

<b>SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT</b>  <b>STATIONARY SOURCE COMPLIANCE DIVISION</b>  <b>PERMIT APPLICATION PROCESSING AND CALCULATIONS</b>	<b>PAGES</b> 12	<b>PAGE</b> 1
	<b>APPL NO</b> 513959	<b>DATE</b> 09/19/2010
	<b>PROCESSED BY</b> TWW	<b>CHECKED BY</b>

**EVALUATION REPORT FOR PERMIT TO CONSTRUCT**

**APPLICANT'S NAME:**  
CHEVRON PRODUCTS COMPANY

**ID NO.: 800032**

**MAILING ADDRESS**  
17881 GOTHARD STREET  
HUNTINGTON BEACH, CA 92647

**CONTACT: FIAZ MOHAMMED**  
TERMINAL MGR

**EQUIPMENT ADDRESS**  
SAME

**EQUIPMENT DESCRIPTION:**  
MODIFICATION OF THE VAPOR RECOVERY AND TREATMENT SYSTEM BY THE REMOVAL OF ALL COMPONENTS OF AIR POLLUTION CONTROL SYSTEM A (A/N R475535) AND AIR POLLUTION CONTROL SYSTEM B (A/N R-475536) WITH THE EXCEPTION OF:

1. CHILLER, CARRIER MODEL 30RB-120 OR EQUIVALENT, 120 TON CAPACITY.
2. CHILLER, HEAT EXCHANGER, TRANTER MODEL SM-22-H-06-US-218 OR EQUIVALENT, SHELL AND PLATE TYPE.
3. VAPOR HOLDER C, WITH EXPANDABLE BLADDER, 60' DIA. X 48' H., 126,000 CUBIC FEET CAPACITY.
4. SUMP PUMP C, SUBMERSIBLE, 55 GPM CAPACITY, 1.5 HP.
5. VAPOR DROP-OUT TANK 91, 1000 GALLON CAPACITY, 4'-0" DIA. X 12'-0"L.
6. VAPOR DROP-OUT PUMP, SUBMERSIBLE, TWO STAGE, 5 HP.
7. SUMP TANK T-92, 10,000 GALLON CAPACITY, 7'-6" DIA. X 30'-0"L.
8. SUMP PUMP P-92, SUBMERSIBLE, 5 HP.

<b>SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT</b>  <b>STATIONARY SOURCE COMPLIANCE DIVISION</b>  <b>PERMIT APPLICATION PROCESSING AND CALCULATIONS</b>	PAGES 12	PAGE 2
	APPL NO 513959	DATE 09/19/2010
	PROCESSED BY TWW	CHECKED BY

AND THE ADDITION OF:

1. TWO CARBON ADSORPTION VESSELS, 11' DIA., EACH VESSEL CONTAINING AT LEAST 17,500 POUNDS OF PELLETIZED ACTIVATED CARBON IN A CARBON BED 8' DEEP.
2. TWO VAPOR BLOWERS, VARIABLE FREQUENCY DRIVE, EACH BLOWER 10 HP, FEEDING A 10 INCH DIA. VAPOR RECOVERY LINE.
3. THREE DRY RING VACUUM PUMPS, EACH PUMP 100 HP.
4. ONE GASOLINE ABSORBING TOWER WITH GASOLINE ABSORBENT.
5. TWO ABSORBENT SUPPLY PUMPS, 20 HP, ONE IN SERVICE, ONE FOR BACKUP.
6. TWO CONDENSATE RETURN PUMPS, 20 HP, ONE IN SERVICE, ONE FOR BACKUP.

**BACKGROUND:**

This application (AN513959) was submitted to replace the vapor recovery system (VRS) at Chevron's Montebello Bulk Terminal (CMT). Currently there are two parallel operating systems that use several processes including compression, refrigeration, condensation, absorption, to recover gasoline vapors. Unrecovered vapors ultimately vent to a thermal oxidizer. CMT is proposing to replace their antiquated and high maintenance process with a regenerating carbon adsorption system. The application was received on Aug. 18, 2010, assigned for processing on Aug. 31, 2010 and deemed complete on Sept. 2, 2010. Because the new VRS will include components from the existing VRS, the application will be processed as a modification rather than new construction.

A review of AQMD Compliance files indicates no NOVs or NCs were issued to the facility in the past 10 years.

The Chevron Montebello Terminal (CMT) is a Title V facility for gasoline and diesel truck loading and unloading, providing fuel to the surrounding Los Angeles area. CMT is capable of loading 78,000 bbl/day of fuel. Unloading operations consist of products brought to the terminal by tanker truck including additive, biodiesel, and ethanol.

There are six truck loading lanes with two lanes dedicated to loading only diesel, two lanes dedicated to loading only gasoline, and the remaining two lanes can load either product. Gasoline and diesel are transferred from the proprietary Chevron pipeline into four product storage tanks at a rate of 3250 BBL/hr. There are 3 gasoline storage tanks (TK-1, TK-2, TK-3) and one diesel tank (TK-4) each are fixed cone roof tanks with a capacity of 50,000 BBL. There is also an internal floating roof type ethanol storage tank (50,000 BBL), several low vapor pressure additive tanks, and a 126,000 cubic foot vapor bladder tank.

Currently, vapors from the three gasoline tanks, the bladder tank and the loading rack are sent via a vapor balance line to the existing VRS. The vapor is processed through a gasoline sponge absorber and the recovered liquids are returned to either TK-2 or TK-3. There are 2 identical absorber systems operating in parallel, each consisting of a saturator, a compressor, an absorber, vapor chiller, and a

<b>SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT</b>  <b>STATIONARY SOURCE COMPLIANCE DIVISION</b>  <b>PERMIT APPLICATION PROCESSING AND CALCULATIONS</b>	<b>PAGES</b> 12	<b>PAGE</b> 3
	<b>APPL NO</b> 513959	<b>DATE</b> 09/19/2010
	<b>PROCESSED BY</b> TWW	<b>CHECKED BY</b>

stripping section. Unrecovered vapors are routed to a thermal oxidizer where they are burned. CMT is permitted to load a combined total of 3, 303,109 gallons per day of diesel, and oxygenated (with ethanol) gasoline. The current VRS efficiency for truck loading operations is 0.04lb/1000 gallons loaded. The VRS efficiency for recovery and destruction of storage tank vapors is rated at 99.9%.

#### PROCESS DESCRIPTION

The new VRS is sized to process vapors generated from loading up to 78,000 BBl/day (3,276,000 gallons/day) of oxygenated gasoline and diesel. The VRS will be skid mounted and consist of two regenerating carbon adsorption vessels, two variable frequency drive blowers, three dry ring vacuum pumps, an absorbent tower, one absorbent supply pump, one return pump, with one each additional supply and return pump as backup spares. The new carbon adsorption system will be tied into the existing vapor balance line between the loading racks and gasoline storage tanks and utilizes the existing vapor holder bladder tank to stabilize flow through the carbon adsorbers. A bypass will be installed around the bladder tank if it is found to be unnecessary and at some time in the future it is removed from service. New variable frequency drive blower(s) will be installed to assist in moving vapors into the carbon adsorption vessels if required to keep the truck loading vapor return line pressure below 18" w.c. as required by Rule 462. A blower bypass line will be installed to bypass the blower(s) if no assist is necessary. A new 10 inch tie-in to the vapor return line will be installed to allow connection to a portable combustion unit that could be brought onsite temporarily to process vapors when/if the carbon system is taken off line for repairs or service.

The carbon adsorption system consists of two vessels, each filled with approximately 17,500 lbs of activated carbon. Vapors recovered from truck loading and tank filling operations are directed to one vessel, while the other vessel is regenerating, alternating on 15 - 30 minute cycles. Exhaust from the active vessel is vented to atmosphere. A new continuous monitoring system (CEMS) analyzer will be installed to monitor volatile organic compound (VOC) concentration in the VRS exhaust. If the VOC concentration approaches the allowable limit, hi VOC readings are communicated to the Terminal PLC system which will automatically shut down the truck loading operation and activate an alarm in the Terminal control rooms and also at the remote pipeline pumping station to suspend tank filling permissives. If the VRS is shut down, the loading rack is automatically shut down and tank filling operations will be suspended as soon as it is safe to do so. In the regeneration cycle, the dry ring vacuum pumps pull adsorbed gasoline vapors out of the activated carbon in the regenerating vessel and discharge it into the absorber tower. Vapors discharged into the absorber tower are directed up through the tower packing where it is absorbed into a down-flowing stream of liquid gasoline. New supply pumps transfer absorber (sponge) gasoline to the tower from TK-2 or TK-3 via an existing 6-inch supply line. A new 4 inch discharge line is installed to route sponge gasoline through the existing chiller to cool it (if necessary) before it enters the absorber tower. The enriched "sponge" gasoline accumulates in the bottom of the absorber and is pumped back to TK-2 or TK-3 by the new VRS return pump via a new 4 inch return line. At the end of the cycle the regenerating vessel is purged with ambient air drawn through the carbon by the vacuum pumps. The purge air is directed into the vapor return line for treatment in the active adsorber.

<b>SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT</b>  <b>STATIONARY SOURCE COMPLIANCE DIVISION</b>  <b>PERMIT APPLICATION PROCESSING AND CALCULATIONS</b>	PAGES 12	PAGE 4
	APPL NO 513959	DATE 09/19/2010
	PROCESSED BY TWW	CHECKED BY

**CALCULATIONS:**

Table 1. Net Change of Fugitive Emissions Due to VRS Modifications

Component Type		Service	No. of Components			Net Emissions				
			Existing to be removed	New VRS	Net Totals	Factor <sup>1</sup>	Lb/yr	Lb/day <sup>2</sup>	Lb/hr	
Valves	Sealed Bellows	Gas/Vapor & Light Liquid.	0	0	0	0	0	0	0	
		Gas/Vapor	0	0	0	4.55	0	0	0	
		Light Liquid	43	91	48	4.55	218.4	0.61	0.025	
		Heavy Liquid	0	0	0	4.55	0	0	0	
Pumps	Sealess Type	Light Liquid	0	0	0	0	0	0	0	
	Double mech. seals/ equivalent	Light Liquid	2	5	3	46.83	140.5	0.39	0.016	
	Single mech. seals	Heavy Liquid	0	0	0	46.83	0	0	0	
Compressor		Gas/Vapor	0	0	0	9.09	0	0	0	
Flanges		All	23	26	3	6.99	20.97	0.06	0.002	
Pressure Indicator Gauges		All	7	3	(4)	9.09	(36.36)	(0.10)	(0.004)	
Process Drains		All	0	0	0	0	0	0	0	
Totals								343.5	0.96	0.039

1. SCAQMD New Fugitive Components with BACT Emission Factors from AER (500 ppmv threshold).

2. Based on 30 day average.

The above table reflects the information provided by the applicant. As can be seen, there is an increase in fugitive VOC that amounts to 0.96 lb/day, just under 1 lb/day so BACT is not triggered. There is no daily throughput increase associated with this application and emission limits and NSR baseline will remain unchanged. The emission limit and throughput limits on the current operating permit will be transferred to the new permit for the modified VRS.

**NSR Emissions/Offsets**

The only emissions associated with the VRS as a control device are associated with the fugitive components. As illustrated in Table 1, the required modification will result in an increase in fugitive emissions of 0.96 lb/day. Multiplied by 1.2 the overall increase for offsets is ~1.2 pounds/day which is rounded to 1 pound per day. The facility will supply 1 pound of ROG ERC to satisfy the emission increase.

Table 2 Offsets

Source	Lb/hr	Lb/day	Offset ERC required	Lb/yr
Fugitive Components	0.039	0.96	1	343.5

1 multiplied by offset ratio (1.2) and rounded to nearest pound.

<b>SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT</b>  <b>STATIONARY SOURCE COMPLIANCE DIVISION</b>  <b>PERMIT APPLICATION PROCESSING AND CALCULATIONS</b>	PAGES 12	PAGE 5
	APPL NO 513959	DATE 09/19/2010
	PROCESSED BY TWW	CHECKED BY

**HEALTH RISK ASSESSMENT**

Emissions used to calculate health risk are taken from the EPA Tanks program Gasoline profile. This profile represents average content of toxic air contaminants typically found in Gasoline.

Table 3. Summary of Air Toxics in Fugitives Increase

Toxic Compound	Wt fraction in Gasoline <sup>1</sup> (Wt%)	Fugitives Emission Rate <sup>2</sup> (Lb/hr)	Emission Rate Lb/hr
Benzene	1.8	0.039	0.00070
Ethyl benzene	1.4	0.039	0.00055
Hexane (n-)	1.0	0.039	0.00039
Toluene	7.0	0.039	0.00273
Xylenes	7.0	0.039	0.00273

1. Wt % and speciation profile from EPA Tanks 4.09d Program

2..Based on Net Increase due to Fugitive Components from Table 1

**MICR and HAZARD INDEX by Tier 2 (See Risk Spreadsheets, Attached)**

Basis:

- Only net emission increase due to new fugitive components is considered. Risk due to emissions generated by storage tank and loading operations are equipment specific and as such are not considered.
- Distances to receptors are measured on Montebello Terminal plot plan from centroid of VRS to closest point on property line.
- Concentrations of Air Toxics are calculated using the gasoline “speciation profile” in the EPA Tanks 4.09d program.
- Emissions are assumed to be distributed evenly over 24 hours per day, 365 days per year.
- The MICR (commercial and residential) is calculated by spreadsheet using the updated risk program.

The results of the RISK Spreadsheet calculations of are summarized in the following tables:

MICR

Carcinogen	Emission Rate (lb/hr)	MICR	
		Sensitive/Residential	Worker/Commercial
Benzene	7.0E-04	6.73E-07	1.31E-07
Ethylbenzene	5.5E-04	4.60E-08	8.98E-09
<b>Totals</b>	<b>n/a</b>	<b>7.19E-07</b>	<b>1.40E-07</b>

<b>SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT</b>  <b>STATIONARY SOURCE COMPLIANCE DIVISION</b>  <b>PERMIT APPLICATION PROCESSING AND CALCULATIONS</b>	PAGES 12	PAGE 6
	APPL NO 513959	DATE 09/19/2010
	PROCESSED BY TWW	CHECKED BY

### HIA & HIC

HIA and HIC are calculated by spreadsheet using Tier 2 methods

VARIABLES			Cancer Burden	NO
Hour/Day	24	hr/day		
Day/Week	7	day/wk	X/Q for one-in-a-million:	
Week/Year	52	wk/yr	Distance (meter	
Units	lb/hr	lb/hr or ppm	Area (km2):	
Exhaust Flow Rate	N/A	scfm	Population:	
Control Efficiency	0	%	<b>Cancer Burden:</b>	
Point Source?	V	p or v	No Cancer Burden – Risk < 1 in 1 million.	
Stack Height	n/a	feet		
Area	1000	sq. ft.		
Distance-Residential	76	meters		
Distance-Commercial	76	meters		
Met. Station		Pico Rivera		

HIA = [Q(lb/hr) * (X/Q)max] / Acute REL	HIA	HIC
HIC = [Q(ton/yr) * (X/Q) * MET * MP] / Chronic REL		
Target Organs	Acute	Chronic
Cardiovascular or blood system		9.12E-06
Central or peripheral nervous system		
Gastrointestinal system and liver		
Immune system	2.55E-04	6.98E-04
Kidney		9.12E-06
Reproductive system	9.04E-05	
Respiratory system	2.21E-04	3.87E-04
Skin	2.21E-04	
Eye		9.12E-06
Endocrine system	3.37E-05	8.20E-04

### **RULES EVALUATION:**

CEQA: The CEQA Applicability Form (400-CEQA) indicates that the project does not have any impacts which trigger the preparation of a CEQA document. The expected impacts of the project on the environment are not significant; therefore a CEQA analysis is not required.

212: Public Notice is not required since risk associated with construction of the new VRS is less than 1 in 1 million for MICR, HIA, & HIC and the facility emissions increase (less than 1 lb./day of fugitives) do not exceed the Rule 212 limits. There is no Cancer Burden. There is no school within 1000 feet.

401: Visible emissions are not expected.

<b>SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT</b>	PAGES 12	PAGE 7
<b>STATIONARY SOURCE COMPLIANCE DIVISION</b>	APPL NO 513959	DATE 09/19/2010
<b>PERMIT APPLICATION PROCESSING AND CALCULATIONS</b>	PROCESSED BY TWW	CHECKED BY

402: Compliance records indicate that there are no N/C and NOV's for the past three years  
The facility is expected to continue in compliance with the rule.

462: Organic Liquid Loading

(d)(1) Class A facility.

(A) The new VRS will require CARB certification. Permit Conditions require CARB certification within 180 days of startup.

(B) The VRS design includes a new CMS that will be installed and maintained as required by Rule 462. A revised CMS Plan is required.

(d)(4) Loading Requirements for Transport Vessels: The Montebello Terminal is currently operating as a Class A Bulk Terminal and has a system in place to insure compliance with the loading requirements of this section.

(d)(5) Uncontrolled Switch Loading. All loading at this Terminal is controlled.

(d) (6) Leak Inspection Requirements. The Terminal is already subject to Rule 1173 which has more stringent requirements. Compliance is expected.

(e)(1) Compliance Schedule: The Terminal is currently operating in compliance with this section. Conditions in the Permit to Construct the new VRS will specify the scheduling to insure the new VRS meets the compliance schedule specified by this section.

(f) Compliance Determination/Test Methods. The Operator will be required to meet the conditions of this section.

(g) Recordkeeping The Operator currently keeps the records required by this section and will continue to do so after then new VRS is operating.

Rule 1147 – NOx Reductions from Miscellaneous Sources. Adopted December 5, 2008

When modifications to the VRS are complete and in operation, the existing flares will be taken out of service and dismantled. This rule will no longer be applicable.

Rule 1173 – Fugitive Emissions of Volatile Organic Compounds, Amended Feb 6, 2009

See BACT evaluation.

REGULATION XIII – New Source Review

1303(a): BACT. The emissions increase calculated to result from the construction of the new VRS are below 1 pound per day. BACT is not triggered . To ensure emissions from new fugitive components remain below 1 pound per day, a 500 ppmv leak threshold limit is imposed by permit condition and periodic monitoring is required using Rule 1173 guidelines.

<b>SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT</b>  <b>STATIONARY SOURCE COMPLIANCE DIVISION</b>  <b>PERMIT APPLICATION PROCESSING AND CALCULATIONS</b>	PAGES 12	PAGE 8
	APPL NO 513959	DATE 09/19/2010
	PROCESSED BY TWW	CHECKED BY

1303(b)      Modeling:      Not required for ROG.  
Offsets:      This project will result in a net increase of 1 pound per day for offsets  
One pound of ROG ERC will be deducted from the Facility's ERC  
Certificate No. 011002.  
Facility Compliance: This facility is in compliance with the rules and regulations of  
the District.  
Major Polluting Facility: Montebello Terminal is a major polluting facility, however,  
this is not a major modification.

Rule 1401 New Source Review of Toxic Air Contaminants

Risk calculations using the maximum potential emissions of air toxics result in MICR values less than one in a million and HIA and HIC are each less than one for commercial and sensitive receptors. Compliance is expected.

40 CFR 60, subpart XX

The requirements of AQMD Rule 462 are equivalent or more stringent than this NSPS and compliance is expected.

40 CFR 63, subpart R (Minor Source)

The facility is required to comply with the Minor Source record keeping requirements of this NESHAP and compliance is expected.

Reg. XXX

The facility is subject to Reg. XXX. The Initial Title V Permit has been issued and the new VRS will be issued in Revision #3 as a Permit to Construct in Section H. Revision 3 is considered a de minimus revision and is subject to EPA 45 day review.

**CONCLUSION:**

This project will meet all District Rules and Regulations. It is recommended that the Permit to Construct be granted subject to the attached conditions. The TV Permit Revision will be submitted to EPA as a de minimus significant revision for 45 day review. Applicant is required to file a new CMS Plan per Rule 462. New VRS must be CARB certified and throughput limits confirmed/established within 180 of construction completion. A source test will be required to demonstrate that the 99.9% control efficiency requirement for fixed roof storage tank emissions is still attainable. Applicant is required to provide an updated fugitives component count upon construction completion. The applicant will be required to cease operation of all old VRS components including the compressors, flares, and vapor holding tanks A & B after the modifications are tested and brought on line.

**CONDITIONS:**

- 1) OPERATION OF THIS EQUIPMENT SHALL BE CONDUCTED IN COMPLIANCE WITH ALL DATA AND SPECIFICATIONS SUBMITTED WITH THE APPLICATION UNDER WHICH THIS PERMIT IS ISSUED UNLESS OTHERWISE NOTED BELOW.  
[RULE 204]

<b>SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT</b>	PAGES 12	PAGE 9
<b>STATIONARY SOURCE COMPLIANCE DIVISION</b>	APPL NO 513959	DATE 09/19/2010
<b>PERMIT APPLICATION PROCESSING AND CALCULATIONS</b>	PROCESSED BY TWW	CHECKED BY

- 2) THIS EQUIPMENT SHALL BE PROPERLY MAINTAINED AND KEPT IN GOOD OPERATING CONDITION AT ALL TIMES.  
[RULE 204]
  
- 3) THE DISPLACED VAPORS FROM TANKER TRUCK LOADING AND FIXED ROOF STORAGE TANK BREATHING AND FILLING OPERATIONS SHALL BE VENTED TO THE ADSORPTION/ABSORPTION VAPOR RECOVERY UNIT, PERMITTED UNDER A/N 513959.  
[RULE 462, RULE 463, 40CFR 60 SUBPART XX]
  
- 4) THE LOADING RATE AT THIS FACILITY SHALL NOT EXCEED 3,303,109 GALLONS PER DAY. THROUGHPUT SHALL BE MONITORED AND RECORDED BY AN AUTOMATED SYSTEM WITH INTERLOCKS THAT AUTOMATICALLY SHUT DOWN THE LOADING OPERATION WHEN THE LOADING RATE LIMIT IS REACHED.  
[RULE 1303(b)(2) OFFSETS]
  
- 5) THE FOLLOWING BACT REQUIREMENTS SHALL APPLY TO VOC SERVICE FUGITIVE COMPONENTS ASSOCIATED WITH DEVICES COVERED BY THIS APPLICATION.
  - A. ALL NEW FUGITIVE COMPONENTS IN VOC SERVICE, EXCEPT VALVES AND FLANGES SHALL BE INSPECTED QUARTERLY USING EPA REFERENCE METHOD 21. ALL NEW VALVES AND FLANGES IN VOC SERVICE SHALL BE INSPECTED MONTHLY USING EPA METHOD 21.
  
  - B. FOR ALL NEW FUGITIVE COMPONENTS IN VOC SERVICE, ANY LEAK GREATER THAN 500 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, PUMP, COMPRESSOR, PRESSURE RELIEF VALVE, DIAPHRAGM, HATCH, SIGHT-GLASS, AND METER.
  
  - C. IF 98.0 PERCENT OR MORE OF THE NEW FLANGES AND (NON-BELLOWS-SEALED) VALVES ARE FOUND TO LEAK GASEOUS OR LIQUID VOLATILE ORGANIC COMPOUNDS AT A RATE LOWER THAN 500 PPM FOR TWO CONSECUTIVE MONTHS, THEN THE OPERATOR MAY REVERT TO A QUARTERLY INSPECTION PROGRAM WITH THE APPROVAL OF THE DISTRICT.

<b>SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT</b>  <b>STATIONARY SOURCE COMPLIANCE DIVISION</b>  <b>PERMIT APPLICATION PROCESSING AND CALCULATIONS</b>	PAGES 12	PAGE 10
	APPL NO 513959	DATE 09/19/2010
	PROCESSED BY TWW	CHECKED BY

- D. THE OPERATOR SHALL KEEP RECORDS OF THE MONTHLY INSPECTION (AND QUARTERLY, WHERE APPLICABLE), SUBSEQUENT REPAIR, AND REINSPECTION, IN A MANNER APPROVED BY THE DISTRICT.  
[RULE 1303(a)(1) BACT]
- 6) THE OPERATOR SHALL CONDUCT SOURCE TEST(S) TO DEMONSTRATE COMPLIANCE WITH THE REQUIREMENTS OF DISTRICT RULES AS FOLLOWS:
- A. WITHIN 30 DAYS AFTER CONSTRUCTION IS COMPLETED A WRITTEN REQUEST SHALL BE SUBMITTED TO CARB FOR CERTIFICATION OF THE VAPOR RECOVERY SYSTEM.
  - B. A TEST SHALL BE CONDUCTED TO DETERMINE THE VOC EMISSION RATE IN POUNDS PER 1,000 GALLONS LOADED.
  - C. A TEST SHALL BE CONDUCTED TO DEMONSTRATE THE CONTROL EFFICIENCY OF THE VAPOR RECOVERY SYSTEM FOR STORAGE TANK EMISSIONS.
  - D. A TEST SHALL BE CONDUCTED TO DEMONSTRATE THAT TRUCK LOADING EMISSIONS DO NOT EXCEED 0.04 POUNDS OF VOLATILE ORGANIC COMPOUNDS (VOC) PER 1000 GALLONS LOADED.
  - D. A TEST SHALL BE CONDUCTED TO DETERMINE THE BULK LOADING RATE IN GALLONS PER HOUR DURING THE SOURCE TEST.
  - F. A TEST SHALL BE CONDUCTED TO DETERMINE THE BACK PRESSURE OF THE VAPOR RECOVERY SYSTEM WHILE ALL LOADING RACKS ARE OPERATING SIMULTANEOUSLY. THE MEASUREMENT IS TO BE TAKEN AT THE TANK TRUCK WHILE LOADING.
  - G. THE TEST(S) SHALL BE CONDUCTED NO LATER THAN 180 DAYS AFTER INITIAL STARTUP.
  - H. THE OPERATOR SHALL SUBMIT THE SOURCE TEST(S) PROTOCOL(S) AND OBTAIN AQMD REVIEW AND APPROVAL OF SAID PROTOCOL(S) PRIOR TO CONDUCTION THE SOURCE TEST.
  - I. THE DISTRICT SHALL BE NOTIFIED OF THE DATE AND TIME OF THE TEST(S) AT LEAST 10 DAYS PRIOR TO THE TEST.
  - J. SOURCE TEST RESULTS SHALL BE SUBMITTED TO THE DISTRICT NO LATER THAN 60 DAYS AFTER THE SOURCE TEST IS CONDUCTED.

<b>SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT</b>  <b>STATIONARY SOURCE COMPLIANCE DIVISION</b>  <b>PERMIT APPLICATION PROCESSING AND CALCULATIONS</b>	PAGES 12	PAGE 11
	APPL NO 513959	DATE 09/19/2010
	PROCESSED BY TWW	CHECKED BY

[RULE 462, RULE 463, RULE 1303(a)(1) BACT]

- 7) THE OPERATOR SHALL INSTALL AND MAINTAIN A CONTINUOUS EMISSIONS MONITORING DEVICE TO ACCURATELY INDICATE THE VOLATILE ORGANIC COMPOUND (VOC) CONCENTRATION AT THE OUTLET OF THE CARBON ADSORBERS IN PPMV. THE EMISSIONS MONITORING DEVICE SHALL BE CALIBRATED DAILY.  
[RULE 462, RULE 1303(a)(1) BACT]
- 8) WITHIN 180 DAYS OF INITIAL OPERATION OF THE CONTINUOUS EMISSIONS MONITORING DEVICE, THE OPERATOR SHALL SUBMIT A CONTINUOUS MONITORING SYSTEM (CMS) PLAN TO THE DISTRICT FOR APPROVAL.  
[RULE 462]
- 9) A TABLE OR GRAPH SHALL BE DEVELOPED TO CORRELATE THE HYDROCARBON MONITOR CONCENTRATION READINGS IN PERCENT (%) OR PARTS PER MILLION BY VOLUME (PPMV) WITH THE EMISSIONS RATE IN LBS PER 1000 GALLONS LOADED.  
[RULE 462]
- 10) WHEN THE HYDROCARBON (HC) MONITORING SYSTEM MEASURES A VOLATILE ORGANIC COMPOUND (VOC) CONCENTRATION THAT APPROACHES THE PPMV OR PERCENT (%) CONCENTRATION EQUIVALENT TO 0.04 POUNDS PER 1000 GALLONS LOADED (SEE CONDITION NO. 9), THE SYSTEM SHALL AUTOMATICALLY:
  - A. ALERT THE OPERATOR BOTH AUDIBLY AND VISUALLY TO PREVENT HYDROCARBON BREAKTHROUGH.
  - B. SHUT OFF OR REDUCE THE RATE OF LOADING RACK AND/OR TANK FILLING VAPORS TO THE VAPOR RECOVERY SYSTEM UNTIL THE VOC CONCENTRATION DROPS BELOW THE EQUIVALENT OF 0.04 POUNDS PER 1000 GALLONS LOADED.
  - C. SHUT DOWN LOADING RACK OPERATIONS AND NOTIFY THE CONTROL ROOM TO SUSPEND TANK FILLING PERMISSIVES.
 [RULE 462, RULE 1303(a)(1) BACT]
- 11) THROUGHPUT RECORDS AND OTHER RECORDS REQUIRED BY THIS PERMIT SHALL BE MAINTAINED FOR A FIVE YEAR PERIOD AND MADE AVAILABLE TO THE DISTRICT UPON REQUEST.  
[RULE 204, RULE 462]

<b>SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT</b>	PAGES 12	PAGE 12
<b>STATIONARY SOURCE COMPLIANCE DIVISION</b>	APPL NO 513959	DATE 09/19/2010
<b>PERMIT APPLICATION PROCESSING AND CALCULATIONS</b>	PROCESSED BY TWW	CHECKED BY

- 12) WITHIN 30 DAYS FROM INITIAL START-UP OF THE ADSORPTION/ABSORPTION VAPOR RECOVERY UNIT, ALL COMPONENTS OF THE AIR POLLUTION CONTROL SYSTEMS CURRENTLY OPERATING UNDER PERMITS NOS. F4142 (A/N 293483, AND F4143, A/N293484) AND NOT INCLUDED IN THE ADSORPTION/ABSORPTION VAPOR RECOVERY UNIT DESCRIPTION, SHALL BE TAKEN OUT OF SERVICE AND RENDERED INOPERABLE.  
[RULE 204, RULE 1303(b)(2) OFFSETS]

**Periodic Monitoring:**

- 13) THE OPERATOR SHALL CONDUCT SOURCE TEST(S) IN ACCORDANCE WITH THE FOLLOWING SPECIFICATIONS:
- A. THE TEST SHALL BE CONDUCTED TO DETERMINE THE BULK LOADING RATE IN GALLONS PER HOUR DURING THE SOURCE TEST.
  - B. THE TEST SHALL BE CONDUCTED TO DETERMINE THE VOC EMISSION RATE IN POUNDS PER 1000 GALLONS OF ORGANIC LIQUIDS LOADED.
  - C. THE TEST SHALL BE CONDUCTED PERIODICALLY AT 3 YEAR INTERVALS.  
[RULE 1303(a)(1) BACT, RULE 3004(a)(4) PERIODIC MONITORING]

**Emissions and Requirements:**

- 14) THIS EQUIPMENT IS SUBJECT TO THE APPLICABLE REQUIREMENTS OF THE FOLLOWING RULES AND REGULATIONS:

VOC: 99.9% EFFICIENCY, RULE 1303(a)(1) BACT  
VOC: 0.04LB/1000 GALLONS OF ORGANIC LIQUID LOADED, 1303(a)(1) BACT  
VOC:0.08 LB/1000 GALLONS ORGANIC LIQUID LOADED, RULE 462  
VOC:35 MG/L, 40CFR60 SUBPART XX  
VOC: 95% EFFICIENCY, RULE 463