San Joaquin Valley
AIR POLLUTION CONTROL DISTRICT

HEALTHY AIR LIVING™

AUG 2 6 2015

Cory Busby
Crimson Renewable Energy
17731 Millux Road
Bakersfield, CA 93311-9714

Re: Notice of Preliminary Decision - Authority to Construct
Facility Number: S-6971
Project Number: S-1153325

Dear Mr. Busby:

Enclosed for your review and comment is the District's analysis of Crimson Renewable Energy's application for an Authority to Construct for the addition of two new process units, at 17731 Millux Road near Bakersfield.

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. Richard Edgehill of Permit Services at (661) 392-5617.

Sincerely,

Arnaud Marjollet
Director of Permit Services

AM:rue/ya

Enclosures

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

Seyed Sadredin
Executive Director/Air Pollution Control Officer

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San Joaquin Valley Air Pollution Control District

Authority to Construct Application Review

Biodiesel Facility

Facility Name:	Crimson Renewable Energy	Date:	August 5, 2015
Mailing Address:	17731 Millux Road	Engineer:	Richard Edgehill
	Bakersfield, CA 93311-9714	Lead Engineer:	Leonard Scandura
Contact Person:	Cory Busby and Rachael Startin (Insight Environmental)		
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Application #(s):	S-6971-1-6, '-22-0 and '-23-0		
Project #:	1153325		
Deemed Complete:	July 23, 2015		

I. Proposal

Crimson Renewable Energy LP (CRE) is submitting an application to add new equipment to its existing biodiesel production facility (S-6971). CRE is planning to add a new Biodiesel Wash System consisting of 2 mixer tanks, 2 settler tanks, and 2 collection vessels and a Glycerin Purification System with 2 buffer tanks, 2 settling tanks, 1 acidification tanks, 1 neutralization tank, 1 collecting tank, centrifuge, and dryer heated using steam from existing boilers.

Note that according the District Policy APR 1025, because the two groups of emissions units in each process cannot be operated independently, two new permit units ('-22-0 and '-23-0) were created.

A detailed description of the added equipment is included in the equipment description.

CRE is a major source for VOCs but has not yet been issued a Title V PTO. An application to comply with Rule 2520 - Federally Mandated Operating Permits has already been submitted to the District. Therefore, no action is required at this time.

Installation of the new tanks results in an increase in fugitive emissions triggering a Federal Major Modification. BACT, offsets, and public notice are required.

Current PTO S-6974-1-4 is included in **Attachment I**.

II. Applicable Rules

Rule 2020 Exemptions (12/18/14)

Rule 2201 New and Modified Stationary Source Review Rule (04/21/11)

Rule 2520 Federally Mandated Operating Permits (6/21/01)

Rule 4001 New Source Performance Standards (4/14/99)

- Subpart Kb Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984
- Subpart VVa Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry
- Subpart NNN Standards of Performance for VOC Emissions From SOCMI Distillation Operations
- Subpart RRR Standards of Performance for VOC Emissions from the SOCMI Reactor Processes

Rule 4101 Visible Emissions (2/17/05)

Rule 4102 Nuisance (12/17/92)

Rule 4455 Components at Petroleum Refineries, Gas Liquids Processing Facilities, and Chemical Plants (4/20/05)

Rule 4623 Storage of Organic Liquids (5/19/05)

CH&SC 41700 Health Risk Assessment

CH&SC 42301.6 School Notice

Public Resources Code 21000-21177: California Environmental Quality Act (CEQA)

CCR, Title 14, Division 6, Chapter 3, Sections 15000-15387: CEQA Guidelines

III. Project Location

The existing biodiesel production facility is located at 17731 Millux Road in Bakersfield, California (Section 2, Township 32S, Range 26E). The facility is not within 1,000 feet of a K-12 school.

IV. Process Description

CRE is in the business of biodiesel production. The biodiesel plant is designed to process a variety of feedstocks including refined vegetable oils (such as soy and canola), used cooking oil (UCO), animal fats, and crude corn oil from ethanol plants, to produce ASTM specification biodiesel and crude glycerin, and to reclaim methanol.

With this project, CRE is proposing to add a new biodiesel wash system, and a new glycerin purification system. These new systems are described below.

New Biodiesel Wash System S-6971-22

Biodiesel (along with water, trace methanol, and other impurities) will be sent from existing post-transesterification surge tank V-360 to new mixer/settler water wash system. Here, biodiesel will be water washed further to remove all contaminants. Biodiesel from the first stage mixer settler will be sent to the second stage mixer settler. After the second stage mixer

settler, the biodiesel will be sent to the existing filtration system. Water/methanol that is separated from the biodiesel will either be recycled or sent to existing methanol column for further recovery.

The new equipment associated with this system is listed below:

- V-1300 First-Stage Mixer
- S-1310 First-Stage Settler
- V-1320 Post-Settler Collection Vessel
- V-1330 Second-Stage Mixer
- S-1340 Second-Stage Settler
- V-1350 Post-Settler Collection Vessel

New Glycerin Purification System S-6971-23

Methanol, water and free fatty acids (FFAs) from the existing acid esterification (AE) reactors, along with the glycerin phase stream (including glycerin, methyl ester, methanol, and water) from the existing transesterification (TE) reactors, will be sent to the new glycerin purification system. This system will separate out the FFAs (which will be recycled to the process), neutralize the catalysts, remove salts from the glycerin-methanol phase and purified glycerin. The new equipment associated with this system is listed below:

- V-1500 Glycerin Phase Collecting Tank
- V-1510 Acidic Water phase buffer tank
- V-1520 Acidification Tank
- C-1530 Centrifuge
- D-1550 Dryer
- V-1560 FFA Buffer Tank
- V-1570 Neutralization Tank
- S-1580 Settling Tank
- S-1590 Settling Tank

Note that the new dryer will be heated using steam from existing boiler S-6971-15 and/or steam generators '-6 and '-7. Therefore, there are no combustion emissions associated with the new dryer. All the new equipment will be nitrogen blanketed and connected to existing vapor incinerator identified on S-6971-1.

Proposed Modification

Existing permit S-6971-1 will be revised to list the new equipment as sharing the gas blanketing/vapor control system. Additionally, CRE is requesting to change permit S-6971-1 Condition 9 to reference permit S-1385-42 instead of permit S-1388-12 (permit S-1388-12 no longer exists).

Permit Exempt Equipment

Applicant also proposes to install a new 6,000 gallon sodium hydroxide tank and a new 26,540 gallon vegetable oil tank, both of which will not be connected to vapor control, and are permit exempt as explained in the Compliance Section below.

A process diagram is included in **Attachment II**.

V. Equipment Listing

Pre-Project Equipment Description

S-6971-1-4: 142,800 GALLON FIXED ROOF METHANOL STORAGE TANK AND ACCOMPANYING UNLOADING OPERATION SERVED BY A GAS BLANKETING/VAPOR CONTROL SYSTEM SHARED WITH TANKS S-6971-16 THROUGH '-21 AND DISCHARGING TO VAPOR SURGE VESSEL (V-300) AND VAPOR INCINERATOR LISTED ON S-1385-42

Proposed Modification:

S-6971-1-5: *MODIFICATION OF* 142,800 GALLON FIXED ROOF METHANOL STORAGE TANK AND ACCOMPANYING UNLOADING OPERATION SERVED BY A GAS BLANKETING/VAPOR CONTROL SYSTEM SHARED WITH TANKS S-6971-16 THROUGH '-21 AND DISCHARGING TO VAPOR SURGE VESSEL (V-300) AND VAPOR INCINERATOR LISTED ON S-1385-42: *ALLOW CONNECTION OF PERMITS S-6971-22 THROUGH '-34 TO THE VAPOR CONTROL SYSTEM AND CHANGE CONDITION 9 TO REFERENCE PERMIT S-1385-42 INSTEAD OF PERMIT S-1388-12.*

Post Project Equipment Description:

S-6971-1-5: 142,800 GALLON FIXED ROOF METHANOL STORAGE TANK AND ACCOMPANYING UNLOADING OPERATION SERVED BY A GAS BLANKETING/VAPOR CONTROL SYSTEM SHARED WITH PERMITS S-6971-16 THROUGH '-34 AND DISCHARGING TO VAPOR SURGE VESSEL (V-300) AND VAPOR INCINERATOR LISTED ON S-1385-42

S-6971-22-0: BIODIESEL WASH SYSTEM CONSISTING OF 2,024 GALLON MIXER (V-1300), 5,924 GALLON SETTLER (S-1310) AND ASSOCIATED 79 GALLON VESSEL (V-1320), 2,024 GALLON MIXER (V-1330), AND 5,924 GALLON SETTLER (S-1340) AND ASSOCIATED 79 GALLON VESSEL (V-1350), ALL SERVED BY THE GAS BLANKETING/VAPOR CONTROL SYSTEM LISTED ON S-6971-1

S-6971-23-0: GLYCERIN PURIFICATION SYSTEM CONSISTING OF 17,535 GALLON GLYCERIN PHASE COLLECTING TANK (V-1500), 4,073 GALLON BUFFER TANK (V-1510), 4,931 GALLON ACIDIFICATION TANK (V-1520), 83.5 HP CENTRIFUGE (C-1530) AND DRYER (D-1550), 5,064 GALLON BUFFER TANK (V-1560), 3,949 GALLON NEUTRALIZATION TANK (V-1570), 3,998 GALLON SETTLING TANK (S-1580), AND 1,424 GALLON SETTLING TANK (S-1590) ALL SERVED BY THE GAS BLANKETING/VAPOR CONTROL SYSTEM LISTED ON S-6971-1

VI. Emission Control Technology Evaluation

The gas blanketing/vapor control system listed on permit S-6971-1 will reduce VOC emissions by 95% or greater.

VII. General Calculations

A. Assumptions

- Operation 24 hr/day, 365 days/yr
- S-6971-1: Connection of the new process vessels to the vapor control system is not a NSR modification of S-6971-1 according to District FYI 111 Category 11. Therefore, only PE2 will be restated for S-6971-1. No change in S-6971-1 emissions is proposed.
- S-6971-22-0 and '-23-0: The only emissions associated with these permits are fugitive VOC emissions. Component counts used in the emissions calculations and the fugitive emissions calculations are included in **Attachment III.**

B. Emission Factors

Fugitive emissions factors were obtained from EPA document Protocol for Equipment Leak Emission Rates, EPA-453/R-95-017, Nov 1995, Table 2-1, "SOCMI Average Fugitive Emissions Factors." The controlled emissions are obtained by multiplying the emissions factors by LDAR control efficiencies provided in Table 5-2 of EPA-453/R-95-017 for HON. The LDAR control efficiencies provided in Table 5-2 of EPA-453/R-95-017 for HON are higher than the LDAR control efficiencies based monthly monitoring with a leak definition of 10,000 ppmv. To validate use of the higher control efficiencies, the leak standard of 500 ppmv has been supplanted by 100 ppmv for valves and 500 ppmv for pumps and compressors.

USEPA's Protocol for Equipment Emission Estimates Table 2-1 SOCMI Average factors and HON LDAR Control Efficiencies in Table 5-2 – EPA-453/R-95-017

	Emission factor (kg/hr/source)	HON LDAR Control %
Light liquid valves	**0.00403**	**88**
Light liquid pumps	**0.0199**	**75**
Compressors	**0.228**	**75***
Connectors	**0.00183**	**93**
Open Ended Lines	**0.0017**	**100****
Pressure Relief Valves***	**0.104**	**92*****

* assumed to be equal to the control efficiency of pumps
** HON requires use of double valves or caps on all open-ended lines
*** assumed to be equal to gas valves

C. Calculations

1. Pre-Project Potential to Emit (PE1)

The process vessels included in S-6971-22 and '-23 are new and therefore PE1 = 0.

2. Post Project Potential to Emit (PE2)

S-6791-1

VOCs: 9.3 lb/day, 3299 lb/yr

Biodiesel Wash System (S-6971-22)

Permit Unit	VOC - Daily PE2 (lb/day)	VOC - Annual PE2 (lb/Year)
V-1300	0.9	337
S-1310 and V-1320	1.8	660
V-1330	1.0	354
V-1340	1.9	701
Total	5.6	2,052

Glycerin Purification System (S-6971-23)

Permit Unit	VOC - Daily PE2 (lb/day)	VOC - Annual PE2 (lb/Year)
V-1500	1.5	539
V-1510	1.0	370
V-1520	2.0	729
C-1530, D-1550	2.1	783
V-1560	1.2	430
V-1570	1.9	692
S-1580	3.9	1417
S-1590	1.8	669
Total	15.4	5,629

Greenhouse Gas (GHG) Emissions

The chemicals processed by the new equipment are not GHGs. Therefore no increase in GHG is expected.

Emissions Profiles are included in **Attachment IV**.

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

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

The Pre-Project Stationary Source Potential to Emit (SSPE1) is based on project #1134522 (the latest ATC project in PAS) and summarized below:

SSPE1 (lb/year)					
	NO_X	SO_X	PM_{10}	CO	VOC
S-6971-1-4	0	0	0	0	3,299
S-6971-5-0	0	0	0	0	416
S-6971-6-2	742	192	155	2,496	364
S-6971-7-2	742	192	155	2,496	364
S-6971-8-0	0	0	0	0	183
S-6971-9-0	0	0	0	0	0
S-6971-10-0	0	0	0	0	0
S-6971-11-1	0	0	0	0	16,017
S-6971-12-1	0	0	0	0	2,423
S-6971-13-1	0	0	14,027	0	0
S-6971-14-0	0	0	14,027	0	0
S-6971-15-0	2,292	816	659	10,599	1,547
S-6971-16-0	0	0	0	0	339
S-6971-17-0	0	0	0	0	441
S-6971-18-0	0	0	0	0	563
S-6971-19-0	0	0	0	0	496
S-6971-20-0	0	0	0	0	1493
S-6971-21-0	0	0	0	0	1691
SSPE1	**3,776**	**1,201**	**29,024**	**15,590**	**29,638**

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

Pursuant to Section 4.10 of District Rule 2201, the Post Project Stationary Source Potential to Emit (SSPE2) is the Potential to Emit (PE) from all units with valid Authorities to Construct (ATC) or Permits to Operate (PTO) at the Stationary Source

and the quantity of emission reduction credits (ERC) which have been banked since September 19, 1991 for Actual Emissions Reductions that have occurred at the source, and which have not been used on-site.

The Post Project Stationary Source Potential to Emit (SSPE2) is calculated below.

SSPE2 (lb/year)					
	NO_X	SO_X	PM_{10}	CO	VOC
SSPE1	3,776	1,201	29,024	15,590	29,638
S-6971-22-0	0	0	0	0	2,052
S-6971-23-0	0	0	0	0	5,629
Σ PE2					**7,681**
SSPE2	**3,776**	**1,201**	**29,024**	**15,590**	**37,319**

5. Major Source Determination

a. Rule 2201 Major Source Determination:

Pursuant to Section 3.23 of District Rule 2201, a major source is a stationary source with post-project emissions or a Post Project Stationary Source Potential to Emit (SSPE2), equal to or exceeding one or more of the following threshold values.

Section 3.23.2 specifies, for the purpose of determining major source status, SSPE2 shall not include the quantity of emission reduction credits (ERC) that have been banked since September 19, 1991 for Actual Emissions Reductions that have occurred at the source, and which have not been used on-site. This ERC quantity includes all ERC held as certificates and all emission reduction credits that have been sold or transferred. CRE does not hold any ERC certificates.

Major Source Determination (lb/year)						
	NO_X	SO_X	PM_{10}	$PM_{2.5}$	CO	VOC
SSPE1	3,776	1,201	29,024	29,024	15,590	29,631
SSPE2	3,776	1,201	29,024	29,024	15,590	37,319
Major Source Threshold	20,000	140,000	140,000	200,000	200,000	20,000
Major Source?	No	No	No	No	No	Yes

As seen in the table above, the facility is an existing Major Source for VOC and will continue to be a major source for VOC.

b. Rule 2410 Major Source Determination:

The facility or the equipment evaluated under this project is listed as one of the categories specified in 40 CFR 52.21 (b)(1)(i). Therefore the following PSD Major Source thresholds are applicable.

PSD Major Source Determination (tons/year)						
	NO_2	SO_2	PM	PM_{10}	CO	VOC
Estimated Facility PE before Project Increase	2	1	15	15	8	15
PSD Major Source Thresholds	100	100	100	100	100	100
PSD Major Source ? (Y/N)	NO	NO	NO	NO	NO	NO

As shown above, the facility is not an existing major source for PSD for at least one pollutant. Therefore the facility is not an existing major source for PSD.

6. Baseline Emissions (BE)

BE = Pre-project Potential to Emit for:

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

otherwise,

BE = Historic Actual Emissions (HAE), calculated pursuant to Section 3.22

As shown above, the facility is currently a Major Source for VOC. BE are equal to zero for the new emissions units.

7. SB 288 Major Modification

SB 288 Major Modification is defined in 40 CFR Part 51.165 as "any physical change in or change in the method of operation of a major stationary source that would result in a significant net emissions increase of any pollutant subject to regulation under the Act." Since this facility is a major source for VOCs, the project's PE2 is compared to the SB 288 Major Modification Thresholds in the following table in order to determine if the SB 288 Major Modification calculation is required.

SB 288 Major Modification Thresholds			
Pollutant	Project PE2 (lb/year)	Threshold (lb/year)	SB 288 Major Modification Calculation Required?
NO_x	0	50,000	No
SO_x	0	80,000	No
PM_{10}	0	30,000	No
VOC	7,681	50,000	No

Since none of the SB 288 Major Modification Thresholds are surpassed with this project, this project does not constitute an SB 288 Major Modification.

8. Rule 2201 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.

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

Step 1

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

As shown in Section VII.C.2 above, there is an increase in VOC emissions, therefore this project constitutes a Federal Major Modification, and no further analysis is required.

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

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 equipment evaluated under this project is listed as one of the categories specified in 40 CFR 52.21 (b)(1)(i). Therefore the following PSD Major Source thresholds are applicable.

PSD Major Source Determination: Potential to Emit (tons/year)						
	NO_2	SO_2	PM	PM_{10}	CO	VOC
Total PE from New and Modified Units	0	0	0	0	0	3.8
PSD Major Source threshold	100	100	100	100	100	100
New PSD Major Source?	NO	NO	NO	NO	NO	NO

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 Quarterly Net Emissions Change is used to complete the emission profile screen for the District's PAS database. The QNEC for each pollutant is shown in the table(s) below and reported in the PAS database emissions profile.

The QNEC shall be calculated as follows:

QNEC = (PE2 – BE)/4, where:

QNEC = Quarterly Net Emissions Change for each emissions unit, lb/qtr.
PE2 = Post Project Potential to Emit for each emissions unit, lb/yr.

QNEC (lb/qtr) — S-6971-22-0					
Pollutant	**NO_X**	**SO_X**	**PM_{10}**	**CO**	**VOC**
PE2 (lb/yr)	0	0	0	0	2,052
BE (lb/yr)	0	0	0	0	0
QNEC	0	0	0	0	513

QNEC (lb/qtr) — S-6971-23-0					
Pollutant	**NO_X**	**SO_X**	**PM_{10}**	**CO**	**VOC**
PE2 (lb/yr)	0	0	0	0	5,629
BE (lb/yr)	0	0	0	0	0
QNEC	0	0	0	0	1,407

VIII. Compliance

Rule 2020 Exemptions

Applicant also proposes to install a new 6,000 gallon sodium hydroxide tank and a new 26,540 gallon vegetable oil tank. Vegetable oil has a boiling point that exceeds 302°F. Rule 2020 Section 6.6.5 exempts from permitting the unheated storage of organic material with an initial boiling point of 302°F or greater as measured by test method ASTM D-86. The sodium hydroxide tank will not be a source of VOCs or other regulated air pollutants. Therefore, neither the vegetable oil or sodium hydroxide tanks require a permit.

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 for the following*:

a. Any new emissions unit with a potential to emit exceeding two pounds per day,
b. The relocation from one Stationary Source to another of an existing emissions unit with a potential to emit exceeding two pounds per day,
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 a Major Modification.

*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 of this evaluation, this project includes new emissions units with a PE greater than 2 lb/day for VOC i.e. S-6971-23 (C-1530 and D-1550, S-1580). BACT is triggered for these new emissions units.

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, for relocation of emissions units with PE > 2 lb/day purposes, is not triggered.

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

As seen in Section VII.C.2 of this evaluation, there are no units being modified. Therefore BACT is not triggered for modification purposes.

d. Major Modification

As discussed in Section VII.C.7 above, this project constitutes a Federal Major Modification for VOC. Therefore BACT is triggered for VOC for all emissions units in the project for which there is an emission increase (all emissions units in S-6971-22 and '-23).

2. BACT Guideline – Attachment V

4.12.1 Chemical Plants – Valves and Compressors
4.12.2 Chemical Plants Pump and Compressor Seals

3. Top-Down BACT Analysis – Attachment VI

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.

Pumps and Compressor Seals

VOC: Leak defined as a reading of methane, in excess of 500 ppmv above background and an Inspection and Maintenance Program pursuant to District Rule 4455.

Valves and Flanges

VOC: Leak defined as a reading of methane, in excess of 100 ppmv above background when measured at a distance of one (1) cm from the potential source and an Inspection and Maintenance Program pursuant to District Rule 4455.

B. Offsets

1. Offset Applicability

Pursuant to Section 4.5.3, offset requirements shall be triggered on a pollutant by pollutant basis and shall be required if SSPE2 equals to or exceeds the offset threshold levels in Table 4-1 of Rule 2201.

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

Offset Determination (lb/year)					
	NO_X	SO_X	PM_{10}	CO	VOC
SSPE2	3,776	1,201	29,024	15,590	37,318
Offset Threshold	20,000	54,750	29,200	200,000	20,000
Offsets triggered?	No	No	No	No	YES

2. Quantity of Offsets Required

As seen above, the SSPE2 is greater than the offset thresholds for VOC only; therefore offset calculations will be required for this project.

Per Sections 4.7.2 and 4.7.3, the quantity of offsets in pounds per year for VOC is calculated as follows for sources with an SSPE1 greater than the offset threshold levels before implementing the project being evaluated.

Offsets required (lb/year) = [$\sum$(PE2– BE + ICCE) x DOR]

For all new or modified emissions units in the project, where,

PE2 = Post Project Potential to Emit, (lb/yr)
BE = Baseline Emissions, (lb/yr)
ICCE = Increase in Cargo Carrier Emissions, (lb/yr)
DOR = Distance Offset Ratio, determined pursuant to Section 4.8

BE are evaluated in Section VII.C.6.

The project is a Federal Major Modificationand therefore the distance offset ratio (DOR) will be 1.5.

The emissions units are new and therefore BE = 0

The amount of VOC ERCs that need to be reserved is:

VOC Offsets Required (lb/year)						
	PE2		BE	ICCE	DOR	
	7,681		0	0	1.5	
VOC Offsets Required =	(7,681	-	0	+ 0)	* 1.5 =	**11,522**

To adjust the quarterly amount of offsets required, the fractional amount of offsets required in each quarter will be summed and redistributed to each quarter based on the number of days in each quarter. The redistribution is based on the Quarter 1 having the fewest days and the Quarters 3 and 4 having the most days. The redistribution method is summarized in the following table:

Redistribution of Required Quarterly Offsets (where X is the annual amount of offsets, and X ÷ 4 = Y.z)				
Value of z	Quarter 1	Quarter 2	Quarter 3	Quarter 4
.0	Y	Y	Y	Y
.25	**Y**	**Y**	**Y**	**Y+1**
.5	Y	Y	Y+1	Y+1
.75	Y	Y+1	Y+1	Y+1

Therefore the appropriate quarterly emissions to be offset for new permit units ('-22 and '-23) are as follows:

	PE2	DOR	Annual Offsets	Quarterly Offsets			
				Q1	Q2	Q3	Q4
S-6971-22-0	2052	1.5	3,078	769	769	770	770
S-6971-23-0	5629	1.5	8,444	2,111	2,111	2,111,	2,111
total	7,681		11,522	2,880	2,880	2,881	2,881

CRE plans to use ERC certificate S-4352-1 to offset the increases in VOC emissions associated with this project. The above certificate has available quarterly VOC credits as follows:

	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
ERC # S-4352-1	4,947	5,044	5,138	5,142

As seen above, the facility has sufficient credits to fully offset the quarterly VOC emissions increases associated with this project.

Proposed Rule 2201 (offset) Conditions

S-6971-22-0:

Prior to operating equipment under this Authority to Construct, permittee shall surrender VOC emission reduction credits for the following quantity of emissions: 1st quarter - 769 lb, 2nd quarter -769 lb, 3rd quarter - 770 lb, and fourth quarter -770 lb. These amounts include the applicable offset ratio specified in Rule 2201 Section 4.8 (as amended 4/21/11) for the ERC specified below. [District Rule 2201] N

S-6971-23-0:

Prior to operating equipment under this Authority to Construct, permittee shall surrender VOC emission reduction credits for the following quantity of emissions: 1st quarter – 2,111 lb, 2nd quarter – 2,111 lb, 3rd quarter – 2,111 lb, and fourth quarter – 2,111 lb. These amounts include the applicable offset ratio specified in Rule 2201 Section 4.8 (as amended 4/21/11) for the ERC specified below. [District Rule 2201] N

ERC Certificate Number S-4352-1 (or a certificate split from this certificate) shall be used to supply the required offsets, unless a revised offsetting proposal is received and approved by the District, upon which this Authority to Construct shall be reissued, administratively specifying the new offsetting proposal. Original public noticing requirements, if any, shall be duplicated prior to reissuance of this Authority to Construct. [District Rule 2201] N

Upon surrender of ERCs, permit units S-6971-22-0 and '-23-0 will be fully offset for VOC emissions. CRE requests the following permit condition appear on each permit:

- This permit unit is fully offset for VOC emissions. [District Rule 2201]

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 VII.C.7, this project does constitute a Federal Major Modification; therefore, public noticing for Federal Major Modification purposes is required.

b. PE > 100 lb/day

Applications which include a new emissions unit with a Potential to Emit greater than 100 pounds during any one day for any pollutant will trigger public noticing requirements. 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

As detailed in the Offsets applicability discussion above, the project will not result in the offset thresholds being surpassed; therefore public noticing is not required for offset purposes.

d. SSIPE > 20,000 lb/year

Public notification is required for any permitting action that results in a Stationary Source Increase in Permitted Emissions (SSIPE) of more than 20,000 lb/year of any affected pollutant. According to District policy, the SSIPE is calculated as the Post Project Stationary Source Potential to Emit (SSPE2) minus the Pre-Project Stationary Source Potential to Emit (SSPE1), i.e. SSIPE = SSPE2 – SSPE1. The values for SSPE2 and SSPE1 are calculated according to Rule 2201, Sections 4.9 and 4.10, respectively. The SSIPE is compared to the SSIPE Public Notice thresholds in the following table:

SSIPE (lb/year)					
	NO_X	SO_X	PM_{10}	CO	VOC
SSPE2	3,776	1,201	29,024	15,590	37,318
SSPE1	3,776	1,201	29,024	15,590	29,638
SSIPE	0	0	0	0	7,681
SSIPE Public Notice Threshold	20,000	20,000	20,000	20,000	20,000
Public Notice Required?	No	No	No	No	No

As demonstrated above, the SSIPE for all pollutants were less than 20,000 lb/year; therefore public noticing for SSIPE purposes is not 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. Therefore, public noticing for Title V significant modifications is not required for this project.

2. Public Notice Action

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

D. Daily Emission Limits (DELs)

Daily Emissions Limitations (DELs) and other enforceable conditions are required by Section 3.15 to restrict a unit's maximum daily emissions, to a level at or below the emissions associated with the maximum design capacity. Per Sections 3.15.1 and

3.15.2, the DEL must be contained in the latest ATC and contained in or enforced by the latest PTO and enforceable, in a practicable manner, on a daily basis. DELs are also required to enforce the applicability of BACT.

Proposed Rule 2201 (DEL) Conditions:

S-6971-22-0:

- Fugitive VOC emission rate shall not exceed 5.6 lb/day. [District Rule 2201]

S-6971-23-0:

- Fugitive VOC emission rate shall not exceed 15.4 lb/day. [District Rule 2201]

E. Compliance Assurance

1. Source Testing

Fugitive emission source operations are not subject to startup source testing.

2. Monitoring

Monitoring in the form of a leak detection and repair (LDAR) program will assure leaking components are identified and repaired in a timely manner.

3. Record Keeping

The operator will be required to keep records of all parameters that are required by the Rules 4455 and 4623.

4. Reporting

No reporting is required to demonstrate compliance with Rule 2201.

F. Ambient Air Quality Analysis

Section 4.14 of this Rule requires that an ambient air quality analysis (AAQA) be conducted for the purpose of determining whether a new or modified Stationary Source will cause or make worse a violation of an air quality standard.

There are no AAQ standards for VOCs and therefore an AAQA is not required.

. Compliance Certification

Section 4.15.2 of this Rule requires the owner of a new Major Source or a source undergoing a Title I Modification to demonstrate to the satisfaction of the District that all other Major Sources owned by such person and operating in California are in compliance or are on a schedule for compliance with all applicable emission limitations and standards. As discussed in Section VIII above, this project does constitute a Title I

modification, therefore this requirement is applicable. CRE's compliance certification is included in **Attachment VII**.

H. Alternate Siting Analysis

Alternative siting analysis is required for any project, which constitutes a New Major Source or a Federal Major Modification.

The current project occurs at an existing facility. The applicant proposes to install new equipment at their existing biodiesel production facility. Since the project will provide new equipment to be used at the same location, the existing site will result in the least possible impact from the project. Alternative sites would involve the relocation and/or construction of various support structures on a much greater scale, and would therefore result in a much greater impact.

Rule 2520 Federally Mandated Operating Permits

Pursuant to their current operating permit, this facility is an existing major source; however, the facility has not received their Title V permit. An application to comply with Rule 2520 - Federally Mandated Operating Permits has already been submitted to the District. Therefore, no action is required at this time.

Rule 4001 New Source Performance Standards

40 CFR Part 60, Subpart A, section 14, defines the meaning of modification to which the the standards are applicable. §60.14, paragraph (e)(5) states that the following will not be considered as a modification: *"the addition or use of any system or device whose primary funtion is the reduction of air pollutants, except when an emission control system is removed or replaced by a system which the Administrator determines to be less environmentally beneficial".*

S-6971-1 is existing and no physical changes or emissions increases are proposed to this equipment. The connection of new equipment to the gas blanketing and vapor control system identified on this permit is not considered a modification as described above. Therefore S-6971-1 will not trigger any new NSPS requirements. S-6971-22 through '-33 are new equipment and is therefore potentially subject to NSPS.

40 CFR Part 60, Subpart Kb: Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984

The affected facility to which this subpart applies is each storage vessel with a capacity greater than or equal to 75 cubic meters (19,813 gallons) that is used to store volatile organic liquids (VOL) for which construction, reconstruction, or modification is commenced after July 23, 1984.

None of the new tanks have a capacity greater than 19,813 gallons, therefore this subpart is not applicable.

40 CFR 60, Subpart NNN - Standards of Performance for Volatile Organic Compound (VOC) Emissions From Synthetic Organic Chemical Manufacturing Industry (SOCMI) Distillation Operations, and

40 CFR 60, Subpart RRR - Standards of Performance for Volatile Organic Compound Emissions From Synthetic Organic Chemical Manufacturing Industry (SOCMI) Reactor Processes

Based on the memorandum from Environment Protection Agency (EPA), Washington DC, dated October 07, 1996, and the memorandum from EPA Washington DC, dated September 06, 1998, 40 CFR Part 60 Subpart NNN and Subpart RRR are applicable to facilities involved in synthesis of organic chemicals using petroleum-based feedstocks and not chemicals extracted from natural sources.

CRE is producing biodiesel from vegetable oils, tallow and methanol. The distillation operations and reactor processes at the facility are not subject to the requirements of 40 CFR Part 60, Subpart NNN or Subpart RRR.

40 CFR 60, Subpart VVa - Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry

Pursuant to Section 60.480a(a)(1), *Applicability and Designation of Affected Facility*, the provisions of this subpart apply to affected facilities in the synthetic organic chemicals manufacturing industry. The ATCs include conditions ensuring compliance with the subpart. Continued compliance is expected.

Rule 4101 Visible Emissions

Per Section 5.0, no person shall discharge into the atmosphere emissions of any air contaminant aggregating more than 3 minutes in any hour that is as dark as or darker than Ringelmann 1 (or 20% opacity). The facility consists primarily of fluid-handling processes. Visible emissions are not typical for this source and category of operation. Compliance with this rule is expected.

Rule 4102 Nuisance

Section 4.0 prohibits discharge of air contaminants which could cause injury, detriment, nuisance or annoyance to the public. Public nuisance conditions are not expected as a result of these operations provided the equipment is well maintained. Therefore, compliance with this rule is expected.

Rule 4455 Components at Petroleum Refineries, Gas Liquids Processing Facilities, and Chemical Plants

This rule limits VOC emissions from leaking components at petroleum refineries, gas liquid process facilities and chemical plants, and is applicable to components that contain or contact VOC at such facilities. Rule requirements are included on the new ATCs. Continued compliance is expected.

California Health & Safety Code 41700 (Health Risk Assessment)

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

An HRA is not required for a project with a total facility prioritization score of less than or equal to one. The total facility prioritization score including this project is less than one. Therefore, no further analysis is required to determine the impact from this project and compliance with the District's Risk Management Policy is expected.

The HRA results are included in **Attachment VIII**.

Rule 4623 Storage of Organic Liquids

Section 5.1 requires that an operator shall not place, hold, or store organic liquid in any tank unless such tank is equipped with a VOC control system. This requirement will be satisfied by connecting the new tanks to the existing gas blanket and vapor control system identified on permit S-6971-1.

Pursuant to Section 6.3.1, an operator whose tanks are subject to the requirements of this rule shall keep an accurate record of each organic liquid stored in each tank, including its storage temperature, TVP, and API gravity.

Proposed Conditions for S-6971-22-0 and '-23-0:

All piping, valves, and fittings subject to Rule 4623 shall be constructed and maintained in a leak-free condition. [District Rule 4623] N

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

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

California Health & Safety Code 42301.6 (School Notice)

The District shall verify that this site is not located within 1,000 feet of the outer boundary of a K-12 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 or will prepare an environmental review document for the project. Thus the District is the Lead Agency for this project. The District's engineering evaluation (this document) demonstrates that the project would not result in an increase in project specific greenhouse gas emissions. The District therefore concludes that the project would have a less than cumulatively significant 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. Issue Authorities to Construct S-6971-1-5, '-22-0 and '-23-0. Draft ATCs are included in **Attachment IX**.

X. Billing Information

Annual Permit Fees			
Permit Number	Fee Schedule	Fee Description	Annual Fee
S-6971-5	3020-05-E	142,800 gallons	$ 258.00
S-6971-22	3020-05-B	16,054 gallons	$ 98.00
S-6971-23	3020-01-C	83.5 hp	$ 207.00

Attachments

I: PTO S-6971-1-4
II: Process Diagram
III: Fugitive Emissions Calculations
IV: Emissions Profiles
V: BACT Guidelines
VI: BACT Analysis
VII: Statewide Compliance Statement
VIII: HRA
IX: Draft ATCs

ATTACHMENT I
PTOs S-6971-1-4

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-6971-1-4 **EXPIRATION DATE:** 05/31/2018

EQUIPMENT DESCRIPTION:
142,800 GALLON FIXED ROOF METHANOL STORAGE TANK AND ACCOMPANYING UNLOADING OPERATION SERVED BY A GAS BLANKETING/VAPOR CONTROL SYSTEM SHARED WITH TANKS S-6971-16 THROUGH '-21 AND DISCHARGING TO VAPOR SURGE VESSEL (V-300) AND VAPOR INCINERATOR LISTED ON S-1385-42

PERMIT UNIT REQUIREMENTS

1. All equipment shall be maintained in good operating condition and shall be operated in a manner to minimize emissions of air contaminants into the atmosphere. [District Rule 2201]
2. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
3. For this Class 1 organic liquid transfer facility, the emission of VOC from the transfer operation shall not exceed 0.08 pounds per 1,000 gallons of organic liquid transferred. [District Rule 4624]
4. All liquids and gases from the transfer operation shall be routed to one of the following systems: a vapor collection and control system; a fixed roof container that meets the control requirements specified in Rule 4623 (Storage of Organic Liquids); a floating roof container that meets the control requirements specified in Rule 4623 (Storage of Organic Liquids); or a pressure vessel equipped with an APCO-approved vapor recovery system that meets the control requirements specified in Rule 4623 (Storage of Organic Liquids); or a closed VOC emission control system. [District Rules 4623 and 4624]
5. The operator of an organic liquid transfer facility shall inspect the vapor collection system, the vapor disposal system, and each transfer rack handling organic liquids for leaks during transfer at least once every calendar quarter using the test method prescribed in Section 6.3.8 of Rule 4624. [District Rule 4624]
6. An operator may apply for a written approval from the APCO to change the inspection frequency from quarterly to annually provided no leaks were found during the inspections required under provisions of Sections 5.9.1 and 5.9.2 of Rule 4624 during five consecutive quarterly inspections. Upon identification of any leak during an annual inspection the frequency shall revert back to quarterly and the operator shall contact the APCO in writing within 14 days. [District Rule 4624]
7. All equipment that are found leaking shall be repaired or replaced within 72 hours. If the leaking component cannot be repaired or replaced within 72 hours, the component shall be taken out of service until such time the component is repaired or replaced. The repaired or replacement equipment shall be reinspected the first time the equipment is in operation after the repair or replacement. [District Rule 4624]
8. Operator shall keep records of the throughputs of materials transferred and the results of any required leak inspections. [District Rules 4455 and 4624]
9. The methanol tank shall be equipped with a gas blanketing/vapor control system consisting of a closed vent system that collects all VOCs from the storage tank, and discharges only to vapor surge vessel (VRT-110) or the vapor incinerator listed on permit S-1388-12. Vapor incinerator listed on S-1388-12 shall be operated to reduce VOC emissions by 95% or greater. The gas blanketing/vapor control system shall not have any gas leaks in excess of 10,000 ppmv above background, as measured by a portable hydrocarbon detection instrument in accordance with the procedures specified in EPA Test Method 21. A reading in excess of 10,000 ppmv above background is a violation of this permit and Rule 4623. [District Rules 2201 and 4623 and 40 CFR 60.112b(a)(3)(ii)]

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

10. Upon detection of any leak >10,000 ppmv above background, the operator shall eliminate the leak within 8 hours after detection, or if the leak can not be eliminated, then minimize the leak to the lowest possible level within 8 hours after detection by using best maintenance practices and eliminate the leak within 48 hours after minimization. In no event shall the total time to eliminate the leak exceed 56 hours after detection. [District Rule 2201 and 4623 and 40 CFR 60.112b(a)(3)(i)]

11. If any of the tank or gas blanketing/vapor control system components are found with detectable leaks >100 ppmv and < 10,000 ppmv above background for valves and connectors and >500 ppmv and < 10,000 ppmv above background for pump and compressor seals, as measured by a portable hydrocarbon detection instrument in accordance with the procedures specified in EPA Test Method 21 , operator shall immediately affix a tag and maintain records of gas leak detection readings, date/time leak was discovered, and date/time the component was repaired to a leak-free condition. [District Rules 2201 and 40 CFR 60.112b(a)(3)(i)]

12. Storage tank or gas blanketing/vapor control system components with detectable leaks >100 ppmv and < 10,000 ppmv above background for valves and connectors and >500 ppmv and < 10,000 ppmv above background for pump and compressor seals shall be repaired pursuant to the requirements and schedule established in Rule 4455. [District Rule 2201 and 40 CFR 60.112b(a)(3)(i)]

13. Except for spillage emissions resulting from liquid line disconnections, VOC emission rate from unloading operations and methanol storage tank shall not exceed 9.0 lb/day based on component count and emission factors from EPA document Protocol for Equipment Leak Emission Rates, Table 2-1, SOCMI Average Emissions Factors with LDAR control efficiencies provided in Table 5-2 of EPA-453/R-95-017 for HON (88% light liquid valves, 75% light liquid pump and compressor seals, 93% connectors, 0% open ended lines, and 92% pressure relief valves). Permittee shall maintain with the permit an accurate fugitive component counts of vapor and condensate handling equipment and resulting emissions calculated using above specified leak rates and control efficiencies. [District Rule 2201]

14. Total VOC emissions from liquid line disconnections during unloading shall not exceed 0.3 lb/day and 14 lb/year. [District Rule 2201]

15. Maximum number of liquid line disconnections shall not exceed 18/day and 823/year. [District Rule 2201]

16. The maximum volume of methanol spilled during each disconnection shall not exceed 10 milliliters. [District Rule 2201]

17. All piping, fittings, and valves directly affixed to the tank or associated with the tank gas blanketing/vapor control system shall be inspected annually by the facility operator in accordance with EPA Method 21, with the instrument calibrated with methane, to ensure compliance with the provisions of this permit. [District Rules 2201, 4623 and 40 CFR 60.112b(a)(3)(i)]

18. If a component type for a given tank is found to leak at a rate >10,000 ppmv above background during an annual inspection, then quarterly inspections of that component type on the tank or system shall be conducted for four consecutive quarters. After four successful quarterly inspections in which the component type is found to leak less than 10,000 ppmv, inspections interval may revert to annual. [District Rule 2201 and 4623 and 40 CFR 60.112b(a)(3)(i)]

19. The operator shall keep a copy of an APCO-approved fugitive component Operator Management Plan (OMP) at the facility. The plan shall conform to the requirements set forth in Rule 4455 and shall be made available to the APCO, ARB and US EPA upon request. 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 Rules 2201, 4455 and 4623 and 40 CFR 60.113b(c)(1)(i) and (ii) and 40 CRF 60.115b(c)(1)]

20. 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 4455 for all components containing or contacting VOC at the this gas liquids processing facility, except for those components specifically exempted in Sections 4.1 and 4.2. [District Rules 2201 and 4455 and 40 CFR 60.113b(c)(1)(i) and (ii)]

21. Operator shall notify the Administrator of the actual date of initial startup postmarked within 15 days after such date. [40 CFR 60.7 (a)(3]

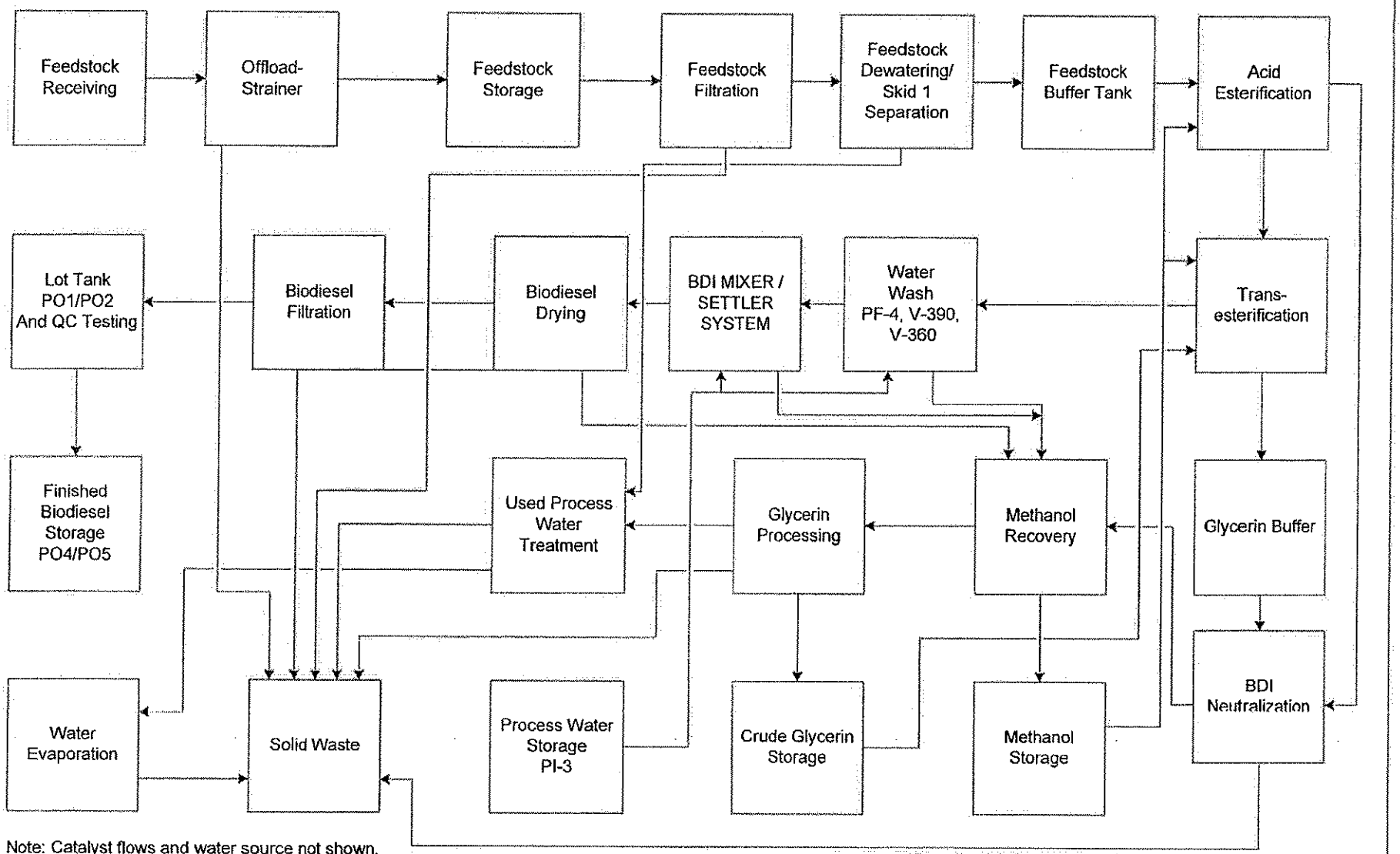
PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

22. Operator shall notify the Administrator of the date construction is commenced postmarked no later than 30 days after such date. Notification shall include the Operating Plan. [40 CFR 60.113b(c)(1) and 60.7 (a)(1]
23. Permittee shall comply with all notification and recordkeeping requirements of 40 CFR Part 60.7. [40 CFR 60.7]
24. Daily and annual records shall be kept of the number of unloading rack disconnects. [District Rule 2201]
25. All records required by this permit shall be retained for a minimum period of 5 years and shall be made available to the APCO, ARB and US EPA upon request. [District Rule 2201 and 4623 and CFR 60.115b(c)(2)]

ATTACHMENT II
Process Diagram

Process Block Flow Diagram Batch Operation 05-19-15

CRIMSON
RENEWABLE ENERGY, LP



Note: Catalyst flows and water source not shown.

ATTACHMENT III
Fugitive Emissions Calculations

1-23

Crimson Renewable Energy

S-6971-22-0

2,024 gallon mixer (V-1300) w/ TVR

Fugitive Emissions Using Average Emission Factors

EPA Protocol for Equipment Leak Emission Estimate

Table 2-1. SOCMI AVERAGE EMISSION FACTORS

With Hazardous Organic NESHAP (HON) Leak Detection and Repair Program (LDAR) Control Efficiency from Tables 5-1 and 5-2

Equipment Type	Service	Screening Value EF - TOC (kg/hr/source)	Screening Value EF - TOC (lb/day/source)	Component Count	HON-LDAR Contol Efficiency (%)	VOC emissions (lb/day)
Valves	Gas	0.00597	0.31588	2	92	0.05
	Light Liquid	0.00403	0.21323	4	88	0.10
	Heavy Liquid	0.00023	0.01217	0	88	0.00
Pump Seals	Light Liquid	0.01990	1.05293	1	75	0.26
	Heavy Liquid	0.00862	0.45609	0	75	0.00
Compressor Seals	Gas	0.22800	12.06369	0	75	0.00
PRVs	Gas	0.10400	5.50274	1	92	0.44
Connectors	All	0.00183	0.09683	10	93	0.07
Open-ended Lines	All	0.00170	0.08995	0	0	0.00
Sampling Connections	All	0.01500	0.79366	0	100	0.00

Total Fugitive Component VOC Emissions = 0.9 lb/day

= 337 lb/year

1-22

Crimson Renewable Energy

~~S-6971-23-0~~

5,924 gallon settler (S-1310) and associated 79 gallon vessel (V-1320), w/ TVR

Fugitive Emissions Using Average Emission Factors

EPA Protocol for Equipment Leak Emission Estimate

Table 2-1. SOCMI AVERAGE EMISSION FACTORS

With Hazardous Organic NESHAP (HON) Leak Detection and Repair Program (LDAR) Control Efficiency from Tables 5-1 and 5-2

Equipment Type	Service	Screening Value EF - TOC (kg/hr/source)	Screening Value EF - TOC (lb/day/source)	Component Count	HON-LDAR Contol Efficiency (%)	VOC emissions (lb/day)
Valves	Gas	0.00597	0.31588	4	92	0.10
	Light Liquid	0.00403	0.21323	8	88	0.20
	Heavy Liquid	0.00023	0.01217	0	88	0.00
Pump Seals	Light Liquid	0.01990	1.05293	2	75	0.53
	Heavy Liquid	0.00862	0.45609	0	75	0.00
Compressor Seals	Gas	0.22800	12.06369	0	75	0.00
PRVs	Gas	0.10400	5.50274	2	92	0.88
Connectors	All	0.00183	0.09683	14	93	0.09
Open-ended Lines	All	0.00170	0.08995	0	0	0.00
Sampling Connections	All	0.01500	0.79366	0	100	0.00

Total Fugitive Component VOC Emissions = 1.8 lb/day

= 660 lb/year

1-22

Crimson Renewable Energy

~~S-6971-24-0~~

2,024 gallon mixer (V-1330) w/ TVR

Fugitive Emissions Using Average Emission Factors

EPA Protocol for Equipment Leak Emission Estimate

Table 2-1. SOCMI AVERAGE EMISSION FACTORS

With Hazardous Organic NESHAP (HON) Leak Detection and Repair Program (LDAR) Control Efficiency from Tables 5-1 and 5-2

Equipment Type	Service	Screening Value EF - TOC (kg/hr/source)	Screening Value EF - TOC (lb/day/source)	Component Count	HON-LDAR Contol Efficiency (%)	VOC emissions (lb/day)
Valves	Gas	0.00597	0.31588	2	92	0.05
	Light Liquid	0.00403	0.21323	6	88	0.15
	Heavy Liquid	0.00023	0.01217	0	88	0.00
Pump Seals	Light Liquid	0.01990	1.05293	1	75	0.26
	Heavy Liquid	0.00862	0.45609	0	75	0.00
Compressor Seals	Gas	0.22800	12.06369	0	75	0.00
PRVs	Gas	0.10400	5.50274	1	92	0.44
Connectors	All	0.00183	0.09683	9	93	0.06
Open-ended Lines	All	0.00170	0.08995	0	0	0.00
Sampling Connections	All	0.01500	0.79366	0	100	0.00

Total Fugitive Component VOC Emissions = 1.0 lb/day

= 354 lb/year

Crimson Renewable Energy

~~S-6971-25-0~~

1-22

5,924 gallon settler (S-1340) and associated 79 gallon vessel (V-1350), w/ TVR

Fugitive Emissions Using Average Emission Factors

EPA Protocol for Equipment Leak Emission Estimate

Table 2-1. SOCMI AVERAGE EMISSION FACTORS

With Hazardous Organic NESHAP (HON) Leak Detection and Repair Program (LDAR) Control Efficiency from Tables 5-1 and 5-2

Equipment Type	Service	Screening Value EF - TOC (kg/hr/source)	Screening Value EF - TOC (lb/day/source)	Component Count	HON-LDAR Contol Efficiency (%)	VOC emissions (lb/day)
Valves	Gas	0.00597	0.31588	6	92	0.15
	Light Liquid	0.00403	0.21323	12	88	0.31
	Heavy Liquid	0.00023	0.01217	0	88	0.00
Pump Seals	Light Liquid	0.01990	1.05293	2	75	0.53
	Heavy Liquid	0.00862	0.45609	0	75	0.00
Compressor Seals	Gas	0.22800	12.06369	0	75	0.00
PRVs	Gas	0.10400	5.50274	2	92	0.88
Connectors	All	0.00183	0.09683	8	93	0.05
Open-ended Lines	All	0.00170	0.08995	0	0	0.00
Sampling Connections	All	0.01500	0.79366	0	100	0.00

Total Fugitive Component VOC Emissions = 1.9 lb/day

= 701 lb/year

1-23

Crimson Renewable Energy

~~S-697-1-26-0~~

17,535 gallon glycerin phase collecting tank (V-1500) w/ TVR

Fugitive Emissions Using Average Emission Factors

EPA Protocol for Equipment Leak Emission Estimate

Table 2-1. SOCMI AVERAGE EMISSION FACTORS

With Hazardous Organic NESHAP (HON) Leak Detection and Repair Program (LDAR) Control Efficiency from Tables 5-1 and 5-2

Equipment Type	Service	Screening Value EF - TOC (kg/hr/source)	Screening Value EF - TOC (lb/day/source)	Component Count	HON-LDAR Contol Efficiency (%)	VOC emissions (lb/day)
Valves	Gas	0.00597	0.31588	3	92	0.08
	Light Liquid	0.00403	0.21323	13	88	0.33
	Heavy Liquid	0.00023	0.01217	0	88	0.00
Pump Seals	Light Liquid	0.01990	1.05293	2	75	0.53
	Heavy Liquid	0.00862	0.45609	0	75	0.00
Compressor Seals	Gas	0.22800	12.06369	0	75	0.00
PRVs	Gas	0.10400	5.50274	1	92	0.44
Connectors	All	0.00183	0.09683	15	93	0.10
Open-ended Lines	All	0.00170	0.08995	0	0	0.00
Sampling Connections	All	0.01500	0.79366	0	100	0.00

Total Fugitive Component VOC Emissions = 1.5 lb/day

= 539 lb/year

1-23

Crimson Renewable Energy

~~S-6071-27-0~~

4,073 gallon buffer tank (V-1510) w/ TVR

Fugitive Emissions Using Average Emission Factors

EPA Protocol for Equipment Leak Emission Estimate

Table 2-1. SOCMI AVERAGE EMISSION FACTORS

With Hazardous Organic NESHAP (HON) Leak Detection and Repair Program (LDAR) Control Efficiency from Tables 5-1 and 5-2

Equipment Type	Service	Screening Value EF - TOC (kg/hr/source)	Screening Value EF - TOC (lb/day/source)	Component Count	HON-LDAR Contol Efficiency (%)	VOC emissions (lb/day)
Valves	Gas	0.00597	0.31588	3	92	0.08
	Light Liquid	0.00403	0.21323	7	88	0.18
	Heavy Liquid	0.00023	0.01217	0	88	0.00
Pump Seals	Light Liquid	0.01990	1.05293	1	75	0.26
	Heavy Liquid	0.00862	0.45609	0	75	0.00
Compressor Seals	Gas	0.22800	12.06369	0	75	0.00
PRVs	Gas	0.10400	5.50274	1	92	0.44
Connectors	All	0.00183	0.09683	8	93	0.05
Open-ended Lines	All	0.00170	0.08995	0	0	0.00
Sampling Connections	All	0.01500	0.79366	0	100	0.00

Total Fugitive Component VOC Emissions = 1.0 lb/day

= 370 lb/year

1-23

Crimson Renewable Energy

~~S-6971-26-0~~

4,931 gallon acidification tank (V-1520) w/ TVR

Fugitive Emissions Using Average Emission Factors

EPA Protocol for Equipment Leak Emission Estimate

Table 2-1. SOCMI AVERAGE EMISSION FACTORS

With Hazardous Organic NESHAP (HON) Leak Detection and Repair Program (LDAR) Control Efficiency from Tables 5-1 and 5-2

Equipment Type	Service	Screening Value EF - TOC (kg/hr/source)	Screening Value EF - TOC (lb/day/source)	Component Count	HON-LDAR Contol Efficiency (%)	VOC emissions (lb/day)
Valves	Gas	0.00597	0.31588	6	92	0.15
	Light Liquid	0.00403	0.21323	14	88	0.36
	Heavy Liquid	0.00023	0.01217	0	88	0.00
Pump Seals	Light Liquid	0.01990	1.05293	2	75	0.53
	Heavy Liquid	0.00862	0.45609	0	75	0.00
Compressor Seals	Gas	0.22800	12.06369	0	75	0.00
PRVs	Gas	0.10400	5.50274	2	92	0.88
Connectors	All	0.00183	0.09683	12	93	0.08
Open-ended Lines	All	0.00170	0.08995	0	0	0.00
Sampling Connections	All	0.01500	0.79366	0	100	0.00

Total Fugitive Component VOC Emissions = 2.0 lb/day

= 729 lb/year

1-23

Crimson Renewable Energy

~~S-6971-29-0~~

83.5 HP centrifuge (C-1530) and dryer (D-1550 w/ TVR

Fugitive Emissions Using Average Emission Factors

EPA Protocol for Equipment Leak Emission Estimate

Table 2-1. SOCMI AVERAGE EMISSION FACTORS

With Hazardous Organic NESHAP (HON) Leak Detection and Repair Program (LDAR) Control Efficiency from Tables 5-1 and 5-2

Equipment Type	Service	Screening Value EF - TOC (kg/hr/source)	Screening Value EF - TOC (lb/day/source)	Component Count	HON-LDAR Contol Efficiency (%)	VOC emissions (lb/day)
Valves	Gas	0.00597	0.31588	8	92	0.20
	Light Liquid	0.00403	0.21323	17	88	0.43
	Heavy Liquid	0.00023	0.01217	0	88	0.00
Pump Seals	Light Liquid	0.01990	1.05293	2	75	0.53
	Heavy Liquid	0.00862	0.45609	0	75	0.00
Compressor Seals	Gas	0.22800	12.06369	0	75	0.00
PRVs	Gas	0.10400	5.50274	2	92	0.88
Connectors	All	0.00183	0.09683	15	93	0.10
Open-ended Lines	All	0.00170	0.08995	0	0	0.00
Sampling Connections	All	0.01500	0.79366	0	100	0.00

Total Fugitive Component VOC Emissions = 2.1 lb/day

= 783 lb/year

Crimson Renewable Energy

~~S-6971-30-0~~

5,064 gallon buffer tank (V-1560) w/ TVR

L-23

Fugitive Emissions Using Average Emission Factors

EPA Protocol for Equipment Leak Emission Estimate

Table 2-1. SOCMI AVERAGE EMISSION FACTORS

With Hazardous Organic NESHAP (HON) Leak Detection and Repair Program (LDAR) Control Efficiency from Tables 5-1 and 5-2

Equipment Type	Service	Screening Value EF - TOC (kg/hr/source)	Screening Value EF - TOC (lb/day/source)	Component Count	HON-LDAR Contol Efficiency (%)	VOC emissions (lb/day)
Valves	Gas	0.00597	0.31588	4	92	0.10
	Light Liquid	0.00403	0.21323	12	88	0.31
	Heavy Liquid	0.00023	0.01217	0	88	0.00
Pump Seals	Light Liquid	0.01990	1.05293	1	75	0.26
	Heavy Liquid	0.00862	0.45609	0	75	0.00
Compressor Seals	Gas	0.22800	12.06369	0	75	0.00
PRVs	Gas	0.10400	5.50274	1	92	0.44
Connectors	All	0.00183	0.09683	10	93	0.07
Open-ended Lines	All	0.00170	0.08995	0	0	0.00
Sampling Connections	All	0.01500	0.79366	0	100	0.00

Total Fugitive Component VOC Emissions = 1.2 lb/day

= 430 lb/year

L-23

Crimson Renewable Energy

~~S-6971-31-0~~

3,949 gallon neutralization tank (V-1570) w/ TVR

Fugitive Emissions Using Average Emission Factors

EPA Protocol for Equipment Leak Emission Estimate

Table 2-1. SOCMI AVERAGE EMISSION FACTORS

With Hazardous Organic NESHAP (HON) Leak Detection and Repair Program (LDAR) Control Efficiency from Tables 5-1 and 5-2

Equipment Type	Service	Screening Value EF - TOC (kg/hr/source)	Screening Value EF - TOC (lb/day/source)	Component Count	HON-LDAR Contol Efficiency (%)	VOC emissions (lb/day)
Valves	Gas	0.00597	0.31588	4	92	0.10
	Light Liquid	0.00403	0.21323	12	88	0.31
	Heavy Liquid	0.00023	0.01217	0	88	0.00
Pump Seals	Light Liquid	0.01990	1.05293	2	75	0.53
	Heavy Liquid	0.00862	0.45609	0	75	0.00
Compressor Seals	Gas	0.22800	12.06369	0	75	0.00
PRVs	Gas	0.10400	5.50274	2	92	0.88
Connectors	All	0.00183	0.09683	12	93	0.08
Open-ended Lines	All	0.00170	0.08995	0	0	0.00
Sampling Connections	All	0.01500	0.79366	0	100	0.00

Total Fugitive Component VOC Emissions = 1.9 lb/day

= 692 lb/year

Crimson Renewable Energy

~~S-6974-32-0~~

3,998 gallon settling tank (S-1580) w/ TVR

1 of 23

Fugitive Emissions Using Average Emission Factors

EPA Protocol for Equipment Leak Emission Estimate

Table 2-1. SOCMI AVERAGE EMISSION FACTORS

With Hazardous Organic NESHAP (HON) Leak Detection and Repair Program (LDAR) Control Efficiency from Tables 5-1 and 5-2

Equipment Type	Service	Screening Value EF - TOC (kg/hr/source)	Screening Value EF - TOC (lb/day/source)	Component Count	HON-LDAR Contol Efficiency (%)	VOC emissions (lb/day)
Valves	Gas	0.00597	0.31588	4	92	0.10
	Light Liquid	0.00403	0.21323	10	88	0.26
	Heavy Liquid	0.00023	0.01217	0	88	0.00
Pump Seals	Light Liquid	0.01990	1.05293	0	75	0.00
	Heavy Liquid	0.00862	0.45609	0	75	0.00
Compressor Seals	Gas	0.22800	12.06369	1	75	3.02
PRVs	Gas	0.10400	5.50274	1	92	0.44
Connectors	All	0.00183	0.09683	10	93	0.07
Open-ended Lines	All	0.00170	0.08995	0	0	0.00
Sampling Connections	All	0.01500	0.79366	0	100	0.00

Total Fugitive Component VOC Emissions = 3.9 lb/day

= 1,417 lb/year

1-23

Crimson Renewable Energy

~~S-6971-33-0~~

1,424 gallon settling tank (S-1590) w/ TVR

Fugitive Emissions Using Average Emission Factors

EPA Protocol for Equipment Leak Emission Estimate

Table 2-1. SOCMI AVERAGE EMISSION FACTORS

With Hazardous Organic NESHAP (HON) Leak Detection and Repair Program (LDAR) Control Efficiency from Tables 5-1 and 5-2

Equipment Type	Service	Screening Value EF - TOC (kg/hr/source)	(lb/day/source)	Component Count	HON-LDAR Contol Efficiency (%)	VOC emissions (lb/day)
Valves	Gas	0.00597	0.31588	6	92	0.15
	Light Liquid	0.00403	0.21323	34	88	0.87
	Heavy Liquid	0.00023	0.01217	0	88	0.00
Pump Seals	Light Liquid	0.01990	1.05293	1	75	0.26
	Heavy Liquid	0.00862	0.45609	0	75	0.00
Compressor Seals	Gas	0.22800	12.06369	0	75	0.00
PRVs	Gas	0.10400	5.50274	1	92	0.44
Connectors	All	0.00183	0.09683	16	93	0.11
Open-ended Lines	All	0.00170	0.08995	0	0	0.00
Sampling Connections	All	0.01500	0.79366	0	100	0.00

Total Fugitive Component VOC Emissions = 1.8 lb/day

= 669 lb/year

ATTACHMENT IV
Emissions Profiles

Application Emissions

Permit #: S-6971-1-6	Last Updated
Facility: CRIMSON RENEWABLE ENERGY, LP	08/01/2015 EDGEHILR

Equipment Pre-Baselined: NO

	NOX	SOX	PM10	CO	VOC
Potential to Emit (lb/Yr):	0.0	0.0	0.0	0.0	3299.0
Daily Emis. Limit (lb/Day)	0.0	0.0	0.0	0.0	9.3
Quarterly Net Emissions Change (lb/Qtr)					
Q1:	0.0	0.0	0.0	0.0	0.0
Q2:	0.0	0.0	0.0	0.0	0.0
Q3:	0.0	0.0	0.0	0.0	0.0
Q4:	0.0	0.0	0.0	0.0	0.0
Check if offsets are triggered but exemption applies	N	N	N	N	N
Offset Ratio					
Quarterly Offset Amounts (lb/Qtr)					
Q1:					
Q2:					
Q3:					
Q4:					

Application Emissions

Permit #: S-6971-22-0	Last Updated
Facility: CRIMSON RENEWABLE ENERGY, LP	08/12/2015 EDGEHILR

Equipment Pre-Baselined: NO

	NOX	SOX	PM10	CO	VOC
Potential to Emit (lb/Yr):	0.0	0.0	0.0	0.0	2052.0
Daily Emis. Limit (lb/Day)	0.0	0.0	0.0	0.0	5.6
Quarterly Net Emissions Change (lb/Qtr)					
Q1:	0.0	0.0	0.0	0.0	513.0
Q2:	0.0	0.0	0.0	0.0	513.0
Q3:	0.0	0.0	0.0	0.0	513.0
Q4:	0.0	0.0	0.0	0.0	513.0
Check if offsets are triggered but exemption applies	N	N	N	N	N
Offset Ratio					1.5
Quarterly Offset Amounts (lb/Qtr)					
Q1:					769.0
Q2:					769.0
Q3:					770.0
Q4:					770.0

Application Emissions

Permit #: S-6971-23-0	Last Updated
Facility: CRIMSON RENEWABLE ENERGY, LP	08/12/2015 EDGEHILR

Equipment Pre-Baselined: NO

	NOX	SOX	PM10	CO	VOC
Potential to Emit (lb/Yr):	0.0	0.0	0.0	0.0	5629.0
Daily Emis. Limit (lb/Day)	0.0	0.0	0.0	0.0	15.4
Quarterly Net Emissions Change (lb/Qtr)					
Q1:	0.0	0.0	0.0	0.0	1407.0
Q2:	0.0	0.0	0.0	0.0	1407.0
Q3:	0.0	0.0	0.0	0.0	1407.0
Q4:	0.0	0.0	0.0	0.0	1408.0
Check if offsets are triggered but exemption applies	N	N	N	N	N
Offset Ratio					1.5
Quarterly Offset Amounts (lb/Qtr)					
Q1:					2111.0
Q2:					2111.0
Q3:					2111.0
Q4:					2111.0

ATTACHMENT V
BACT Guidelines

San Joaquin Valley
Unified Air Pollution Control District

Best Available Control Technology (BACT) Guideline 4.12.1*

Last Update: 11/26/2006

Chemical Plants - Valves & Connectors

Pollutant	Achieved in Practice or contained in the SIP	Technologically Feasible	Alternate Basic Equipment
VOC	Leak defined as a reading of methane in excess of 100 ppmv above background when measured per EPA Method 21 and Maintenance Program pursuant to District Rule 4455		

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 s 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.

***This is a Summary Page for this Class of Source**

San Joaquin Valley
Unified Air Pollution Control District

Best Available Control Technology (BACT) Guideline 4.12.2*

Last Update: 11/27/2006

Chemical Plants Pump and Compressor Seals

Pollutant	Achieved in Practice or contained in the SIP	Technologically Feasible	Alternate Basic Equipment
VOC	Leak defined as a reading of methane in excess of 500 ppmv above background when measure per EPA Method 21 and an Inspection and Maintenance Program pursuant to District Rule 4455		

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 s 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.

***This is a Summary Page for this Class of Source**

ATTACHMENT VI
BACT Analysis

S-6971-22, '-23 Fugitive Emissions – Valves and Connectors

Top-Down Analysis for VOC Emissions

Facility fugitive emissions are included on this permit unit. For the facility fugitive emissions from valves and connectors the applicable BACT requirements guideline is: BACT Clearinghouse Guideline 4.12.1 (Current Version), Chemical Plants – Valves & Connectors

Step 1 - Identify All Possible Control Technologies

Leak defined as a reading of methane, in excess of 100 ppmv above background when measured at a distance of one (1) cm from the potential source and an Inspection and Maintenance Program pursuant to District Rule 4455.

Step 2 - Eliminate Technologically Infeasible Options

There is no technologically infeasible option.

Step 3 - Rank Remaining Control Technologies by Control Effectiveness

Leak defined as a reading of methane, in excess of 100 ppmv above background when measured at a distance of one (1) cm from the potential source and an Inspection and Maintenance Program pursuant to District Rule 4455.

Step 4 - Cost Effectiveness Analysis

Since the applicant has chosen the most effective control technology listed in step 3 as a technologically feasible option; a cost effectiveness analysis is not required.

Step 5 - Select BACT

Leak defined as a reading of methane, in excess of 100 ppmv above background when measured at a distance of one (1) cm from the potential source and an Inspection and Maintenance Program pursuant to District Rule 4455.

S-6971-22, '-23 Fugitive Emissions – Pump and Compressor Seals

Facility fugitive emissions are included on this permit unit. For the facility fugitive emissions from pumps and compressor seals the applicable BACT requirements guideline is: BACT Clearinghouse (Current Version) Guideline is 4.12.2 Chemical Plants Pump and Compressor Seals

Top-Down Analysis for VOC Emissions

Step 1 - Identify All Possible Control Technologies

Leak defined as a reading of methane, in excess of 500 ppmv above background and an Inspection and Maintenance Program pursuant to District Rule 4455.

Step 2 - Eliminate Technologically Infeasible Options

There is no technologically infeasible option.

Step 3 - Rank Remaining Control Technologies by Control Effectiveness

Leak defined as a reading of methane, in excess of 500 ppmv above background when measured at a distance of one (1) cm from the potential source and an Inspection and Maintenance Program pursuant to District Rule 4455.

Step 4 - Cost Effectiveness Analysis

Since the applicant has chosen the most effective control technology listed in step 3 as a technologically feasible option; a cost effectiveness analysis is not required.

Step 5 - Select BACT

Leak defined as a reading of methane, in excess of 500 ppmv above background and an Inspection and Maintenance Program pursuant to District Rule 4455.

ATTACHMENT VII
Statewide Compliance Statement

CERTIFICATION

Crimson Renewable Energy, LP hereby certifies as follows:

1. Crimson Renewable Energy, LP owns or operates certain major stationary sources in the State of California. Such sources are comprised of a vast number of emission points. As used in this certification, the term "major stationary source" shall, with respect to Crimson Renewable Energy, LP stationary sources in the SJVUAPCD, have the meaning ascribed thereto in SJVUAPCD Rule 2201, Section 3.23, and shall, with respect to all of Crimson Renewable Energy, LP's other stationary sources in the State of California, have the meaning ascribed thereto in section 302(J) of the Clean Air Act (42 U.S.C. Section 7602 (J)).

2. Subject to paragraphs 3 and 4 below, all major stationary sources owned or operated by Crimson Renewable Energy, LP in the State of California are either in compliance, or on an approved schedule of compliance, with all applicable emission limitations and standards under the Clean Air Act and all of the State Implementation Plan approved by the Environmental Protection Agency.

3. This certification is made on information and belief and is based upon a review of Crimson Renewable Energy, LP major stationary sources in the State of California by those employees of Crimson Renewable Energy, LP who have operational responsibility for compliance. In conducting such reviews, Crimson Renewable Energy, LP and its employees have acted in good faith and have exercised best efforts to identify any exceedance of the emission limitations and standards referred to in paragraph 2 thereof.

4. This certification shall speak as of the time and date of its execution.

CERTIFICATION

By: _____
Cory Busby

Title: Plant Manager

Date: 7/21/2015

ATTACHMENT VIII
HRA

San Joaquin Valley Air Pollution Control District
Risk Management Review

To:	Richard Edgehill – Permit Services
From:	Leland Villalvazo – Technical Services
Date:	August 14, 2015
Facility Name:	Crimson Renewable Energy LP
Location:	17731 Millux Rd., Bakersfield
Application #(s):	S-6971-1-5, 22-0 thru 33-0
Project #:	S-1153325

A. RMR SUMMARY

RMR Summary			
Categories	**Biodiesel Operation w/ Tanks (Unit 1-5, 22-0 thru 33-0)**	**Project Totals**	**Facility Totals**
Prioritization Score	0.068*	0.068	0.35
Acute Hazard Index	N/A	N/A	N/A
Chronic Hazard Index	N/A	N/A	N/A
Maximum Individual Cancer Risk (10^{-6})	N/A	N/A	N/A
T-BACT Required?	**No**		
Special Permit Conditions?	**No**		

*Prioritization for this project was less than 1.0; no further analysis is required.

Proposed Permit Conditions

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

Units # 11-1, 16-0 thru 21-0

No special conditions are required.

B. RMR REPORT

I. Project Description

Technical Services received a request on July 27, 2015 to perform an Ambient Air Quality Analysis (AAQA) and a Risk Management Review for the proposed installation of 12 process vessels that will be connect to unit 1-5 control equipment.

II. Analysis

Toxic emissions for these proposed units were calculated using emission rates provided by the project engineer. Emissions were assumed to be methanol as a worst case as per previous projects. In accordance with the District's *Risk Management Policy for Permitting New and Modified Sources* (APR 1905, March 2, 2001), risks from the proposed unit's toxic emissions were prioritized using the procedure in the 1990 CAPCOA Facility Prioritization Guidelines and incorporated in the District's HEARTs database. The prioritization score for this proposed unit was less than 1.0 (see RMR Summary Table). Therefore, no further analysis was necessary.

The following parameters were used for the review:

Analysis Parameters (Units 1-5, 22-0 thru 33-0)			
Type of Closest Receptor	Business	**Closest Receptor (m)**	15
Methanol Emission Unit 1-5 (Lb/hr)	3,299	**Methanol Emission Unit 28-0 (Lb/yr)**	729
Methanol Emission Unit 22-0 (Lb/hr)	337	**Methanol Emission Unit 29-0 (Lb/yr)**	783
Methanol Emission Unit 23-0 (Lb/hr)	660	**Methanol Emission Unit 30-0 (Lb/yr)**	430
Methanol Emission Unit 24-0 (Lb/hr)	354	**Methanol Emission Unit 31-0 (Lb/yr)**	692
Methanol Emission Unit 25-0 (Lb/hr)	701	**Methanol Emission Unit 32-0 (Lb/yr)**	1417
Methanol Emission Unit 26-0 (Lb/hr)	539	**Methanol Emission Unit 33-0 (Lb/yr)**	669
Methanol Emission Unit 27-0 (Lb/hr)	370		

An AAQA was not performed since the processing engineer indicated only an increase in VOCs for this project. AAQA's only require modeling for criteria pollutants NOx, CO, SOx, PM_{10}, and $PM_{2.5}$

III. Conclusion

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

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

IV. Attachments

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

ATTACHMENT IX
Draft ATCs

San Joaquin Valley
Air Pollution Control District

AUTHORITY TO CONSTRUCT

PERMIT NO: S-6971-1-6

ISSUANCE DATE: DRAFT

LEGAL OWNER OR OPERATOR: CRIMSON RENEWABLE ENERGY, LP
MAILING ADDRESS: 1801 CALIFORNIA STREET, STE 3600
DENVER, CO 80202-2617

LOCATION: 17731 MILLUX RD
BAKERSFIELD, CA

EQUIPMENT DESCRIPTION:
MODIFICATION OF 142,800 GALLON FIXED ROOF METHANOL STORAGE TANK AND ACCOMPANYING UNLOADING OPERATION SERVED BY A GAS BLANKETING/VAPOR CONTROL SYSTEM SHARED WITH TANKS S-6971-16 THROUGH '-21 AND DISCHARGING TO VAPOR SURGE VESSEL (V-300) AND VAPOR INCINERATOR LISTED ON S-1385-42: ALLOW CONNECTION OF PERMITS S-6971-22 THROUGH '-34 TO THE VAPOR CONTROL SYSTEM AND CHANGE CONDITION 9 TO REFERENCE PERMIT S-1385-42 INSTEAD OF PERMIT S-1388-12.

CONDITIONS

1. {1407} All equipment shall be maintained in good operating condition and shall be operated in a manner to minimize emissions of air contaminants into the atmosphere. [District Rule 2201]
2. {98} No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
3. For this Class 1 organic liquid transfer facility, the emission of VOC from the transfer operation shall not exceed 0.08 pounds per 1,000 gallons of organic liquid transferred. [District Rule 4624]
4. All liquids and gases from the transfer operation shall be routed to one of the following systems: a vapor collection and control system; a fixed roof container that meets the control requirements specified in Rule 4623 (Storage of Organic Liquids); a floating roof container that meets the control requirements specified in Rule 4623 (Storage of Organic Liquids); or a pressure vessel equipped with an APCO-approved vapor recovery system that meets the control requirements specified in Rule 4623 (Storage of Organic Liquids); or a closed VOC emission control system. [District Rules 4623 and 4624]
5. The operator of an organic liquid transfer facility shall inspect the vapor collection system, the vapor disposal system, and each transfer rack handling organic liquids for leaks during transfer at least once every calendar quarter using the test method prescribed in Section 6.3.8 of Rule 4624. [District Rule 4624]

CONDITIONS CONTINUE ON NEXT PAGE

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

Seyed Sadredin, Executive Director / APCO

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Arnaud Marjollet, Director of Permit Services

S-6971-1-6: Aug 5 2015 9:18AM – EDGEHILR : Joint Inspection NOT Required

6. An operator may apply for a written approval from the APCO to change the inspection frequency from quarterly to annually provided no leaks were found during the inspections required under provisions of Sections 5.9.1 and 5.9.2 of Rule 4624 during five consecutive quarterly inspections. Upon identification of any leak during an annual inspection the frequency shall revert back to quarterly and the operator shall contact the APCO in writing within 14 days. [District Rule 4624]

7. All equipment that are found leaking shall be repaired or replaced within 72 hours. If the leaking component cannot be repaired or replaced within 72 hours, the component shall be taken out of service until such time the component is repaired or replaced. The repaired or replacement equipment shall be reinspected the first time the equipment is in operation after the repair or replacement. [District Rule 4624]

8. Operator shall keep records of the throughputs of materials transferred and the results of any required leak inspections. [District Rules 4455 and 4624]

9. The methanol tank shall be equipped with a gas blanketing/vapor control system consisting of a closed vent system that collects all VOCs from the storage tank, and discharges only to vapor surge vessel (VRT-110) or the vapor incinerator listed on permit S-1385-42. Vapor incinerator listed on S-1385-42 shall be operated to reduce VOC emissions by 95% or greater. The gas blanketing/vapor control system shall not have any gas leaks in excess of 10,000 ppmv above background, as measured by a portable hydrocarbon detection instrument in accordance with the procedures specified in EPA Test Method 21. A reading in excess of 10,000 ppmv above background is a violation of this permit and Rule 4623. [District Rules 2201 and 4623 and 40 CFR 60.112b(a)(3)(ii)]

10. Upon detection of any leak >10,000 ppmv above background, the operator shall eliminate the leak within 8 hours after detection, or if the leak can not be eliminated, then minimize the leak to the lowest possible level within 8 hours after detection by using best maintenance practices and eliminate the leak within 48 hours after minimization. In no event shall the total time to eliminate the leak exceed 56 hours after detection. [District Rule 2201 and 4623 and 40 CFR 60.112b(a)(3)(i)]

11. If any of the tank or gas blanketing/vapor control system components are found with detectable leaks >100 ppmv and < 10,000 ppmv above background for valves and connectors and >500 ppmv and < 10,000 ppmv above background for pump and compressor seals, as measured by a portable hydrocarbon detection instrument in accordance with the procedures specified in EPA Test Method 21 , operator shall immediately affix a tag and maintain records of gas leak detection readings, date/time leak was discovered, and date/time the component was repaired to a leak-free condition. [District Rules 2201 and 40 CFR 60.112b(a)(3)(i)]

12. Storage tank or gas blanketing/vapor control system components with detectable leaks >100 ppmv and < 10,000 ppmv above background for valves and connectors and >500 ppmv and < 10,000 ppmv above background for pump and compressor seals shall be repaired pursuant to the requirements and schedule established in Rule 4455. [District Rule 2201 and 40 CFR 60.112b(a)(3)(i)]

13. Except for spillage emissions resulting from liquid line disconnections, VOC emission rate from unloading operations and methanol storage tank shall not exceed 9.0 lb/day based on component count and emission factors from EPA document Protocol for Equipment Leak Emission Rates, Table 2-1, SOCMI Average Emissions Factors with LDAR control efficiencies provided in Table 5-2 of EPA-453/R-95-017 for HON (88% light liquid valves, 75% light liquid pump and compressor seals, 93% connectors, 0% open ended lines, and 92% pressure relief valves). Permittee shall maintain with the permit an accurate fugitive component counts of vapor and condensate handling equipment and resulting emissions calculated using above specified leak rates and control efficiencies. [District Rule 2201]

14. Total VOC emissions from liquid line disconnections during unloading shall not exceed 0.3 lb/day and 14 lb/year. [District Rule 2201]

15. Maximum number of liquid line disconnections shall not exceed 18/day and 823/year. [District Rule 2201]

16. The maximum volume of methanol spilled during each disconnection shall not exceed 10 milliliters. [District Rule 2201]

17. All piping, fittings, and valves directly affixed to the tank or associated with the tank gas blanketing/vapor control system shall be inspected annually by the facility operator in accordance with EPA Method 21, with the instrument calibrated with methane, to ensure compliance with the provisions of this permit. [District Rules 2201, 4623 and 40 CFR 60.112b(a)(3)(i)]

CONDITIONS CONTINUE ON NEXT PAGE

18. If a component type for a given tank is found to leak at a rate >10,000 ppmv above background during an annual inspection, then quarterly inspections of that component type on the tank or system shall be conducted for four consecutive quarters. After four successful quarterly inspections in which the component type is found to leak less than 10,000 ppmv, inspections interval may revert to annual. [District Rule 2201 and 4623 and 40 CFR 60.112b(a)(3)(i)]

19. The operator shall keep a copy of an APCO-approved fugitive component Operator Management Plan (OMP) at the facility. The plan shall conform to the requirements set forth in Rule 4455 and shall be made available to the APCO, ARB and US EPA upon request. 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 Rules 2201, 4455 and 4623 and 40 CFR 60.113b(c)(1)(i) and (ii) and 40 CRF 60.115b(c)(1)]

20. 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 4455 for all components containing or contacting VOC at the this gas liquids processing facility, except for those components specifically exempted in Sections 4.1 and 4.2. [District Rules 2201 and 4455 and 40 CFR 60.113b(c)(1)(i) and (ii)]

21. Operator shall notify the Administrator of the actual date of initial startup postmarked within 15 days after such date. [40 CFR 60.7 (a)(3]

22. Operator shall notify the Administrator of the date construction is commenced postmarked no later than 30 days after such date. Notification shall include the Operating Plan. [40 CFR 60.113b(c)(1) and 60.7 (a)(1]

23. Permittee shall comply with all notification and recordkeeping requirements of 40 CFR Part 60.7. [40 CFR 60.7]

24. Daily and annual records shall be kept of the number of unloading rack disconnects. [District Rule 2201]

25. All records required by this permit shall be retained for a minimum period of 5 years and shall be made available to the APCO, ARB and US EPA upon request. [District Rule 2201 and 4623 and CFR 60.115b(c)(2)]

San Joaquin Valley
Air Pollution Control District

AUTHORITY TO CONSTRUCT

PERMIT NO: S-6971-22-0

ISSUANCE DATE: DRAFT

DRAFT

LEGAL OWNER OR OPERATOR: CRIMSON RENEWABLE ENERGY, LP
MAILING ADDRESS: 1801 CALIFORNIA STREET, STE 3600
DENVER, CO 80202-2617

LOCATION: 17731 MILLUX RD
BAKERSFIELD, CA

EQUIPMENT DESCRIPTION:
BIODIESEL WASH SYSTEM CONSISTING OF 2,024 GALLON MIXER (V-1300), 5,924 GALLON SETTLER (S-1310) AND ASSOCIATED 79 GALLON VESSEL (V-1320), 2,024 GALLON MIXER (V-1330), AND 5,924 GALLON SETTLER (S-1340) AND ASSOCIATED 79 GALLON VESSEL (V-1350), ALL SERVED BY THE GAS BLANKETING/VAPOR CONTROL SYSTEM LISTED ON S-6971-1

CONDITIONS

1. Prior to operating equipment under this Authority to Construct, permittee shall surrender VOC emission reduction credits for the following quantity of emissions: 1st quarter - 769 lb, 2nd quarter - 769 lb, 3rd quarter - 770 lb, and fourth quarter - 770 lb. These amounts include the applicable offset ratio specified in Rule 2201 Section 4.8 (as amended 4/21/11) for the ERC specified below. [District Rule 2201]
2. ERC Certificate Number S-4352-1 (or a certificate split from this certificate) shall be used to supply the required offsets, unless a revised offsetting proposal is received and approved by the District, upon which this Authority to Construct shall be reissued, administratively specifying the new offsetting proposal. Original public noticing requirements, if any, shall be duplicated prior to reissuance of this Authority to Construct. [District Rule 2201]
3. This permit unit is fully offset for VOC emissions. [District Rule 2201]
4. ATC shall be implemented concurrently with or subsequent to ATC S-6971-1-6. [District Rule 2201]
5. Mixer (V-1300), Settler (S-1310) and associated vessel (V-1320), Mixer (V-1330), and Settler (S-1340) and associated vessel (V-1350) shall be connected to the gas blanket and vapor control system identified on permit S-6971-1. [District Rules 2201 & 4623]
6. All piping, valves, and fittings subject to Rule 4623 shall be constructed and maintained in a leak-free condition. [District Rule 4623]

CONDITIONS CONTINUE ON NEXT PAGE

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Seyed Sadredin, Executive Director / APCO

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Arnaud Marjollet, Director of Permit Services

S-6971-22-0 : Aug 12 2015 11:28AM – EDGEHELR : Joint Inspection NOT Required

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

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

9. Fugitive VOC emissions rate from components affixed to the tank and in the vapor line from the tank to the vapor control system trunk line shall be calculated using EPA document Protocol for Equipment Leak Emission Rates, Table 2-1, SOCMI Average Emissions Factors with LDAR control efficiencies provided in Table 5-2 of EPA-453/R-95-017 for HON (88% light liquid valves, 75% light liquid pump and compressor seals, 93% connectors, 0% open ended lines, and 92% pressure relief valves). Permittee shall maintain with the permit an accurate fugitive component counts of vapor and condensate handling equipment and resulting emissions calculated using above specified leak rates and control efficiencies. [District Rule 2201]

10. Fugitive VOC emission rate from Mixer (V-1300), Settler (S-1310) and associated vessel (V-1320), Mixer (V-1330), and Settler (S-1340) and associated vessel (V-1350) shall not exceed 5.6 lb/day. [District Rule 2201]

11. A component shall be considered leaking if one or more of the conditions specified in Sections 5.1.4.1 through 5.1.4.4 of Rule 4455 exist at the facility. For this permit unit, except for pumps and compressors, a minor gas leak shall be defined for any component listed in Rule 4455 Section 3.22 Table 1 in either liquid or gas/vapor service as a reading in excess of 100 ppmv above background up to and including a reading of 10,000 ppmv above background. For pumps, compressors and other component types not specifically listed in Rule 4455 Section 3.22 Table 1 in either liquid or gas/vapor service, a minor gas leak shall be defined as a reading in excess of 500 ppmv above background up to and including a reading of 10,000 ppmv above background. Readings shall be taken as methane using a portable hydrocarbon detection instrument and shall be made in accordance with the methods specified in Section 6.4.1 of Rule 4455. [District NSR Rule and Rule 4455, 5.1.4]

12. The operator shall not use any component that leaks in excess of the allowable leak standards of Rule 4455, or is found to be in violation of the provisions specified in Section 5.1.3. A component identified as leaking in excess of an allowable leak standard may be used provided it has been identified with a tag for repair, has been repaired, or is awaiting re-inspection after repair, within the applicable time period specified within the rule. [District Rule 4455, 5.1.1]

13. Each hatch shall be closed at all times except during sampling or adding of process material through the hatch, or during attended repair, replacement, or maintenance operations, provided such activities are done as expeditiously as possible and with minimal spillage of material and VOC emissions to the atmosphere. [District Rule 4455, 5.1.2]

14. The operator shall be in violation of Rule 4455 if any District inspection demonstrates that one or more of the conditions in Sections 5.1.4 exist at the facility. [District Rule 4455, 5.1.3.1]

15. Except for annual operator inspection described in Section 5.1.3.2.3, any operator inspection that demonstrates that one or more of the conditions in Section 5.1.4 exist at the facility shall not constitute a violation of Rule 4455 if the leaking components are repaired as soon as practicable but not later than the time frame specified in Rule 4455. Such components shall not be counted towards determination of compliance with the provisions of Section 5.1.4. [District Rule 4455, 5.1.3.2.1]

16. Leaking components detected during operator inspection pursuant Section 5.1.3.2.1 that are not repaired, replaced, or removed from operation as soon as practicable but not later than the time frame specified in Rule 4455 shall be counted toward determination of compliance with the provisions of Section 5.1.4. [District Rule 4455, 5.1.3.2.2]

17. Any operator inspection conducted annually for a component type (including operator annual inspections pursuant to Section 5.2.5, 5.2.6, 5.2.7, or 5.2.8) that demonstrates one or more of the conditions in Section 5.1.4 exist at the facility shall constitute a violation of Rule 4455 regardless of whether or not the leaking components are repaired, replaced, or removed from operation within the allowable repair time frame specified in Rule 4455. [District Rule 4455, 5.1.3.2.3]

CONDITIONS CONTINUE ON NEXT PAGE

18. The operator shall audio-visually inspect for leaks all accessible operating pumps, compressors and Pressure Relief Devices (PRDs) in service at least once every 24 hours, except when operators do not report to the facility for that given 24 hours. Any identified leak that cannot be immediately repaired shall be reinspected within 24 hours using a portable analyzer. If a leak is found, it shall be repaired as soon as practical but not later than the time frame specified in Table 3. [District Rule 4455, 5.2.1 & 5.2.2]

19. The operator shall inspect all components at least once every calendar quarter, except for inaccessible components, unsafe-to-monitor components and pipes. Inaccessible components, unsafe-to-monitor components and pipes shall be inspected in accordance with the requirements set forth in Sections 5.2.5, 5.2.6, and 5.2.7. New, replaced, or repaired fittings, flanges and threaded connections shall be inspected immediately after being placed into service. Components shall be inspected using EPA Method 21. [District Rule 4455, 5.2.3, 5.2.4, 5.2.5, 5.2.6 & 5.2.7]

20. The operator may apply for a written approval from the APCO to change the inspection frequency from quarterly to annually for a component type, provided the operator meets all the criteria specified in Sections 5.2.8.1 through 5.2.8.3. This approval shall apply to accessible component types, specifically designated by the APCO, except pumps, compressors, and PRDs which shall continue to be inspected on a quarterly basis. [District Rule 4455, 5.2.8]

21. An annual inspection frequency approved by the APCO shall revert to quarterly inspection frequency for a component type if either the operator inspection or District inspection demonstrates that a violation of the provisions of Sections 5.1, 5.2 and 5.3 of the rule exists for that component type, or the APCO issued a Notice of Violation for violating any of the provisions of Rule 4455 during the annual inspection period for that component type. When the inspection frequency changes from annual to quarterly inspections, the operator shall notify the APCO in writing within five (5) calendar days after changing the inspection frequency, giving the reason(s) and date of change to quarterly inspection frequency. [District Rule 4455, 5.2.9 & 5.2.10]

22. The operator shall initially inspect a process PRD that releases to the atmosphere as soon as practicable but not later than 24 hours after the time of the release. To insure that the process PRD is operating properly, and is leak-free, the operator shall re-inspect the process PRD not earlier than 24 hours after the initial inspection but not later than 15 calendar days after the date of the release using EPA Method 21. If the process PRD is found to be leaking at either inspection, the PRD leak shall be treated as if the leak was found during quarterly operator inspections. [District Rule 4455, 5.2.11]

23. Except for process PRD, a component shall be inspected within 15 calendar days after repairing the leak or replacing the component using EPA Method 21. [District Rule 4455, 5.2.12]

24. Upon detection of a leaking component, the operator shall affix to that component a weatherproof readily visible tag that contains the information specified in Section 5.3.3. The tag shall remain affixed to the component until the leaking component has been repaired or replaced; has been re-inspected using EPA Method 21; and is found to be in compliance with the requirements of Rule 4455. [District Rule 4455, 5.3.1 5.3.2 and 5.3.3]

25. An operator shall minimize all component leaks immediately to the extent possible, but not later than one (1) hour after detection of leaks in order to stop or reduce leakage to the atmosphere. [District Rule 4455, 5.3.4]

26. If the leak has been minimized but the leak still exceeds the applicable leak standards of Rule 4455, an operator shall repair or replace the leaking component, vent the leaking component to a closed vent system, or remove the leaking component from operation as soon as practicable but not later than the time period specified in Table 3. For each calendar quarter, the operator may be allowed to extend the repair period as specified in Table 3, for a total number of leaking components, not to exceed 0.05 percent of the number of components inspected, by type, rounded upward to the nearest integer where required. [District Rule 4455, 5.3.5]

27. If the leaking component is an essential component or a critical component and which cannot be immediately shut down for repairs, the operator shall minimize the leak within one hour after detection of the leak. If the leak has been minimized, but the leak still exceeds any of the applicable leak standards of Rule 4455, the essential component or critical component shall be repaired or replaced to eliminate the leak during the next process unit turnaround, but in no case later than one year from the date of the original leak detection, whichever comes earlier. [District Rule 4455 5.3.6]

CONDITIONS CONTINUE ON NEXT PAGE

28. For any component that has incurred five repair actions for major gas leaks or major liquid leaks, or any combination of major gas leaks and major liquid leaks within a continuous 12-month period, the operator shall comply with at least one of the requirements specified in Sections 5.3.7.1, 5.3.7.2, 5.3.7.3, or 5.3.7.4 by the applicable deadlines specified in Sections 5.3.7.5 and 5.3.7.6. If the original leaking component is replaced with a new like-in-kind component before incurring five repair actions for major leaks within 12-consecutive months, the repair count shall start over for the new component. An entire compressor or pump need not be replaced provided the compressor part(s) or pump part(s) that have incurred five repair actions as described in Section 5.3.7 are brought into compliance with at least one of the requirements of Sections 5.3.7.1 through 5.3.7.6. [District Rule4455, 5.3.7]

29. The operator shall monitor process PRD by using electronic process control instrumentation that allows for real time continuous parameter monitoring or by using telltale indicators for the process PRD where parameter monitoring is not feasible. [District Rule 4455, 5.4.1]

30. All major components and critical components shall be physically identified clearly and visibly for inspection, repair, and recordkeeping purposes. The physical identification shall consist of labels, tags, manufacturer's nameplate identifier, serial number, or model number, or other system approved by the APCO that enables an operator or District personnel to locate each individual component. The operator shall replace tags or labels that become missing or unreadable as soon as practicable but not later than 24 hours after discovery. The operator shall comply with the requirements of Sections 6.1.4 if there is any change in the description of major components or critical components. [District Rule 4455, 5.5.1 & 5.5.2]

31. The operator shall keep a copy of the operator management plan at the facility and make it available to the APCO, ARB and US EPA upon request. 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 operator management plan. [District Rule 4455, 6.1.2 & 6.1.4]

32. The operator shall maintain an inspection log containing, at a minimum, 1) total number of components inspected, and total number and percentage of leaking components found by component types, 2) location, type, name or description of each leaking component, and description of any unit where the leaking component is found, 3) date of leak detection and method of 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) date of repair, replacement, or removal from operation of leaking components, 6) identification and location of essential component and critical components found leaking that cannot be repaired until the next process unit turnaround or not later one year after leak detection, whichever comes earlier, 7) methods used to minimize the leak from essential components and critical components that cannot be repaired until the next process unit turnaround or not later one year after leak detection, whichever comes earlier, 8) after the component is repaired or is replaced, the date of reinspection and the leak concentration in ppmv, 9) inspector's name, business mailing address, and business telephone number, and 10) the facility operator responsible for the inspection and repair program shall sign and date the inspection log certifying the accuracy of the information recorded in the log. [District Rule 4455, 6.2.1]

33. Records of each calibration of the portable hydrocarbon detection instrument utilized for inspecting components, including a copy of current calibration gas certification from the vendor of said calibration gas cylinder, the date of calibration, concentration of calibration gas, analyzer reading of calibration gas before adjustment, instrument reading of calibration gas after adjustment, calibration gas expiration date, and calibration gas cylinder pressure at the time of calibration. [District Rule 4455, 6.2.3]

34. The operator shall notify the APCO, by telephone or other methods approved by the APCO, of any process PRD release described in Sections 5.4.4 and 5.4.5, and any release in excess of the reportable quantity limits as stipulated in 40 CFR, Part 117, Part 302 and Part 355, including any release in excess of 100 pounds of VOC, within one hour of such occurrence or within one hour of the time said person knew or reasonably should have known of its occurrence. [District Rule 4455, 6.3.1]

35. The operator shall submit a written report to the APCO within thirty (30) calendar days following a PRD release subject to 6.3.1. The written report shall include 1) process PRD type, size, and location, 2) date, time and duration of the process PRD release, 3) types of VOC released and individual amounts, in pounds, including supporting calculations, 4) cause of the process PRD release, and 5) corrective actions taken to prevent a subsequent process PRD release. [District Rule4455 6.3.2]

CONDITIONS CONTINUE ON NEXT PAGE

36. Copies of all records shall be retained for a minimum of five (5) years after the date of an entry. Such records shall be made available to the APCO, ARB, or US EPA upon request. [District Rule 4455, 6.2.2, 6.2.3 & 6.2.4]

37. Measurements of gaseous leak concentrations shall be conducted according to US EPA Method 21 using an appropriate portable hydrocarbon detection instrument calibrated with methane. The instrument shall be calibrated in accordance with the procedures specified in US EPA Method 21 or the manufacturer's instruction, as appropriate, not more than 30 days prior to its use. The operator shall record the calibration date of the instrument. [District Rule 4455, 6.4.1]

38. The VOC content shall be determined using American Society of Testing and Materials (ASTM) D 1945 for gases and South Coast Air Quality Management District (SCAQMD) Method 304-91 for liquids. [District Rule 4455, 6.4.2]

39. The percent by volume liquid evaporated at 1500C shall be determined using ASTM D 86. [District Rule 4455, 6.4.3]

40. Each owner or operator subject to the provisions of this subpart shall demonstrate compliance with the requirements of 40 CFR 60.482-1a through 60.482-10a or 40 CFR 60.480a(e) for all equipment within 180 days of initial startup. [40 CFR 60.482-1a(a)]

41. Valves in gas/vapor service and in light liquid service shall be monitored for the first time within 30 days after the initial startup date for the process unit as required by 40 CFR 60.482-2a and 40 CFR 60.482-7a. [40 CFR 60.482-2a (a) and 40 CFR 60.482-7 a(a)]

42. Compliance with 40 CFR 60.482-1a to 60.482-10a will be determined by review of records and reports, review of performance test results, and inspection using the methods and procedures specified in 40 CFR 60.485a. [40 CFR 60.482-1a(b)]

43. An owner or operator may request a determination of equivalence of a means of emission limitation to the requirements of 40 CFR 60.482-2a, 60.482-3a, 60.482-5a, 60.482-6a, 60.482-7a, 60.482-8a, and 60.482-10a as provided in 40 CFR 60.484a. [40 CFR 60.482-1a(c)(1)]

44. If the Administrator makes a determination that a means of emission limitation is at least equivalent to the requirements of 40 CFR 60.482-2a, 60.482-3a, 60.482-5a, 60.482-6a, 60.482-7a, 60.482-8a, or 60.482-10a, an owner or operator shall comply with the requirements of that determination. [40 CFR 60.482-1a(c)(2)]

45. Equipment that is in vacuum service is excluded from the requirements of 40 CFR 60.482-2a to 40 CFR 60.482-10a if it is identified as required in 40 CFR 60.486a(e)(5). [40 CFR 60.482-1a(d)]

46. Each pump in light liquid service (PLLS) shall be monitored monthly to detect leaks by the methods specified in 40 CFR 60.485a(b), except as provided in 40 CFR 60.482-1a(c) and 40 CFR 60.482-2a(d), (e), and (f). Each pump in light liquid service shall be checked by visual inspection each calendar week for indications of liquids dripping from the pump seal. A leak is detected if an instrument reading of 500 ppmv or greater is measured or if there are indications of liquids dripping from the pump seal. [40 CFR 60.482-2a(a) and (b), and District Rule 2201]

47. When a leak is detected for each PLLS, it shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected, except as provided in 40 CFR 60.482-9a. A first attempt at repair shall be made no later than 5 calendar days after each leak is detected. [40 CFR 60.482-2a(c)]

48. Each PLLS equipped with a dual mechanical seal system that includes a barrier fluid system is exempt from the requirements of 40 CFR 60.482-2a(a) provided the requirements specified in 40 CFR 60.482-2a(d)(1) through (6) are met. [40 CFR 60.482a(d)]

49. Any PLLS that is designated, as described in 40 CFR 60.486a(e)(1) and (2), for no detectable emissions, as indicated by an instrument reading of less than 500 ppmv above background, is exempt from the requirements of 40 CFR 60.482-2a(a), (c), and (d) if the pump meets the requirements specified in 40 CFR 60.482-2a(e)(1), (2), and (3). [40 CFR 60.482-2a(e), and District Rule 2201]

50. If any PLLS is equipped with a closed vent system capable of capturing and transporting leakage from the seal or seals to a control device that complies with the requirements of 40 CFR 60.482-10a, it is exempt from the requirements of 40 CFR 60.482-2a(a) through (e). [40 CFR 60.482-2a(f)]

CONDITIONS CONTINUE ON NEXT PAGE

51. Any pump in PLLS that is designated, as described in 40 CFR 60.486a(f)(1), as an unsafe-to-monitor pump is exempt from the monitoring and inspection requirements of 40 CFR 60.482-2a(a) and 40 CFR 60.482-2a(d)(4) through (6) if: 1) The owner or operator of the pump demonstrates that the pump is unsafe-to-monitor because monitoring personnel would be exposed to an immediate danger as a consequence of complying with 40 CFR 60.482-2a(a); and 2) The owner or operator of the pump has a written plan that requires monitoring of the pump as frequently as practicable during safe-to-monitor times but not more frequently than the periodic monitoring schedule otherwise applicable, and repair of the equipment according to the procedures in 40 CFR 60.482-2a(c) if a leak is detected. [40 CFR 60.482-2a(g)]

52. Any pump that is located within the boundary of an unmanned plant site is exempt from the weekly visual inspection requirement of 40 CFR 60.482-2a(a)(2) and (d)(4) and the daily requirements of 40 CFR 60.482-2a(d)(5), provided that each pump is visually inspected as often as practicable and at least monthly. [40 CFR 60.482-2a(h)]

53. Unless exempt under 40 CFR 60.482-3a, each compressor shall be equipped with a seal system that includes a barrier fluid system and that prevents leakage of VOC to the atmosphere, except as provided in 40 CFR 60.482-3a(h) and (i). The barrier fluid system shall be in heavy liquid service or shall not be in VOC service. Each compressor shall be operated and equipped as specified in 40 CFR 60.482-3a(b)(1), (2), or (3). [40 CFR 60.482-3a(a), (b), and (c)]

54. If a barrier fluid system is used for a compressor, the barrier fluid system shall be equipped with a sensor that will detect failure of the seal system, barrier fluid system or both. Each sensor shall be checked daily or shall be equipped with an audible alarm. The owner or operator shall determine, based on design considerations and operating experience, a criterion that indicates failure of the seal system, the barrier fluid system, or both. If the sensor indicates failure of the seal system, the barrier system, or both based on the established criterion, a leak is detected. [40 CFR 60.482-3a(d), (e), and (f)]

55. If a barrier fluid system is used for a compressor, detected leaks shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected, except as provided in 40 CFR 60.482-9a. A first attempt at repair shall be made no later than 5 calendar days after each leak is detected. [40 CFR 60.482-3a(g)]

56. Any compressor that is designated, as described in 40 CFR 60.486a(e)(1) and (2), for no detectable emissions, as indicated by an instrument reading of less than 500 ppmv above background, is exempt from the requirements of 40 CFR 60.482-3a(a) through (h) if the compressor meets the requirements specified in 40 CFR 60.482-3a(i)(1) and (2). [40 CFR 60.482-3a(i), and District Rule 2201]

57. Any existing reciprocating compressor in a process unit which becomes an affected facility under the provisions of 40 CFR 60.14 or 40 CFR 60.15 is exempt from 40 CFR 60.482a(a), (b), (c), (d), (e), and (h), provided the owner or operator demonstrates that recasting the distance piece or replacing the compressor are the only options available to bring the compressor into compliance with the provisions of 40 CFR 60.482-3a(a), (b), (c), (d), (e), and (h). [40 CFR 60.482-3a(j)]

58. Except during pressure releases, each pressure relief device in gas/vapor service shall be operated with no detectable emissions, as indicated by an instrument reading of less than 100 ppm above background, as determined by the methods specified in 40 CFR 60.485a(c). [40 CFR 60.482-4a(a), and District Rule 2201]

59. After each pressure release, the pressure relief device shall be returned to a condition of no detectable emissions, as indicated by an instrument reading of less than 100 ppm above background, as soon as practicable, but no later than 5 calendar days after the pressure release, except as provided in 40 CFR 60.482-9a. No later than 5 calendar days after the pressure release, the pressure relief device shall be monitored to confirm the conditions of no detectable emissions, as indicated by an instrument reading of less than 100 ppm above background, by the methods specified in 40 CFR 60.485a(c). [40 CFR 60.482-4a(b), and District Rule 2201]

60. Any pressure relief device that is routed to a process or fuel gas system or equipped with a closed vent system capable of capturing and transporting leakage through the pressure relief device to a control device as described in 40 CFR 60.482-10a is exempted from the requirements of 40 CFR 60.482-4a(a) and (b). [40 CFR 60.482-4a(c)]

61. Any pressure relief device that is equipped with a rupture disk upstream of the pressure relief device is exempt from the 40 CFR 60.482-4a(a) and (b), provided the owner or operator complies with the requirements in 40 CFR 60.482-4a(d)(2) of this section. After each pressure release, a new rupture disk shall be installed upstream of the pressure relief device as soon as practicable, but no later than 5 calendar days after each pressure release, except as provided in 40 CFR 60.482-9a. [40 CFR 60.482-4a(d)]

CONDITIONS CONTINUE ON NEXT PAGE

62. Except for in-situ sampling systems and sampling systems without purges, each sampling connection system shall be equipped with a closed-purge, closed-loop, or closed-vent system, except as provided in 40 CFR 60.482-1a(c). Each closed-purge, closed-loop, or closed-vent system shall comply with the requirements specified in 40 CFR 60.482-5a(b)(1), (2), (3), and (4). [40 CFR 60.482-5a(a), (b), and (c)]

63. Each open-ended valve or line shall be equipped with a cap, blind flange, plug, or a second valve, except as provided in 40 CFR 60.482-1a(c). The cap, blind flange, plug, or second valve shall seal the open end at all times except during operations requiring process fluid flow through the open-ended valve or line. When a double block-and-bleed system is being used, the bleed valve or line may remain open during operations that require venting the line between the block valves but shall comply with this condition at all other times. [40 CFR 60.482-6a(a) and (c)]

64. Each open-ended valve or line equipped with a second valve shall be operated in a manner such that the valve on the process fluid end is closed before the second valve is closed. [40 CFR 60.482-6a(b)]

65. Open-ended valves or lines in an emergency shutdown system which are designed to open automatically in the event of a process upset are exempt from the requirements of 40 CFR 60.482-6a(a), (b) and (c). [40 CFR 60.482-6a(d)]

66. Open-ended valves or lines containing materials which would autocatalytically polymerize or would present an explosion, serious overpressure, or other safety hazard if capped or equipped with a double block and bleed system as specified in 40 CFR 60.482-6a(a) through (c) are exempt from the requirements of 40 CFR 60.482-6a(a) through (c). [40 CFR 60.482-6a(e)]

67. Each valve in gas/vapor service and in light liquid service shall be monitored monthly to detect leaks by the methods specified in 40 CFR 60.485a(b) and shall comply with 40 CFR 60.482-7a(b) through (e), except as provided in 40 CFR 60.482-7a(f), (g), and (h), 40 CFR 60.483-1a, 40 CFR 60.483-2a, 40 CFR 60.482-1a(c), and 40 CFR 60.482-1a(f). A leak is detected if an instrument reading of 100 ppmv or greater is measured. [40 CFR 60.482-7a(a) and (b), and District Rule 2201]

68. Any valve in gas/vapor service or in light liquid service for which a leak is not detected for 2 successive months may be monitored the first month of every quarter, beginning with the next quarter, until a leak is detected. If a leak is detected, the valve shall be monitored monthly until a leak is not detected for 2 successive months. [40 CFR 60.482-7a(c)(1) and (2)]

69. When a leak is detected for any valve in gas/vapor service or in light liquid service, it shall be repaired as soon as practicable, but no later than 15 calendar days after the leak is detected, except as provided in 40 CFR 60.482-9a. A first attempt at repair shall be made no later than 5 calendar days after each leak is detected. First attempts at repair include, but are not limited to, the best practices specified in 40 CFR 60.482-7a(e)(1), (2), (3), and (4), where practicable. [40 CFR 60.482-7a(d) and (e)]

70. Any valve in gas/vapor service or in light liquid service that is designated, as described in 40 CFR 60.486a(e)(2), for no detectable emissions, as indicated by an instrument reading of less than 100 ppmv above background, is exempt from the requirements of 40 CFR 60.482-7a(a) if the valve meets the requirements specified in 40 CFR 60.482-7a(f)(1), (2), and (3). [40 CFR 60.482-7a(f), and District Rule 2201]

71. Any valve in gas/vapor service or in light liquid service that is designated, as described in 40 CFR 60.486a(f)(1), as an unsafe-to-monitor valve is exempt from the requirements of 40 CFR 60.482-7a(a) if: 1) The owner or operator of the valve demonstrates that the valve is unsafe to monitor because monitoring personnel would be exposed to an immediate danger as a consequence of complying with 40 CFR 60.482-7a(a); and 2) The owner or operator of the valve adheres to a written plan that requires monitoring of the valve as frequently as practicable during safe-to-monitor times. [40 CFR 60.482-7a(g)]

72. Any valve in gas/vapor service or in light liquid service that is designated, as described in 40 CFR 60.486a(f)(2), as a difficult-to-monitor valve is exempt from the requirements of 40 CFR 60.482-7a(a) if: 1) The owner or operator of the valve demonstrates that the valve cannot be monitored without elevating the monitoring personnel more than 2 meters above a support surface; 2) The process unit within which the valve is located either becomes an affected facility through 40 CFR 60.14 or 40 CFR 60.15 or the owner or operator designates less than 3.0 percent of the total number of valves as difficult-to-monitor; and 3) The owner or operator of the valve follows a written plan that requires monitoring of the valve at least once per calendar year. [40 CFR 60.482-7a(h)]

CONDITIONS CONTINUE ON NEXT PAGE

73. If evidence of a potential leak is found by visual, audible, olfactory, or any other detection method at pumps and valves in heavy liquid service, pressure relief devices in light liquid or heavy liquid service, and connectors, the owner or operator shall follow either one of the following procedures: 1) The owner or operator shall monitor the equipment within 5 days by the method specified in 40 CFR 60.485a(b) and shall comply with the requirements of 40 CFR 60.482-8a(b) through (d); or 2) The owner or operator shall eliminate the visual, audible, olfactory, or other indication of a potential leak. A leak is detected if an instrument reading of 100 ppmv or greater for valves and connectors and 500 ppmv or greater for pumps and compressor seals, is measured. [40 CFR 60.482-8a(a) and (b); and District Rule 2201]

74. When a leak is detected in pumps and valves in heavy liquid service, pressure relief devices in light liquid or heavy liquid service, and connectors, it shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected, except as provided in 40 CFR 60.482-9a. The first attempt at repair shall be made no later than 5 calendar days after each leak is detected. First attempts at repair include, but are not limited to, the best practices described under 40 CFR 60.482-2a(c)(2) and 40 CFR 60.482-7a(e). [40 CFR 60.482-8a(c) and (d)]

75. For closed vent systems and control devices, vapor recovery systems shall be designed and operated to recover the VOC emissions vented to them with an efficiency of 95 percent or greater, or to an exit concentration of 20 parts per million by volume, whichever is less stringent. [40 CFR 60.482-10a(b)]

76. For closed vent systems and control devices, enclosed combustion devices shall be designed and operated to reduce the VOC emissions vented to them with an efficiency of 95 percent or greater, or to an exit concentration of 20 parts per million by volume, on a dry basis, corrected to 3 percent oxygen, whichever is less stringent or to provide a minimum residence time of 0.75 seconds at a minimum temperature of 816 degrees C. [40 CFR 60.482-10a(c)]

77. Owners or operators of control devices shall monitor these control devices to ensure that they are operated and maintained in conformance with their designs. [40 CFR 60.482-10a(e)]

78. Except as provided in 40 CFR 60.482-10a(i) through (k), each closed vent system shall be inspected according to the procedures and schedule specified in 40 CFR 60.482-10a(f)(1) and (f)(2). Leaks, as indicated by an instrument reading greater than 100 ppmv for valves and connectors or 500 ppmv for pumps and compressor seals above background or by visual inspections, shall be repaired as soon as practicable except as provided in 40 CFR 60.482-10a(h). A first attempt at repair shall be made no later than 5 calendar days after the leak is detected. Repair shall be completed no later than 15 calendar days after the leak is detected. [40 CFR 60.482-10a(f) and (g), and District Rule 2201]

79. Delay of repair of a closed vent system for which leaks have been detected is allowed if the repair is technically infeasible without a process unit shutdown or if the owner or operator determines that emissions resulting from immediate repair would be greater than the fugitive emissions likely to result from delay of repair. Repair of such equipment shall be complete by the end of the next process unit shutdown. [40 CFR 60.482-10a(h)]

80. If a vapor collection system or closed vent system is operated under a vacuum, it is exempt from the inspection requirements of 40 CFR 60.482-10a(f)(1)(i) and (f)(2). [40 CFR 60.482-10a(i)]

81. Any parts of the closed vent system that are designated, as described in 40 CFR 60.482-10a(l)(1), as unsafe to inspect are exempt from the inspection requirements of 40 CFR 60.482-10a(f)(1)(i) and (f)(2) if they comply with the requirements specified in 40 CFR 60.482-10a (j)(1) and (j)(2). [40 CFR 60.482-10a(j)]

82. Any parts of the closed vent system that are designated, as described in 40 CFR 60.482-10a(l)(2), as difficult to inspect are exempt from the inspection requirements of 40 CFR 60.482-10a(f)(1)(i) and (f)(2) if they comply with the requirements specified in 40 CFR 60.482-10a(k)(1) through (k)(3). [40 CFR 60.482-10a(k)]

83. The owner or operator shall record the following information: 1) Identification of all parts of the closed vent system that are designated as unsafe to inspect, an explanation of why the equipment is unsafe to inspect, and the plan for inspecting the equipment; 2) Identification of all parts of the closed vent system that are designated as difficult to inspect, an explanation of why the equipment is difficult to inspect, and the plan for inspecting the equipment; 3) For each inspection during which a leak is detected, a record of the information specified in 40 CFR 60.486a(c); 4) For each inspection conducted in accordance with 40 CFR 60.485a(b) during which no leaks are detected, a record that the inspection was performed, the date of the inspection, and a statement that no leaks were detected; and 5) For each visual inspection conducted in accordance with 40 CFR 60.482-10a(f)(1)(ii) during which no leaks are detected, a record that the inspection was performed, the date of the inspection, and a statement that no leaks were detected. [40 CFR 60.482-10a(l)]

CONDITIONS CONTINUE ON NEXT PAGE

84. Closed vent systems and control devices shall be operated at all times when emissions may be vented to them. [40 CFR 60.482-10a(m)]

85. The owner or operator may elect to comply with the applicable provisions for valves in gas/vapor service and in light liquid service as specified in 40 CFR 60.483-1a and 60.483-2a. [40 CFR 60.483-1a and 60.483-2a]

86. The owner or operator may apply to the Administrator for a determination of equivalency for any means of emission limitation that achieves a reduction in emissions of VOC at least equivalent to the reduction in emissions of VOC achieved by the controls required in Subpart VVa. [40 CFR 60.484a(a)]

87. The owner or operator shall determine compliance with the standards in 40 CFR 60.482a, 60.483a, and 60.484a as follows: Method 21 shall be used to determine the presence of leaking sources. The instrument shall be calibrated before use each day of its use by the procedures specified in Method 21. The following calibration gases shall be used: (i) Zero air (less than 10 ppmv of hydrocarbon in air); and (ii) A mixture of methane or n-hexane and air at a concentration of about, but less than, 100 ppmv methane or n-hexane for valves and connectors and 500 ppmv methane or n-hexane for pumps and compressor seals. [40 CFR 60.485a(b); and District Rule 2201]

88. The owner or operator shall determine compliance with the no detectable emission standards in 40 CFR 60.482-2a(e), 60.482-3a(i), 60.482-4a, 60.482-7a(f), and 60.482-10a(e) as follows: 1) The requirements of 40 CFR 60.485a(b) shall apply. 2) Method 21 shall be used to determine the background level. All potential leak interfaces shall be traversed as close to the interface as possible. The arithmetic difference between the maximum concentration indicated by the instrument and the background level is compared with 100 ppmv methane for valves and connectors and 500 ppmv methane for pumps and compressor seals for determining compliance. [40 CFR 60.485a(c); and District Rule 2201]

89. The owner or operator shall test each piece of equipment unless demonstrated that a process unit is not in VOC service, i.e., that the VOC content would never be reasonably expected to exceed 10 percent by weight. For purposes of this demonstration, the following methods and procedures shall be used: 1) Procedures that conform to the general methods in ASTM E260-73, 91, or 96, E168-67, 77, or 92, E169-63, 77, or 93 (incorporated by reference as seen in 40 CFR 60.17) shall be used to determine the percent VOC content in the process fluid that is contained in or contacts a piece of equipment; 2) Organic compounds that are considered by the Administrator to have negligible photochemical reactivity may be excluded from the total quantity of organic compounds in determining the VOC content of the process fluid; and 3) Engineering judgment may be used to estimate the VOC content, if a piece of equipment had not been shown previously to be in service. If the Administrator disagrees with the judgment, the previous two procedures as specified in 40 CFR 60.485a(d)(1) and (2) shall be used to resolve the disagreement. [40 CFR 60.485a(d)]

90. The owner or operator shall demonstrate that an equipment is in light liquid service by showing that all the following conditions apply: 1) The vapor pressure of one or more of the components is greater than 0.3 kPa at 20 øC (1.2 in. H2O at 68 degrees F). Standard reference texts or ASTM D2879-83, 96, or 97 (incorporated by reference as seen in 40 CFR 60.17) shall be used to determine the vapor pressures; 2) The total concentration of the pure components having a vapor pressure greater than 0.3 kPa at 20 degrees Celsius is equal to or greater than 20 percent by weight; and 3) The fluid is a liquid at operating conditions. [40 CFR 60.485a(e)]

91. An owner or operator of more than one affected facility subject to the provisions Subpart VVa may comply with the recordkeeping requirements for these facilities in one recordkeeping system if the system identifies each record by each facility. [40 CFR 60.486a(a)]

92. When each leak is detected as specified in 40 CFR 60.482-2a, 60.482-3a, 60.482-7a, 60.482-8a, and 60.483-2a, the following requirements apply: 1) A weatherproof and readily visible identification, marked with the equipment identification number, shall be attached to the leaking equipment; 2) The identification on a valve may be removed after it has been monitored for 2 successive months as specified in 40 CFR 60.482-7a(c) and no leak has been detected during those 2 months; and 3) The identification on equipment except on a valve, may be removed after it has been repaired. [40 CFR 60.486a(b)]

CONDITIONS CONTINUE ON NEXT PAGE

93. When each leak is detected as specified in 40 CFR 60.482-2a, 60.482-3a, 60.482-7a, 60.482-8a, and 60.483-2a, the following information shall be recorded in a log and shall be kept for 5 years in a readily accessible location: 1) The instrument and operator identification numbers and the equipment identification number; 2) The date the leak was detected and the dates of each attempt to repair the leak; 3) Repair methods applied in each attempt to repair the leak; 4) "Above 100 ppmv for valves and connectors or 500 ppmv for pumps and compressor seals" if the maximum instrument reading measured by the methods specified in 40 CFR 60.485a(a) after each repair attempt is equal to or greater than 100 ppmv for valves and connectors or 500 ppmv for pumps and compressor seals; 5) "Repair delayed" and the reason for the delay if a leak is not repaired within 15 calendar days after discovery of the leak; 6) The signature of the owner or operator (or designate) whose decision it was that repair could not be effected without a process shutdown; 7) The expected date of successful repair of the leak if a leak is not repaired within 15 days; 8) Dates of process unit shutdown that occur while the equipment is unrepaired; and 9) The date of successful repair of the leak. [40 CFR 60.486a(c); and District Rule 2201]

94. The following information pertaining to the design requirements for closed vent systems and control devices described in 40 CFR 60.482-10a shall be recorded and kept in a readily accessible location: 1) Detailed schematics, design specifications, and piping and instrumentation diagrams; 2) The dates and descriptions of any changes in the design specifications; 3) A description of the parameter or parameters monitored, as required in 40 CFR 60.482-10a(e), to ensure that control devices are operated and maintained in conformance with their design and an explanation of why that parameter (or parameters) was selected for the monitoring; 4) Periods when the closed vent systems and control devices required in 40 CFR 60.482-2a, 60.482-3a, 60.482-4a, and 60.482-5a are not operated as designed, including periods when a flare pilot light does not have a flame; and 5) Dates of startups and shutdowns of the closed vent systems and control devices required in 40 CFR 60.482-2a, 60.482-3a, 60.482-4a, and 60.482-5a. [40 CFR 60.486a(d)]

95. The following information pertaining to all equipment subject to the requirements in 40 CFR 60.482-1a to 60.482-10a shall be recorded in a log that is kept in a readily accessible location: 1) A list of identification numbers for equipment subject to the requirements of Subpart VVa; 2) (i) A list of identification numbers for equipment that are designated for no detectable emissions under the provisions of 40 CFR 60.482-2a(e), 60.482-3a(i) and 60.482-7a(f). (ii) The designation of equipment as subject to the requirements of 40 CFR 60.482-2a(e), 60.482-3a(i) and 60.482-7a(f) shall be signed by the owner or operator; 3) A list of equipment identification numbers for pressure relief devices required to comply with ⊥ 60.482-4a; 4) (i) The dates of each compliance test as required in 40 CFR 60.482-2a(e), 60.482-3a(i), ⊥ 60.482-4a, and 60.482-7a(f). (ii) The background level measured during each compliance test. (iii) The maximum instrument reading measured at the equipment during each compliance test; and 5) A list of identification numbers for equipment in vacuum service. [40 CFR 60.486a(e)]

96. The following information pertaining to all valves subject to the requirements of 40 CFR 60.482-7a(g) and (h) and to all pumps subject to the requirements of 40 CFR 60.482-2a(g) shall be recorded in a log that is kept in a readily accessible location: 1) A list of identification numbers for valves and pumps that are designated as unsafe-to-monitor, an explanation for each valve or pump stating why the valve or pump is unsafe-to-monitor, and the plan for monitoring each valve or pump; and 2) A list of identification numbers for valves that are designated as difficult-to-monitor, an explanation for each valve stating why the valve is difficult-to-monitor, and the schedule for monitoring each valve. [40 CFR 60.486a(f)]

97. The following information shall be recorded for valves complying with 40 CFR 60.483-2a: 1) A schedule of monitoring; 2) The percent of valves found leaking during each monitoring period. [40 CFR 60.486a(g)]

98. The following information shall be recorded in a log that is kept in a readily accessible location: 1) Design criterion required in 40 CFR 60.482-2a(d)(5) and 60.482-3a(e)(2) and explanation of the design criterion; and 2) Any changes to this criterion and the reasons for the changes. [40 CFR 60.486a(h)]

99. The following information shall be recorded in a log that is kept in a readily accessible location for use in determining exemptions as provided in 40 CFR 60.480a(d): 1) An analysis demonstrating the design capacity of the affected facility; 2) A statement listing the feed or raw materials and products from the affected facilities and an analysis demonstrating whether these chemicals are heavy liquids or beverage alcohol; and 3) An analysis demonstrating that equipment is not in VOC service. [40 CFR 60.486a(i)]

100. Information and data used to demonstrate that a piece of equipment is not in VOC service shall be recorded in a log that is kept in a readily accessible location. [40 CFR 60.486a(j)]

CONDITIONS CONTINUE ON NEXT PAGE

101. The provisions of 40 CFR 60.7 (b) and (d) do not apply to affected facilities subject to Subpart VVa. [40 CFR 60.486a(k)]

102. All semiannual reports to the Administrator shall include the following information, summarized from the information in 40 CFR 60.486a: 1) Process unit identification; 2) For each month during the semiannual reporting period, i) Number of valves for which leaks were detected as described in 40 CFR 60.482-7a(b) or 40 CFR 60.483-2a, (ii) Number of valves for which leaks were not repaired as required in 40 CFR 60.482-7a(d)(1), (iii) Number of pumps for which leaks were detected as described in 40 CFR 60.482-2a(b) and (d)(6)(i), (iv) Number of pumps for which leaks were not repaired as required in 40 CFR 60.482-2a(c)(1) and (d)(6)(ii), (v) Number of compressors for which leaks were detected as described in 40 CFR 60.482-3a(f), (vi) Number of compressors for which leaks were not repaired as required in 40 CFR 60.482-3a(g)(1), and (vii) The facts that explain each delay of repair and, where appropriate, why a process unit shutdown was technically infeasible; 3) Dates of process unit shutdowns which occurred within the semiannual reporting period; 4) Revisions to items reported in the semiannual report if changes have occurred since the initial report, as required in 40 CFR 60.487a(a) and (b), or subsequent revisions to the initial report. [40 CFR 60.487a(c)]

103. An owner or operator electing to comply with the provisions of 40 CFR 60.483-1a and 60.483-2a shall notify the Administrator of the alternative standard selected 90 days before implementing either of the provisions. [40 CFR 60.487a(d)]

104. The semiannual reporting requirements of 40 CFR 60.487a(a), (b), and (c) remain in force until and unless EPA, in delegating enforcement authority to a State under section 111(c) of the Act, approves reporting requirements or an alternative means of compliance surveillance adopted by such State. In that event, affected sources within the State will be relieved of the obligation to comply with the requirements of 40 CFR 60.487a(a), (b), and (c), provided that they comply with the requirements established by the State. [40 CFR 60.487a(f)]

105. Operator shall notify the Administrator of the actual date of initial startup postmarked within 15 days after such date. [40 CFR 60.7 (a)(3]

106. Operator shall notify the Administrator of the date construction is commenced postmarked no later than 30 days after such date. Notification shall include the Operating Plan. [40 CFR 60.113b(c)(1) and 60.7 (a)(1]

107. Permittee shall comply with all notification and recordkeeping requirements of 40 CFR Part 60.7. [40 CFR 60.7]

108. Permittee shall maintain with the permit accurate fugitive component counts and resulting emissions calculated as required by this permit. [District Rule 2201]

109. All records required by Rule 4455 shall be retained for a minimum period of 5 years and shall be made available to the APCO, ARB and US EPA upon request. [District Rule 4455]

110. {2490} All records required to be maintained by this permit shall be maintained for a period of at least five years and shall be made readily available for District inspection upon request. [District Rule 4623]

San Joaquin Valley
Air Pollution Control District

AUTHORITY TO CONSTRUCT

PERMIT NO: S-6971-23-0

ISSUANCE DATE: DRAFT

DRAFT

LEGAL OWNER OR OPERATOR: CRIMSON RENEWABLE ENERGY, LP
MAILING ADDRESS: 1801 CALIFORNIA STREET, STE 3600
DENVER, CO 80202-2617

LOCATION: 17731 MILLUX RD
BAKERSFIELD, CA

EQUIPMENT DESCRIPTION:
GLYCERIN PURIFICATION SYSTEM CONSISTING OF 17,535 GALLON GLYCERIN PHASE COLLECTING TANK (V-1500), 4,073 GALLON BUFFER TANK (V-1510), 4,931 GALLON ACIDIFICATION TANK (V-1520), 83.5 HP CENTRIFUGE (C-1530) AND DRYER (D-1550), 5,064 GALLON BUFFER TANK (V-1560), 3,949 GALLON NEUTRALIZATION TANK (V-1570), 3,998 GALLON SETTLING TANK (S-1580), AND 1,424 GALLON SETTLING TANK (S-1590) ALL SERVED BY THE GAS BLANKETING/VAPOR CONTROL SYSTEM LISTED ON S-6971-1

CONDITIONS

1. Prior to operating equipment under this Authority to Construct, permittee shall surrender VOC emission reduction credits for the following quantity of emissions: 1st quarter - 2111 lb, 2nd quarter - 2111 lb, 3rd quarter - 2111 lb, and fourth quarter - 2111 lb. These amounts include the applicable offset ratio specified in Rule 2201 Section 4.8 (as amended 4/21/11) for the ERC specified below. [District Rule 2201]
2. ERC Certificate Number S-4352-1 (or a certificate split from this certificate) shall be used to supply the required offsets, unless a revised offsetting proposal is received and approved by the District, upon which this Authority to Construct shall be reissued, administratively specifying the new offsetting proposal. Original public noticing requirements, if any, shall be duplicated prior to reissuance of this Authority to Construct. [District Rule 2201]
3. This permit unit is fully offset for VOC emissions. [District Rule 2201]
4. ATC shall be implemented concurrently with or subsequent to ATC S-6971-1-6. [District Rule 2201]
5. V-1500 Glycerin Phase Collecting tank, V-1510 Acidic Water phase buffer tank, V-1520 Acidification tank , C-1530 Centrifuge, D-1550 Dryer, V-1560 FFA Buffer tank, V-1570 Neutralization tank, S-1580 Settling tank, and S-1590 Settling tank shall be connected to the gas blanket and vapor control system identified on permit S-6971-1. [District Rules 2201 & 4623]

CONDITIONS CONTINUE ON NEXT PAGE

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

Seyed Sadredin, Executive Director / APCO

DRAFT

Arnaud Marjollet, Director of Permit Services

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6. All piping, valves, and fittings associated with tanks subject to Rule 4623 shall be constructed and maintained in a leak-free condition. [District Rule 4623]

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

8. Fugitive VOC emissions rate from components affixed to the tank and in the vapor line from the tank to the vapor control system trunk line shall be calculated using EPA document Protocol for Equipment Leak Emission Rates, Table 2-1, SOCMI Average Emissions Factors with LDAR control efficiencies provided in Table 5-2 of EPA-453/R-95-017 for HON (88% light liquid valves, 75% light liquid pump and compressor seals, 93% connectors, 0% open ended lines, and 92% pressure relief valves). Permittee shall maintain with the permit an accurate fugitive component counts of vapor and condensate handling equipment and resulting emissions calculated using above specified leak rates and control efficiencies. [District Rule 2201]

9. Fugitive VOC emission rate from V-1500 Glycerin Phase Collecting tank, V-1510 Acidic Water phase buffer tank, V-1520 Acidification tank , C-1530 Centrifuge, D-1550 Dryer, V-1560 FFA Buffer tank, V-1570 Neutralization tank, S-1580 Settling tank, and S-1590 Settling tank tanks and from all components in vapor lines connected to the vapor control system trunk line shall not exceed 15.4 lb/day. [District Rule 2201]

10. A component shall be considered leaking if one or more of the conditions specified in Sections 5.1.4.1 through 5.1.4.4 of Rule 4455 exist at the facility. For this permit unit, except for pumps and compressors, a minor gas leak shall be defined for any component listed in Rule 4455 Section 3.22 Table 1 in either liquid or gas/vapor service as a reading in excess of 100 ppmv above background up to and including a reading of 10,000 ppmv above background. For pumps, compressors and other component types not specifically listed in Rule 4455 Section 3.22 Table 1 in either liquid or gas/vapor service, a minor gas leak shall be defined as a reading in excess of 500 ppmv above background up to and including a reading of 10,000 ppmv above background. Readings shall be taken as methane using a portable hydrocarbon detection instrument and shall be made in accordance with the methods specified in Section 6.4.1 of Rule 4455. [District NSR Rule and Rule 4455, 5.1.4]

11. The operator shall not use any component that leaks in excess of the allowable leak standards of Rule 4455, or is found to be in violation of the provisions specified in Section 5.1.3. A component identified as leaking in excess of an allowable leak standard may be used provided it has been identified with a tag for repair, has been repaired, or is awaiting re-inspection after repair, within the applicable time period specified within the rule. [District Rule 4455, 5.1.1]

12. Each hatch shall be closed at all times except during sampling or adding of process material through the hatch, or during attended repair, replacement, or maintenance operations, provided such activities are done as expeditiously as possible and with minimal spillage of material and VOC emissions to the atmosphere. [District Rule 4455, 5.1.2]

13. The operator shall be in violation of Rule 4455 if any District inspection demonstrates that one or more of the conditions in Sections 5.1.4 exist at the facility. [District Rule 4455, 5.1.3.1]

14. Except for annual operator inspection described in Section 5.1.3.2.3, any operator inspection that demonstrates that one or more of the conditions in Section 5.1.4 exist at the facility shall not constitute a violation of Rule 4455 if the leaking components are repaired as soon as practicable but not later than the time frame specified in Rule 4455. Such components shall not be counted towards determination of compliance with the provisions of Section 5.1.4. [District Rule 4455, 5.1.3.2.1]

15. Leaking components detected during operator inspection pursuant Section 5.1.3.2.1 that are not repaired, replaced, or removed from operation as soon as practicable but not later than the time frame specified in Rule 4455 shall be counted toward determination of compliance with the provisions of Section 5.1.4. [District Rule 4455, 5.1.3.2.2]

16. Any operator inspection conducted annually for a component type (including operator annual inspections pursuant to Section 5.2.5, 5.2.6, 5.2.7, or 5.2.8) that demonstrates one or more of the conditions in Section 5.1.4 exist at the facility shall constitute a violation of Rule 4455 regardless of whether or not the leaking components are repaired, replaced, or removed from operation within the allowable repair time frame specified in Rule 4455. [District Rule 4455, 5.1.3.2.3]

CONDITIONS CONTINUE ON NEXT PAGE

17. The operator shall audio-visually inspect for leaks all accessible operating pumps, compressors and Pressure Relief Devices (PRDs) in service at least once every 24 hours, except when operators do not report to the facility for that given 24 hours. Any identified leak that cannot be immediately repaired shall be reinspected within 24 hours using a portable analyzer. If a leak is found, it shall be repaired as soon as practical but not later than the time frame specified in Table 3. [District Rule 4455, 5.2.1 & 5.2.2]

18. The operator shall inspect all components at least once every calendar quarter, except for inaccessible components, unsafe-to-monitor components and pipes. Inaccessible components, unsafe-to-monitor components and pipes shall be inspected in accordance with the requirements set forth in Sections 5.2.5, 5.2.6, and 5.2.7. New, replaced, or repaired fittings, flanges and threaded connections shall be inspected immediately after being placed into service. Components shall be inspected using EPA Method 21. [District Rule 4455, 5.2.3, 5.2.4, 5.2.5, 5.2.6 & 5.2.7]

19. The operator may apply for a written approval from the APCO to change the inspection frequency from quarterly to annually for a component type, provided the operator meets all the criteria specified in Sections 5.2.8.1 through 5.2.8.3. This approval shall apply to accessible component types, specifically designated by the APCO, except pumps, compressors, and PRDs which shall continue to be inspected on a quarterly basis. [District Rule 4455, 5.2.8]

20. An annual inspection frequency approved by the APCO shall revert to quarterly inspection frequency for a component type if either the operator inspection or District inspection demonstrates that a violation of the provisions of Sections 5.1, 5.2 and 5.3 of the rule exists for that component type, or the APCO issued a Notice of Violation for violating any of the provisions of Rule 4455 during the annual inspection period for that component type. When the inspection frequency changes from annual to quarterly inspections, the operator shall notify the APCO in writing within five (5) calendar days after changing the inspection frequency, giving the reason(s) and date of change to quarterly inspection frequency. [District Rule 4455, 5.2.9 & 5.2.10]

21. The operator shall initially inspect a process PRD that releases to the atmosphere as soon as practicable but not later than 24 hours after the time of the release. To insure that the process PRD is operating properly, and is leak-free, the operator shall re-inspect the process PRD not earlier than 24 hours after the initial inspection but not later than 15 calendar days after the date of the release using EPA Method 21. If the process PRD is found to be leaking at either inspection, the PRD leak shall be treated as if the leak was found during quarterly operator inspections. [District Rule 4455, 5.2.11]

22. Except for process PRD, a component shall be inspected within 15 calendar days after repairing the leak or replacing the component using EPA Method 21. [District Rule 4455, 5.2.12]

23. Upon detection of a leaking component, the operator shall affix to that component a weatherproof readily visible tag that contains the information specified in Section 5.3.3. The tag shall remain affixed to the component until the leaking component has been repaired or replaced; has been re-inspected using EPA Method 21; and is found to be in compliance with the requirements of Rule 4455. [District Rule 4455, 5.3.1 5.3.2 and 5.3.3]

24. An operator shall minimize all component leaks immediately to the extent possible, but not later than one (1) hour after detection of leaks in order to stop or reduce leakage to the atmosphere. [District Rule 4455, 5.3.4]

25. If the leak has been minimized but the leak still exceeds the applicable leak standards of Rule 4455, an operator shall repair or replace the leaking component, vent the leaking component to a closed vent system, or remove the leaking component from operation as soon as practicable but not later than the time period specified in Table 3. For each calendar quarter, the operator may be allowed to extend the repair period as specified in Table 3, for a total number of leaking components, not to exceed 0.05 percent of the number of components inspected, by type, rounded upward to the nearest integer where required. [District Rule 4455, 5.3.5]

26. If the leaking component is an essential component or a critical component and which cannot be immediately shut down for repairs, the operator shall minimize the leak within one hour after detection of the leak. If the leak has been minimized, but the leak still exceeds any of the applicable leak standards of Rule 4455, the essential component or critical component shall be repaired or replaced to eliminate the leak during the next process unit turnaround, but in no case later than one year from the date of the original leak detection, whichever comes earlier. [District Rule 4455 5.3.6]

CONDITIONS CONTINUE ON NEXT PAGE

27. For any component that has incurred five repair actions for major gas leaks or major liquid leaks, or any combination of major gas leaks and major liquid leaks within a continuous 12-month period, the operator shall comply with at least one of the requirements specified in Sections 5.3.7.1, 5.3.7.2, 5.3.7.3, or 5.3.7.4 by the applicable deadlines specified in Sections 5.3.7.5 and 5.3.7.6. If the original leaking component is replaced with a new like-in-kind component before incurring five repair actions for major leaks within 12-consecutive months, the repair count shall start over for the new component. An entire compressor or pump need not be replaced provided the compressor part(s) or pump part(s) that have incurred five repair actions as described in Section 5.3.7 are brought into compliance with at least one of the requirements of Sections 5.3.7.1 through 5.3.7.6. [District Rule4455, 5.3.7]

28. The operator shall monitor process PRD by using electronic process control instrumentation that allows for real time continuous parameter monitoring or by using telltale indicators for the process PRD where parameter monitoring is not feasible. [District Rule 4455, 5.4.1]

29. All major components and critical components shall be physically identified clearly and visibly for inspection, repair, and recordkeeping purposes. The physical identification shall consist of labels, tags, manufacturer's nameplate identifier, serial number, or model number, or other system approved by the APCO that enables an operator or District personnel to locate each individual component. The operator shall replace tags or labels that become missing or unreadable as soon as practicable but not later than 24 hours after discovery. The operator shall comply with the requirements of Sections 6.1.4 if there is any change in the description of major components or critical components. [District Rule 4455, 5.5.1 & 5.5.2]

30. The operator shall keep a copy of the operator management plan at the facility and make it available to the APCO, ARB and US EPA upon request. 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 operator management plan. [District Rule 4455, 6.1.2 & 6.1.4]

31. The operator shall maintain an inspection log containing, at a minimum, 1) total number of components inspected, and total number and percentage of leaking components found by component types, 2) location, type, name or description of each leaking component, and description of any unit where the leaking component is found, 3) date of leak detection and method of 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) date of repair, replacement, or removal from operation of leaking components, 6) identification and location of essential component and critical components found leaking that cannot be repaired until the next process unit turnaround or not later one year after leak detection, whichever comes earlier, 7) methods used to minimize the leak from essential components and critical components that cannot be repaired until the next process unit turnaround or not later one year after leak detection, whichever comes earlier, 8) after the component is repaired or is replaced, the date of reinspection and the leak concentration in ppmv, 9) inspector's name, business mailing address, and business telephone number, and 10) the facility operator responsible for the inspection and repair program shall sign and date the inspection log certifying the accuracy of the information recorded in the log. [District Rule 4455, 6.2.1]

32. Records of each calibration of the portable hydrocarbon detection instrument utilized for inspecting components, including a copy of current calibration gas certification from the vendor of said calibration gas cylinder, the date of calibration, concentration of calibration gas, analyzer reading of calibration gas before adjustment, instrument reading of calibration gas after adjustment, calibration gas expiration date, and calibration gas cylinder pressure at the time of calibration. [District Rule 4455, 6.2.3]

33. The operator shall notify the APCO, by telephone or other methods approved by the APCO, of any process PRD release described in Sections 5.4.4 and 5.4.5, and any release in excess of the reportable quantity limits as stipulated in 40 CFR, Part 117, Part 302 and Part 355, including any release in excess of 100 pounds of VOC, within one hour of such occurrence or within one hour of the time said person knew or reasonably should have known of its occurrence. [District Rule 4455, 6.3.1]

34. The operator shall submit a written report to the APCO within thirty (30) calendar days following a PRD release subject to 6.3.1. The written report shall include 1) process PRD type, size, and location, 2) date, time and duration of the process PRD release, 3) types of VOC released and individual amounts, in pounds, including supporting calculations, 4) cause of the process PRD release, and 5) corrective actions taken to prevent a subsequent process PRD release. [District Rule4455 6.3.2]

CONDITIONS CONTINUE ON NEXT PAGE

35. Copies of all records shall be retained for a minimum of five (5) years after the date of an entry. Such records shall be made available to the APCO, ARB, or US EPA upon request. [District Rule 4455, 6.2.2, 6.2.3 & 6.2.4]

36. Measurements of gaseous leak concentrations shall be conducted according to US EPA Method 21 using an appropriate portable hydrocarbon detection instrument calibrated with methane. The instrument shall be calibrated in accordance with the procedures specified in US EPA Method 21 or the manufacturer's instruction, as appropriate, not more than 30 days prior to its use. The operator shall record the calibration date of the instrument. [District Rule 4455, 6.4.1]

37. The VOC content shall be determined using American Society of Testing and Materials (ASTM) D 1945 for gases and South Coast Air Quality Management District (SCAQMD) Method 304-91 for liquids. [District Rule 4455, 6.4.2]

38. The percent by volume liquid evaporated at 1500C shall be determined using ASTM D 86. [District Rule 4455, 6.4.3]

39. Each owner or operator subject to the provisions of this subpart shall demonstrate compliance with the requirements of 40 CFR 60.482-1a through 60.482-10a or 40 CFR 60.480a(e) for all equipment within 180 days of initial startup. [40 CFR 60.482-1a(a)]

40. Valves in gas/vapor service and in light liquid service shall be monitored for the first time within 30 days after the initial startup date for the process unit as required by 40 CFR 60.482-2a and 40 CFR 60.482-7a. [40 CFR 60.482-2a (a) and 40 CFR 60.482-7 a(a)]

41. Compliance with 40 CFR 60.482-1a to 60.482-10a will be determined by review of records and reports, review of performance test results, and inspection using the methods and procedures specified in 40 CFR 60.485a. [40 CFR 60.482-1a(b)]

42. An owner or operator may request a determination of equivalence of a means of emission limitation to the requirements of 40 CFR 60.482-2a, 60.482-3a, 60.482-5a, 60.482-6a, 60.482-7a, 60.482-8a, and 60.482-10a as provided in 40 CFR 60.484a. [40 CFR 60.482-1a(c)(1)]

43. If the Administrator makes a determination that a means of emission limitation is at least equivalent to the requirements of 40 CFR 60.482-2a, 60.482-3a, 60.482-5a, 60.482-6a, 60.482-7a, 60.482-8a, or 60.482-10a, an owner or operator shall comply with the requirements of that determination. [40 CFR 60.482-1a(c)(2)]

44. Equipment that is in vacuum service is excluded from the requirements of 40 CFR 60.482-2a to 40 CFR 60.482-10a if it is identified as required in 40 CFR 60.486a(e)(5). [40 CFR 60.482-1a(d)]

45. Each pump in light liquid service (PLLS) shall be monitored monthly to detect leaks by the methods specified in 40 CFR 60.485a(b), except as provided in 40 CFR 60.482-1a(c) and 40 CFR 60.482-2a(d), (e), and (f). Each pump in light liquid service shall be checked by visual inspection each calendar week for indications of liquids dripping from the pump seal. A leak is detected if an instrument reading of 500 ppmv or greater is measured or if there are indications of liquids dripping from the pump seal. [40 CFR 60.482-2a(a) and (b), and District Rule 2201]

46. When a leak is detected for each PLLS, it shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected, except as provided in 40 CFR 60.482-9a. A first attempt at repair shall be made no later than 5 calendar days after each leak is detected. [40 CFR 60.482-2a(c)]

47. Each PLLS equipped with a dual mechanical seal system that includes a barrier fluid system is exempt from the requirements of 40 CFR 60.482-2a(a) provided the requirements specified in 40 CFR 60.482-2a(d)(1) through (6) are met. [40 CFR 60.482a(d)]

48. Any PLLS that is designated, as described in 40 CFR 60.486a(e)(1) and (2), for no detectable emissions, as indicated by an instrument reading of less than 500 ppmv above background, is exempt from the requirements of 40 CFR 60.482-2a(a), (c), and (d) if the pump meets the requirements specified in 40 CFR 60.482-2a(e)(1), (2), and (3). [40 CFR 60.482-2a(e), and District Rule 2201]

49. If any PLLS is equipped with a closed vent system capable of capturing and transporting leakage from the seal or seals to a control device that complies with the requirements of 40 CFR 60.482-10a, it is exempt from the requirements of 40 CFR 60.482-2a(a) through (e). [40 CFR 60.482-2a(f)]

CONDITIONS CONTINUE ON NEXT PAGE

50. Any pump in PLLS that is designated, as described in 40 CFR 60.486a(f)(1), as an unsafe-to-monitor pump is exempt from the monitoring and inspection requirements of 40 CFR 60.482-2a(a) and 40 CFR 60.482-2a(d)(4) through (6) if: 1) The owner or operator of the pump demonstrates that the pump is unsafe-to-monitor because monitoring personnel would be exposed to an immediate danger as a consequence of complying with 40 CFR 60.482-2a(a); and 2) The owner or operator of the pump has a written plan that requires monitoring of the pump as frequently as practicable during safe-to-monitor times but not more frequently than the periodic monitoring schedule otherwise applicable, and repair of the equipment according to the procedures in 40 CFR 60.482-2a(c) if a leak is detected. [40 CFR 60.482-2a(g)]

51. Any pump that is located within the boundary of an unmanned plant site is exempt from the weekly visual inspection requirement of 40 CFR 60.482-2a(a)(2) and (d)(4) and the daily requirements of 40 CFR 60.482-2a(d)(5), provided that each pump is visually inspected as often as practicable and at least monthly. [40 CFR 60.482-2a(h)]

52. Unless exempt under 40 CFR 60.482-3a, each compressor shall be equipped with a seal system that includes a barrier fluid system and that prevents leakage of VOC to the atmosphere, except as provided in 40 CFR 60.482-3a(h) and (i). The barrier fluid system shall be in heavy liquid service or shall not be in VOC service. Each compressor shall be operated and equipped as specified in 40 CFR 60.482-3a(b)(1), (2), or (3). [40 CFR 60.482-3a(a), (b), and (c)]

53. If a barrier fluid system is used for a compressor, the barrier fluid system shall be equipped with a sensor that will detect failure of the seal system, barrier fluid system or both. Each sensor shall be checked daily or shall be equipped with an audible alarm. The owner or operator shall determine, based on design considerations and operating experience, a criterion that indicates failure of the seal system, the barrier fluid system, or both. If the sensor indicates failure of the seal system, the barrier system, or both based on the established criterion, a leak is detected. [40 CFR 60.482-3a(d), (e), and (f)]

54. If a barrier fluid system is used for a compressor, detected leaks shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected, except as provided in 40 CFR 60.482-9a. A first attempt at repair shall be made no later than 5 calendar days after each leak is detected. [40 CFR 60.482-3a(g)]

55. Any compressor that is designated, as described in 40 CFR 60.486a(e)(1) and (2), for no detectable emissions, as indicated by an instrument reading of less than 500 ppmv above background, is exempt from the requirements of 40 CFR 60.482-3a(a) through (h) if the compressor meets the requirements specified in 40 CFR 60.482-3a(i)(1) and (2). [40 CFR 60.482-3a(i), and District Rule 2201]

56. Any existing reciprocating compressor in a process unit which becomes an affected facility under the provisions of 40 CFR 60.14 or 40 CFR 60.15 is exempt from 40 CFR 60.482a(a), (b), (c), (d), (e), and (h), provided the owner or operator demonstrates that recasting the distance piece or replacing the compressor are the only options available to bring the compressor into compliance with the provisions of 40 CFR 60.482-3a(a), (b), (c), (d), (e), and (h). [40 CFR 60.482-3a(j)]

57. Except during pressure releases, each pressure relief device in gas/vapor service shall be operated with no detectable emissions, as indicated by an instrument reading of less than 100 ppm above background, as determined by the methods specified in 40 CFR 60.485a(c). [40 CFR 60.482-4a(a), and District Rule 2201]

58. After each pressure release, the pressure relief device shall be returned to a condition of no detectable emissions, as indicated by an instrument reading of less than 100 ppm above background, as soon as practicable, but no later than 5 calendar days after the pressure release, except as provided in 40 CFR 60.482-9a. No later than 5 calendar days after the pressure release, the pressure relief device shall be monitored to confirm the conditions of no detectable emissions, as indicated by an instrument reading of less than 100 ppm above background, by the methods specified in 40 CFR 60.485a(c). [40 CFR 60.482-4a(b), and District Rule 2201]

59. Any pressure relief device that is routed to a process or fuel gas system or equipped with a closed vent system capable of capturing and transporting leakage through the pressure relief device to a control device as described in 40 CFR 60.482-10a is exempted from the requirements of 40 CFR 60.482-4a(a) and (b). [40 CFR 60.482-4a(c)]

60. Any pressure relief device that is equipped with a rupture disk upstream of the pressure relief device is exempt from the 40 CFR 60.482-4a(a) and (b), provided the owner or operator complies with the requirements in 40 CFR 60.482-4a(d)(2) of this section. After each pressure release, a new rupture disk shall be installed upstream of the pressure relief device as soon as practicable, but no later than 5 calendar days after each pressure release, except as provided in 40 CFR 60.482-9a. [40 CFR 60.482-4a(d)]

CONDITIONS CONTINUE ON NEXT PAGE

61. Except for in-situ sampling systems and sampling systems without purges, each sampling connection system shall be equipped with a closed-purge, closed-loop, or closed-vent system, except as provided in 40 CFR 60.482-1a(c). Each closed-purge, closed-loop, or closed-vent system shall comply with the requirements specified in 40 CFR 60.482-5a(b)(1), (2), (3), and (4). [40 CFR 60.482-5a(a), (b), and (c)]

62. Each open-ended valve or line shall be equipped with a cap, blind flange, plug, or a second valve, except as provided in 40 CFR 60.482-1a(c). The cap, blind flange, plug, or second valve shall seal the open end at all times except during operations requiring process fluid flow through the open-ended valve or line. When a double block-and-bleed system is being used, the bleed valve or line may remain open during operations that require venting the line between the block valves but shall comply with this condition at all other times. [40 CFR 60.482-6a(a) and (c)]

63. Each open-ended valve or line equipped with a second valve shall be operated in a manner such that the valve on the process fluid end is closed before the second valve is closed. [40 CFR 60.482-6a(b)]

64. Open-ended valves or lines in an emergency shutdown system which are designed to open automatically in the event of a process upset are exempt from the requirements of 40 CFR 60.482-6a(a), (b) and (c). [40 CFR 60.482-6a(d)]

65. Open-ended valves or lines containing materials which would autocatalytically polymerize or would present an explosion, serious overpressure, or other safety hazard if capped or equipped with a double block and bleed system as specified in 40 CFR 60.482-6a(a) through (c) are exempt from the requirements of 40 CFR 60.482-6a(a) through (c). [40 CFR 60.482-6a(e)]

66. Each valve in gas/vapor service and in light liquid service shall be monitored monthly to detect leaks by the methods specified in 40 CFR 60.485a(b) and shall comply with 40 CFR 60.482-7a(b) through (e), except as provided in 40 CFR 60.482-7a(f), (g), and (h), 40 CFR 60.483-1a, 40 CFR 60.483-2a, 40 CFR 60.482-1a(c), and 40 CFR 60.482-1a(f). A leak is detected if an instrument reading of 100 ppmv or greater is measured. [40 CFR 60.482-7a(a) and (b), and District Rule 2201]

67. Any valve in gas/vapor service or in light liquid service for which a leak is not detected for 2 successive months may be monitored the first month of every quarter, beginning with the next quarter, until a leak is detected. If a leak is detected, the valve shall be monitored monthly until a leak is not detected for 2 successive months. [40 CFR 60.482-7a(c)(1) and (2)]

68. When a leak is detected for any valve in gas/vapor service or in light liquid service, it shall be repaired as soon as practicable, but no later than 15 calendar days after the leak is detected, except as provided in 40 CFR 60.482-9a. A first attempt at repair shall be made no later than 5 calendar days after each leak is detected. First attempts at repair include, but are not limited to, the best practices specified in 40 CFR 60.482-7a(e)(1), (2), (3), and (4), where practicable. [40 CFR 60.482-7a(d) and (e)]

69. Any valve in gas/vapor service or in light liquid service that is designated, as described in 40 CFR 60.486a(e)(2), for no detectable emissions, as indicated by an instrument reading of less than 100 ppmv above background, is exempt from the requirements of 40 CFR 60.482-7a(a) if the valve meets the requirements specified in 40 CFR 60.482-7a(f)(1), (2), and (3). [40 CFR 60.482-7a(f), and District Rule 2201]

70. Any valve in gas/vapor service or in light liquid service that is designated, as described in 40 CFR 60.486a(f)(1), as an unsafe-to-monitor valve is exempt from the requirements of 40 CFR 60.482-7a(a) if: 1) The owner or operator of the valve demonstrates that the valve is unsafe to monitor because monitoring personnel would be exposed to an immediate danger as a consequence of complying with 40 CFR 60.482-7a(a); and 2) The owner or operator of the valve adheres to a written plan that requires monitoring of the valve as frequently as practicable during safe-to-monitor times. [40 CFR 60.482-7a(g)]

71. Any valve in gas/vapor service or in light liquid service that is designated, as described in 40 CFR 60.486a(f)(2), as a difficult-to-monitor valve is exempt from the requirements of 40 CFR 60.482-7a(a) if: 1) The owner or operator of the valve demonstrates that the valve cannot be monitored without elevating the monitoring personnel more than 2 meters above a support surface; 2) The process unit within which the valve is located either becomes an affected facility through 40 CFR 60.14 or 40 CFR 60.15 or the owner or operator designates less than 3.0 percent of the total number of valves as difficult-to-monitor; and 3) The owner or operator of the valve follows a written plan that requires monitoring of the valve at least once per calendar year. [40 CFR 60.482-7a(h)]

CONDITIONS CONTINUE ON NEXT PAGE

72. If evidence of a potential leak is found by visual, audible, olfactory, or any other detection method at pumps and valves in heavy liquid service, pressure relief devices in light liquid or heavy liquid service, and connectors, the owner or operator shall follow either one of the following procedures: 1) The owner or operator shall monitor the equipment within 5 days by the method specified in 40 CFR 60.485a(b) and shall comply with the requirements of 40 CFR 60.482-8a(b) through (d); or 2) The owner or operator shall eliminate the visual, audible, olfactory, or other indication of a potential leak. A leak is detected if an instrument reading of 100 ppmv or greater for valves and connectors and 500 ppmv or greater for pumps and compressor seals, is measured. [40 CFR 60.482-8a(a) and (b); and District Rule 2201]

73. When a leak is detected in pumps and valves in heavy liquid service, pressure relief devices in light liquid or heavy liquid service, and connectors, it shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected, except as provided in 40 CFR 60.482-9a. The first attempt at repair shall be made no later than 5 calendar days after each leak is detected. First attempts at repair include, but are not limited to, the best practices described under 40 CFR 60.482-2a(c)(2) and 40 CFR 60.482-7a(e). [40 CFR 60.482-8a(c) and (d)]

74. For closed vent systems and control devices, vapor recovery systems shall be designed and operated to recover the VOC emissions vented to them with an efficiency of 95 percent or greater, or to an exit concentration of 20 parts per million by volume, whichever is less stringent. [40 CFR 60.482-10a(b)]

75. For closed vent systems and control devices, enclosed combustion devices shall be designed and operated to reduce the VOC emissions vented to them with an efficiency of 95 percent or greater, or to an exit concentration of 20 parts per million by volume, on a dry basis, corrected to 3 percent oxygen, whichever is less stringent or to provide a minimum residence time of 0.75 seconds at a minimum temperature of 816 degrees C. [40 CFR 60.482-10a(c)]

76. Owners or operators of control devices shall monitor these control devices to ensure that they are operated and maintained in conformance with their designs. [40 CFR 60.482-10a(e)]

77. Except as provided in 40 CFR 60.482-10a(i) through (k), each closed vent system shall be inspected according to the procedures and schedule specified in 40 CFR 60.482-10a(f)(1) and (f)(2). Leaks, as indicated by an instrument reading greater than 100 ppmv for valves and connectors or 500 ppmv for pumps and compressor seals above background or by visual inspections, shall be repaired as soon as practicable except as provided in 40 CFR 60.482-10a(h). A first attempt at repair shall be made no later than 5 calendar days after the leak is detected. Repair shall be completed no later than 15 calendar days after the leak is detected. [40 CFR 60.482-10a(f) and (g), and District Rule 2201]

78. Delay of repair of a closed vent system for which leaks have been detected is allowed if the repair is technically infeasible without a process unit shutdown or if the owner or operator determines that emissions resulting from immediate repair would be greater than the fugitive emissions likely to result from delay of repair. Repair of such equipment shall be complete by the end of the next process unit shutdown. [40 CFR 60.482-10a(h)]

79. If a vapor collection system or closed vent system is operated under a vacuum, it is exempt from the inspection requirements of 40 CFR 60.482-10a(f)(1)(i) and (f)(2). [40 CFR 60.482-10a(i)]

80. Any parts of the closed vent system that are designated, as described in 40 CFR 60.482-10a(l)(1), as unsafe to inspect are exempt from the inspection requirements of 40 CFR 60.482-10a(f)(1)(i) and (f)(2) if they comply with the requirements specified in 40 CFR 60.482-10a (j)(1) and (j)(2). [40 CFR 60.482-10a(j)]

81. Any parts of the closed vent system that are designated, as described in 40 CFR 60.482-10a(l)(2), as difficult to inspect are exempt from the inspection requirements of 40 CFR 60.482-10a(f)(1)(i) and (f)(2) if they comply with the requirements specified in 40 CFR 60.482-10a(k)(1) through (k)(3). [40 CFR 60.482-10a(k)]

82. The owner or operator shall record the following information: 1) Identification of all parts of the closed vent system that are designated as unsafe to inspect, an explanation of why the equipment is unsafe to inspect, and the plan for inspecting the equipment; 2) Identification of all parts of the closed vent system that are designated as difficult to inspect, an explanation of why the equipment is difficult to inspect, and the plan for inspecting the equipment; 3) For each inspection during which a leak is detected, a record of the information specified in 40 CFR 60.486a(c); 4) For each inspection conducted in accordance with 40 CFR 60.485a(b) during which no leaks are detected, a record that the inspection was performed, the date of the inspection, and a statement that no leaks were detected; and 5) For each visual inspection conducted in accordance with 40 CFR 60.482-10a(f)(1)(ii) during which no leaks are detected, a record that the inspection was performed, the date of the inspection, and a statement that no leaks were detected. [40 CFR 60.482-10a(l)]

CONDITIONS CONTINUE ON NEXT PAGE

83. Closed vent systems and control devices shall be operated at all times when emissions may be vented to them. [40 CFR 60.482-10a(m)]

84. The owner or operator may elect to comply with the applicable provisions for valves in gas/vapor service and in light liquid service as specified in 40 CFR 60.483-1a and 60.483-2a. [40 CFR 60.483-1a and 60.483-2a]

85. The owner or operator may apply to the Administrator for a determination of equivalency for any means of emission limitation that achieves a reduction in emissions of VOC at least equivalent to the reduction in emissions of VOC achieved by the controls required in Subpart VVa. [40 CFR 60.484a(a)]

86. The owner or operator shall determine compliance with the standards in 40 CFR 60.482a, 60.483a, and 60.484a as follows: Method 21 shall be used to determine the presence of leaking sources. The instrument shall be calibrated before use each day of its use by the procedures specified in Method 21. The following calibration gases shall be used: (i) Zero air (less than 10 ppmv of hydrocarbon in air); and (ii) A mixture of methane or n-hexane and air at a concentration of about, but less than, 100 ppmv methane or n-hexane for valves and connectors and 500 ppmv methane or n-hexane for pumps and compressor seals. [40 CFR 60.485a(b); and District Rule 2201]

87. The owner or operator shall determine compliance with the no detectable emission standards in 40 CFR 60.482-2a(e), 60.482-3a(i), 60.482-4a, 60.482-7a(f), and 60.482-10a(e) as follows: 1) The requirements of 40 CFR 60.485a(b) shall apply. 2) Method 21 shall be used to determine the background level. All potential leak interfaces shall be traversed as close to the interface as possible. The arithmetic difference between the maximum concentration indicated by the instrument and the background level is compared with 100 ppmv methane for valves and connectors and 500 ppmv methane for pumps and compressor seals for determining compliance. [40 CFR 60.485a(c); and District Rule 2201]

88. The owner or operator shall test each piece of equipment unless demonstrated that a process unit is not in VOC service, i.e., that the VOC content would never be reasonably expected to exceed 10 percent by weight. For purposes of this demonstration, the following methods and procedures shall be used: 1) Procedures that conform to the general methods in ASTM E260-73, 91, or 96, E168-67, 77, or 92, E169-63, 77, or 93 (incorporated by reference as seen in 40 CFR 60.17) shall be used to determine the percent VOC content in the process fluid that is contained in or contacts a piece of equipment; 2) Organic compounds that are considered by the Administrator to have negligible photochemical reactivity may be excluded from the total quantity of organic compounds in determining the VOC content of the process fluid; and 3) Engineering judgment may be used to estimate the VOC content, if a piece of equipment had not been shown previously to be in service. If the Administrator disagrees with the judgment, the previous two procedures as specified in 40 CFR 60.485a(d)(1) and (2) shall be used to resolve the disagreement. [40 CFR 60.485a(d)]

89. The owner or operator shall demonstrate that an equipment is in light liquid service by showing that all the following conditions apply: 1) The vapor pressure of one or more of the components is greater than 0.3 kPa at 20 øC (1.2 in. H2O at 68 degrees F). Standard reference texts or ASTM D2879-83, 96, or 97 (incorporated by reference as seen in 40 CFR 60.17) shall be used to determine the vapor pressures; 2) The total concentration of the pure components having a vapor pressure greater than 0.3 kPa at 20 degrees Celsius is equal to or greater than 20 percent by weight; and 3) The fluid is a liquid at operating conditions. [40 CFR 60.485a(e)]

90. An owner or operator of more than one affected facility subject to the provisions Subpart VVa may comply with the recordkeeping requirements for these facilities in one recordkeeping system if the system identifies each record by each facility. [40 CFR 60.486a(a)]

91. When each leak is detected as specified in 40 CFR 60.482-2a, 60.482-3a, 60.482-7a, 60.482-8a, and 60.483-2a, the following requirements apply: 1) A weatherproof and readily visible identification, marked with the equipment identification number, shall be attached to the leaking equipment; 2) The identification on a valve may be removed after it has been monitored for 2 successive months as specified in 40 CFR 60.482-7a(c) and no leak has been detected during those 2 months; and 3) The identification on equipment except on a valve, may be removed after it has been repaired. [40 CFR 60.486a(b)]

CONDITIONS CONTINUE ON NEXT PAGE

92. When each leak is detected as specified in 40 CFR 60.482-2a, 60.482-3a, 60.482-7a, 60.482-8a, and 60.483-2a, the following information shall be recorded in a log and shall be kept for 5 years in a readily accessible location: 1) The instrument and operator identification numbers and the equipment identification number; 2) The date the leak was detected and the dates of each attempt to repair the leak; 3) Repair methods applied in each attempt to repair the leak; 4) "Above 100 ppmv for valves and connectors or 500 ppmv for pumps and compressor seals" if the maximum instrument reading measured by the methods specified in 40 CFR 60.485a(a) after each repair attempt is equal to or greater than 100 ppmv for valves and connectors or 500 ppmv for pumps and compressor seals; 5) "Repair delayed" and the reason for the delay if a leak is not repaired within 15 calendar days after discovery of the leak; 6) The signature of the owner or operator (or designate) whose decision it was that repair could not be effected without a process shutdown; 7) The expected date of successful repair of the leak if a leak is not repaired within 15 days; 8) Dates of process unit shutdown that occur while the equipment is unrepaired; and 9) The date of successful repair of the leak. [40 CFR 60.486a(c); and District Rule 2201]

93. The following information pertaining to the design requirements for closed vent systems and control devices described in 40 CFR 60.482-10a shall be recorded and kept in a readily accessible location: 1) Detailed schematics, design specifications, and piping and instrumentation diagrams; 2) The dates and descriptions of any changes in the design specifications; 3) A description of the parameter or parameters monitored, as required in 40 CFR 60.482-10a(e), to ensure that control devices are operated and maintained in conformance with their design and an explanation of why that parameter (or parameters) was selected for the monitoring; 4) Periods when the closed vent systems and control devices required in 40 CFR 60.482-2a, 60.482-3a, 60.482-4a, and 60.482-5a are not operated as designed, including periods when a flare pilot light does not have a flame; and 5) Dates of startups and shutdowns of the closed vent systems and control devices required in 40 CFR 60.482-2a, 60.482-3a, 60.482-4a, and 60.482-5a. [40 CFR 60.486a(d)]

94. The following information pertaining to all equipment subject to the requirements in 40 CFR 60.482-1a to 60.482-10a shall be recorded in a log that is kept in a readily accessible location: 1) A list of identification numbers for equipment subject to the requirements of Subpart VVa; 2) (i) A list of identification numbers for equipment that are designated for no detectable emissions under the provisions of 40 CFR 60.482-2a(e), 60.482-3a(i) and 60.482-7a(f). (ii) The designation of equipment as subject to the requirements of 40 CFR 60.482-2a(e), 60.482-3a(i) and 60.482-7a(f) shall be signed by the owner or operator; 3) A list of equipment identification numbers for pressure relief devices required to comply with $^{\perp}$ 60.482-4a; 4) (i) The dates of each compliance test as required in 40 CFR 60.482-2a(e), 60.482-3a(i), $^{\perp}$ 60.482-4a, and 60.482-7a(f). (ii) The background level measured during each compliance test. (iii) The maximum instrument reading measured at the equipment during each compliance test; and 5) A list of identification numbers for equipment in vacuum service. [40 CFR 60.486a(e)]

95. The following information pertaining to all valves subject to the requirements of 40 CFR 60.482-7a(g) and (h) and to all pumps subject to the requirements of 40 CFR 60.482-2a(g) shall be recorded in a log that is kept in a readily accessible location: 1) A list of identification numbers for valves and pumps that are designated as unsafe-to-monitor, an explanation for each valve or pump stating why the valve or pump is unsafe-to-monitor, and the plan for monitoring each valve or pump; and 2) A list of identification numbers for valves that are designated as difficult-to-monitor, an explanation for each valve stating why the valve is difficult-to-monitor, and the schedule for monitoring each valve. [40 CFR 60.486a(f)]

96. The following information shall be recorded for valves complying with 40 CFR 60.483-2a: 1) A schedule of monitoring; 2) The percent of valves found leaking during each monitoring period. [40 CFR 60.486a(g)]

97. The following information shall be recorded in a log that is kept in a readily accessible location: 1) Design criterion required in 40 CFR 60.482-2a(d)(5) and 60.482-3a(e)(2) and explanation of the design criterion; and 2) Any changes to this criterion and the reasons for the changes. [40 CFR 60.486a(h)]

98. The following information shall be recorded in a log that is kept in a readily accessible location for use in determining exemptions as provided in 40 CFR 60.480a(d): 1) An analysis demonstrating the design capacity of the affected facility; 2) A statement listing the feed or raw materials and products from the affected facilities and an analysis demonstrating whether these chemicals are heavy liquids or beverage alcohol; and 3) An analysis demonstrating that equipment is not in VOC service. [40 CFR 60.486a(i)]

99. Information and data used to demonstrate that a piece of equipment is not in VOC service shall be recorded in a log that is kept in a readily accessible location. [40 CFR 60.486a(j)]

CONDITIONS CONTINUE ON NEXT PAGE

100. The provisions of 40 CFR 60.7 (b) and (d) do not apply to affected facilities subject to Subpart VVa. [40 CFR 60.486a(k)]

101. All semiannual reports to the Administrator shall include the following information, summarized from the information in 40 CFR 60.486a: 1) Process unit identification; 2) For each month during the semiannual reporting period, i) Number of valves for which leaks were detected as described in 40 CFR 60.482-7a(b) or 40 CFR 60.483-2a, (ii) Number of valves for which leaks were not repaired as required in 40 CFR 60.482-7a(d)(1), (iii) Number of pumps for which leaks were detected as described in 40 CFR 60.482-2a(b) and (d)(6)(i), (iv) Number of pumps for which leaks were not repaired as required in 40 CFR 60.482-2a(c)(1) and (d)(6)(ii), (v) Number of compressors for which leaks were detected as described in 40 CFR 60.482-3a(f), (vi) Number of compressors for which leaks were not repaired as required in 40 CFR 60.482-3a(g)(1), and (vii) The facts that explain each delay of repair and, where appropriate, why a process unit shutdown was technically infeasible; 3) Dates of process unit shutdowns which occurred within the semiannual reporting period; 4) Revisions to items reported in the semiannual report if changes have occurred since the initial report, as required in 40 CFR 60.487a(a) and (b), or subsequent revisions to the initial report. [40 CFR 60.487a(c)]

102. An owner or operator electing to comply with the provisions of 40 CFR 60.483-1a and 60.483-2a shall notify the Administrator of the alternative standard selected 90 days before implementing either of the provisions. [40 CFR 60.487a(d)]

103. The semiannual reporting requirements of 40 CFR 60.487a(a), (b), and (c) remain in force until and unless EPA, in delegating enforcement authority to a State under section 111(c) of the Act, approves reporting requirements or an alternative means of compliance surveillance adopted by such State. In that event, affected sources within the State will be relieved of the obligation to comply with the requirements of 40 CFR 60.487a(a), (b), and (c), provided that they comply with the requirements established by the State. [40 CFR 60.487a(f)]

104. Operator shall notify the Administrator of the actual date of initial startup postmarked within 15 days after such date. [40 CFR 60.7 (a)(3]

105. Operator shall notify the Administrator of the date construction is commenced postmarked no later than 30 days after such date. Notification shall include the Operating Plan. [40 CFR 60.113b(c)(1) and 60.7 (a)(1]

106. Permittee shall comply with all notification and recordkeeping requirements of 40 CFR Part 60.7. [40 CFR 60.7]

107. Permittee shall maintain with the permit accurate fugitive component counts and resulting emissions calculated as required by this permit. [District Rule 2201]

108. All records required by Rule 4455 shall be retained for a minimum period of 5 years and shall be made available to the APCO, ARB and US EPA upon request. [District Rule 4455]

109. {2490} All records required to be maintained by this permit shall be maintained for a period of at least five years and shall be made readily available for District inspection upon request. [District Rule 4623]