



SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
ENGINEERING AND COMPLIANCE DIVISION

ENGINEERING EVALUATION REPORT

PAGE	1 of 12
APPL. NO.	405783
PROCESSED BY	Yan Yang
CHECKED BY	
DATE	6/25/2013

PC to PO Evaluation

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: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

EQUIPMENT DESCRIPTION:

The equipment under Process 16/System 5 will be removed from Section H and added to Process 21/System 11 Section D in the Title V permit. The current listed equipment under this system in Section D will be deleted. Additions and deletions are noted in underlines and ~~strikeouts~~, respectively.

Equipment	ID No.	Connected To	RECLAIM Source Type	Emission* And Requirements	Conditions
Process 16: STORAGE TANKS Process 21: MISCELLANEOUS PETROLEUM					P13.1
System 5: PORTABLE STORAGE TANKS System 10: FUEL STORAGE AND DISPENSING					S13.3 <u>S13.6</u>
STORAGE TANK, FIXED ROOF, PORTABLE , T-101, <u>ABOVEGROUND</u> , GASOLINE, NO DISPENSING NOZZLE, HARD PIPED TO FIRE SCHOOL PROPS., 1000 GALS; WIDTH: 4 FT 10 IN; HEIGHT: 4 FT 8 IN; LENGTH: 11 FT A/N: 405783 Permit to Construct Issued: 08/10/04	D1875				C1.51, D90.35, E118.1, <u>H23.x,</u> <u>J109.1,</u> J119.1, J123.1, <u>J373.x,</u> <u>K67.47</u>



SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
ENGINEERING AND COMPLIANCE DIVISION

ENGINEERING EVALUATION REPORT

PAGE	2 of 12
APPL. NO.	405783
PROCESSED BY	Yan Yang
CHECKED BY	
DATE	6/25/2013

CONDITIONS:

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
HAPs	40CFR61, SUBPART	FF

[**40CFR 61 Subpart FF, 12-4-2003**]
[Processes subject to this condition: 16]

SYSTEM CONDITIONS

S13.3 All devices under this system are subject to the applicable requirements of the following rules or regulations:

Contaminant	Rule	Rule/Subpart
VOC	District Rule	1149
VOC	District Rule	463
VOC	District Rule	1178

[**RULE 1149, 5-2-2008; RULE 1178, 4-7-2006; RULE 463, 5-6-2005**]
[Systems subject to this condition : Process 16, System 1 , 2 , 3 , 5]

S13.6 All devices under this system are subject to the applicable requirements of the following rules or regulations:

Contaminant	Rule	Rule/Subpart
VOC	District Rule	461

[**RULE 461, 3-7-2008**]
[Systems subject to this condition : Process 21, System 10]

C. Throughput or Operating Parameter Limits

C1.51 The operator shall limit the throughput to no more than ~~381 barrels~~ **1333.5 gallons** in any one calendar year ~~year~~ **month**.

[**RULE 1304(c)-Offset Exemption, 6-14-1996**]
[Devices subject to this condition : D1875]

D. Monitoring/Testing Requirements

D90.35 The operator shall monitor the throughput of this device according to the following specifications:



SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
ENGINEERING AND COMPLIANCE DIVISION

ENGINEERING EVALUATION REPORT

PAGE	3 of 12
APPL. NO.	405783
PROCESSED BY	Yan Yang
CHECKED BY	
DATE	6/25/2013

The throughput shall be derived by using engineering calculations using parameters obtained from process records, purchase records, shipping invoices, manual tank level gauging, etc.

Records of throughput shall be retained for a period of five years and made available to the Executive Officer upon request.

[**RULE 1303(b)(2)-Offset, 5-10-1996; RULE 3004(a)(4)-Periodic Monitoring, 12-12-1997**]
 [Devices subject to this condition : D1875, D2186, D3777]

E. Equipment Operation/Construction Requirements

E118.1 The operator shall ensure that all openings to the atmosphere on the tank and on the tank truck shall be closed during a gasoline transfer to the storage tank.

[**RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(b)(2)-Offset, 5-10-1996**]
 [Devices subject to this condition : D1875]

H. Applicable Rules

H23.x 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	1149
VOC	District Rule	463

[**RULE 1149, 5-2-2008; RULE 463, ~~5-6-2005~~ 11-4-2011**]
 [Devices subject to this condition : D1875]

J. Rule 461

J109.1 The operator shall use, except for diesel transfer, the phase I vapor recovery system in full operation whenever this equipment is in use. This system shall be installed, operated and maintained to meet all CARB certification requirements.

[**RULE 461, ~~3-7-2008~~ 4-6-2012**]
 [Devices subject to this condition : D1871, **D1875**]

J119.1 A CARB certified pressure/vacuum relief valve shall be installed on the tank vent stack and shall be set as specified in its CARB certification.

[**RULE 461, ~~3-7-2008~~ 4-6-2012**]
 [Devices subject to this condition : D1875]

J123.1 The operator shall not dispense fuel from this equipment into motor vehicles.

[**RULE 461, ~~3-7-2008~~ 4-6-2012**]
 [Devices subject to this condition : D1875]



SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
ENGINEERING AND COMPLIANCE DIVISION

ENGINEERING EVALUATION REPORT

PAGE	4 of 12
APPL. NO.	405783
PROCESSED BY	Yan Yang
CHECKED BY	
DATE	6/25/2013

J373.x The operator shall comply with the following gasoline transfer requirements:

Except for diesel transfers, Phase I vapor recovery systems shall be in full operation whenever fuel is being transferred into storage tanks.

A static pressure leak decay test shall be conducted within sixty (60) days from the issue date of the permit and annually thereafter to demonstrate that the storage tanks and associated vapor return piping and fittings are free from vapor leaks. The test shall be conducted in accordance with CARB's most recent version of test procedure TP-201.3B as a performance test and as a reverification test. Results shall be submitted to the AQMD, Office of Engineering and Compliance, within seventy-two (72) hours of test.

A leak rate and cracking pressure test of pressure/vacuum relief vent valves shall be conducted within ten days (10) after the Standing Loss Control vapor recovery systems is installed and at least once every three (3) years thereafter to determine the pressure and vacuum at which the pressure/vacuum vent valve actuates, and to determine the volumetric leak rate at a given pressure. The test shall be conducted in accordance with the most recent version of test procedure TP-201.1E.

The AQMD shall be notified by e-mail at r461testing@aqmd.gov or by facsimile at telephone number (909) 396-3606 at least seventy-two (72) hours prior to any of the above mentioned testing requirements. Such notification shall include the name of the owner or operator; the name of the contractor; the location of the facility; and the scheduled start and completion dates of the tests to be performed.

The testing for the above mentioned tests shall be conducted in accordance with the most recent Rule 461 amendment or CARB executive order requirements, whichever is more stringent.

[RULE 461, 4-6-2012]

[Devices subject to this condition : D1875]

K. Record Keeping/Reporting

K67.47 The operator shall keep records, in a manner approved by the District, for the following parameter(s) or item(s):

All records and test results required to be maintained by Rule 461.

Such records shall be maintained and kept on file for at least five years, and shall be made available to the Executive Officer or his authorized representative upon request.

[RULE 3004(a)(4)-Periodic Monitoring, 12-12-1997; RULE 461, ~~3-7-2008~~ 4-6-2012]

[Devices subject to this condition : D1871, **D1875**, D4270]

COMPLIANCE RECORD REVIEW:



SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
ENGINEERING AND COMPLIANCE DIVISION

ENGINEERING EVALUATION REPORT

PAGE	5 of 12
APPL. NO.	405783
PROCESSED BY	Yan Yang
CHECKED BY	
DATE	6/25/2013

The AQMD’s compliance database shows that Chevron El Segundo Refinery has been cited with eight 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. Finally, no violation notice has been issued to the gasoline storage tank T-101 in the past two years.

BACKGROUND:

Permit History

Chevron was issued a Permit to Construct/Operate (PC/PO, AN 290069) for the installation of a gasoline storage tank T-101, which was used to provide gasoline to props for firefighting training by the refinery’s Fire and Rescue Division on March 1, 1994. The proposed storage tank was a Hallmark tank equipped with a Pressure/Vacuum (PV) relief valve, a coaxial fill pipe and one dispensing nozzle with a Phase II vapor recovery system (VRS). The storage tank was required to be installed, operated and maintained to meet CARB certification requirement (CARB Executive Order G-70-116).

On November 22, 1996, Chevron submitted AN 322642 to modify the original PC/PO. Chevron indicated that the tank had never been put into its intended service, and dispensing nozzle was never purchased or installed. Instead of a dispensing nozzle, Chevron proposed under the new application to install a dispensing cabinet containing a pump. The gasoline would be hard piped directly to the Fire School’s props. Additionally, the gasoline from this tank would not be used for refueling motorized vehicles. A PC was issued on December 19, 1996 for the proposed modifications to the storage tank T-101.

Chevron submitted application AN 405783 on August 21, 2002 requesting a change of condition for the storage tank T-101. An incorrect CARB certification (G-70-116) was imposed in the PC which specified a pressure/vacuum relief valve be installed on the tank’s vent stack in accordance to Condition J119.1. Executive order G-70-116 was certified only for the Convault vaulted above ground gasoline tanks. However, the gasoline storage tank T-101 is a Hallmark vaulted tank where a CARB certified Morrison Brother 749CRB0600 pressure/vacuum relief valve has been installed. Therefore, Condition J119.1 was revised accordingly, and PC A/N 405783 was issued on August 10, 2004.

Table 1. Gasoline Storage Tank T-101’s Permit History

AN	Status	Type	Applied for	Issued
405783	26	60	Change of Condition J119.1 to delete the incorrect Executive Order	August 10, 2004, with a throughput limit
322642	52	50	Deletion of the dispensing nozzle and correction in the dimensions	December 19, 1996 without any throughput limit
290069	31	10	Installation of a 1000 gallon gasoline storage tank with a dispensing nozzle	March 1, 1994



SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
ENGINEERING AND COMPLIANCE DIVISION

ENGINEERING EVALUATION REPORT

PAGE	6 of 12
APPL. NO.	405783
PROCESSED BY	Yan Yang
CHECKED BY	
DATE	6/25/2013

Process Description

The gasoline storage tank T-101 is a 1000-gallon, aboveground and rectangular tank. The pictures of the tank T-101 before the Standing Loss Control vapor recovery system was installed are shown in **Appendix B**. The tank is 11 ft (length) × 4 ft 10 in (width) × 4 ft 8 in (height). Since the tank receives gasoline from tank trucks, it is subject to the requirements applicable to the Phase I vapor recovery system in Rule 461 as indicated in the permit condition J109.1. The Phase I vapor recovery system on T-101 is a two-point system, not a coaxial system as permitted in AN 290069. The VRS is outfitted with two Phil Tite Enterprises 100-101 fittings—one on the fill line and one of the vapor line. Since gasoline is not being transferred from this storage tank into any mobile vehicle or being used for motorized vehicle fuel, storage tank T-101 is not subject to the requirements applicable to the Phase II vapor recovery system in Rule 461. Gasoline from this tank is only permitted to be used for training of Chevron’s fire-fighting personnel. Currently, the storage tank T-101 is permitted as a fixed roof, portable tank and listed under Portable Storage Tanks System (Process 16, System 5) in Chevron’s facility permit. Since this tank is not subject to Rule 1178, it will be moved to the Fuel Storage and Dispensing System (Process 21, System 10) of the facility permit.

Compliance with Permit-to-Construct

The vapor recovery system for tank T-101 permitted under AN 290069 was the one certified under CARB Executive Order (EO) G-70-116. However, EO G-70-116 was imposed by mistake for the Phase I and Phase II vapor recovery system, as well as the PV relief valves installed on the tank in the initial PC/PO. The correct certification of the vapor recovery systems for this aboveground storage tank should be G-70-131-A (see Chevron’s A/I response email dated February 28, 2013). A copy of EO G-70-131-A is included in **Appendix C**.

Testing Requirement

In the EO G-70-131-A, the tank is required to comply with “any emergency vent installed on the tanks be leak free at the operating pressure of the tank when tested in accordance with ARB Method 2-6.” Method 2-6 is titled “Test Procedures for Gasoline Vapor Leak Detection Using Combustible Gas Detector”. The amendment date of this test was September 1, 1982 as indicated in the EO G-70-131-A. However, the procedures for Test Method 2-6 could not be found by Chevron. As a result, Chevron has been testing the tank’s emergency vent as well as other fittings for leaks using EPA Method 21 on a quarterly basis. EPA Method 21 was determined by the District during this PO evaluation not to be an appropriate test method for the tank because it is not a pressure decay test. The District proposed the CARB TP 201.3B to be equivalent to ARB Method 2-6. The Test Method TP 201.3B—Determination of Static Pressure Performance of Vapor Recovery Systems of Dispensing Facilities with Above-Ground Storage Tanks is included in **Appendix D**. Chevron has agreed to conduct the performance/reverification test in accordance with TP 201.3B in the future.

Standing Loss Control Vapor Recovery System

The requirements of Standing Loss Control Vapor Recovery System for existing aboveground gasoline storage tanks per EO VR-301-D took effect on April 1, 2013. The requirements involved painting the tank with the approved reflective coating as well as installation of a Husky 5885 PV vent. The tank was painted using Ponderosa Paint Company Enviro-Clad 2600 White (100) Base and Enviro-Clad 2600 Catalyst. MSDS for the coating materials are included in **Appendix E**. The Morrison Brothers PV valve was removed from the tank and a cap was installed in its place. The newly installed Husky 5885 PV vent valve was tested in accordance with TP-201.1E and passed the



SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
ENGINEERING AND COMPLIANCE DIVISION

ENGINEERING EVALUATION REPORT

PAGE	7 of 12
APPL. NO.	405783
PROCESSED BY	Yan Yang
CHECKED BY	
DATE	6/25/2013

test on March 19, 2013. The cracking pressure results were +4.03 and -9.42. The leak rate results were +0.01 and -0.04. The invoice documentation regarding the testing is included in **Appendix E**. The pictures of the tank T-101 after the Standing Loss Control vapor recovery system was installed are shown in **Appendix B**.

Monthly Gasoline Throughput

Chevron submitted the amounts of gasoline stored in the tank T-101 during 2011 and 2012. See **Appendix F** for details. A total of 171.2 gal of gasoline stored from this tank T-101 was burned for the training purpose. The throughput didn't exceed the throughput limit set in the permit condition C1.51.

EMISSIONS:

I. Criteria Pollutant Emissions

The change of condition under AN 405783 doesn't involve any physical modification and emission increase. The gasoline storage tank T-101 was modified in accordance with the current EO VR-301-D for the Standing Loss Control. This modification did not require filing an additional permit application. There is no emission increase resulted from the modification.

In the original PC/PO AN 290269, the emission from this tank was calculated as the emission from a fixed roof tank. The throughput limit was 1333.5 *gallon/month* (381 *barrel/yr*, 16,002 *gallon/yr*) as imposed in the permit condition C1.51. The total of the breathing loss and working loss was 0.4727 *lb/day*. Since this storage tank T-101 is not only a storage tank, gasoline is also being loaded from tank trucks. As a result, the emissions from the tank are re-calculated below to include refueling loss and loss from the spillage in addition to loading loss, breathing loss. The calculations are similar to the procedures used for a typical Rule 461 tank. Table 2 shows the emission factors developed by the Districts Planning Division for a Rule 461 gasoline tank.

Table 2. Emission Factors and Control Efficiencies for Aboveground Tanks

Process Type	Loading ^(a)	Breathing	Refueling ^(b)	Spillage
Uncontrolled Emission Factors (lb/1,000 gallons)	8.40	0.21	3.95	0.24 ^(c)
Control Efficiency	95%	75%	94.732%	0
Controlled Emission Factors (lb/1,000 gallons)	0.42	0.0525	0.208	0.24
Toxic Air Contaminants (TACs) weight% ^(d)				
Benzene	0.3%	0.3%	0.3%	1%
Ethyl benzene	0.118%	0.118%	0.118%	1.64%
Naphthalene	0	0	0	0.14%

- (a) Revised from 90%. Assumed by CAPCOA to 95% based on SCAQMD's finding.
- (b) Revised from 99%. Assumed by CAPCOA to ~95% based on SCAQMD's finding.
- (c) Spillage emission factor was revised from 0.42 to 0.24 based on EVR Regulation.
- (d) Specification profiles for TACs are from <http://www.arb.ca.gov/ei/speciate/speciate.htm>

Since the tank T-101 is not subject to the requirements for the Phase II vapor recovery system, it was assumed there was no control for the refueling process. The tank's throughput is 1333.5 *gal/month*. The uncontrolled potential to emit (R1) of ROG is 17.07 *lb/month* and the controlled potential to emit (R2) of ROG is 6.22 *lb/month* as shown below.

Table 3 -- Emission from Gasoline Storage Tank T-101



SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
ENGINEERING AND COMPLIANCE DIVISION

ENGINEERING EVALUATION REPORT

PAGE	8 of 12
APPL. NO.	405783
PROCESSED BY	Yan Yang
CHECKED BY	
DATE	6/25/2013

Emission (lb/month)		Process Type				Total ROG
		Loading	Breathing	Refueling	Spillage	
ROG	R1	1.120E+01	2.800E-01	5.267E+00	3.200E-01	1.707E+01
	R2	5.601E-01	7.001E-02	5.267E+00	3.200E-01	6.217E+00
Benzene	R1	3.360E-02	8.401E-04	1.580E-02	3.200E-03	5.345E-02
	R2	1.680E-03	2.100E-04	1.580E-02	3.200E-03	2.089E-02
Ethyl benzene	R1	1.322E-02	3.304E-04	6.215E-03	5.249E-03	2.501E-02
	R2	6.609E-04	8.261E-05	6.215E-03	5.249E-03	1.221E-02
Naphthalene	R1	0.000E+00	0.000E+00	0.000E+00	4.481E-04	4.481E-04
	R2	0.000E+00	0.000E+00	0.000E+00	4.481E-04	4.481E-04

II. Toxic Air Contaminant Emissions and Health Risk Impacts

MICR (maximum individual cancer risk) calculated using risk values provided by CAPCOA

The TAC emissions including the emission of Benzene, Ethyl benzene and Naphthalene were calculated using the default specification profiles from CARB. Benzene is the only toxic emittant that has significant effect to the MICR. Using the CAPCOA provided risk values, the staff in the District's Planning Division prepared reference MICRs for different scenarios, i.e., for underground and aboveground tanks, and for residence and workers. These MICRs are tabulated for different downwind distances from a permit unit that is located in West LA with annual gasoline throughput of one million gallons. The reference MICR for the aboveground tanks is included in **Appendix G**.

The cancer risk assessment was based on 16,002 gallon/yr of proposed maximum annual throughput. The nearest distance to the residential receptor and commercial worker is assumed to be 200 m (656 ft).

Gasoline Throughput/MM Gallons gasoline = 16,002/1,000,000 = 0.016

Facility Zone = 03

MET Factor = 0.90

Downwind Distance to Residence (m) = 200

Downwind Distance to Workers (m) = 200

MICR for Residences

Reference MICR [in-a-million/(1 MMGal/year)] = 0.091

Adjusted MICR [in-a-million]

= (Reference MICR) × (MET factor) × (Gasoline Throughput/MM Gallons gasoline)

= 0.091 × 0.9 × 0.016

= 0.0013

MICR for workers

Reference MICR [in-a-million/(1 MMGal/year)] = 0.018

Adjusted MICR [in-a-million]

= (Reference MICR) × (MET factor) × (Gasoline Throughput/MM Gallons gasoline)

= 0.018 × 0.9 × 0.016

= 0.00026



SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
ENGINEERING AND COMPLIANCE DIVISION

ENGINEERING EVALUATION REPORT

PAGE	9 of 12
APPL. NO.	405783
PROCESSED BY	Yan Yang
CHECKED BY	
DATE	6/25/2013

The results show that MICR for residences and workers are far below one in-a-million. There has been no emission increase of TACs since the gasoline storage tank T-101 was first constructed and operated.

Rule 1401 Health Risk Assessment (HRA)

The gasoline stored in the tank T-101 contains Benzene, Ethyl benzene and Naphthalene, which are TACs listed in Rule 1401 Table 1. The post-modification potential-to-emit for these TACs are given in Table 3. Tier I Health Risk Assessment (HRA) analysis was performed for this tank. Neither the cumulative cancer/chronic hazard nor acute hazard index will exceed 1. Therefore, the emissions of TACs do not exceed the Tier I HRA Screening Levels for this tank T-101. See details in Table 4.

Table 4. TAC Emissions and Pollutant Screening Index (PSI)

TAC	E (lb/hr)	E (lb/yr)	PSL acute (100 meter)	PSL cancer/chronic (100 meter)	PSI acute	PSI cancer/chronic
Benzene	2.90E-05	2.51E-01	3.96E+00	8.92E+00	7.33E-06	2.81E-02
Ethylbenzene	1.70E-05	1.46E-01		1.02E+02		1.44E-03
Naphthalene	6.22E-07	5.38E-03		7.44E+00		7.23E-04
Total					7.33E-06	3.03E-02

$E (lb/hr) = E (lb/month)/30/24, E (lb/yr) = E (lb/month) \times 12$

RULE EVALUATION:

PART 1: SCAQMD REGULATIONS

Rule 212: Standards for Approving Permits and Issuing Public Notice

Amended
11/14/97

The gasoline storage tank T-101 is not located within 1000 feet of a school. There is no emission increase of criteria pollutant or TACs for the tank since the gasoline storage tank T-101 was first constructed and operated. Therefore, a public notice is not required.

Rule 401: Visible Emissions

Amended
11/9/01

The gasoline storage tank T-101 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 461 Gasoline Transfer and Dispensing

Amended
4/6/12

This rule applies to the transfer of gasoline from any tank truck, trailer, or railroad tank car into any stationary storage tank. Therefore this rule is applicable to this gasoline storage tank T-101.

Rule 461 (c)(1)(B) and (c)(3) specifies the Phase I requirements of aboveground storage tanks.



SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
ENGINEERING AND COMPLIANCE DIVISION

ENGINEERING EVALUATION REPORT

PAGE	10 of 12
APPL. NO.	405783
PROCESSED BY	Yan Yang
CHECKED BY	
DATE	6/25/2013

Rule 461(f) states “All required tests shall be conducted in accordance with the most recently CARB approved version of CARB Test Methods or as stated in the applicable CARB Executive Orders...” CARB Method TP 201.3B will be employed by Chevron in the future for performance test and annual reverification test in lieu of ARB Method 2-6 for the storage tank T-101.

Per Rule 461 (c)(3)(F), a person shall not store, or allow the storage of, gasoline in any stationary storage tank with a capacity of 950 liters (251 gallons) or more, or any mobile fueler with a capacity of 454 liters (120 gallons) or more, unless such tank complies with Rule 463 or complies with the following:

- (i) The tank is equipped with a Phase I vapor recovery system; and
- (ii) The tank is operated and maintained with an integral vapor-tight drain valve to return spilled gasoline to the storage tank, if the tank is equipped with a spill container except for mobile fuelers.

Gasoline Storage Tank T-101 is equipped with a VRS and operated in accordance to the above requirements. The tank complies with this rule.

Rule 463:
Amended
11/4/11

Organic Liquid Storage

The capacity of this gasoline storage tank T-101 is 1000 gallons. Therefore, it is subject to this rule. Since the tank is a fixed roof tank, it is required to be controlled with a vapor recovery system that has an efficiency of at least 95 percent by weight. All openings, fittings and tank roof shall be maintained in vapor tight condition with no tears or uncovered openings. As discussed above, tank T-101 complies with Rule 461 and is equipped with CARB certified Phase I VRS which achieves 95% efficiency. Additionally, the tank is equipped with a pressure-vacuum valve, which is set to within 10 percent of the maximum allowable working pressure of the container. Compliance with this rule is expected.

Rule 1149:
Amended
5/2/08

Storage Tank and Pipeline Cleaning and Degassing

The vapor pressure of the gasoline stored in storage tank T-101 is greater than 3.9 psia under actual storage condition and the capacity of this tank is greater than 500 gallons. This tank shall not open to the atmosphere unless the emissions are controlled by control methods or equipment listed in (c)(1).

Rule 1178:
Adopted
4/7/06

Further Reduction of VOC emissions from Storage Tanks at Petroleum Facilities

The rule only applies to the aboveground storage tanks that have capacity equal to or greater than 75,000 liters (19,815 gallons). The capacity of the gasoline storage tank T-101 is 1000 gallons. Therefore, this tank is not subject to this rule.

The system condition S13.3 which was imposed to this tank and required this tank to comply with Rule 1178 should not apply to this tank. This tank will be moved from Process 16 (Storage Tanks) System 5 (Portable Storage Tanks) to Process 21 (Miscellaneous Petroleum) System 10 (Fuel Storage and Dispensing).

REG XIII New Source Review



SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
ENGINEERING AND COMPLIANCE DIVISION

ENGINEERING EVALUATION REPORT

PAGE	11 of 12
APPL. NO.	405783
PROCESSED BY	Yan Yang
CHECKED BY	
DATE	6/25/2013

1301 General
Amended The provisions of this regulation shall apply to the modification of an existing source
12/7/1995 which may cause the issuance of any nonattainment air contaminant, any ODC, or ammonia at any facility. This regulation is applicable to the storage tank.

1303 Requirements
Amended (a) There has been no emission increase since the gasoline storage tank T-101 was
12/6/2002 first constructed and operated. However, this tank would be required to have Phase I EVR installed by July 1, 2014.
(b) There has been no emission increase since the gasoline storage tank T-101 was first constructed and operated. Therefore, the storage tank is not subject to the modeling and offset.

Rule 1401 **New Source Review of Toxic Air Contaminants**
Amended This storage tank T-101 will emit several toxic air contaminants listed in Table 1 of
5/3/02 Rule 1401, such as Benzene, Ethyl Benzene and Naphthalene. Therefore, the tank is subject to all applicable requirements of this rule. The application for this tank was deemed completed on September 19, 2002. As a result, the tank is subject to the version of this rule that was amended on May 3, 2002.

MICR and Cancer Burden

The health risk assessment results show that MICR for residences and workers are far below one in-a-million. There has been no emission increase of TACs since the gasoline storage tank T-101 was first constructed and operated.

Chronic/Acute Hazard Index

The cumulative increases in total chronic and acute hazard indices for any target organ system for this gasoline storage tank will not exceed 1.0 at any receptor location.

Permit condition limiting the use or emissions of toxic compounds

A throughput condition C1.51 was imposed to limit the use or emission of TACs. This condition only applies to the TACs listed in Rule 1401 amended on May 3, 2002.

The storage tank T-101 is expected to comply with all applicable requirements of this rule.

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. The proposed permit revision does not require any significant change in monitoring terms or conditions in the permit; does not require relaxation of any recordkeeping, or reporting requirement in the permit; does not result in an emission increase of any Reg XIII pollutant; and is not a modification of an existing permit unit. Therefore, it is a Minor Revision under Rule



SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
ENGINEERING AND COMPLIANCE DIVISION

ENGINEERING EVALUATION REPORT

PAGE	12 of 12
APPL. NO.	405783
PROCESSED BY	Yan Yang
CHECKED BY	
DATE	6/25/2013

3000. Accordingly, the proposed revision is subject to the 45 day EPA review process but is not subject to public noticing requirements under Rule 3006.

PART 2: STATE REGULATIONS

CEQA California Environmental Quality Act

The CEQA Applicability Form (400-CEQA) submitted by the applicant indicates that the project does not have any impacts which trigger the preparation of a CEQA document. The construction of the gasoline storage tank T-101 and the issuance of a PO have no possibility to cause a significant adverse effect on the environment. Therefore, the expected impacts of the project on the environment are not significant and preparation of an Environmental Impact Report (EIR) is not required.

PART 3: FEDERAL REGULATIONS

40CFR 60 STANDARDS OF PERFORMANCE FOR NEW STATIONARY SOURCES

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 storage capacity of this gasoline tank is determined below threshold (19813 gal) for the subpart. So this tank is not subject to this regulation.

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

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

The storage capacity of this gasoline tank is determined below threshold of the capacity of a storage vessel (10,567 gallon) for the subpart. So this tank is not subject to this regulation.

RECOMMENDATION/CONCLUSION:

Issue Permit to Operate for the storage tank T-101 for the modification of the commodities subject to the conditions indicated on pages 2 to 4.

List of Appendices in Evaluation:

- A Compliance History
- B Pictures of Gasoline Storage Tank T-101
- C CARB Executive Orders
- D CARB Test Methods
- E Standing Loss Control Vapor Recovery System
- F Gasoline Storage Tank T-101 Throughput Record
- G Reference MICR for Aboveground Tanks

APPENDIX A

Compliance History

APPENDIX B

Pictures of Gasoline Storage Tank T-101

APPENDIX C

CARB Executive Orders

APPENDIX D

CARB Test Methods

APPENDIX D

Standing Loss Control Vapor Recovery System

APPENDIX E

Gasoline Storage Tank T-101 Throughput Record

APPENDIX F

Reference MICR for Aboveground Tanks