



SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
ENGINEERING AND COMPLIANCE DIVISION

ENGINEERING EVALUATION REPORT

PAGE	1 of 11
APPL. NO.	413909&385372
PROCESSED BY	Yan Yang
CHECKED BY	
DATE	11/30/2012

A/N413909 PC Alternation and PC to PO
A/N385372 Cancellation

COMPANY NAME: Chevron Products Company
El Segundo Refinery

MAILING ADDRESS: 324 W. El Segundo Blvd.
El Segundo, CA 90245

EQUIPMENT LOCATION: 324 W. El Segundo Blvd.
El Segundo, CA 90245

CONTACT PERSON: R. Mélida Escalante-Henricks
Permitting Engineer
Health, Environmental and Safety Department

SECTION D/H: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

EQUIPMENT DESCRIPTION:

The equipment under Process 3/System 5 will be moved from Section H to Section D in the Title V permit. Some equipment under Process 9/System 2 will be moved from Section H to Process 3/System 5 in Section D. Additions and deletions are noted in underlines and ~~strikeouts~~, respectively.

FACILITY PERMIT SECTION D					
Equipment	ID No.	Connected To	RECLAIM Source Type	Emission* And Requirements	Conditions
Process 3: FLUID CATALYTIC CRACKING					P13.1
System 5: GASOLINE SPLITTER UNIT					S7.2, S13.2, S15.7, S15.10, S31.15
<u>COLUMN, FCC DEPENTANIZER, C-5700, HEIGHT: 166 7 FT 4.5 IN; DIAMETER: 10 6 FT 6 IN</u> A/N: 284288413909 Permit to Construct Issued: 11/18/93	D2093 (formerly in TAME Plant)				
<u>ACCUMULATOR, V-5700, DEPENTANIZER OVERHEAD, HEIGHT LENGTH: 20 49 FT 9 IN; DIAMETER: 8 FT 6 IN</u> A/N: 284288413909 Permit to Construct Issued: 11/18/93	D2096 (formerly in TAME Plant)				
<u>REACTOR, PRIMARY, R-5740, SURGE DRUM, GASOLINE SPLITTER BOTTOMS, V-5745, HEIGHT: 28 FT ; DIAMETER: 10 FT</u> A/N: 284288413909 Permit to Construct Issued: 11/18/93	D2108 (formerly in TAME Plant)				



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FACILITY PERMIT SECTION D					
Equipment	ID No.	Connected To	RECLAIM Source Type	Emission* And Requirements	Conditions
Process 3: FLUID CATALYTIC CRACKING					P13.1
System 5: GASOLINE SPLITTER UNIT					S7.2, S13.2, S15.7, S15.10, S31.15
KNOCK OUT POT, METHANOL FLARE, V-5790, HEIGHT-LENGTH: 15 FT ; DIAMETER: 8 FT A/N: 284288413909 Permit to Construct Issued: 11/18/93	D2125 (formerly in TAME Plant)				
POT, DEPENTANIZER WATER DRAW-OFF, V-5701, HEIGHT: 3 4 FT ; DIAMETER: 2 FT A/N: 284288413909 Permit to Construct Issued: 11/18/93	D3419 (formerly in TAME Plant)				
VESSEL, V-5740, GASOLINE SPLITTER ACCUMULATOR, HEIGHT-LENGTH: 20 FT ; DIAMETER: 8 FT A/N: 385372 413909 Permit to Construct Issued: 03/04/09	D3790				K171.1
VESSEL, V-5747, GASOLINE SPLITTER REBOILER CONDENSATE POT, HEIGHT: 5 FT ; DIAMETER: 2 FT 6 IN A/N: 385372 413909 Permit to Construct Issued: 03/04/09	D3791				K171.1
COLUMN, C-5740, FCC GASOLINE SPLITTER, HEIGHT: 165 FT 4.5 IN ; DIAMETER: 9 FT 6 IN A/N: 385372 413909 Permit to Construct Issued: 03/04/09	D3792				K171.1
FUGITIVE EMISSIONS, MISCELLANEOUS A/N: 385372 413909 Permit to Construct Issued: 03/04/09	D4302			HAP: (10) [40CFR 63 Subpart CC, #5A, 6-23-2003]	H23.19

Note: See Appendix B for other devices that were installed/constructed in connection with the above permit units and would not be identified or described in the permit per refinery permitting guidelines.

- CONDITIONS -

New are noted in bold & underlines. Additions are noted in bold and deletions in strikeouts.

PROCESS CONDITIONS:

P13.1 All devices under this process are subject to the applicable requirements of the following rules or regulations:

Contaminant	Rule	Rule/Subpart
Benzene	40CFR61, SUBPART	FF



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[40CFR 61 Subpart FF, 12-4-2003]
 [Processes subject to this condition : 3]

SYSTEM CONDITIONS:

S7.2 The following conditions shall apply to all refinery operation and related devices from this system:

The operator shall comply with all applicable mitigation measures stipulated in the "Statement of Findings, Statement of Overriding Considerations, and Mitigation Monitoring Plan" document which is part of the AQMD Certified Final Environmental Impact Report dated 30-Nov-2001 for this facility.

[CA PRC CEQA, 11-23-1970]
 [Systems subject to this condition : Process 3, System 5; Process 4, System 3 , 4; Process 8, System 8; Process 14, System 28]

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

Contaminant	Rule	Rule/Subpart
VOC	District Rule	1123

[RULE 1123, 12-7-1990]
 [Systems subject to this condition : Process 3, System 5]

S15.7 The vent gases from all affected devices of this process/system shall be vented as follows:

All emergency vent gases shall be directed to a vapor recovery system and/or flare system except Devices IDs D15, D3195, D3199, D3200 (Process 1, System 3), D106 (Process 1, System 13), D3574, D3371, D3373, D591, D595, D597, D3372, D592, D598 & D602 (Process 6, System 4) that vent to the atmosphere.

This process/system shall not be operated unless the vapor recovery system and/or 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(b)(2)-Offset, 5-10-1996]
 [Systems subject to this condition : Process 3, System 5]

S15.10 The vent gases from all affected devices of this process/system shall be vented as follows:

All vent gases under normal operating conditions shall be directed to the vapor recovery system.

This process/system shall not be operated unless the vapor recovery system(s) is in full use and has a valid permit to receive vent gases from this system.



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[RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(b)(2)-Offset, 5-10-1996]
[Systems subject to this condition : Process 3, System 5]

S31.15 The following BACT requirements shall apply to VOC service fugitive components associated with the devices that are covered by application number(s) 378811, 380595, 380596, 380597, 380611, 385372, 385373, 385374, 413909 and 475142:

The operator shall provide to the District, no later than 60 days after initial startup, a recalculation of the fugitive emissions based on actual components installed and removed from service. The valves and flanges shall be categorized by size and service. The operator shall submit a listing of all new non-bellows seal valves which shall be categorized by tag no., size, type, operating temperature, operating pressure, body material, application, and reasons why bellows seal valves were not used.

All new valves in VOC service, except those specifically exempted by 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 (e.g., drain valves with valve stems in horizontal position), 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 R1173, 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 Method 21.

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 500 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 less than 500 ppmv.

All new components in VOC service with a leak greater than 500 ppmv but less than 1,000 ppmv, as methane, measured above background using EPA Method 21 shall be repaired within 14 days of detection. Components shall be defined as any valve, fitting, pump, compressor, pressure relief valve, diaphragm, hatch, sight-glass, and meter, which are not exempted by Rule 1173.



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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 the Executive Officer or his authorized representative upon request.

[RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(b)(2)-Offset, 5-10-1996]

[Systems subject to this condition : Process 3, System 5]

DEVICE CONDITIONS:

H. Applicable Rules

H23.19 This equipment is subject to the applicable requirements of the following rules or regulations:

Contaminant	Rule	Rule/Subpart
VOC	District Rule	1173
VOC	40CFR60, SUBPART	GGG

[RULE 1173, 5-13-1994; RULE 1173, 2-6-2009; 40CFR 60 Subpart GGG, 6-2-2008]

[Devices subject to this condition : D3639]

K. Record Keeping/Reporting

K171.1 The operator shall provide to the District the following items:

Final drawings and/or specifications of the equipment installed/constructed shall be submitted to the District within 60 days prior to the operation of the equipment.

[RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(b)(2)-Offset, 5-10-1996]

[Devices subject to this condition : ~~D3790, D3791, D3792~~]

COMPLIANCE RECORD REVIEW:

The AQMD's compliance database shows that Chevron El Segundo Refinery has been cited with 8 Notices of Violation and three Notices to Comply within the last two years. **Appendix A** includes a list of the citations. All of the NOV's and NC's have been resolved to the satisfaction of the Executive Officer. District records do not indicate any outstanding compliance problem with the operation of the Process 3 System 5 (P3S5).

BACKGROUND:

A/N 385372 was one of the applications that Chevron submitted for the CARB Phase 3 Clean Fuels Project and MTBE Phase-out Project. Chevron applied for a permit to build a new Gasoline Splitter in the FCC unit (Process 3, System 5) to segregate the highest sulfur portion of the FCC light gasoline for subsequent sulfur removal to meet the lower gasoline sulfur requirements. The permit to construct (PC) for the FCC Gasoline Splitter Unit was issued on March 12, 2002 under A/N 385372.

The original application materials were submitted to the District in April of 2001. The supplemental information to the application was submitted in June, July and September of 2001. The PC for the proposed FCC Gasoline Splitter Unit, which was issued on March 12, 2002 under Process 3, System 5



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of Chevron’s facility permit, included only four devices: the Gasoline Splitter Accumulator V-5740 (device D3790), Gasoline Splitter Reboiler Condensate Pot V-5747 (device D3791), FCC Gasoline Splitter Column C-5740 (device D3792) and miscellaneous fugitive components (device D4302). The proposed FCC Gasoline Splitter Unit would be built using some of the equipment previously belongs to the TAME Plant (process 9, system 2)—the Catalytic Distillation Column (formerly device D2110) in TAME Plant was modified to make the Gasoline Splitter Column. However, most of the equipment in the FCC Gasoline Splitter was supposed to be new according to the information provided by Chevron dated September 28, 2001. The FCC Gasoline Splitter Unit originally started up in January of 2003.

On April 1, 2003, Chevron submitted application A/N 413909 for modifications without obtaining a permit to the FCC Gasoline Splitter Unit. Chevron indicated in the application that the FCC Gasoline Splitter was already constructed using the Primary Reactor (device D2108) of the TAME Plant, which was modified and being used for the Gasoline Splitter Bottoms Surge Drum. The surge drum was installed due to the holdup in the bottom of the accumulator C-5740 being too short. The purpose of the bottoms surge drum was to smooth out the flow rate of the bottoms product when the column was feeding inline to No. 3 Naphtha Hydrotreater. In the supplemental information dated August 8, 2005, Chevron also informed the District that many devices in the C₅ Prefractionation section of TAME Plant were actually being re-used for the construction of the new FCC Gasoline Splitter Unit after the shutdown of the MTBE production in late 2002. Consequently, Chevron also requested the existing TAME Plant’s devices D2093, D2096, D2108, D2108, D2125 and D3419 currently listed in Process 9, System 2 be moved into Process 3, System 5 for the FCC Gasoline Splitter Unit. All the equipment in the TAME plant (Process 9 System 2) in the facility permit and the status of the equipment after the TAME Plant was shut down are shown in Table 1.

Table 1 – Current Status of TAME Plant Equipment

TAME Plant	Equipment Name	Tag ID	Device ID	Current Operation
C ₅ prefractionation	FCC Depentanizer	C-5700	D2093	Gasoline Splitter
	Depentanizer Overhead Accumulator	V-5700	D2096	Gasoline Splitter
	Depentanizer Water Draw-Off Pot	V-5701	D3419	Gasoline Splitter
C ₅ pretreatment	Water Washer	V-5725	D2099	C ₅ SHU
	Water Coalescer	V-5726	D2100	C ₅ SHU
	C5 Selective Hydrogenation Surge Tank	V-5730	D2101	C ₅ SHU
	C5 Selective Hydrogenation Reactor	R-5730	D2107	C ₅ SHU
TAME	Primary Reactor	R-5740	D2108	Gasoline Splitter
	Catalytic Distillation Column	C-5740	D2110	Gasoline Splitter
	Catalytic Distillation Overhead Accumulator	V-5740	D2112	Alkylate Depentanizer
	Catalytic Distillation Overhead Water Coalescer	V-5741	D2115	Out of service
	Methanol Extraction Column	C-5750	D2116	Out of service
	Methanol Extraction Overhead Coalescer	V-5750	D2117	Out of service
	Methanol Recovery Column	C-5760	D2118	Alkylate Depentanizer
	Methanol Recovery Column Accumulator	V-5760	D2122	Undetermined
	Methanol Flare Knock Out Pot	V-5790	D2125	Gasoline Splitter
	Methanol Filter	K-5740	D3417	Out of service
Catalytic Distillation Water Draw-Off Pot	V-5748	D3421	Alkylate Depentanizer	



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A total of six devices from the original TAME Plant were actually being re-used to construct the new FCC Gasoline Splitter Unit. A complete equipment list of this system is included in **Appendix B**. The former Primary Reactor was modified to serve as a surge drum. Physical modifications included removing all reactor catalyst, installing a new internal bottoms nozzle vortex breaker, and installing new nozzles for a new level control device. It has also been renumbered V-5745. The description of D2125 should be changed to Flare Knock Out Pot from Methanol Flare Knock Out Pot. The Flare Knock Out Pot serves relief devices in the Gasoline Splitter Unit, C₅ Pretreatment and C₅ SHU areas. Only the Gasoline Splitter Accumulator V-5740 and Gasoline Splitter Reboiler Condensate Pot V-5747 were newly installed equipment. No modification to the FCC Gasoline Splitter Unit has been made since its original start-up.

Before the installation of the FCC Gasoline Splitter Unit, FCC light gasoline is blended directly into finished gasoline products. FCC light gasoline contains the majority of the sulfur in the gasoline blend pool, and most of the sulfur is in the heavier portion of this stream. The FCC Gasoline Splitter was constructed in order to achieve low sulfur level required by CARB RFG-3. Debutanized gasoline and light gasoline from the FCC is sent to Depentanizer Column C-5700 of the Gasoline Splitter section. In the Depentanizer, a pentane cut is taken overhead for further processing. Depentanizer bottoms are sent to Gasoline Splitter Column C-5740 which splits the FCCU gasoline into light and heavy gasoline streams. The effluent streams are subsequently blended into the finished gasoline products. Depending on pool sulfur levels, the heavy gasoline stream may be further hydrotreated in No. 3 Naphtha Hydrotreater prior to being blended into the finished products. The P&IDs of Gasoline Splitter Unit can be found in **Appendix B**.

The process vents of the FCC Gasoline Splitter are discharged to the refinery fuel gas system via the FCCU Vapor Recovery System, which consists of four motor-driven reciprocating compressors. In emergencies, process vents go to the FCCU Flare. The locations of the process vents in Gasoline Splitter Unit are shown in Table 2 below.

Table 2 – Locations of Process Vents in Gasoline Splitter Unit

Location of Process Vents	Identification	Size
C-5700	PSV 5010	8" x 10"
V-5700	PSV-5014	4" x 6"
V-5701	Water Draw	2"
C-5740	PSV 5034	8" x 10"
V-5740	Water Draw	2"
V-5740	Vapor Vent	2"
E-5740A/B/C	Vapor Vent	1" Each

PERMIT CONDITION COMPLIANCE REVIEW

Non-BACT (Bellows Seal) Valves

A combined list of non-BACT valves installed in the construction of the FCC Gasoline Splitter (A/N 385372) and the Alkylate Depentanizer (A/N 385373) was submitted to the District on April 7, 2003. All of the non-Bellows Seal valves were qualified to be exempt from BACT for reasons such as space limitations, torsional motion stem valves and control valves (see **Appendix C**).



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EMISSIONS:

Criteria Pollutant Emissions

Fugitive VOCs are the main air pollutants emitted from the FCC Gasoline Splitter Unit. Table 3 shows the as-built total emissions for the FCC Gasoline Splitter Unit and the portion of the total emissions which belongs to the existing the TAME Plant equipment. As discussed above, many of the FCC Gasoline Splitter components were actually existing equipment of the TAME Plant and being re-used in the Gasoline Splitter. Therefore, the actual emission increase from the installation of the Gasoline Splitter equals to 13.37 lbs/day. The fugitive counts provided by Chevron are included in **Appendix D**. The emission increase estimated for the PC A/N 385372 equals 3.7 lb/day using the old fugitive emission factor. Using the new fugitive emission factors, the PC emission increase is recalculated to be 8.31 lb/day. Therefore, there is an increase of 5.06 lbs VOC between the proposed FCC Gasoline Splitter Unit and as-built permit unit.

Table 3 – Fugitive Emission for FCC Gasoline Splitter Unit

Source Unit		Service	Emission Factor lb/yr	As-built Total Emissions		Existing TAME Parts	
				Component	Emission lb/yr	Component	Emission lb/yr
Valves	Sealed bellows	All	0	552		407	
	SCAQMD Approved I&M Program	Gas/Vapor	4.55				
		Light Liquid	4.55	280	1272.81	171	777.32
		Heavy liquid	4.55				
Pumps	Double Mechanical Seals or Equivalent Seals	Light Liquid	46.83	10	468.25	8	374.60
Flanges	ANSI/API standards	All	6.99	1499	10478.29	1069	7472.51
Connectors		All	2.86	1043	2984.42	656	1877.07
PRVs	Closed vent system	All	0	5		5	
Drains	P-Trap or Seal Pot	All	9.09	43	390.85	31	281.78
Total counts				3432		2347	
Annual Emission, lbs/yr					15595		10783.28
Hourly Emission = (Annual)/(52×7×24), lb/hr					1.79		1.23
Daily Maximum=(Annual)/(52×7), lbs/day					42.84		29.62
30-day Average = (Annual)/(12×30), lbs/day					43.32		29.95

Toxic Air Contaminant Emissions and Health Risk Assessment (HRA)

Toxic air contaminants (TACs) expected to be emitted from FCC Gasoline Splitter included benzene, naphthalene, toluene, xylene, ethylbenzene and *n*-Hexane. The emission increase of these TACs in lb/year can be found in the PC application A/N 395372 under “HRA and Modeling Section for the Permit to Construct Application” submitted on July 18, 2001. The health risk assessment was analyzed using the fugitive emission increase of 7.1 lb/day, which was estimated by Chevron using standard engineering design practices. The cumulative Maximum Individual Cancer Risk (MICR) of the proposed FCC Gasoline Splitter Unit was determined to be 4.4×10^{-8} . The maximum noncarcinogenic acute and chronic hazard indices (HI) were 7×10^{-5} and 4×10^{-5} , respectively. Even though the VOC emissions for the FCC Gasoline Splitter increases from 8.31 lbs/day for the proposed gasoline splitter to 13.37 lbs/day for the as-built permit unit, the health risks would still remain below the rule allowable limits. Prorating the risks to the higher VOC emissions, the MICR equals to 8.3×10^{-8} , and acute and chronic hazard indices equals 1.3×10^{-4} and 7.5×10^{-5} , respectively.



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RULE EVALUATION:

PART 1: SCAQMD REGULATIONS

Rule 212: Standards for Approving Permits and Issuing Public Notice

Amended
11/14/97
Installation of the new FCC Gasoline Splitter results in a VOC emission increase of 13.37 lb/day, which does not trigger public notice requirements by itself. However, as part of Chevron's CARB Phase 3 Clean Fuels Projects, a public notice was distributed that included the proposed construction of the FCC Gasoline Splitter under application A/N 385372.

Rule 401: Visible Emissions

Amended
11/9/01
The FCC Gasoline Splitter Unit is not expected to result in visible emissions under normal operating conditions. Compliance is expected.

Rule 402: Nuisance

Adopted
5/7/76
Nuisance complaints are not expected under normal operating conditions. Compliance is expected.

Rule 1173: Control of Volatile Organic Compound Leaks and Releases from Components at Petroleum Facilities and Chemical Plants

Amended
2/6/09
Chevron has an on-going Leak Detection And Repair (LDAR) program to meet all applicable requirements of the rule, such as: Identification Requirements (e), Operator Inspection Requirement (f), Maintenance Requirements (g), Atmospheric Process PRD Requirements (h), Recordkeeping and Reporting Requirements (i), and Test Methods. All of the fugitive components in FCC Gasoline Splitter Unit are expected to comply with to this rule.

REG XIII New Source Review

1301 General

Amended
12/7/95
The modifications FCC Gasoline Splitter Unit caused the issuance of VOC at the refinery. Therefore, they were subject to this rule.

1303 Requirements

Amended
12/6/02
The FCC Gasoline Splitter Unit was constructed using many existing equipment of the TAME plant. The emission from the existing equipment of the TAME plant was estimated at 29.95 lb/day. The emission increase permitted in the PC of the initial application A/N 385372 to construct the FCC Gasoline Splitter Unit was about 3.7 lb/day using the old emission factors. It was equivalent to 8.31 lb/day adjusted using the new emission factors. Therefore, the baseline emission of A/N 385372 was 38.26 lb/day which was calculated by adding the emission increase of 8.31 lb/day to the emission from the existing equipment of the TAME plant (29.95 lb/day). Nevertheless, the installation of the FCC Gasoline Splitter Unit resulted in a total increase of VOC about 13.37 lb/day. This was back calculated by subtracting the existing emission of 29.95 lb/day from the as-built total emissions for the FCC Gasoline Splitter Unit (43.32 lb/day). The emission increase permitted in A/N 413909 was estimated at 5.06 lb/day by subtracting the emission increase permitted in A/N



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385372 (8.31 lb/day) from the total emission increase resulted from the installation of the FCC Gasoline Splitter (13.37 lb/day). The 5.06 lb/day of emission increase included: 1) the expected emission differences between the actual component counts and the proposed component counts and 2) the emission differences due to refined components counts and realignment of permit unit boundaries.

Best Available Control Technology (BACT)

As discussed above, the total VOC emission increase resulted from the installation of the FCC Gasoline Splitter Unit was about 13.37 lb/day. Therefore, any new or replacement fugitive components to be installed on this system were required to have BACT as indicated in S31.15. As shown in "PERMIT CONDITION COMPLIANCE REVIEW" above, the new FCC Gasoline Splitter is equipped with the required BACT for fugitive emission components.

Offset

The emission increase of 8.31 lb/day permitted in the PC of A/N 385372 was exempt from offsets per Rule 1304 (c)(4). The emission increase of 5.06 lb/day permitted in A/N 413909 will be exempt from offsets as well. See the evaluation of Rule 1304.

1304

Amended
6/14/96

Exemptions

The emission increase due to the installation of the FCC Gasoline Splitter Unit is exempt from offset per Regulatory Compliance section in Rule 1304 (c)(4).

Rule 1401

Amended
2/7/03

New Source Review of Toxic Air Contaminants

The FCC Gasoline Splitter Unit could emit Benzene, Naphthalene, Toluene, Xylene, Ethyl Benzene and *n*-Hexane, which are the toxic air contaminants listed in Table 1 of Rule 1401. Therefore, the facility is subject to all applicable requirements of this rule. The application AN 413909 for the modification was deemed completed on April 16, 2003. As a result, the facility is subject to the version of this rule that was amended on February 7, 2003.

As shown above, the cumulative risk of the FCC Gasoline Splitter Unit is re-estimated to be 8.3×10^{-8} with the higher VOC emission. The maximum noncarcinogenic acute and chronic hazard indices equal to 1.3×10^{-4} and 7.5×10^{-5} , respectively. Therefore, the FCC Gasoline Splitter Unit is expected to comply with all applicable requirements of this rule.

REG XVII

Amended
8/13/99

Prevention of Significant Deterioration (PSD)

The proposed project will only impact VOC emissions at this facility. VOC is not an attainment pollutant for the South Coast Air Basin. Therefore, PSD analysis is not required.

REG XXX

Title V

Chevron El Segundo Refinery is subject to Reg XXX and a Title V permit for the facility was issued on September 1, 2009. This issuance of the PO permit to the FCC



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Gasoline Splitter Unit is considered a De Minimis Significant Revision under Rule 3000 due to an increase in VOC emissions. All of the De Minimis Significant Revisions thus far have a total VOC emission increase of 10.7 lbs as show in Appendice E. Therefore, the VOC emission increase for A/N 413909 of 5.06 lbs/day would not make this proposed revision a Significant Revision. Accordingly, the proposed revision is subject to the 45 day EPA review process, but not public noticing requirements under Rule 3006.

PART 2: STATE REGULATIONS

CEQA California Environmental Quality Act

The addition of the FCC Gasoline Splitter Unit permitted under A/N 385372 and A/N 413909 was part of Chevron's Phase 3 Clean Fuel Project which was determined to have a significant effect on the environment. The Environmental Impact Report (EIR) was prepared by Chevron and certified by the District on November 30, 2001. Details can be found in the PC evaluation of this application.

PART 3: FEDERAL REGULATIONS

40CFR 60 STANDARDS OF PERFORMANCE FOR NEW STATIONARY SOURCES

Subpart GGG Standards of Performance for Equipment Leaks of VOC in Petroleum Refineries for which Construction, Reconstruction, or Modification Commenced After January 4, 1983, and on or Before November 7, 2006

The equipment in the FCC Gasoline Splitter Unit which are subject to this subpart include valves, pumps, pressure relief devices, sampling connectors, open-ended valves or lines. It requires monthly inspection for valves in gas and light liquid services against quarterly inspection by Rule 1173. In general, the equipment leak inspection and monitoring requirements of District Rule 1173 are more stringent than requirements specified at §60.482-1a through §60.482-10a. However, pertinent requirements will be incorporated into Chevron's leak detection and repair (LDAR) Program for fugitive components. Compliance with this regulation is expected.

40CFR 63 NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS FOR SOURCE CATEGORIES

Subpart CC National Emission Standards for Hazardous Air Pollutants From Petroleum Refineries

It was determined that D4302 (Miscellaneous Fugitive Emissions, in Process 3, system 5) contains fugitive leak components that are in "organic HAP service" as defined at §63.641 of this regulation. As a result, the FCC Gasoline Splitter Unit is subject to this regulation. The permit unit has already been subject to the requirements described in the Section J in the Facility Permit under 40CFR 63 Subpart CC, #5A 6-23-2003. Continued compliance with these requirements is expected.

RECOMMENDATION/CONCLUSION:

Issue Permit to Operate for the Gasoline Splitter Unit to the conditions indicated on pages 2 to 5.