

<b>SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT</b>  <b>ENGINEERING AND COMPLIANCE DIVISION</b>  <b>PERMIT APPLICATION EVALUATION AND CALCULATIONS</b>	PAGES 5	PAGE 1
	APPL NO 518139 & 141	DATE 12-2-11
	PROCESSED BY LLD	CHECKED BY

**OWNER/OPERATOR:**

COID: 800364

CONOCOPHILLIPS/COLTON TERMINAL-WEST  
3900 KILROY AIRPORT WAY, SUITE 210  
LONG BEACH, CA 90806

CONTACT PERSON: JAMES ADAMS  
E. COORDINATOR  
(562) 290-1516

**EQUIPMENT LOCATION:**

COLTON TERMINAL WEST  
2301 S. RIVERSIDE DR  
BLOOMINGTON, CA 92316

CONTACT: ROLAND PARKER  
TERMINAL SUPERVISOR  
(909) 877-6500

**EQUIPMENT DESCRIPTION**

**A/N 518139**  
TV Minor Revision

**Change of Conditions (Page 2)**

<i>Application No.</i>	<i>Equipment</i>	<i>Action</i>
518141  (previous A/N 391332 F86597)	VRS - CARBON ADSORBERS	Change annual source testing requirement to "every five years"

<b>SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT</b>  <b>ENGINEERING AND COMPLIANCE DIVISION</b>  <b>PERMIT APPLICATION EVALUATION AND CALCULATIONS</b>	PAGES 5	PAGE 2
	APPL NO 518139 & 141	DATE 12-2-11
	PROCESSED BY LLD	CHECKED BY

## A/N 518141 – VRS CARBON ADSORBER SYSTEM

### **INTRODUCTION:**

This application was submitted 1-13-11 as a Class III for change of conditions (to A/N 391332) to change the annual source test requirement to “every five years”

The facility’s current Rule 462 Plan (A/N 416108 issued October 9, 2009) requires continuous (at least once per minute) NMHC monitoring and recording. Instantaneous and 15-minute averages are recorded.

Since this is a TV facility (A/N 333027- Initial issued 4/16/01) with subsequent revisions and a renewal (A/N 449725) issued October 7, 2011. An application (A/N 518139) is also included to incorporate these changes into a revised TV facility permit.

### **PROJECT DESCRIPTION:**

This is a Class A organic liquid bulk loading facility (Colton West) with three lanes. A second facility (Colton East COID 18503) is another Class A facility with two lanes located nearby. Each facility stores and loads gasoline and distillate products from tanks, to loading bays to truck. Displaced vapors are directed to a Vapor Recovery System – Carbon Adsorption where product is eventually absorbed back into liquid product.

The VRS consists of two 13,000 lb carbon vessels and associated pumps, and controls. It was certified for 1.4 million gallons of total products per day and complies with 0.08 lb/1000 gallons VOC. Displaced vapors from the West Terminal and the East Terminal are routed through a 12-in main vapor line to the VRS where it passes through one of the two carbon beds. The hydrocarbon is adsorbed onto the carbon. Every 15 minutes, the activated carbon goes through a regeneration cycle, where the adsorbed hydrocarbons are subjected to a vacuum of 27-28 in. mercury. This volatilizes the hydrocarbons which are then swept from the carbon beds by solenoid controlled purge air. The desorbed hydrocarbons are then pumped through an adsorbing column which are brought into contact with gasoline from storage and adsorbed into product. Remaining air/vapor mixture is then passed through the on-line carbon bed to remove any remaining hydrocarbons before venting to atmosphere.

There have been no NOV’s or NC’s within the last three years for this facility.  
There are no schools within 1000 feet of this facility.

### **PERMIT HISTORY:**

A/N 518141 submitted to change testing frequency from annually to every five years (once per term of the TV Permit).

<b>SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT</b>  <b>ENGINEERING AND COMPLIANCE DIVISION</b>  <b>PERMIT APPLICATION EVALUATION AND CALCULATIONS</b>	PAGES 5	PAGE 3
	APPL NO 518139 & 141	DATE 12-2-11
	PROCESSED BY LLD	CHECKED BY

TV Renewal issued October 7, 2011 under A/N 449725 in the newer “WORD” format.

A/N 391332:F86597 – original VRS application submitted 9/21/01. P/C (new construction) issued 9/26/02 under Section H. Startup 5/26/03. P/O finalized and issued 12/22/06 (from Section H to D)

Initial TV Permit issued : April 16, 2001

**EMISSIONS AND CALCULATIONS:**

Previous VOC tests results are as follows:

Test Date	SCAQMD Method 25.1 <lb/1000 gal>	CARB Method 203.1 <lb/1000 gal>
12/2/10	0.0014	0.016
6/4/09	0.0001	0.008
5/22/08	0.0004	0.019
5/25/07	0.000009	0.0174
5/10-11/06	Not tested	0.0005 *
9/23/05	Not tested	0.032
4/20-21/04	Not tested	0.00016 *

\* CARB certification test using CP-203

All previous test results show compliance with the Rule 462 limit of 0.08 lb/1000 gal.

Criteria Emissions: Since this is an absorber, there are no emissions of NO<sub>x</sub>, CO, PM<sub>10</sub>, nor SO<sub>x</sub>. The ROG emissions are associated in the BASIC equipment (the racks) and are not accounted here in the CONTROL equipment.

Toxic Emissions: There are no emission increases with this change of conditions, so there is no increase in toxic emissions.

**EVALUATION:**

Rules:

401: Visible emissions are not expected.

<b>SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT</b>  <b>ENGINEERING AND COMPLIANCE DIVISION</b>  <b>PERMIT APPLICATION EVALUATION AND CALCULATIONS</b>	PAGES 5	PAGE 4
	APPL NO 518139 & 141	DATE 12-2-11
	PROCESSED BY LLD	CHECKED BY

402: Nuisance is not expected with proper operational procedures and mitigation measures.

462: This equipment meets the 0.08 lb/1000 gal limit of this rule and will continue to comply with all applicable requirements of the rule. The facility currently has an approved R462 Plan under A/N 416108 which requires continuous (at least once every minute) monitoring of NMHC and records instantaneous and 15-min average at the exhaust to ensure compliance with emission limits.

Reg 13: There is no increase in emissions. Reg 13 is not triggered in this “change of conditions”.

1401: There is no increase in risk with this change of condition

TV: This permit will be issued as a “minor” revision to the existing TV facility permit (*Section D Revision 4 issued November 28, 2007*). The proposed revision is not a relaxation in monitoring because:

- The “every five years” test frequency meets SCAQMD’s Periodic Monitoring Guidelines for TV Facilities, Stationary Source Compliance, November 1997.
- The existing permit for the VRU requires a 15-minute absorber cycle time
- The existing permit for the VRU requires continuous monitoring of NMHC vapors
- The 99% reduction requirement (BACT), which is 0.08 lb/1000 gal loaded, is equivalent to 0.46 percent NMHC, as propane. Condition no. 8 currently limits the concentration to 0.46 percent NMHC, as propane. Six months of CEMS data (May to November 2011) were submitted which showed compliance well within this limit.

A 45-day EPA review period must be completed prior to issuance of the revised facility permit.

**CONCLUSION:**

This project meets all District Rules and Regulations. It is recommended that a Permit to Operate be granted to change the annual test condition to a “every five years” since this was not a Rule 462 requirement nor a BACT requirement at the time the condition was imposed. The “every five year” test frequency will meet Title V Periodic Monitoring.

<b>SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT</b>  <b>ENGINEERING AND COMPLIANCE DIVISION</b>  <b>PERMIT APPLICATION EVALUATION AND CALCULATIONS</b>	PAGES 5	PAGE 5
	APPL NO 518139 &141	DATE 12-2-11
	PROCESSED BY LLD	CHECKED BY

This is a “minor revision” to the TV permit and is subject to 45-day EPA review.

**Proposed Conditions:**

Condition No. 6:

6. THE OPERATOR SHALL CONDUCT SOURCE TEST(S) IN COMPLIANCE WITH THE FOLLOWING SPECIFICATIONS:

THE TEST SHALL BE CONDUCTED AT LEAST ~~ANNUALLY~~ **ONCE EVERY FIVE (5) YEARS.**

THE TEST SHALL BE CONDUCTED TO DETERMINE THE VOC EMISSION RATE IN POUNDS PER 1,000 GALLONS OF ORGANIC LIQUID LOADED.

THE TEST SHALL BE CONDUCTED TO DEMONSTRATE A 99 PERCENT OVERALL CONTROL EFFICIENCY FOR THE VAPOR RECOVERY SYSTEM.

THE TEST SHALL BE CONDUCTED TO DETERMINE THE BULK LOADING RATE IN GALLONS PER HOUR DURING THE SOURCE TEST.

THE DISTRICT SHALL BE NOTIFIED OF THE DATE AND TIME OF THE TEST AT LEAST 10 DAYS PRIOR TO THE TEST.

[RULE 1303(a)(1)-BACT, 3004(a)(4)-PERIODIC MONITORING]