suitable gases are air, nitrogen, carbon dioxide, or natural gas containing less than 10 percent VOC by weight. [District Rule 4623]
23. During tank degassing, the operator shall discharge or displace organic vapors contained in the tank vapor space to an APCO-approved vapor recovery system. [District Rule 4623]
24. To facilitate connection to an external APCO-approved recovery system, a suitable tank fitting, such as a manway, may be temporarily removed for a period of time not to exceed 1 hour. [District Rule 4623]
25. This tank shall be in compliance with the applicable requirements of District Rule 4623 at all times during draining, degassing, and refilling the tank with an organic liquid having a TVP of 0.5 psia or greater. [District Rule 4623]
26. After a tank has been degassed pursuant to the requirements of this permit, vapor control requirements are not applicable until an organic liquid having a TVP of 0.5 psia or greater is placed, held, or stored in this tank. [District Rule 4623]
27. 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]
28. 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]
29. During sludge removal from a tank containing an organic liquid with a TVP of 1.5 psia or greater, 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]
30. Permittee shall only transport removed sludge from a tank containing an organic liquid with a TVP of 1.5 psia or greater in closed, liquid leak-free containers. [District Rule 4623]
31. Permittee shall store removed sludge from a tank containing an organic liquid with a TVP of 1.5 psia or greater, 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. Intermediate storage of sludge from a tank containing an organic liquid with a TVP of 1.5 psia or greater while determining suitability for use as roadmix must be in vapor leak free containers or in tanks complying with the vapor control requirements of Rule 4623. 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]
32. 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 4409 and 4623]

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San Joaquin Valley
Air Pollution Control District

AUTHORITY TO CONSTRUCT

PERMIT NO: C-8578-17-0

LEGAL OWNER OR OPERATOR: THE TERMO COMPANY
MAILING ADDRESS: PO BOX 2767
LONG BEACH, CA 90801

LOCATION: LIGHT OIL PRODUCTION
FRESNO COUNTY, CA

SECTION: SE5 TOWNSHIP: 16S RANGE: 18E

EQUIPMENT DESCRIPTION:

500 BBL TANK FIXED ROOF CRUDE OIL STORAGE TANK SERVED BY VAPOR RECOVERY SYSTEM LISTED ON C-8578-2 (WALROND LEASE)

ISSUANCE DATE: DRAFT
DRAFT

CONDITIONS

1. The permittee's crude oil production shall average less than 6,000 bbl/day from all operations within Fresno County and permittee shall not engage in refining, transporting, or marketing of refined petroleum products. [District Rule 4623]
2. {98} No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
3. This tank shall be equipped with a fixed roof with no holes or openings. [District Rules 2201 and 4623]
4. This tank shall be equipped with a vapor control system consisting of a closed vent system that collects all VOCs from the tank and a VOC control device. The vapor recovery system shall be APCO-approved and maintained in gas-tight condition. Collected vapors shall be directed to a gas pipeline or flare with a destruction efficiency of at least 95% by weight, as determined by the test method specified in Section 6.4.6 of District Rule 4623. [District Rules 2201 and 4623]
5. Any tank gauging or sampling device on a tank vented to the vapor control system shall be equipped with a leak free cover which shall be closed at all times except during gauging or sampling. [District Rule 4623]
6. Except as otherwise provided in this permit, the operator shall ensure that the vapor control system is functional and is operating as designed at all times. [District Rule 2201]
7. Except during tank cleaning, tank roof appurtenances shall be maintained leak free. [District Rule 4623]

CONDITIONS CONTINUE ON NEXT PAGE

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Seyed Sadredin, Executive Director, APCO

Arnaud Marjollet, Director of Permit Services

C-8578-17-0 | Oct 23 2015 3:09PM - TORID : Jctnl Inspection NOT Required

8. Except as otherwise provided in this permit, all piping, valves, and fittings shall be constructed and maintained in a leak free condition. [District Rule 4623]
9. A leak-free condition is defined as a condition without a gas leak or 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 liquid leak is defined as the dripping of organic liquid at a rate of more than 3 drops per minute. [District Rule 4623]
10. VOC emissions from the components associated with this tank up to the vapor recovery system trunk line shall not exceed 0.2 lb/day. [District Rule 2201]
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14. {3469} By January 30 of each year, the operator shall submit to the APCO for approval, in writing, an annual report indicating any changes to the existing, approved OMP. [District Rule 4409]
15. {3470} In accordance with the approved OMP, the operator shall meet all applicable operating, inspection and re-inspection, maintenance, process pressure relief device (PRD), component identification, recordkeeping, and notification requirements of Rule 4409 for all components containing or contacting VOCs at this facility except for those components specifically exempted in Sections 4.1 and 4.2 of Rule 4409. [District Rule 4409]
16. {3472} The operator shall maintain an inspection log that has been signed and dated by the facility operator responsible for the inspection, certifying the accuracy of the information recorded in the log. The inspection log shall contain, at a minimum, all of the following information: 1) The total number of components inspected, and the total number and percentage of leaking components found by component types; 2) The location, type, name or description of each leaking component and the description of any unit where the leaking component is found; 3) Date of the leak detection and method of the leak detection; 4) For gaseous leaks, record the leak concentration in ppmv, and for liquid leaks record whether the leak is a major liquid leak or a minor liquid leak; 5) The date of repair, replacement, or removal from operation of the leaking component(s); 6) The identification and location of essential components and critical components found leaking that cannot be repaired until the next process unit turnaround or not later than one year after leak detection, whichever comes first; 7) The method(s) used to minimize the leak from essential components and critical components found leaking that cannot be repaired until the next process unit turnaround or not later than one year after leak detection, whichever comes earlier; 8) The date of re-inspection and the leak concentration in ppmv after the component is repaired or is replaced; 9) The inspector's name, business mailing address, and business telephone number. [District Rule 4409, 6.2.1]
17. {3473} Records of leaks detected during quarterly or annual operator inspections, and each subsequent repair and re-inspection, shall be submitted to the District, ARB, and EPA upon request. [District Rule 4409, 6.2.2]
18. {3474} Records shall be maintained of each calibration of the portable hydrocarbon detection instrument utilized for inspecting components. The records shall include a copy of the current calibration gas certification from the vendor of the calibration gas cylinder, the date of calibration, the concentration of calibration gas, the instrument reading of calibration gas before adjustment, the instrument reading of calibration gas after adjustment, the calibration gas expiration date, and the calibration gas cylinder pressure at the time of calibration. [District Rule 4409, 6.2.3]
19. The permittee shall maintain monthly records of average daily crude oil throughput. [District Rule 4623]
20. This permit authorizes tank cleaning that is not the result of breakdowns or poor maintenance as a routine maintenance activity. [District Rule 2020]

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CONDITIONS CONTINUE ON NEXT PAGE

21. Permittee shall notify the APCO in writing at least three (3) days prior to performing tank degassing and interior tank cleaning activities. Written notification shall include the following: 1) the Permit to Operate number and physical location of the tank being degassed, 2) the date and time the tank degassing and cleaning activities will begin, 3) the degassing method, as allowed in this permit, to be used, 4) the method to be used to clean the tank, including any solvents to be used, and 5) the method to be used to dispose of any removed sludge, including methods that will be used to control emissions from the receiving vessel and emissions during transport. [District Rule 4623]
22. Tank degassing shall be accomplished by emptying the tank of organic liquid having a TVP of 0.5 psia or greater, and minimizing organic vapors in the tank vapor space by one of the following methods: 1) tank shall be degassed before commencing interior cleaning by exhausting VOCs contained in the tank vapor space to an APCO-approved vapor recovery system until the organic vapor concentration is 5,000 ppmv or less, or is 10 percent or less of the lower explosion limit (LEL), whichever is less, or 2) tank shall be degassed before commencing interior cleaning by displacing VOCs contained in the tank vapor space to an APCO-approved vapor recovery system by filling the tank with a suitable liquid until 90 percent or more of the maximum operating level of the tank is filled. Suitable liquids are organic liquids having a TVP of less than 0.5 psia, water, clean produced water, or produced water derived from crude oil having a TVP less than 0.5 psia, or 3) tank shall be degassed before commencing interior cleaning by displacing VOCs contained in the tank vapor space to an APCO-approved vapor recovery system by filling the tank with a suitable gas. Degassing shall continue until the operator has achieved a vapor displacement equivalent to at least 2.3 times the tank capacity. Suitable gases are air, nitrogen, carbon dioxide, or natural gas containing less than 10 percent VOC by weight. [District Rule 4623]
23. During tank degassing, the operator shall discharge or displace organic vapors contained in the tank vapor space to an APCO-approved vapor recovery system. [District Rule 4623]
24. To facilitate connection to an external APCO-approved recovery system, a suitable tank fitting, such as a manway, may be temporarily removed for a period of time not to exceed 1 hour. [District Rule 4623]
25. This tank shall be in compliance with the applicable requirements of District Rule 4623 at all times during draining, degassing, and refilling the tank with an organic liquid having a TVP of 0.5 psia or greater. [District Rule 4623]
26. After a tank has been degassed pursuant to the requirements of this permit, vapor control requirements are not applicable until an organic liquid having a TVP of 0.5 psia or greater is placed, held, or stored in this tank. [District Rule 4623]
27. 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]
28. 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]
29. During sludge removal from a tank containing an organic liquid with a TVP of 1.5 psia or greater, 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]
30. Permittee shall only transport removed sludge from a tank containing an organic liquid with a TVP of 1.5 psia or greater in closed, liquid leak-free containers. [District Rule 4623]
31. Permittee shall store removed sludge from a tank containing an organic liquid with a TVP of 1.5 psia or greater, 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. Intermediate storage of sludge from a tank containing an organic liquid with a TVP of 1.5 psia or greater while determining suitability for use as roadmix must be in vapor leak free containers or in tanks complying with the vapor control requirements of Rule 4623. 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]
32. 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 4409 and 4623]

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San Joaquin Valley
Air Pollution Control District

AUTHORITY TO CONSTRUCT

PERMIT NO: C-8578-18-0

LEGAL OWNER OR OPERATOR: THE TERMO COMPANY
MAILING ADDRESS: PO BOX 2767
LONG BEACH, CA 90801

LOCATION: LIGHT OIL PRODUCTION
FRESNO COUNTY, CA

EQUIPMENT DESCRIPTION:
500 BBL TANK FIXED ROOF WASH TANK SERVED BY 4.9 MMBTU/HR COANDA-EFFECT FLARE (PETERS LEASE)

ISSUANCE DATE: DRAFT

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CONDITIONS

1. ATCs C-8578-7-0 and '12-0 shall be canceled upon implementation of this ATC. [District Rule 2201]
2. The permittee's crude oil production shall average less than 6,000 bbl/day from all operations within Fresno County and permittee shall not engage in refining, transporting, or marketing of refined petroleum products. [District Rule 4623]
3. {98} No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
4. 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 1/4 or 5% opacity, [District Rules 2201 and 4101]
5. The following permit units shall be tied into the shared vapor recovery system C-8578-18, '19 and '20. [District Rule 2201]
6. Flare shall be equipped with operational produced gas volume flow meter. [District Rule 2201]
7. Measured heating value and quantity of flared gas shall be used to determine compliance with heat input limit. [District Rule 2201]
8. The flare outlet shall be equipped with an automatic ignition system, or shall operate with a pilot flame present at all times when combustible gases are vented through the flare, except during purge periods for automatic-ignition equipped flares. [District Rule 2201]
9. The sulfur compound concentration of gas combusted shall not exceed 5 gr S/100 scf. [District Rule 2201]

CONDITIONS CONTINUE ON NEXT PAGE

YOU MUST NOTIFY THE DISTRICT COMPLIANCE DIVISION AT (559) 230-5950 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 Marjolle, Director of Permit Services

C-8578-18-0: Oct 23 2015 3:00PM -- TORID: Joint Inspection NOT Required

10. Emissions from the flare shall not exceed any of the following limits (based on total gas combusted): NO_x: 0,068 lb/MMBtu; PM₁₀: 0.003 lb/MMBtu; CO: 0.37 lb/MMBtu; or VOC: 0.063 lb/MMBtu. [District Rule 2201]
11. The permittee shall measure sulfur content of gas incinerated in flare within 60 days of startup. [District Rules 2201 and 4801]
12. The permittee shall conduct quarterly sampling of the sulfur content of the gas flared. If 8 consecutive quarterly samplings show compliance, then sampling frequency shall only be required annually. [District Rule 2201]
13. The sulfur content of the gas being combusted shall be determined using ASTM methods D1072, D3031, D4084, D3246 or grab sample analysis by GC-FPD/TCD performed in the laboratory. The sulfur content of flared gas shall be measured within one day of restarting the unit if the unit has not been in use for more than 7 days. [District Rules 1081 and 2201]
14. Permittee shall keep accurate records of annual throughput, material usage, or other information necessary to demonstrate that facility emissions are less than 10 tons NO_x/yr and 10 tons VOC/yr for exemption from Rule 431 I. [District Rule 4311]
15. Permittee shall keep accurate daily and annual records of flare gas volumes, sulfur content, and higher heating value of flared gas and such records shall be retained for a period of 5 years and be made readily available for District inspection upon request. [District Rule 2201]
16. This tank shall be equipped with a fixed roof with no holes or openings. [District Rules 2201 and 4623]
17. This tank shall be equipped with a vapor control system consisting of a closed vent system that collects all VOCs from the tank and a VOC control device. The vapor recovery system shall be APCO-approved and maintained in gas-tight condition. Collected vapors shall be directed to a gas pipeline or flare with a destruction efficiency of at least 95% by weight, as determined by the test method specified in Section 6.4.6 of District Rule 4623. [District Rules 2201 and 4623]
18. Any tank gauging or sampling device on a tank vented to the vapor control system shall be equipped with a leak free cover which shall be closed at all times except during gauging or sampling. [District Rule 4623]
19. Except as otherwise provided in this permit, the operator shall ensure that the vapor control system is functional and is operating as designed at all times. [District Rule 2201]
20. Except during tank cleaning, tank roof appurtenances shall be maintained leak free. [District Rule 4623]
21. Except as otherwise provided in this permit, all piping, valves, and fittings shall be constructed and maintained in a leak free condition. [District Rule 4623]
22. A leak-free condition is defined as a condition without a gas leak or 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 liquid leak is defined as the dripping of organic liquid at a rate of more than 3 drops per minute. [District Rule 4623]
23. VOC fugitive emissions from this tank and tank vapor control system including vapor control system trunk line not exceed 0.8 lb/day. [District Rule 2201]
24. There shall be no leaks exceeding 10,000 ppmv from fugitive emissions components associated with this tank. [District Rule 2201]
25. The permittee shall maintain with the permit accurate fugitive component counts and resulting emissions from this tank and vapor control system, calculated using California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities Table IV-2C: Oil and Gas Production Screening Value Ranges (<10,000 ppmv) Emission Factors with 100% VOC content in components. [District Rules 1070 and 2201]
26. {3468} The operator shall maintain a copy of the latest APCO-approved Operator Management Plan (OMP) at the facility and make it available to the APCO, ARB, and US EPA upon request. [District Rule 4409]
27. {3469} By January 30 of each year, the operator shall submit to the APCO for approval, in writing, an annual report indicating any changes to the existing, approved OMP. [District Rule 4409]

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CONDITIONS CONTINUE ON NEXT PAGE

28. {3470} In accordance with the approved OMP, the operator shall meet all applicable operating, inspection and re-inspection, maintenance, process pressure relief device (PRD), component identification, recordkeeping, and notification requirements of Rule 4409 for all components containing or contacting VOCs at this facility except for those components specifically exempted in Sections 4.1 and 4.2 of Rule 4409. [District Rule 4409]
29. {3472} The operator shall maintain an inspection log that has been signed and dated by the facility operator responsible for the inspection, certifying the accuracy of the information recorded in the log. The inspection log shall contain, at a minimum, all of the following information: 1) The total number of components inspected, and the total number and percentage of leaking components found by component types; 2) The location, type, name or description of each leaking component and the description of any unit where the leaking component is found; 3) Date of the leak detection and method of the leak detection; 4) For gaseous leaks, record the leak concentration in ppmv, and for liquid leaks record whether the leak is a major liquid leak or a minor liquid leak; 5) The date of repair, replacement, or removal from operation of the leaking component(s); 6) The identification and location of essential components and critical components found leaking that cannot be repaired until the next process unit turnaround or not later than one year after leak detection, whichever comes first; 7) The method(s) used to minimize the leak from essential components and critical components found leaking that cannot be repaired until the next process unit turnaround or not later than one year after leak detection, whichever comes earlier; 8) The date of re-inspection and the leak concentration in ppmv after the component is repaired or is replaced; 9) The inspector's name, business mailing address, and business telephone number. [District Rule 4409, 6.2.1]
30. {3473} Records of leaks detected during quarterly or annual operator inspections, and each subsequent repair and re-inspection, shall be submitted to the District, ARB, and EPA upon request. [District Rule 4409, 6.2.2]
31. {3474} Records shall be maintained of each calibration of the portable hydrocarbon detection instrument utilized for inspecting components. The records shall include a copy of the current calibration gas certification from the vendor of the calibration gas cylinder, the date of calibration, the concentration of calibration gas, the instrument reading of calibration gas before adjustment, the instrument reading of calibration gas after adjustment, the calibration gas expiration date, and the calibration gas cylinder pressure at the time of calibration. [District Rule 4409, 6.2.3]
32. The permittee shall maintain monthly records of average daily crude oil throughput. [District Rule 4623]
33. This permit authorizes tank cleaning that is not the result of breakdowns or poor maintenance as a routine maintenance activity. [District Rule 2020]
34. Permittee shall notify the APCO in writing at least three (3) days prior to performing tank degassing and interior tank cleaning activities. Written notification shall include the following: 1) the Permit to Operate number and physical location of the tank being degassed, 2) the date and time the tank degassing and cleaning activities will begin, 3) the degassing method, as allowed in this permit, to be used, 4) the method to be used to clean the tank, including any solvents to be used, and 5) the method to be used to dispose of any removed sludge, including methods that will be used to control emissions from the receiving vessel and emissions during transport. [District Rule 4623]
35. Tank degassing shall be accomplished by emptying the tank of organic liquid having a TVP of 0.5 psia or greater, and minimizing organic vapors in the tank vapor space by one of the following methods: 1) tank shall be degassed before commencing interior cleaning by exhausting VOCs contained in the tank vapor space to an APCO-approved vapor recovery system until the organic vapor concentration is 5,000 ppmv or less, or is 10 percent or less of the lower explosion limit (LEL), whichever is less, or 2) tank shall be degassed before commencing interior cleaning by displacing VOCs contained in the tank vapor space to an APCO-approved vapor recovery system by filling the tank with a suitable liquid until 90 percent or more of the maximum operating level of the tank is filled. Suitable liquids are organic liquids having a TVP of less than 0.5 psia, water, clean produced water, or produced water derived from crude oil having a TVP less than 0.5 psia, or 3) tank shall be degassed before commencing interior cleaning by displacing VOCs contained in the tank vapor space to an APCO-approved vapor recovery system by filling the tank with a suitable gas. Degassing shall continue until the operator has achieved a vapor displacement equivalent to at least 2.3 times the tank capacity. Suitable gases are air, nitrogen, carbon dioxide, or natural gas containing less than 10 percent VOC by weight. [District Rule 4623]
36. During tank degassing, the operator shall discharge or displace organic vapors contained in the tank vapor space to an APCO-approved vapor recovery system. [District Rule 4623]
37. To facilitate connection to an external APCO-approved recovery system, a suitable tank fitting, such as a manway, may be temporarily removed for a period of time not to exceed 1 hour. [District Rule 4623]

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CONDITIONS CONTINUE ON NEXT PAGE

38. This tank shall be in compliance with the applicable requirements of District Rule 4623 at all times during draining, degassing, and refilling the tank with an organic liquid having a TVP of 0.5 psia or greater. [District Rule 4623]
39. After a tank has been degassed pursuant to the requirements of this permit, vapor control requirements are not applicable until an organic liquid having a TVP of 0.5 psia or greater is placed, held, or stored in this tank. [District Rule 4623]
40. 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]
41. 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]
42. During sludge removal from a tank containing an organic liquid with a TVP of 1.5 psia or greater, 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]
43. Permittee shall only transport removed sludge from a tank containing an organic liquid with a TVP of 1.5 psia or greater in closed, liquid leak-free containers. [District Rule 4623]
44. Permittee shall store removed sludge from a tank containing an organic liquid with a TVP of 1.5 psia or greater, 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. Intermediate storage of sludge from a tank containing an organic liquid with a TVP of 1.5 psia or greater while determining suitability for use as roadmix must be in vapor leak free containers or in tanks complying with the vapor control requirements of Rule 4623. 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]
45. 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 4409 and 4623]

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San Joaquin Valley
Air Pollution Control District

AUTHORITY TO CONSTRUCT

ISSUANCE DATE: DRAFT

PERMIT NO: C-8578-19-0

LEGAL OWNER OR OPERATOR: THE TERMO COMPANY
MAILING ADDRESS: PO BOX 2767
LONG BEACH, CA 90801

LOCATION: LIGHT OIL PRODUCTION
FRESNO COUNTY, CA

EQUIPMENT DESCRIPTION:
400 BBL TANK FIXED ROOF CRUDE OIL STORAGE TANK SERVED BY VAPOR RECOVERY SYSTEM LISTED ON C-8578-18 (PETERS LEASE)

CONDITIONS

1. The permittee's crude oil production shall average less than 6,000 bbl/day from all operations within Fresno County and permittee shall not engage in refining, transporting, or marketing of refined petroleum products. [District Rule 4623]
2. {98} No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
3. This tank shall be equipped with a fixed roof with no holes or openings. [District Rules 2201 and 4623]
4. This tank shall be equipped with a vapor control system consisting of a closed vent system that collects all VOCs from the tank and a VOC control device. The vapor recovery system shall be APCO-approved and maintained in gas-tight condition. Collected vapors shall be directed to a gas pipeline or flare with a destruction efficiency of at least 95% by weight, as determined by the test method specified in Section 6.4.6 of District Rule 4623. [District Rules 2201 and 4623]
5. Any tank gauging or sampling device on a tank vented to the vapor control system shall be equipped with a leak free cover which shall be closed at all times except during gauging or sampling. [District Rule 4623]
6. Except as otherwise provided in this permit, the operator shall ensure that the vapor control system is functional and is operating as designed at all times. [District Rule 2201]
7. Except during tank cleaning, tank roof appurtenances shall be maintained leak free. [District Rule 4623]

CONDITIONS CONTINUE ON NEXT PAGE

YOU **MUST** NOTIFY THE DISTRICT COMPLIANCE DIVISION AT (559) 230-5950 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.

Sayed Sadredin, Executive Director, APCO

Arnaud Marjolle, Director of Permit Services
C-8578-19-0; Oct 23 2015 3:09PM - TORID - Joint Inspection NOT Required

8. Except as otherwise provided in this permit, all piping, valves, and fittings shall be constructed and maintained in a leak free condition. [District Rule 4623]
9. A leak-free condition is defined as a condition without a gas leak or 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 liquid leak is defined as the dripping of organic liquid at a rate of more than 3 drops per minute. [District Rule 4623]
10. VOC emissions from the components associated with this tank up to the vapor recovery system trunk line shall not exceed 0.2 lb/day. [District Rule 2201]
11. There shall be no leaks exceeding 10,000 ppmv from fugitive emissions components associated with this tank. [District Rule 2201]
12. The permittee shall maintain with the permit accurate fugitive component counts and resulting emissions from this tank and vapor control system, calculated using California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities Table IV-2C: Oil and Gas Production Screening Value Ranges (<10,000 ppmv) Emission Factors with 100% VOC content in components. [District Rules 1070 and 2201]
13. {3468} The operator shall maintain a copy of the latest APCO-approved Operator Management Plan (OMP) at the facility and make it available to the APCO, ARB, and US EPA upon request. [District Rule 4409]
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17. {3473} Records of leaks detected during quarterly or annual operator inspections, and each subsequent repair and re-inspection, shall be submitted to the District, ARB, and EPA upon request. [District Rule 4409, 6.2.2]
18. {3474} Records shall be maintained of each calibration of the portable hydrocarbon detection instrument utilized for inspecting components. The records shall include a copy of the current calibration gas certification from the vendor of the calibration gas cylinder, the date of calibration, the concentration of calibration gas, the instrument reading of calibration gas before adjustment, the instrument reading of calibration gas after adjustment, the calibration gas expiration date, and the calibration gas cylinder pressure at the time of calibration. [District Rule 4409, 6.2.3]
19. The permittee shall maintain monthly records of average daily crude oil throughput. [District Rule 4623]
20. This permit authorizes tank cleaning that is not the result of breakdowns or poor maintenance as a routine maintenance activity. [District Rule 2020]

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CONDITIONS CONTINUE ON NEXT PAGE

21. Permittee shall notify the APCO in writing at least three (3) days prior to performing tank degassing and interior tank cleaning activities. Written notification shall include the following: 1) the Permit to Operate number and physical location of the tank being degassed, 2) the date and time the tank degassing and cleaning activities will begin, 3) the degassing method, as allowed in this permit, to be used, 4) the method to be used to clean the tank, including any solvents to be used, and 5) the method to be used to dispose of any removed sludge, including methods that will be used to control emissions from the receiving vessel and emissions during transport. [District Rule 4623]
22. Tank degassing shall be accomplished by emptying the tank of organic liquid having a TVP of 0.5 psia or greater, and minimizing organic vapors in the tank vapor space by one of the following methods: 1) tank shall be degassed before commencing interior cleaning by exhausting VOCs contained in the tank vapor space to an APCO-approved vapor recovery system until the organic vapor concentration is 5,000 ppmv or less, or is 10 percent or less of the lower explosion limit (LEL), whichever is less, or 2) tank shall be degassed before commencing interior cleaning by displacing VOCs contained in the tank vapor space to an APCO-approved vapor recovery system by filling the tank with a suitable liquid until 90 percent or more of the maximum operating level of the tank is filled. Suitable liquids are organic liquids having a TVP of less than 0.5 psia, water, clean produced water, or produced water derived from crude oil having a TVP less than 0.5 psia, or 3) tank shall be degassed before commencing interior cleaning by displacing VOCs contained in the tank vapor space to an APCO-approved vapor recovery system by filling the tank with a suitable gas. Degassing shall continue until the operator has achieved a vapor displacement equivalent to at least 2.3 times the tank capacity. Suitable gases are air, nitrogen, carbon dioxide, or natural gas containing less than 10 percent VOC by weight. [District Rule 4623]
23. During tank degassing, the operator shall discharge or displace organic vapors contained in the tank vapor space to an APCO-approved vapor recovery system. [District Rule 4623]
24. To facilitate connection to an external APCO-approved recovery system, a suitable tank fitting, such as a manway, may be temporarily removed for a period of time not to exceed 1 hour. [District Rule 4623]
25. This tank shall be in compliance with the applicable requirements of District Rule 4623 at all times during draining, degassing, and refilling the tank with an organic liquid having a TVP of 0.5 psia or greater. [District Rule 4623]
26. After a tank has been degassed pursuant to the requirements of this permit, vapor control requirements are not applicable until an organic liquid having a TVP of 0.5 psia or greater is placed, held, or stored in this tank. [District Rule 4623]
27. 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]
28. 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]
29. During sludge removal from a tank containing an organic liquid with a TVP of 1.5 psia or greater, 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]
30. Permittee shall only transport removed sludge from a tank containing an organic liquid with a TVP of 1.5 psia or greater in closed, liquid leak-free containers. [District Rule 4623]
31. Permittee shall store removed sludge from a tank containing an organic liquid with a TVP of 1.5 psia or greater, 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. Intermediate storage of sludge from a tank containing an organic liquid with a TVP of 1.5 psia or greater while determining suitability for use as roadmix must be in vapor leak free containers or in tanks complying with the vapor control requirements of Rule 4623. 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] Federally Enforceable Through Title V Permit
32. 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 4409 and 4623]

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San Joaquin Valley
Air Pollution Control District

AUTHORITY TO CONSTRUCT

ISSUANCE DATE: DRAFT

PERMIT NO: C-8578-20-0

LEGAL OWNER OR OPERATOR: THE TERMO COMPANY
MAILING ADDRESS: PO BOX 2767
LONG BEACH, CA 90801

LOCATION: LIGHT OIL PRODUCTION
FRESNO COUNTY, CA

EQUIPMENT DESCRIPTION:
400 BBL TANK FIXED ROOF CRUDE OIL STORAGE TANK SERVED BY VAPOR RECOVERY SYSTEM LISTED ON C-8578-18 (PETERS LEASE)

CONDITIONS

1. The permittee's crude oil production shall average less than 6,000 bbl/day from all operations within Fresno County and permittee shall not engage in refining, transporting, or marketing of refined petroleum products. [District Rule 4623]
2. {98} No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
3. This tank shall be equipped with a fixed roof with no holes or openings. [District Rules 2201 and 4623]
4. This tank shall be equipped with a vapor control system consisting of a closed vent system that collects all VOCs from the tank and a VOC control device. The vapor recovery system shall be APCO-approved and maintained in gas-tight condition. Collected vapors shall be directed to a gas pipeline or flare with a destruction efficiency of at least 95% by weight, as determined by the test method specified in Section 6.4.6 of District Rule 4623. [District Rules 2201 and 4623]
5. Any tank gauging or sampling device on a tank vented to the vapor control system shall be equipped with a leak free cover which shall be closed at all times except during gauging or sampling. [District Rule 4623]
6. Except as otherwise provided in this permit, the operator shall ensure that the vapor control system is functional and is operating as designed at all times. [District Rule 2201]
7. Except during tank cleaning, tank roof appurtenances shall be maintained leak free. [District Rule 4623]

CONDITIONS CONTINUE ON NEXT PAGE

YOU MUST NOTIFY THE DISTRICT COMPLIANCE DIVISION AT (559) 230-5950 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

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8. Except as otherwise provided in this permit, all piping, valves, and fittings shall be constructed and maintained in a leak free condition. [District Rule 4623]
9. A leak-free condition is defined as a condition without a gas leak or 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 liquid leak is defined as the dripping of organic liquid at a rate of more than 3 drops per minute. [District Rule 4623]
10. VOC emissions from the components associated with this tank up to the vapor recovery system trunk line shall not exceed 0.2 lb/day. [District Rule 2201]
11. There shall be no leaks exceeding 10,000 ppmv from fugitive emissions components associated with this tank. [District Rule 2201]
12. The permittee shall maintain with the permit accurate fugitive component counts and resulting emissions from this tank and vapor control system, calculated using California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities Table IV-2C: Oil and Gas Production Screening Value Ranges (<10,000 ppmv) Emission Factors with 100% VOC content in components. [District Rules 1070 and 2201]
13. {3468} The operator shall maintain a copy of the latest APCO-approved Operator Management Plan (OMP) at the facility and make it available to the APCO, ARB, and US EPA upon request. [District Rule 4409]
14. {3469} By January 30 of each year, the operator shall submit to the APCO for approval, in writing, an annual report indicating any changes to the existing, approved OMP. [District Rule 4409]
15. {3470} In accordance with the approved OMP, the operator shall meet all applicable operating, inspection and re-inspection, maintenance, process pressure relief device (PRD), component identification, recordkeeping, and notification requirements of Rule 4409 for all components containing or contacting VOCs at this facility except for those components specifically exempted in Sections 4.1 and 4.2 of Rule 4409. [District Rule 4409]
16. {3472} The operator shall maintain an inspection log that has been signed and dated by the facility operator responsible for the inspection, certifying the accuracy of the information recorded in the log. The inspection log shall contain, at a minimum, all of the following information: 1) The total number of components inspected, and the total number and percentage of leaking components found by component types; 2) The location, type, name or description of each leaking component and the description of any unit where the leaking component is found; 3) Date of the leak detection and method of the leak detection; 4) For gaseous leaks, record the leak concentration in ppmv, and for liquid leaks record whether the leak is a major liquid leak or a minor liquid leak; 5) The date of repair, replacement, or removal from operation of the leaking component(s); 6) The identification and location of essential components and critical components found leaking that cannot be repaired until the next process unit turnaround or not later than one year after leak detection, whichever comes first; 7) The method(s) used to minimize the leak from essential components and critical components found leaking that cannot be repaired until the next process unit turnaround or not later than one year after leak detection, whichever comes earlier; 8) The date of re-inspection and the leak concentration in ppmv after the component is repaired or is replaced; 9) The inspector's name, business mailing address, and business telephone number. [District Rule 4409, 6.2.1]
17. {3473} Records of leaks detected during quarterly or annual operator inspections, and each subsequent repair and re-inspection, shall be submitted to the District, ARB, and EPA upon request. [District Rule 4409, 6.2.2]
18. {3474} Records shall be maintained of each calibration of the portable hydrocarbon detection instrument utilized for inspecting components. The records shall include a copy of the current calibration gas certification from the vendor of the calibration gas cylinder, the date of calibration, the concentration of calibration gas, the instrument reading of calibration gas before adjustment, the instrument reading of calibration gas after adjustment, the calibration gas expiration date, and the calibration gas cylinder pressure at the time of calibration. [District Rule 4409, 6.2.3]
19. The permittee shall maintain monthly records of average daily crude oil throughput. [District Rule 4623]
20. This permit authorizes tank cleaning that is not the result of breakdowns or poor maintenance as a routine maintenance activity. [District Rule 2020]

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CONDITIONS CONTINUE ON NEXT PAGE

21. Permittee shall notify the APCO in writing at least three (3) days prior to performing tank degassing and interior tank cleaning activities. Written notification shall include the following: 1) the Permit to Operate number and physical location of the tank being degassed, 2) the date and time the tank degassing and cleaning activities will begin, 3) the degassing method, as allowed in this permit, to be used, 4) the method to be used to clean the tank, including any solvents to be used, and 5) the method to be used to dispose of any removed sludge, including methods that will be used to control emissions from the receiving vessel and emissions during transport. [District Rule 4623]
22. Tank degassing shall be accomplished by emptying the tank of organic liquid having a TVP of 0.5 psia or greater, and minimizing organic vapors in the tank vapor space by one of the following methods: 1) tank shall be degassed before commencing interior cleaning by exhausting VOCs contained in the tank vapor space to an APCO-approved vapor recovery system until the organic vapor concentration is 5,000 ppmv or less, or is 10 percent or less of the lower explosion limit (LEL), whichever is less, or 2) tank shall be degassed before commencing interior cleaning by displacing VOCs contained in the tank vapor space to an APCO-approved vapor recovery system by filling the tank with a suitable liquid until 90 percent or more of the maximum operating level of the tank is filled. Suitable liquids are organic liquids having a TVP of less than 0.5 psia, water, clean produced water, or produced water derived from crude oil having a TVP less than 0.5 psia, or 3) tank shall be degassed before commencing interior cleaning by displacing VOCs contained in the tank vapor space to an APCO-approved vapor recovery system by filling the tank with a suitable gas. Degassing shall continue until the operator has achieved a vapor displacement equivalent to at least 2.3 times the tank capacity. Suitable gases are air, nitrogen, carbon dioxide, or natural gas containing less than 10 percent VOC by weight. [District Rule 4623]
23. During tank degassing, the operator shall discharge or displace organic vapors contained in the tank vapor space to an APCO-approved vapor recovery system. [District Rule 4623]
24. To facilitate connection to an external APCO-approved recovery system, a suitable tank fitting, such as a manway, may be temporarily removed for a period of time not to exceed 1 hour. [District Rule 4623]
25. This tank shall be in compliance with the applicable requirements of District Rule 4623 at all times during draining, degassing, and refilling the tank with an organic liquid having a TVP of 0.5 psia or greater. [District Rule 4623]
26. After a tank has been degassed pursuant to the requirements of this permit, vapor control requirements are not applicable until an organic liquid having a TVP of 0.5 psia or greater is placed, held, or stored in this tank. [District Rule 4623]
27. 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]
28. 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]
29. During sludge removal from a tank containing an organic liquid with a TVP of 1.5 psia or greater, 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]
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