Title V Revision For a Section D Permit To Construct/Operate

APPLICANT	Equilon Enterprises, LLC
MAILING ADDRESS	20945 S. Wilmington Ave. Carson, CA 90810
EQUIPMENT LOCATION	2457 Redondo Avenue Long Beach, CA 90806

EQUIPMENT DESCRIPTION:

VAPOR RECOVERY SYSTEM, CARBON ADSORBER WITH REGENERATION SYSTEM, JOHN ZINK, MODEL AA-825-6-15B, 200 CFM CAPACITY, SERVING THREE GASOLINE LOADING/UNLOADING RACKS, CONSISTING OF:

1. SIX VAPOR PICK-UP LINES AND A COLLECTION HEADER.

2. ONE VAPOR HOLDER, 30,000-CU. FT. CAPACITY, 30'-0" DIA. X 24'-0" H., FIXED ROOF WITH INTERNAL DIAPHRAGM.

3 TWO CARBON ADSORBERS, 6'-0" DIA X 15'-0" H. EACH

4 ONE VERTICAL ABSORBER, 2'-6" DIA X 10'-0" H.

5. ONE HORIZONTAL SEPARATOR, 4'-0" DIA. X 10'-0" L.

6. TWO VACUUM PUMPS, MECHANICAL SEALS, 75 HP EACH.

7. ONE GASOLINE SUPPLY PUMP, MECHANICAL SEALS, 10 HP.

8. TWO GASOLINE RETURN PUMPS, MECHANICAL SEALS, 25 HP EACH.

9. ONE SEAL FLUID CIRCULATION PUMP, 2 HP.

10. TWO BLOWERS, 3-HP EACH, ONE STANDBY.

11. VACUUM BOOSTER BLOWER, WITH 60 HP MOTOR

12. VAPOR HOLDER BYPASS

Conditions:

1. OPERATION OF THIS EQUIPMENT SHALL BE CONDUCTED IN ACCORDANCE WITH ALL DATA AND SPECIFICATIONS SUBMITTED WITH THE APPLICATION UNDER WHICH THIS PERMIT IS ISSUED UNLESS OTHERWISE NOTED BELOW.

[RULE 204]

2. THIS EQUIPMENT SHALL BE PROPERLY MAINTAINED AND KEPT IN GOOD OPERATING CONDITION AT ALL TIMES.

   [RULE 204]

3. THE MAXIMUM GASOLINE LOADING RATE SHALL NOT EXCEED 2,118,404 GALLONS PER DAY FROM ALL THREE LOADING RACKS NOS. 1, 2, AND 3.

   [RULE 1303(b)(2) - OFFSET]

4. THE CONTINUOUS HYDROCARBON MONITORING SYSTEM SHALL BE IN FULL USE AT ALL TIMES AND SHALL ALERT THE OPERATOR BOTH AUDIBLY AND VISUALLY TO PREVENT HYDROCARBON BREAKTHROUGH. THE ALARM SHALL BE SET TO ACTIVATE AT A HYDROCARBON EMISSION RATE OF 0.065 POUND HYDROCARBON PER 1000 GALLONS.

   [RULE 1303(a)(1)-BACT, RULE 1303(b)(2) - OFFSET]

5. THROUGHPUT RECORDS SHALL BE MAINTAINED FOR AT LEAST FIVE YEARS AND MADE AVAILABLE TO AQMD PERSONNEL UPON REQUEST.

   [RULE 1303(b)(2) - OFFSET]

6. THE OPERATOR SHALL KEEP RECORDS, IN A MANNER APPROVED BY THE DISTRICT, FOR THE FOLLOWING PARAMETER(S) OR ITEM(S):

   GASOLINE LOADING RATES FOR RACKS NOS. 1, 2 AND 3
   FREQUENCY OF HYDROCARBON BREAKTHROUGHS

   [RULE 462, RULE 1303(b)(2) - OFFSET]

7. THIS PERMIT SHALL EXPIRE IF CONSTRUCTION OF THIS EQUIPMENT IS NOT COMPLETE WITHIN ONE YEAR FROM THE DATE OF ISSUANCE UNLESS AN EXTENSION IS GRANTED BY THE EXECUTIVE OFFICER.

   [RULE 204]

8. THE VAPOR HOLDER MAY BE BYPASSED DURING PERIODS OF MAINTANANCE, REPAIR, BREAKDOWN, OR OTHER TIMES DETERMINED APPROPRIATE BY THE PERMITTEE. VOC EMISSIONS SHALL NOT EXCEED 0.065 POUNDS PER 1,000 GALLONS OF ORGANIC LIQUID LOADED WHILE THE BLADDER TANK IS BYPASSED. THE OPERATOR SHALL KEEP RECORDS OF THE DATES AND DURATIONS WHEN THE VAPOR RECOVERY SYSTEM IS IN BYPASS MODE.

   [RULE 1303(a)(1)-BACT, RULE 1303(b)(2) - OFFSET]

9. WITHIN 30 CALENDAR DAYS AFTER COMPLETING CONSTRUCTION OF THE VAPOR HOLDER BYPASS MODIFICATION, A WRITTEN REQUEST SHALL BE SUBMITTED TO THE CALIFORNIA AIR RESOURCES BOARD (CARB) FOR CERTIFICATION OF THE MODIFIED VAPOR RECOVERY SYSTEM.

   [RULE 462]

10. THE OPERATOR SHALL LIMIT THE FLOW RATE OF THE VENT GAS TO THE CARBON ADSORBER TO NO MORE THAN 200 STANDARD CUBIC FEET PER MINUTE (1-HOUR AVERAGE). TO COMPLY WITH THIS CONDITION, THE OPERATOR SHALL INSTALL, MAINTAIN AND OPERATE A FLOW METER TO MONITOR AND RECORD THE FLOW RATE OF THE GASES SENT TO THE CARBON ADSORBER AT LEAST ONCE EVERY MINUTE.

    [RULE 204]

Periodic Monitoring:

11. THE OPERATOR SHALL CONDUCT SOURCE TEST(S), WHEN THE SYSTEM IS NORMAL MODE, IN ACCORDANCE WITH THE FOLLOWING SPECIFICATIONS:

    THE TEST SHALL BE CONDUCTED AT LEAST ONCE EVERY THREE YEARS.

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

    THE TEST SHALL BE CONDUCTED TO DETERMINE THE TOTAL VOC EMISSION RATE IN POUNDS PER 1000 GALLONS OF ORGANIC LIQUID LOADED AND IN MILLIGRAMS PER LITER OF ORGANIC LIQUID LOADED.

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

Emissions and Requirements:

12. THIS EQUIPMENT IS SUBJECT TO THE APPLICABLE REQUIREMENTS OF THE FOLLOWING RULES AND REGULATIONS:

VOC:	0.08 LB/1000 GAL. ORGANIC LIQUID LOADED	RULE 462
VOC:	0.065 LB/1000 GAL. ORGANIC LIQUID LOADED	RULE 1303(a)(1) - BACT
VOC/TOC:	35 MG/L GASOLINE LOADED	40CFR60 SUBPART XX

BACKGROUND

This facility is a Title V facility which is a truck terminal loading facility and tank storage facility consisting of various size tanks used to store various refinery products. The facility

currently operates several storage tanks, truck loading racks and a carbon adsorption system. The Title V Revision application is 505269.

This application is for a modification to an existing carbon adsorber system used to vent three gasoline loading/unloading racks at this facility. The current permit no. for the regenerative carbon absorption system is G11216 and is in the current Title V permit.

This application is required because the applicant would like to add a vapor holder bypass so vapor controlled by this system can go directly into the carbon adsorption system without being stored in the vapor holder first. The applicant wants to have the option of sending the vapors to the vapor holder first, or directly to the carbon adsorption system.

Nothing else will be changed in this system.

Equilon is requesting this modification by adding this vapor bypass so they can continue to operate the carbon adsorption system during periods of vapor holder tank maintenance, repair, breakdown, or other appropriate situations. Equilon will continue to comply with the throughput emission limits of the permit and will not exceed 0.065 pounds of VOC emitted per 1,000 gallons or organic liquid transferred when the bladder tank is bypassed and VOC emissions are sent directly to the carbon adsorption unit.

Based on the data provided by the applicant, this equipment will be continue to comply with all rules, regulations and conditions imposed on this equipment. There is a flow meter after the bladder that will guarantee that equipment will not exceed 200 scfm when operating in vapor bladder bypass mode. The CMS system will continue to operate to verify the concentration at the outlet of the carbon absorption system when the system is in vapor bladder bypass mode. Records will be kept to verify continued compliance when the equipment is operated in bypass mode.

I discussed with Mr. Noel Kurai, Environmental Coordinator, of Equilon Enterprises, he informed me that the last time the bladder had problems was in 2009, basically indicating that the vapor bypass will be used very infrequently. He also informed me the manufacture of the bladder stated that the bladder would probably need to be replaced approximately every 8 years. This replacement will take approximately 4-6 weeks in which the system will be operated in bypass mode.

The current total throughput for all three loading racks combined that this system will be venting is 2,118,404 GPD and this amount will not change due to this modification.

The gasoline loading unloading racks are currently permitted in the following applications: F16846, F16850, and F16851.

There have been no NOV's or NTC's issued for this equipment within the last 2 years.

A msn.com live search indicated that there is no K-12 school within 1000 ft. of the equipment.

EMISSION CALCULATIONS

There will be no change in emissions due to this modification however the current emissions will be shown for information purposes only.

Operating Hours: 24 hrs/day, 30 days/month, 12 month/year
Maximum flow rate 200 scfm.

VOC Loading Emissions.

2,118,404 gal/day x 0.065 lbs/1000 gal = 137.82 lbs/day

(0.065 lbs/1000 gal is limit on previous permit)

There are no other criteria emissions that are emitted from this equipment.

VOC Fugitive Emissions

The applicant provided the following information indicating that when the system is operating in bypass mode, there will be fewer fugitive components that the exhaust gas will travel through. Therefore there will be no increase in fugitive emissions when the system is operated in bypass mode.

Component Type	Normal mode	Bypass mode
Valves	7	3
Fittings		
Flanges	16	8
Threaded Connectors	4	4
Misc		
Others		
Hatch	3	
Meter		
Diaphram		
Sight Glass	1	
Pumps		
Compressors		
Pressure Relief Devices		

See diagram included in this file.

1401 Toxic emissions

There will be no increase in 1401 toxic emissions due to this modification, therefore no 1401 risk evaluation will be required for this modification.

EVALUATION

RULE 212 Standards for Approving Permits and Issuing Public Notice

This modification meets all the criteria in Rule 212 for permit approval. This modified equipment is designed so it can be expected to operate without emitting air contaminants in violation of sections 41700, 41701, and 44300 of the State Health and Safety Code or in violation of AQMD's rules and regulations. The fugitive emissions from the loading/unloading racks does not constitute a significant project because 1) the modified permit unit is not located within 1000 feet of a school. 2) There is no emissions increase, therefore the equipment will not exceed the daily maximum specified in subdivision (g) of Rule 212: and 3) The new modified permit unit will not have an increased cancer risk greater than, or equal to, one in a million (1 x 10-6) during a lifetime of 70 years or pose a risk of nuisance.

Rule 401 Visible Emissions

Visible emissions are not expected under normal operating conditions of the loading racks and the carbon adsorption system

Rule 402 Nuisance

No Nuisance complaints are expected provided that the operation is conducted according to design. Compliance with Rule 402 is expected.

Rule 462 Organic Liquid Loading

This facility is a Class A facility under Rule 462. As such it is required to have a CARB certified vapor recovery/control system meeting an emissions limit of 0.08 lbs VOC/ 1000 gallons loaded. The vapor recovery system has been certified by the California Air Resourced Board (CARB) of capable achieving a minimum control efficiency of 0.08 lbs of volatile organic compounds (VOCs) per 1000 gallons loaded by its loading racks. Based on reviewing information in previous evaluations including previous source tests results, this equipment currently complies with the limits of this rule and should continue to comply with this rule. Future source tests will be required to so that compliance can be determined in the future.

Rule 1173 Fugitive Emissions of volatile Organic Compounds

This rule specifies leak control, identification, operator inspection, maintenance, and recordkeeping requirements for valves pumps, compressors, pressure relief valves, and other components from which fugitive VOC emissions may emanate. Based on reviewing previous inspection records, this equipment is currently in compliance and should continue to comply with the applicable rule requirements of Rule 1173, as required by a facility–wide permit condition.

Regulation XIII - New Source Review

1303(a) Best Available Control Technology

This application is for a modification to a Carbon Adsorption system which is considered BACT for the gasoline loading/unloading racks it serves, therefore BACT is provided for the loading racks this equipment serves.

Fugitive Equipment BACT.

The will be no increase in fugitive emissions by this modification.

1303(b)(1) – Modeling

Modeling is not required for VOC emissions, therefore this equipment exempt from this requirement.

1303(b)(2) – Emission Offsets

Offsets are required for emissions increases of 0.5 lbs/day. There will be no increase in emissions, therefore offsets are not required for this modification.

Rule 1401: New Source Review of Toxic Air Contaminant

There will be no increase in daily toxic compound emissions for this equipment. Therefore a toxic risk evaluation is not required.

Reg XX: REGIONAL CLEAN AIR INCENTIVES MARKET (RECLAIM)

This facility is not a RECLAIM facility, therefore it is subject to Regulation XX.

REGULATION XXX – TITLE V PERMITS

Rule 3000 General

This regulation defines permit application and issuance procedures as well as compliance requirements associated with the program. Rule 3000 (b)(1)(D)

This permit is a minor permit revision which involves issuing a final permit to construct for equipment previously issued a title V permit.

Rule 3004 Permit Types and Content

RULE 3004(A)(4) Monitoring, recordkeeping and reporting requirements. The company will monitor and control fugitive emissions in accordance with an SCAQMD approved Inspection and Maintanence (I & M) Program and EPA NSPS with monthly inspection and maintenance (I & M) and 500 ppm by OVA. Valves which do no leak during two successive monthly inspections will revert to a quarterly inspection interval.

40 CFR Part 64 – Compliance Assurance Monitoring (CAM) Rule

This rule specifies the monitoring, reporting and recordkeeping criteria that must conducted by Title V facilities to demonstrate ongoing compliance with emission limitations and standards. Per 40 CFR Part 64.2(b)(1)(i). The requirements of this part shall not apply to the emissions limitations proposed by the Administrator after November 15, 1990 pursuant to section 111 or 112 of the ACT. Since this Titile V facility is subject to Neshaps Rule for Gasoline Distribution which is 40 CFR Subpart R promulgated on December 14, 1994, it is exempt from CAM rule.

40 CFR 60 Subpart XX

Standards of Performance for New Sationary Sources (Standards of Performance for Bulk Gasoline Terminals). This regulation requires that the loading racks meet the requirements of 40 CFR 60.502, which states, "the emissions to the atmosphere from the vapor collection system due to the loading of liquid product into gasoline tank trucks are not to exceed 35 milligrams of total organic compounds per liter of gasoline loaded, except as noted in paragraph (c) of this section." Compliance with District Rule 462, assures compliance with these requirements.

40 CFR 63 Subpart R

National emission Standards for Gasoline Distribution Facilities (Bulk Gasoline Terminals and Pipeline Breakout Stations. This equipment in not subject to this rule, because it is not a Major Source R facility. However this facility is a minor source R facility, which requires the operator to comply with the applicable recordkeeping, reporting and other requirements to demonstrated that facility is not subject to Subpart R, as required by 40 CFR, Subpart A, Section 63.10(b)(3), and Section 63.420 of Subpart R. This facility is currently required via facility wide condition to operate under the requirements of Minor Source R rule and should continue to do so. See section J of the Title V permit.

40 CFR 63, Subpart BBBBBB

National Emission Standards for Gasoline Distribution Bulk Terminals, Bulk Plants, and Pipeline Facilities. This regulation requires that the loading racks meet the applicable testing and monitoring requirements specified in §63.11092, submit applicable notifications as required under §63.11093, and shall keep records and submit reports as specified in §63.11094 and §63.11095. The owner operator shall perform monthly leak inspections of all equipment in gasoline service, as defined §63.11100.For facilities with a gasoline throughput $\geq$250,000 gallons per day : the facility shall 1) reduce HAP emissions to 80 milligrams (mg) or less, per liter of gasoline loaded into cargo tanks, and 2) limit the loading of gasoline into cargo tanks demonstrated to be vapor tight using Reference Method 27 or equivalent. This facility is currently required via facility wide condition to operate under the requirements of this rule and should continue to do so. See section J of the Title V permit.

CEQA California Environmental Quality ACT

CEQA requires that the environmental impacts of proposed projects be evaluated and that feasible methods to reduce, avoid or eliminate identified significant adverse impacts of these projects be considered. The CEQA Applicability Form (400-CEQA) submitted 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.

RECOMMENDATION

THE FOLLOWING DISPOSITION IS RECOMMENDED:

Based on the above evaluation, the permit to construct/operate should be issued in a revision for section H of the Title V Permit.