

## FACILITY PERMIT TO OPERATE EQUILON ENTERPRISES, LLC SHELL OIL PROD. US

### PERMIT TO OPERATE

Permit No. TBD  
A/N 479011

#### Equipment Description:

STORAGE TANK NO. M28, HYDROCARBON LIQUID, FIXED ROOF TYPE, 9,593 BARREL CAPACITY, 38'-5" DIA. X 48'-0" H.

#### Conditions:

- 1) OPERATION OF THIS EQUIPMENT SHALL BE IN COMPLIANCE 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) THIS TANK SHALL NOT BE USED FOR STORING PETROLEUM LIQUIDS HAVING VAPOR PRESSURES GREATER THAN 0.022 PSIA UNDER ACTUAL STORAGE CONDITIONS.  
[RULE 1303(b)(2) OFFSETS]
- 4) THROUGHPUT OF ORGANIC LIQUIDS TO THIS TANK SHALL NOT EXCEED 240,341 GALLONS IN ANY ONE CALENDAR MONTH.  
[RULE 1303(b)(2) OFFSETS]
- 5) MONTHLY RECORDS SHALL BE KEPT FOR TYPE OF MATERIAL STORED, TRUE VAPOR PRESSURE, AND THROUGHPUT. RECORDS SHALL BE MAINTAINED AND MADE AVAILABLE TO DISTRICT PERSONNEL UPON REQUEST.  
[RULE 204]

**Periodic Monitoring: None**

#### Emissions and Requirements:

- 6) THIS EQUIPMENT IS SUBJECT TO THE APPLICABLE REQUIREMENTS OF THE FOLLOWING RULES AND REGULATIONS:  
  
VOC: RULE 463

**FACILITY PERMIT TO OPERATE  
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**PERMIT TO CONSTRUCT**

**Permit No. TBD  
A/N 479015**

ALTERATION TO MARINE LOADING/UNLOADING FACILITIES SERVING BERTHS NOS. 167, 168 AND 169  
CONSISTING OF:

MAST NO.2

1. LOADING/UNLOADING MAST WITH TWO CHUGGER HOISTS, AIR OPERATED.

BY THE REMOVAL OF:

1. ONE DEBALLAST RISER, 1'-0" DIA.
2. ONE DEBALLAST RISER, 0'-6" DIA.
3. FIVE LIGHT/DARK OIL RISER, EACH 1'-0" DIA.
4. ONE LUBE OIL RISER, 1'-0" DIA.
5. ONE LIGHT/DARK OIL RISER, 0'-8" DIA.

AND THE ADDITION OF

1. TWO 16 INCH LINES (RISERS) EACH WITH ONE EIGHT INCH CONNECTION.
2. CARBON ADSORPTION SYSTEM NO. 1, TWO CARBON ADSORPTION UNITS, IN SERIES, 2000 LBS. EACH, VENTING MAST NOS. 2 & 3 (COMMON TO MAST NOS. 2 & 3).

MAST NO.3

1. LOADING/UNLOADING MAST WITH TWO CHUGGER HOISTS, AIR OPERATED.

BY THE REMOVAL OF:

1. ONE DEBALLAST RISER, 0'-6" DIA.
2. THREE LIGHT/DARK OIL RISER, EACH 1'-0" DIA.
3. TWO LIGHT/DARK OIL RISER, EACH 0'-8" DIA.

AND THE ADDITION OF:

1. TWO 16 INCH LINES (RISERS) EACH WITH ONE EIGHT INCH CONNECTION.

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2. CARBON ADSORPTION SYSTEM NO. 1, TWO CARBON ADSORPTION UNITS, IN SERIES, 2000 LBS. EACH, VENTING MAST NOS. 2 & 3 (COMMON TO MAST NOS. 2 & 3).

### MAST NO.4

1. LOADING/UNLOADING MAST WITH TWO CHUGGER HOISTS, AIR OPERATED.

#### BY THE ADDITION OF

- 1 TWO 16 INCH LINES (RISERS) EACH WITH ONE EIGHT INCH CONNECTION.
- 2 CARBON ADSORPTION SYSTEM NO. 2, TWO CARBON ADSORPTION UNITS, IN SERIES, 2000 LBS. EACH, VENTING MAST NOS. 4 & 5 (COMMON TO MAST NOS. 4 & 5).

### MAST NO.5

1. LOADING/UNLOADING MAST WITH TWO (2) CHUGGER HOISTS, AIR OPERATED.

#### BY THE REMOVAL OF:

1. ONE DEBALLAST RISER, 1'-0" DIA.
2. ONE DEBALLAST RISER, 0'-6" DIA.
3. FOUR LIGHT/DARK OIL RISERS, EACH 1'-0" DIA.
4. ONE LIGHT/DARK OIL RISER, 0'-8" DIA.
5. ONE LUBE OIL RISER, 1'-0" DIA.

#### AND THE ADDITION OF

1. TWO 16 INCH LINES (RISERS) EACH WITH ONE EIGHT INCH CONNECTION.
2. CARBON ADSORPTION SYSTEM NO. 2, TWO CARBON ADSORPTION UNITS, IN SERIES, 2000 LBS. EACH, VENTING MAST NOS. 4 & 5 (COMMON TO MAST NOS. 4 & 5).

### MAST NO.6

1. LOADING/UNLOADING MAST WITH ONE CHUGGER HOIST, AIR OPERATED.

### GENERAL

1. PUMP, MI-10, DARK/JET/DIESEL OIL, CENTRIFUGAL TYPE WITH PACKED GLAND, 150-HP.
2. PUMP, MI-13, LIGHT/DARK OIL, CENTRIFUGAL TYPE WITH SINGLE MECHANICAL SEAL, 400-HP.
3. PUMP, MI-16, RECOVERED OIL, CENTRIFUGAL TYPE WITH SINGLE MECHANICAL SEAL, 20-HP.

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4. PUMP, MI-32, RECOVERED OIL/BALLAST WATER, CENTRIFUGAL TYPE WITH SINGLE MECHANICAL SEAL, 20-HP.
5. PUMP, MI-37, LIGHT/DARK OIL, CENTRIFUGAL TYPE WITH SINGLE MECHANICAL SEAL, 800-HP.
6. PUMP, MI-38, LIGHT/DARK OIL, CENTRIFUGAL TYPE WITH SINGLE MECHANICAL SEAL, 800-HP.
7. PUMP, MI-394, SUMP WITH PACKED GLANDS, 5-HP.
8. PUMP, MI-395, SUMP WITH PACKED GLANDS, 5-HP.
9. PUMP, MI-8445, RECOVERED OIL, DOUBLE DIAPHRAGM TYPE, AIR DRIVEN.
10. PUMP, MI-8446, RECOVERED OIL, GEAR TYPE WITH SINGLE MECHANICAL SEAL, 0.75 H.P.
11. PUMP, MI-8447, RECOVERED OIL/WATER, CENTRIFUGAL TYPE WITH SINGLE MECHANICAL SEAL, 7-1/2 H.P.

### **BY THE REMOVAL OF**

1. PUMP, MI-11, RECOVERED OIL, RECIPROCATING TYPE WITH PACKED GLAND, 7-1/2 H.P.
2. PUMP, MI-12, LIGHT/BLACK OIL, CENTRIFUGAL TYPE WITH SINGLE MECHANICAL SEAL, 125-HP.
3. PUMP, MI-15, LIGHT/BLACK OIL, CENTRIFUGAL TYPE WITH SINGLE MECHANICAL SEAL, 40-HP.
4. PUMP, MI-16A, RECOVERED OIL, RECIPROCATING TYPE WITH PACKED GLAND, AIR DRIVEN (STANDBY).
5. PUMP, MI-30, LIGHT/BLACK OIL, CENTRIFUGAL TYPE WITH SINGLE MECHANICAL SEAL, 700-HP.
6. PUMP, MI-31, LIGHT/BLACK OIL, CENTRIFUGAL TYPE WITH SINGLE MECHANICAL SEAL, 150-HP.
7. PUMP, MI-275, LUBE OIL, CENTRIFUGAL TYPE WITH SINGLE MECHANICAL SEAL, 350-HP.

### **AND THE ADDITION OF:**

1. PUMP, MI-11, RECOVERED OIL, PNEUMATIC, DOUBLE DIAPHRAGM.
2. PUMP, MI-15A, LIGHT/DARK OIL, CENTRIFUGAL TYPE WITH SINGLE MECHANICAL SEAL, 30-HP.
3. PUMP, MI-16A, RECOVERED OIL, PNEUMATIC, DOUBLE DIAPHRAGM
4. PUMP, MI-40, LIGHT/DARK OIL, CENTRIFUGAL TYPE WITH DOUBLE MECHANICAL SEAL, 1750-HP.
5. TWO PUMPS, PNEUMATIC, DOUBLE DIAGRAM.

### **Conditions:**

## **FACILITY PERMIT TO OPERATE EQUILON ENTERPRISES, LLC SHELL OIL PROD. US**

- 1) CONSTRUCTION AND 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]
- 2) THIS EQUIPMENT SHALL BE PROPERLY MAINTAINED AND KEPT IN GOOD OPERATING CONDITION AT ALL TIMES.  
[RULE 204]
- 3) ALL MARINE TANKERS ENGAGED IN A LOADING, LIGHTERING, BALLASTING, OR UNLOADING EVENT AT THIS FACILITY SHALL BE EQUIPPED WITH SEGREGATED BALLAST TANKS, WHICH ARE IN GOOD OPERATING CONDITIONS.  
[RULE 1142]
- 4) THE MARINE LOADING OF "LIGHT OIL" PRODUCTS SHALL NOT EXCEED 165,000 BARRELS PER DAY AVERAGED OVER ONE CALENDAR MONTH.  
[RULE 1303(b)(2) OFFSETS]
- 5) THE MARINE UNLOADING OF "LIGHT OIL AND DARK OIL" PRODUCTS SHALL NOT EXCEED A COMBINED TOTAL OF 242,000 BARRELS PER DAY AVERAGED OVER ONE CALENDAR MONTH.  
[RULE 1303(b)(2) OFFSETS]
- 6) THE MARINE LOADING OF "DARK OIL" PRODUCTS SHALL NOT EXCEED 77,000 BARRELS PER DAY AVERAGED OVER ONE CALENDAR MONTH.  
[RULE 1303(b)(2) OFFSETS]
- 7) "LIGHT OIL" SHALL BE DEFINED AS LIQUIDS HAVING VAPOR PRESSURES GREATER THAN 0.1 PSIA AT ACTUAL OPERATING CONDITIONS.  
[RULE 1303(b)(2) OFFSETS]
- 8) "DARK OIL" SHALL BE DEFINED AS LIQUIDS HAVING VAPOR PRESSURES LESS THAN OR EQUAL TO 0.1 PSIA AT ACTUAL OPERATING CONDITIONS.  
[RULE 1303(b)(2) OFFSETS]
- 9) RECORDS OF LOADING VOLUME AND UNLOADING VOLUME OF LIQUIDS SHALL BE MAINTAINED AND MADE AVAILABLE TO DISTRICT PERSONNEL UPON REQUEST.  
[RULE 204]
- 10) THE LINES FOR MAST NOS 2, 3, 4, OR 5 SHALL NOT BE REFILLED WITH PRODUCT UNLESS THE LINES ARE CONNECTED TO THE PASSIVE CARBON ADSORPTION SYSTEMS.  
[RULE 1303(b)(2) OFFSETS]
- 11) THE VOLATILE ORGANIC COMPOUND (VOC) CONCENTRATION AT THE OUTLET OF THE CARBON ADSORPTION SYSTEMS SHALL NOT EXCEED 500 PPMV AS METHANE.  
[RULE 1303(b)(2) OFFSETS]
- 12) VOLATILE ORGANIC COMPOUND (VOC) CONCENTRATION SHALL BE MEASURED AT THE OUTLET OF THE VAPOR CONTROL SYSTEM DAILY FOR THE FIRST 7 OPERATING DAYS AND AT LEAST ONCE EVERY SIX MONTHS THEREAFTER. THE OPERATOR SHALL USE A FLAME IONIZATION DETECTOR OR A DISTRICT APPROVED ORGANIC VAPOR ANALYZER CALIBRATED

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IN PARTS PER MILLION BY VOLUME (PPMV) OF METHANE (IF ANOTHER AGENT IS USED, THE MEASUREMENT SHALL BE CORRELATED TO AND EXPRESSED AS METHANE). THE INSTRUMENT SHALL BE MAINTAINED AND CALIBRATED PER EPA METHOD 21.  
[RULE 1303(b)(2) OFFSETS]

- 13) THE CARBON VESSELS SHALL BE REPLENISHED WITH FRESH CARBON OR RE-SEQUENCED AND THE CARBON REPLENISHED IN SUCH A MANNER AS TO ENSURE COMPLIANCE WITH CONDITION NO. 11. SUCH REPLENISHMENT OR RE-SEQUENCING SHALL BE CONDUCTED AS FOLLOWS:
  - A. SPENT CARBON IN THE PRIMARY CARBON ADSORBER SHALL BE REPLACED WITH FRESH ACTIVATED CARBON, AND
  - B. VAPOR FLOW SHALL BE RE-ROUTED SUCH THAT THE SECONDARY CARBON VESSEL BECOMES THE PRIMARY VESSEL AND THE REPLENISHED VESSEL BECOMES THE SECONDARY VESSEL.[RULE 1303(b)(2)-OFFSETS]
- 14) RECORDS SHALL BE MAINTAINED TO PROVE COMPLIANCE WITH CONDITIONS ABOVE, THE RECORDS SHALL BE KEPT IN A FORMAT APPROVED IN WRITING BY THE SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT (SCAQMD). THE RECORDS SHALL BE MAINTAINED FOR AT LEAST FIVE YEARS, AND MADE AVAILABLE TO SCAQMD PERSONNEL UPON REQUEST.  
[RULE 204]
- 15) THE ACTIVATED CARBON USED IN THE PRIMARY AND SECONDARY CARBON ADSORBERS SHALL HAVE A CARBON TETRACHLORIDE ACTIVITY NUMBER NOT LESS THAN 60% AS MEASURED BY ASTM METHOD D3467-99 OR A BUTANE ACTIVITY NUMBER OF NOT LESS THAN 23.5% AS MEASURED BY ASTM METHOD 5742-95.  
[RULE 204]
- 16) SPENT CARBON REMOVED FROM THE SYSTEM SHALL BE MAINTAINED OR STORED IN CLOSED CONTAINERS PRIOR TO REMOVAL FROM THE SITE.  
[RULE 204]
- 17) THE OPERATOR SHALL SUBMIT TO THE SCAQMD IN WRITING THE RESULTS OF THE FIRST MONTH OF OPERATION UNDER THIS PERMIT, INCLUDING BUT NOT LIMITED TO, MONITORING DATA SUFFICIENT TO PROVE COMPLIANCE WITH EACH CONDITION OF THIS PERMIT. SUBMITTAL SHALL BE WITHIN 45 DAYS OF INITIAL OPERATION OF THIS PERMIT UNIT AND SHALL BE ADDRESSED TO:

MR. SEAN CULLINS  
SCAQMD  
TOXICS AND WASTE MANAGEMENT TEAM  
ENGINEERING AND COMPLIANCE DIVISION  
21865 COPLEY DRIVE  
DIAMOND BAR, CA 91765  
[RULE 204]

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- 18) THIS PERMIT SHALL EXPIRE IF CONSTRUCTION OF THIS EQUIPMENT IS NOT COMPLETE WITHIN ONE YEAR FROM THE DATE ISSUANCE OF THIS PERMIT UNLESS AN EXTENSION IS GRANTED BY THE EXECUTIVE OFFICER.  
[RULE 205]

**Periodic Monitoring: None**

**Emissions and Requirements:**

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

VOC: 2 LBS/1000 BBLS ORGANIC LIQUID, RULE 1142