

 <b>SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT</b>  <b>ENGINEERING &amp; COMPLIANCE DIVISION</b>  APPLICATION PROCESSING AND CALCULATIONS	PAGES 15	PAGE 1
	APPL. NO. <b>526353 &amp; 529077</b>	DATE 06/01/12
	PROCESSED BY Angelita Alfonso	CHECKED BY

**PERMIT TO CONSTRUCT**

COMPANY NAME: PARAMOUNT PETROLEUM CORP  
ID No. 800183

MAILING ADDRESS: 14700 Downey Ave  
Paramount, CA 90745

EQUIPMENT LOCATION: 14700 Downey Ave  
Paramount, CA 90745

CONTACT PERSON: June Christman  
(562) 748-4704

**EQUIPMENT DESCRIPTION**

Additions to the Facility Permit are noted in underlines and deletions are noted in ~~strikeouts~~.

SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions And Requirements	Conditions
<b>Process 15: AIR POLLUTION CONTROL</b>					
<b>System 1: FLARE VAPOR RECOVERY SYSTEM</b>			S13.2, <del>S15.12</del> , <del>S18.2</del> , S31.3, <u>S56.1</u> , <u>S58.1</u>		
DRUM, LIQUID SEAL, JOHN ZINK, LENGTH: 20 FT; DIAMETER: 10 FT A/N: <del>458560</del> <u>529077</u>	D807				
COMPRESSOR, TWO STAGE, FLARE GAS VAPOR RECOVERY, 150 SCFM CAPACITY A/N: <del>458560</del> <u>529077</u>	D808				H23.24
COMPRESSOR, TWO STAGE, FLARE GAS VAPOR RECOVERY, 150 SCFM CAPACITY A/N: <del>458560</del> <u>529077</u>	D809				H23.24
KNOCK OUT POT, WITH DEMISTER A/N: <del>458560</del> <u>529077</u>	D810				



**SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT**

**ENGINEERING & COMPLIANCE DIVISION**

APPLICATION PROCESSING AND CALCULATIONS

PAGES

15

PAGE

2

APPL. NO.

**526353 & 529077**

DATE

06/01/12

PROCESSED BY

Angelita Alfonso

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Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions And Requirements	Conditions
KNOCK OUT POT, WITH DEMISTER A/N: 458560 529077	D811				
FUGITIVE EMISSIONS, MISCELLANEOUS A/N: 458560 529077	D812				H23.2
<b>System 2: REFINERY FLARE SYSTEM</b>			<u>S13.2, S18.9, S58.2</u>		
KNOCK OUT POT, D-723, LENGTH: 50 FT; DIAMETER: 10 FT A/N: 459987 526353	D395				
FLARE, ELEVATED WITH STEAM INJECTION, NW-791, REFINERY GAS, HEIGHT: 100 FT; DIAMETER: 1 FT A/N: 459987 526353	C396	D738		CO: 2000 PPMV (5)[RULE 407,4-2-1982]; PM: 0.1 GRAINS/SCF (5) [RULE 409, 8-7-1981]	D12.3 D323.1 D323.2 E193.3 E193.5 H23.22 <del>H-1</del> <del>H-6</del>
DRUM, D-806, RELIEF, W/ CONDENSING WATER SPRAYS, HEIGHT: 34 FT; DIAMETER: 5 FT A/N: 459987 526353	D397				
FUGITIVE EMISSIONS, MISCELLANEOUS A/N: 459987 526353	D650				
<b>Process 1: CRUDE UNIT; System 1, 2, 4, 5, 6, 7</b>					<u>S56.1</u>
<b>Process 2: HYDROTREATING UNIT; System 1, 3, 4</b>					
<b>Process 3: CATALYTIC REFORMING UNIT; System 1</b>					
<b>Process 6: TREATING, STRIPPING; System 1, 2, 4, 5, 6, 7</b>					
<b>Process 7: SULFUR RECOVERY UNIT; System 2</b>					
<b>Process 10: STORAGE TANKS; System 3</b>					
<b>Process 13: MISCELLANEOUS; System 6</b>					
<b>Process 15: FLARE VAPOR RECOVERY SYSTEM; Sytem 1</b>					
<b>Process 16: ISOMERIZATION; System1, 2, 3</b>					

 <b>SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT</b>  <b>ENGINEERING &amp; COMPLIANCE DIVISION</b>  APPLICATION PROCESSING AND CALCULATIONS	PAGES 15	PAGE 3
	APPL. NO. <b>526353 &amp; 529077</b>	DATE 06/01/12
	PROCESSED BY Angelita Alfonso	CHECKED BY

**CONDITIONS**

S13.2 All devices under this system are subject to the applicable requirements of the following rules or regulations:

Contaminant	Rule	Rule/Subpart
VOC [Rule 1123, 12-7-1990]	District Rule	1123

[Systems subject to this condition: Process 1, System 1, 2, 4, 5, 6, 7; Process 2, System 1, 3, 4; Process 3, System 1; Process 6, System 1, 2, 4, 5, 6, 7; Process 13, System 6; Process 15, System 1, 2, 4; Process 16, System 1, 2, 3]

~~S15.12 The vent gases from all affected devices of this process/system shall be vented as follows:~~

~~All emergency vent gases shall be directed to the blowdown flare system.~~

~~This process/system shall not be operated unless the blowdown flare system is in full use and has a valid permit to receive vent gases from this system.~~

~~[Rule 1303(a)(1) BACT, 5-10-1996; Rule 1303(a)(1) BACT, 12-6-2002; Rule 1303(b)(2) Offset, 5-10-1996; Rule 1303(b)(2) Offset, 12-6-2002]~~

~~[Systems subject to this condition: Process 15, System 1]~~

**Note: This condition is replaced with S56.1.**

~~S18.2 All affected devices listed under this process/system shall be used only to receive, recover, and/or dispose of vent gases routed from the system(s) or process(es) listed below, in addition to specific devices identified in the "connected to" column:~~

- ~~Crude Unit (Process: 1, System: 1, 2, 4, 5, 6, & 7)~~
- ~~Hydrotreating Unit (Process: 2, System: 1, 3, & 4)~~
- ~~Catalytic Reforming Unit (Process: 3, System: 1)~~
- ~~Treating, Stripping (Process: 6, System: 1, 2, 4, 5, 6 & 7)~~
- ~~Sulfur Recovery Unit (Process: 7, System: 2)~~
- ~~Storage Tanks (Process: 10, System: 3)~~
- ~~Miscellaneous (Process: 13, System: 6)~~
- ~~Naphtha Splitter (Process: 1, System: 7)~~
- ~~Isomerization (Penex Plus) Process (Process: 16, System: 1, 2 & 3)~~

~~[Rule 1303(a)(1) BACT, 5-10-1996; Rule 1303(a)(1) BACT, 12-6-2002; Rule 1303(b)(2) Offset, 5-10-1996; Rule 1303(b)(2) Offset, 12-6-2002]~~

~~[Systems subject to this condition: Process 15, System 1]~~

**Note: This condition is replaced with S58.1.**

 <p><b>SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT</b></p> <p><i>ENGINEERING &amp; COMPLIANCE DIVISION</i></p> <p>APPLICATION PROCESSING AND CALCULATIONS</p>	PAGES 15	PAGE 4
	APPL. NO. <b>526353 &amp; 529077</b>	DATE 06/01/12
	PROCESSED BY Angelita Alfonso	CHECKED BY

S18.9 ~~All affected devices listed under this process/system shall be used only to receive, recover, and/or dispose of vent gases routed from the system(s) or process(es) listed below, in addition to specific devices identified in the “connected to” column:~~

~~Flare Gas Vapor Recovery System (Process: 15, System: 1)~~

~~{Rule 1118, 2-13-1998; Rule 1118, 11-4-2005}~~

~~{Systems subject to this condition: Process 15, System 2}~~

**Note: This condition is replaced with S58.2.**

S31.3 The following BACT requirements shall apply to VOC service fugitive components associated with the devices that are covered by application number(s) 477619 (Naphtha Hydrodesulfurization Unit, HDS #1), 477621 (Naphtha Splitter), 458560 (Flare Vapor Recovery System), 486510, Wastewater Separation Facility (Hydroprocessing Area):

All open-ended lines shall be equipped with cap, blind flange, plug, or a second valve.

All pressure relief valves shall be connected to a closed vent system.

All new light liquid pumps shall utilize double seals.

All compressors shall be equipped with a seal system with a higher pressure barrier fluid.

Prior to start of construction of the Naphtha Splitter, under A/N 477621, the operator shall replace Valve No. 1017 with a bellows-seal valve.

All new valves in VOC service, except those specifically exempted by Rule 1173 and those in heavy liquid service as defined in Rule 1173, shall be bellows seal valves, except as approved by the District, in the following applications: heavy liquid service, control valve, instrument piping/tubing, applications requiring torsional valve stem motion, applications where valve failure could pose safety hazard, retrofits/special applications with space limitations, and valves not commercially available.

All new valves and major components in VOC service as defined by Rule 1173, except those specifically exempted by Rule 1173 and those in heavy liquid service as defined in Rule 1173, shall be distinctly identified from other components through their tag numbers (e.g., numbers ending in the letter “N”), and shall be noted in the records.

All new components in VOC service as defined in Rule 1173, except valves and flanges, shall be inspected quarterly using EPA Reference Method 21. All new valves and flanges in VOC service, except those specifically exempted by Rule 1173, shall be inspected monthly using EPA Reference Method 21.

 <b>SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT</b>  <b>ENGINEERING &amp; COMPLIANCE DIVISION</b>  APPLICATION PROCESSING AND CALCULATIONS	PAGES 15	PAGE 5
	APPL. NO. <b>526353 &amp; 529077</b>	DATE 06/01/12
	PROCESSED BY Angelita Alfonso	CHECKED BY

If 98.0 percent or greater of the new (non-bellows seal) valves and the new flange population inspected is found to leak gaseous or liquid volatile organic compounds at a rate less than 200 ppmv for two consecutive months, then the operator may change to a quarterly inspection program with the approval of the District.

The operator shall revert from quarterly to monthly inspection program if less than 98.0 percent of the new (non-bellows seal) valves and the new flange population inspected is found to leak gaseous or liquid volatile organic compounds at a rate of less than 200 ppmv.

All components in VOC service except for pumps, compressors, and drains, a leak greater than 200 ppm but less than 1,000 ppm measured as methane above background as measured using EPA Method 21, shall be repaired within 14 days of detection. Components shall be defined as any valve, fitting, pressure relief device, diaphragm, hatch, sight-glass, and meter, which are not exempted by Rule 1173. A leak greater than 1,000 ppm shall be repaired according to Rule 1173.

All pumps, compressors, and drains, a leak greater than 500 ppm but less than 1,000 ppm measured as methane above background as measured using EPA Method 21, shall be repaired within 14 days of detection. A leak greater than 1,000 ppm shall be repaired according to Rule 1173.

The operator shall keep records of the monthly inspection (quarterly where applicable), subsequent repair, and reinspection, in a manner approved by the District. Records shall be kept and maintained for at least five years, and shall be made available to Executive Officer of his authorized representative upon request.

[**Rule 1303(a)(1)-BACT, 5-10-1996**; Rule 1303(a)(1)-BACT, 12-6-2002; **Rule 1303(b)(2)-Offset, 5-10-1996**; Rule 1303(b)(2)-Offset, 12-6-2002]

[Systems subject to this condition: Process 1, System 7; Process 2, System 1; Process 15, System 1]

S56.1

Vent gases from all affected devices of this process/system shall be directed to a gas recovery system, except for the venting of gases from equipment specifically identified in a permit condition, and for the following events for which vent gases may be directed to a flare:

1. Vent gases resulting from an Emergency as defined in Rule 1118; and
2. Vent gases resulting from Planned Shutdowns, Startups, and/or Turnarounds as defined in Rule 1118, provided that the owner/operator follows the applicable options and any associated limitations to reduce flaring that were identified, evaluated and most recently submitted by the owner/operator to the Executive Officer pursuant to Rule 1118, or any other option(s) which reduces flaring for such planned event; and
3. Vent gases due to and resulting from an Essential Operational Need as defined in Rule 1118.

 <p><b>SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT</b></p> <p><i>ENGINEERING &amp; COMPLIANCE DIVISION</i></p> <p>APPLICATION PROCESSING AND CALCULATIONS</p>	PAGES 15	PAGE 6
	APPL. NO. <b>526353 &amp; 529077</b>	DATE 06/01/12
	PROCESSED BY Angelita Alfonso	CHECKED BY

The evaluation of options to reduce flaring during Planned Shutdowns, Startups and/or Turnarounds shall be updated annually to reflect any revisions, and submitted to the Executive Officer within thirty days from when the permit under A/N 526353 is issued in the first quarter of each year by May 31, 2012 for the first update and by March 31<sup>st</sup> for the subsequent annual updates.

This process/system shall not be operated unless its designated flare(s) are in full use and have valid permits to receive vent gases from this process/system.

[Rule 1303(a)(1)-BACT, 5-10-1996; Rule 1303(a)(1)-BACT, 12-6-2002; Rule 1303(b)(2)-Offset, 5-10-1996; Rule 1303(b)(2)-Offset, 12-6-2002]

[Systems subject to this condition: Process 1, System 1, 2, 4, 5, 6, & 7; Process 2, System 1, 3, & 4; Process 3, System 1; Process 6, System 1, 2, 4, 5, 6 & 7; Process 7, System 2; Process 10, System 3; Process 13, System 6; Process 15, System 1; Process 16, System 1, 2 & 3]

**Note: This condition is added to all the above systems.**

S58.1 The Flare Vapor Recovery System shall only be used to receive and handle vent gases from the following Process(es) and System(s):

Crude Unit (Process: 1, System: 1, 2, 4, 5, 6, & 7)  
Hydrotreating Unit (Process: 2, System: 1, 3, & 4)  
Catalytic Reforming Unit (Process: 3, System: 1)  
Treating, Stripping (Process: 6, System: 1, 2, 4, 5, 6 & 7)  
Sulfur Recovery Unit (Process: 7, System: 2)  
Storage Tanks (Process: 10, System: 3)  
Miscellaneous (Process: 13, System: 6)  
Isomerization (Penex Plus) Process (Process: 16, System: 1, 2 & 3)

The flare gas recovery system shall be operated in full use when any of the above Process(es) and System(s) is in operation. Full use means one of two compressor trains (Process 15, System 1) is online at any given time..

[Rule 1303(a)(1)-BACT, 5-10-1996; Rule 1303(a)(1)-BACT, 12-6-2002; Rule 1303(b)(2)-Offset, 5-10-1996; Rule 1303(b)(2)-Offset, 12-6-2002]

[Systems subject to this condition: Process 15, System 1]

S58.2 The Refinery Flare System shall only be used to receive and handle vent gases from the following Process(es) and System(s):

Crude Unit (Process: 1, System: 1, 2, 4, 5, 6, & 7)  
Hydrotreating Unit (Process: 2, System: 1, 3, & 4)  
Catalytic Reforming Unit (Process: 3, System: 1)  
Treating, Stripping (Process: 6, System: 1, 2, 4, 5, 6 & 7)

 <p><b>SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT</b></p> <p><i>ENGINEERING &amp; COMPLIANCE DIVISION</i></p> <p>APPLICATION PROCESSING AND CALCULATIONS</p>	PAGES 15	PAGE 7
	APPL. NO. <b>526353 &amp; 529077</b>	DATE 06/01/12
	PROCESSED BY Angelita Alfonso	CHECKED BY

Sulfur Recovery Unit (Process: 7, System: 2)  
Storage Tanks (Process: 10, System: 3)  
Miscellaneous (Process: 13, System: 6)  
Flare Vapor Recovery System (Process: 15, System 1)  
Isomerization (Penex Plus) Process (Process: 16, System: 1, 2 & 3)

The flare gas recovery system shall be operated in full use when any of the above Process(es) and System(s) is in operation. Full use means one of two compressor trains (Process 15, System 1) is online at any given time.

**[Rule 1118, 11-4-2005]**

[Systems subject to this condition: Process 15, System 2]

D12.3 The operator shall install and maintain a(n) thermocouple or any other equivalent device to accurately indicate the presence of a flame at the pilot light.

**[Rule 1118, 11-4-2005; Rule 3004(a)(4)-Periodic Monitoring, 12-12-1997; 40CFR60 Subpart A, 4-9-1993]**

[Devices subject to this condition: C396]

D323.1 The operator shall conduct an inspection for visible emissions from all stacks and other emission points of this equipment whenever there is a public complaint of visible emissions, whenever visible emissions are observed, and on a bi-weekly basis whenever fuel oil is burned. The routine bi-weekly inspection shall be conducted while the equipment is in operation and during daylight hours.

If any visible emissions (not including condensed water vapor) are detected that last more than three minutes in any one hour, the operator shall verify and certify within 24 hours that the equipment causing the emission and any associated air pollution control equipment are operating normally according to their design and standard procedures and under the same conditions under which compliance was achieved in the past, and either:

- 1) Take corrective action(s) that eliminates the visible emissions within 24 hours and report the visible emissions as a potential deviation in accordance with the reporting requirements in Section K of this permit; or
- 2) Have a CARB-certified smoke reader determine compliance with the opacity standard, using EPA Method 9 or the procedures in the CARB manual "Visible Emissions Evaluation", within three business days and report any deviations to AQMD.

The operator shall keep the records in accordance with the recordkeeping requirements in Section K of this permit and the following records:

- 1) Stack or emission point identification;
- 2) Description of any corrective actions taken to abate visible emissions;

 <p><b>SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT</b></p> <p><i>ENGINEERING &amp; COMPLIANCE DIVISION</i></p> <p>APPLICATION PROCESSING AND CALCULATIONS</p>	PAGES 15	PAGE 8
	APPL. NO. <b>526353 &amp; 529077</b>	DATE 06/01/12
	PROCESSED BY Angelita Alfonso	CHECKED BY

- 3) Date and time visible emission was abated; and
- 4) All visible emission observation records by operator or a certified smoke reader.

**[Rule 3004(a)(4)-Periodic Monitoring, 12-12-1997; Rule 401, 11-9-2001]**

[Devices subject to this condition: C175, C396, C531]

D323.2

The operator shall conduct an inspection for visible emissions from all stacks and other emission points of this equipment whenever there is a public complaint of visible emissions, whenever visible emissions are observed, and on a semi-annual basis, at least, unless the equipment did not operate during the entire semi-annual period. The routine semi-annual inspection shall be conducted while the equipment is in operation and during daylight hours.

If any visible emissions (not including condensed water vapor) are detected that last more than three minutes in any one hour, the operator shall verify and certify within 24 hours that the equipment causing the emission and any associated air pollution control equipment are operating normally according to their design and standard procedures and under the same conditions under which compliance was achieved in the past, and either:

- 1) Take corrective action(s) that eliminates the visible emissions within 24 hours and report the visible emissions as a potential deviation in accordance with the reporting requirements in Section K of this permit; or
- 2) Have a CARB-certified smoke reader determine compliance with the opacity standard, using EPA Method 9 or the procedures in the CARB manual "Visible Emissions Evaluation", within three business days and report any deviations to AQMD.

The operator shall keep the records in accordance with the recordkeeping requirements in Section K of this permit and the following records:

- 1) Stack or emission point identification;
- 2) Description of any corrective actions taken to abate visible emissions;
- 3) Date and time visible emission was abated; and
- 4) All visible emission observation records by operator or a certified smoke reader.

**[Rule 3004(a)(4)-Periodic Monitoring, 12-12-1997; Rule 401, 11-9-2001]**

[Devices subject to this condition: D80, D85, D87, D89, D181, D206, D273, D274, D274, C396, D527, D528]

E193.3

The operator shall operate and maintain this equipment according to the following specifications:

 <b>SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT</b>  <b>ENGINEERING &amp; COMPLIANCE DIVISION</b>  APPLICATION PROCESSING AND CALCULATIONS	PAGES 15	PAGE 9
	APPL. NO. <b>526353 &amp; 529077</b>	DATE 06/01/12
	PROCESSED BY Angelita Alfonso	CHECKED BY

The operator shall comply with all applicable requirements specified by Section 60.18 of subpart A of the 40CFR60.

**[40CFR60 Subpart A, 4-9-1993]**

[Devices subject to this condition: C396]

E193.5 The operator shall operate and maintain this equipment according to the following specifications:

The assisted-steam system shall have the capability to deliver a maximum rate of 21,000 lb/hr of 100 psig steam to the flare flame.

**[Rule 401, 3-2-1984; Rule 401, 11-9-2001]**

[Devices subject to this condition: C396]

H23.2 This equipment is subject to the applicable requirements of the following rules or regulations:

<u>Contaminant</u>	<u>Rule</u>	<u>Rule/Subpart</u>
VOC	District Rule	1173

**[Rule 1173, 5-13-1994; Rule 1173, 2-6-2009]**

[Devices subject to this condition: D616, D618, D657, D700, D701, D704, D706, D707, D708, D718, D803, D812, D816, D817, D818, D819, D829, D856]

H23.22 This equipment is subject to the applicable requirements of the following rules or regulations:

<u>Contaminant</u>	<u>Rule</u>	<u>Rule/Subpart</u>
SOX	District Rule	1118

**[Rule 1118, 11-4-2005]**

[Devices subject to this condition: C396]

H23.24 This equipment is subject to the applicable requirements of the following rules or regulations:

<u>Contaminant</u>	<u>Rule</u>	<u>Rule/Subpart</u>
VOC	District Rule	1173
VOC	40CFR60, SUBPART	GGGa

**[Rule 1173, 5-13-1994; Rule 1173, 6-1-2007; 40CFR60 Subpart GGGa, 6-2-2008]**

[Devices subject to this condition: D610, D808, D809]

 <p><b>SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT</b></p> <p><i>ENGINEERING &amp; COMPLIANCE DIVISION</i></p> <p>APPLICATION PROCESSING AND CALCULATIONS</p>	PAGES 15	PAGE 10
	APPL. NO. <b>526353 &amp; 529077</b>	DATE 06/01/12
	PROCESSED BY Angelita Alfonso	CHECKED BY

H.1 ~~The operator shall comply with all the requirements of the Variance, Case No. 2914-87, dated April 24 2007, and the modification and extension of the variance, dated July 17, 2008, in accordance with the Findings and Decisions of the Hearing Board or as subsequently modified by the Hearing Board. The operator shall submit progress reports at least semi-annually, or more frequently if specified in the Findings and Decisions. The progress reports shall contain dates for achieving activities, milestones or compliance required in the schedule of compliance and dates when such activities, milestones or compliance were achieved; and an explanation of why any dates in the schedule of compliance were not, or will not be met, and any preventative or corrective measures adopted.~~

~~[Rule 3004(a)(10)(C) 12-12-1997]~~

~~[Devices subject to this condition: C396]~~

**Note: This condition is deleted. Work has been completed and Variance Case No. 2914-87 dated April 24 2007 has been terminated.**

H.6 ~~The operator shall comply with all the requirements of the Variance, Case No. 2914-95, dated January 13, 2009, in accordance with the Order and Decision of the Hearing Board or as subsequently modified by the Hearing Board. The operator shall submit progress reports at least semi-annually, or more frequently if specified in the Order and Decision. The progress reports shall contain dates for achieving activities, milestones or compliance required in the schedule of compliance and dates when such activities, milestones or compliance were achieved; and an explanation of why any dates in the schedule of compliance were not, or will not be met, and any preventative or corrective measures adopted.~~

~~[Rule 3004(a)(10)(C) 12-12-1997]~~

~~[Devices subject to this condition: C396]~~

**Note: This condition is deleted. Work has been completed and Variance Case No. 2914-95 dated January 13, 2009 has been terminated.**

**BACKGROUND**

Paramount Petroleum Corporation (Paramount) operates a petroleum refinery located at 14700 Downey Avenue in the city of Paramount in the southern portion of Los Angeles County. Paramount processes crude oil into marketable products including gasoline, diesel fuel, jet fuel, asphalt and other products. Emission sources at the refinery include combustion sources (heaters, boilers, and IC engines), fugitive components (pumps, valves, flanges, compressors, drains, etc.), cooling towers, storage tanks, flares and loading/unloading facilities. The South Coast Air Quality Management District (AQMD) identification number for the facility is 800183.

 <b>SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT</b>  <b>ENGINEERING &amp; COMPLIANCE DIVISION</b>  APPLICATION PROCESSING AND CALCULATIONS	PAGES 15	PAGE 11
	APPL. NO. <b>526353 &amp; 529077</b>	DATE 06/01/12
	PROCESSED BY Angelita Alfonso	CHECKED BY

Paramount operates one general service flare and a flare vapor recovery system recovering flared gases from various processes and retuning them to the fuel gas system. Paramount submitted Application Nos. 526353 and 529077 for a change of permit conditions to clarify the operation of the flare and flare vapor recovery system during planned shutdown, startups, and turnarounds (SD/SU/TA).

AQMD received the application package on August 26, 2011. Paramount submitted supplemental application and information from November, 2011 to February, 2012. Table 1 lists permit processing tracking information and fees. No additional fees are required for these permit applications.

**Table 1: PERMIT ADMINISTRATION & APPLICATION TRACKING INFORMATION**

	<i>A/N</i>	<i>Equipment Description</i>	<i>Status/Type</i>	<i>BCAT/CCAT</i>	<i>Previous A/N Status</i>	<i>Fee Paid</i>
1	526353	Flare System, Refinery	20/60	92	459987/26	\$6,675.72
2	529077	Vapor Recovery System	20/60	59	458560/26	\$4,572.63
3	512792	Title V revision Fee	21/85	555009	N/A	\$1,747.19

### **COMPLIANCE RECORD REVIEW**

A review of the AQMD Compliance Database showed 33 Notices of Violation (NOV) and Notices to Comply (NC) issued to Paramount in the past five years (06/01/07 - 06/01/12). All notices are either closed or in compliance status. The Stipulated Orders for Abatement (SOFA) are closed. Paramount is on a schedule to compliance on the Variance Cases.

### **PROCESS AND PROJECT DISCUSSION**

Paramount currently operates a flare gas recovery system, FGRS, (Process 15 System 1) and one general service flare (Process 15, System 2). The FGRS consists of two compressors to recover 300 scfm of flare gas from the flare header system. The actual design is for one compressor to recover 150 scfm, with one compressor as 100% back-up, but can also be brought online to increase recovery capacity to 300 scfm. The recovered flare gas is compressed for use in the facility as fuel gas. If the volume of the flare gas that is relieved into the flare system exceeds the capacity of the FGRS, the pressure in the flare header will increase until it exceeds the back-pressure exerted on the header by a water seal. This excess gas volume will pass through the water seal drum and on to the flare where it will be burned.

The subject of this engineering evaluation is to clarify the operation of the flare and FGRS during planned shutdown, startups, and turnarounds (SD/SU/TA). There will be no modification or operational changes to their operation.

 <b>SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT</b>  <b>ENGINEERING &amp; COMPLIANCE DIVISION</b>  APPLICATION PROCESSING AND CALCULATIONS	PAGES 15	PAGE 12
	APPL. NO. <b>526353 &amp; 529077</b>	DATE 06/01/12
	PROCESSED BY Angelita Alfonso	CHECKED BY

Refinery equipment undergoes turnaround or other maintenance activities periodically for system performance and safety reasons, during which time flaring has been an essential part of completing these activities. Nevertheless, the existing permits issued to refineries have not been clear in determining if flaring during planned SD/SU/TA is a permitted activity. In November 2005, the District amended Rule 1118 that allows flaring during SD/SU/TA, along with a few other activities, but requires minimization of flaring. Consequently, some refineries including Paramount have filed applications requesting a change of permit conditions to reflect what is allowed in Rule 1118. According to Mohsen Mazemi's email dated April 2, 2011, a new set of standard conditions were prepared and evaluated by the District and WSPA member refineries to replace existing conditions which basically requires that all vent gases are to be recovered except during emergencies and SD/SU/TA, which may be flared.

Therefore, the following changes will be incorporated in the Paramount's facility permit:

1. System condition S56.1 will be added to the appropriate process units. In accordance with Jay Chen's email of June 14, 2011, while an application is required for each flare and flare as recovery system, no application is needed for the process unit.
2. Existing system conditions S18.2 and S18.9 for the flare and the flare gas recovery systems will be replaced with new system conditions S58.1 and S58.2

### **EMISSIONS CALCULATION**

There is no change in emissions with the proposed Change of Condition.

### **RULES EVALUATION**

#### **PART 1: SCAQMD REGULATIONS**

**Rule 212**      Standards for Approving and Issuing Public Notice (Amended Nov. 14, 1997)  
 Since there is no change in emissions, this rule does not apply. Public notification is therefore not required.

**Rule 401**      Visible Emissions (Amended November 9, 2001)  
 Operation of the subject pieces of equipment is not expected to result in visible emissions. Therefore, compliance with this rule is expected.

**Rule 402**      Nuisance (Adopted May 7, 1976)  
 Operation of the subject pieces of equipment is not expected to result in a public nuisance. Therefore, compliance with this rule is expected.

#### **Reg IX** Standards of Performance for New Stationary Sources (NSPS)

40 CFR 60 Subpart GGGa: Standards of Performance for Equipment Leaks of VOC in Petroleum Refineries for Which Construction, Reconstruction, or Modification Commenced After November 7, 2006

This regulation is applicable to affected facilities in refineries that begin construction after November 7, 2006. The compressors in the flare vapor recovery system are already subject to the requirements of this regulation as imposed by device condition H23.24. Continued compliance is expected.

 <b>SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT</b>  <b>ENGINEERING &amp; COMPLIANCE DIVISION</b>  APPLICATION PROCESSING AND CALCULATIONS	PAGES 15	PAGE 13
	APPL. NO. <b>526353 &amp; 529077</b>	DATE 06/01/12
	PROCESSED BY Angelita Alfonso	CHECKED BY

**Reg X**      National Emission Standards for Hazardous Air Pollutants (NESHAP)  
40 CFR 61 **Subpart FF**: National Emission Standard for Benzene Waste Operations

§61.342 Standards: General (Amended May 25, 2001)

Paramount has provided data to the District showing that the total annual benzene quantity of the refinery's waste is less than 10 megagrams per year. In accordance to paragraph (a), the refinery is exempt from the requirements of paragraphs (b) and (c) of this section. Therefore, the refinery is not required to treat and manage its waste. However, the refinery is required to maintain a record in accordance to paragraph (g) in order to demonstrate its exempt status.

**Rule 1118**      Control of Emissions from Refinery Flares (Amended 11/04/05)

This rule has requirements for flares used at petroleum refineries to monitor and record data on flaring operations and to control and minimize flaring and flare related emissions. The refinery flare is subject to the requirements of this regulation as imposed by device conditions D12.3 and H23.22. Paramount submitted a Flare Monitoring and Recording Plan on June 30, 2006 under A/N 458583. Continued compliance is expected.

**Rule 1173**      Control of Volatile Organic Compound Leaks and Releases from Components at Petroleum Facilities and Chemical Plants (Amended 06/01/07)

This rule specifies leak control, identification, operator inspection, maintenance and recordkeeping requirements for valves, pumps, compressors, pressure relief valves, and other components from which fugitive VOC emissions may emanate. The miscellaneous fugitive components of the flare vapor recovery system are subject to Rule 1173 per Condition H23.2 and H23.24. The facility has an approved Inspection and Maintenance (I&M) program for monitoring and repairing fugitive components. All new and existing fugitive components are tagged with Rule 1173 and are monitored according to Paramount's Rule 1173 leak detection and repair plan. Continued compliance with this rule is expected.

**Reg XIII**      New Source Review (NSR)

This rule has requirements for the use of Best Available Control Technology (BACT), providing emissions offsets for increases in criteria pollutants, and performing air quality modeling to determine the impacts of the projects on ambient air quality.

According to the guidance provided in Mohsen Nazemi's email dated April 2, 2011, NSR will not be triggered by this application. According to this guidance, the proposed change in permit condition for flaring during planned SD/SU/TA is not subject to the NSR requirements due to the following reasons:

1. The existing permits do not prohibit flaring during planned SD/SU/TA and the permit revisions, as requested, are to clarify such intent; and
2. These applications are filed to reflect what are specified under Rule 1118, subject to flaring minimization procedures.

Therefore, in accordance with the guidance, Reg XIII does not apply.

 <b>SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT</b>  <b>ENGINEERING &amp; COMPLIANCE DIVISION</b>  APPLICATION PROCESSING AND CALCULATIONS	PAGES 15	PAGE 14
	APPL. NO. <b>526353 &amp; 529077</b>	DATE 06/01/12
	PROCESSED BY Angelita Alfonso	CHECKED BY

**Reg XIV**      Toxics and Other Non-Criteria Pollutants  
 This rule has requirements that any new construction or modification not result in a Maximum Individual Cancer Risk (MICR) exceeding  $1 \times 10^{-6}$  if T-BACT is not used or  $10 \times 10^{-6}$  if T-BACT is applied, that chronic and acute hazard indices not exceed 1.0, and that the cancer burden not exceed 0.5. The proposed change of condition will not result in an increase in toxic air contaminants. Therefore, per 1401(g)(1)(B), it is exempt from the requirements of this rule.

**Reg XVII**      Prevention of Significant Deterioration (PSD)  
 This regulation sets forth preconstruction review requirements for stationary sources to ensure that air quality in clean air areas does not significantly deteriorate while maintaining a margin for future industrial growth.

The requirements of this regulation are not applicable for the proposed change in condition covered in this engineering evaluation since there is no net increase in annual emissions of any of the attainment air contaminant.

**Reg XX**      Regional Clean Air Incentives Market (RECLAIM)  
 Paramount is a Cycle 1 NO<sub>x</sub> and SO<sub>x</sub> RECLAIM facility and therefore is subject to RECLAIM requirements. However, under Rules 2011 and 2012, flares are exempt from the monitoring, reporting and recordkeeping requirements. Therefore, this proposed change in condition is not subject to the requirements under this regulation.

**Reg XXX**      Title V Permits  
  
Rule 3001(a): Applicability (Amended November 14, 1997)  
 The Title V Permit system is the air pollution control permit system required to implement the federal Operating Permit Program as required by Title V of the federal Clean Air Act as amended in 1990. Paramount has been designated as a Phase One Title V facility and has submitted A/N 337522 for their initial Title V permit on February 5, 1998. The final initial Title V permit was issued on March 19, 2009.

Rule 3005: Permit Revisions (Amended March 16, 2001)  
 The permits for this project will be issued as a minor revision of the Title V permit since the revision meets all of the requirements of Rule 3000(b)(12) and will be sent to the EPA for a 45-day review per Rule 3005(c)(2)(B). Public Notice is not required per Rule 3006(b).

Rule 3006: Public Participation (Amended November 14, 1997)  
 Since the permit for this project will be issued as a minor revision of the Title V permit, Public Notice is not required per Rule 3006(b).

**PART 2: STATE REGULATIONS**

**CEQA**      California Environmental Quality Act  
 CEQA requires that the environmental impacts of proposed projects be evaluated and

 <b>SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT</b>  <b>ENGINEERING &amp; COMPLIANCE DIVISION</b>  APPLICATION PROCESSING AND CALCULATIONS	PAGES 15	PAGE 15
	APPL. NO. <b>526353 &amp; 529077</b>	DATE 06/01/12
	PROCESSED BY Angelita Alfonso	CHECKED BY

that feasible methods to reduce, avoid or eliminate identified significant adverse impacts of these projects be considered. The CEQA Applicability Form (400-CEQA) submitted by Paramount indicates that the project does not have any impacts which trigger the preparation of a CEQA document; therefore a CEQA analysis is not required.

### **PART 3: FEDERAL REGULATIONS**

**40 CFR 63**      Subpart CC: National Emission Standards for Hazardous Air Pollutants (NESHAP) for Petroleum Refineries

§63.640 Applicability and designation of affected source (Amended May 25, 2001)

The refining process units and equipment located at the Paramount Refinery are subject to the requirements of this subpart addressing:

- miscellaneous process vents
- storage vessels
- wastewater streams,
- loading, and
- equipment leaks

Paramount has provided data to the District to show that Paramount Refinery is not a major HAP source which is defined as a source emitting 10 tpy of any single HAP or 25 tpy of all HAPs combined. Therefore, this subpart is not applicable because the refinery does not meet the criterion specified by paragraph (a)(1) of this section.

**Note:** Federal Rule Subpart GGGa applicability is evaluated under Regulation IX above.

### **CONCLUSION AND RECOMMENDATION**

The operation of the subject pieces of equipment is expected to comply with all applicable District, State and Federal Rules and Regulations. Therefore, issuance of Permits to Construct (Change of Condition) is recommended.