

FACILITY PERMIT TO OPERATE EQUILON ENTER. LLC, SHELL OIL PROD. U S

SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

The operator shall comply with the terms and conditions set forth below:

Equipment	ID No.	Connected To	RECLAIM Source Type / Monitoring Unit	Emissions and Requirements	Conditions
System 2: INTERNAL FLOATING ROOF TANKS					S13.2
PROCESS 3: STORAGE TANKS					
STORAGE TANK, INTERNAL FLOATING ROOF, NO. 505, 80143 BBL; DIAMETER: 117 FT 3 IN; HEIGHT: 41 FT 10 IN WITH A/N 349383 <u>501511</u> FLOATING ROOF, PONTOON <u>PAN</u> , RIVETED SHELL PRIMARY SEAL, WIPER-TYPE <u>METALLIC SHOE</u> SECONDARY SEAL, WIPER-TYPE <u>RIM MOUNTED</u>	D174				B22.5, C1.37, C6.1, H23.13
STORAGE TANK, INTERNAL FLOATING ROOF, NO. 733, GASOLINE, 117302 BBL; DIAMETER: 144 FT 2 IN; HEIGHT: 40 FT 2 IN WITH A/N 349434 <u>509406</u> FLOATING ROOF PAN, WELDED <u>RIVETED</u> SHELL PRIMARY SEAL, METALLIC SHOE SECONDARY SEAL, WIPER TYPE	D355				C1.37, C6.1, E.71.8, H23.13

- (1) Denotes RECLAIM emission factor
 - (2) Denotes RECLAIM emission rate
 - (3) Denotes RECLAIM concentration limit
 - (4) Denotes BACT emission limit
 - (5)(5A)(5B) Denotes command and control emission limit
 - (6) Denotes air toxic control rule limit
 - (7) Denotes NSR applicability limit
 - (8)(8A)(8B) Denotes 40 CFR limit (e.g. NSPS, NESHAPS, etc.)
 - (9) See App B for Emission Limits
 - (10) See Section J for NESHAP MACT requirements
- ** Refer to Section F and G of this permit to determine the monitoring, recordkeeping and reporting requirements for this device.

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SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

The operator shall comply with the terms and conditions set forth below:

S. System Conditions

S13.2

All devices under this system are subject to the applicable requirements of the following rules and regulations.

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

[RULE 1149 7-14-1995; RULE 1149, 5-2-2008; RULE 1178, 4-7,2006; RULE 463,. 5-6-2005]
 [Systems subject to this condition: Process 3, System 1, 2, 3, 5]

DEVICE CONDITIONS

B. Material/Fuel Type Limits

B22.5

The operator shall not use this equipment with materials having a(n) true vapor pressure of 11 psia or greater under actual operating conditions.

[RULE 1303(b)(2)-Offset, 5-10-1996; RULE 463, 5-6-2005]

[Devices subject to this condition : D146, D148, D152, D174, D175, D176, D177, D178, D179, D180, D181, D182, D183, D184, D186, D187, D188, D189, D190, D192, D193, D194, D195, D196, D197, D198, D199, D200, D201, D203, D356, D750]

C. Throughput or Operating Parameter Limits

C1.37 The operator shall limit the throughput to no more than 9.125e + 06 barrels in any one year.

[RULE 1303(b)(2)-Offset, 5-10-1996]

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- (2) Denotes RECLAIM emission rate
- (3) Denotes RECLAIM concentration limit
- (4) Denotes BACT emission limit
- (5)(SA)(SB) Denotes command and control emission limit
- (6) Denotes air toxic control rule limit
- (7) Denotes NSR applicability limit
- (8)(8A)(8B) Denotes 40 CFR limit (e.g. NSPS, NESHAPS, etc.)
- (9) See App B for Emission Limits
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The operator shall comply with the terms and conditions set forth below:

[Devices subject to this condition : D146, D148, D152, D174, D175, D176, D177, D178, D179, D180, D181, D182, D183, D184, D186, D187, D188, D189, D190, D192, D193, D194, D195, D196, D197, D198, D199, D200, D201, D353, D354, D355, D356, D357, D750]

C6.1 The operator shall use this equipment in such a manner the hydrocarbon concentration being monitored, as indicated below, does not exceed 50 percent of the Lower Explosive Limit.

The operator shall use an explosimeter or equivalent device to monitor the hydrocarbon concentration in the vapor space above the floating roof twice a year at 4 to 8 month intervals.

[RULE 463, 5-6-2005, RULE 1178, 4-7-2006]

[Devices subject to this condition : D148, D174, D175, D176, D177, D178, D179, D180, D181, D182, D184, D186, D187, D188, D189, D190, D192, D193, D194, D355, D750]

E. Equipment Operation/Construction Requirements

E.71.8 The operator shall only use this equipment for the storage of any of the following commodities: Alkylate, Diesel Fuel, Denatured Ethanol, Iso-Octane, Jet Fuel, and Gasoline.

[RULE 1303(b)(2)-Offset, 5-10-1996]

[Devices subject to this condition : D355]

H. Applicable Rules

H 23.13 This equipment is subject to the applicable requirements of the following rules or regulations.

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|--|---|
| (1) Denotes RECLAIM emission factor | (2) Denotes RECLAIM emission rate |
| (3) Denotes RECLAIM concentration limit | (4) Denotes BACT emission limit |
| (5)(5A)(5B) Denotes command and control emission limit | (6) Denotes air toxic control rule limit |
| (7) Denotes NSR applicability limit | (8)(8A)(8B) Denotes 40 CFR limit (e.g. NSPS, NESHAPS, etc.) |
| (9) See App B for Emission Limits | (10) See Section J for NESHAP/MACT requirements |

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SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

The operator shall comply with the terms and conditions set forth below:

Contaminant	Rule	Rule/Subpart
HAPs	40CFR63, SUBPART	R

[Devices subject to this condition : D148, D174, D175, D176, D177, D178, D179, D180, D181, D182, D183, D184, D186, D187, D188, D189, D190, D192, D193, D194, D195, D196, D197, D198, D199, D200, D201, D202, D355, D356, D750]

DRAFT

- (1) Denotes RECLAIM emission factor
 - (2) Denotes RECLAIM emission rate
 - (3) Denotes RECLAIM concentration limit
 - (4) Denotes BACT emission limit
 - (5)(5A)(5B) Denotes command and control emission limit
 - (6) Denotes air toxic control rule limit
 - (7) Denotes NSR applicability limit
 - (8)(8A)(8B) Denotes 40 CFR limit (e.g. NSPS, NESHAPS, etc.)
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FACILITY PERMIT TO OPERATE EQUILON ENTER. LLC, SHELL OIL PROD. U S

SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

The operator shall comply with the terms and conditions set forth below:

Equipment	ID No.	Connected To	RECLAIM Source Type / Monitoring Unit	Emissions and Requirements	Conditions
PROCESS 6: GROUNDWATER TREATMENT					
SYSTEM 3 GROUNDWATER BIOREACTOR TREATMENT SYSTEM					S13.4
REACTOR, BIOLOGICAL , WASTE WATER, 70,000 GALLON CAPACITY, FIBERGLASS PANEL FIXED ROOF COVER WITH PRV VALVE, WIDTH: 24 FT; HEIGHT: 11 FT; LENGTH: 42 FT A/N: 504107	D907	C915			D29.1, E193.3, K40.1
REACTOR, BIOLOGICAL , WASTE WATER, 70,000 GALLON CAPACITY, FIBERGLASS PANEL FIXED ROOF COVER WITH PRV VALVE, WIDTH: 24 FT; HEIGHT: 11 FT; LENGTH: 42 FT A/N: 504107	D908	C915			D29.1, E193.3, K40.1
BLOWER, THREE(3) AERATION, 350 CFM, MAXIMUM 2 IN OPERATION WITH ONE SPARE, 10 HP A/N: 504107	D909				E193.3
CLARIFIER, FOUR (4), COVERED, WIDTH: 12 FT; LENGTH: 12 FT A/N: 504107	D910				
TANK, SURGE, (BIOREACTOR SURGE TANK) EFFLUENT EQUALIZING, 1400 GALS; DIAMETER: 7 FT 2 IN; HEIGHT: 6 FT 4.25 IN A/N: 504107	D911				
PUMP, BIOREACTOR FEED, 3 HP A/N: 504107	D912				
PUMP, EFFLUENT, 15 HP A/N: 504107	D913				

- (1) Denotes RECLAIM emission factor
 - (2) Denotes RECLAIM emission rate
 - (3) Denotes RECLAIM concentration limit
 - (4) Denotes BACT emission limit
 - (5)(5A)(5B) Denotes command and control emission limit
 - (6) Denotes air toxic control rule limit
 - (7) Denotes NSR applicability limit
 - (8)(8A)(8B) Denotes 40 CFR limit (e.g. NSPS, NESHAPS, etc.)
 - (9) See App B for Emission Limits
 - (10) See Section J for NESHAP/MACT requirements
- ** Refer to Section F and G of this permit to determine the monitoring, recordkeeping and reporting requirements for this device.

FACILITY PERMIT TO OPERATE EQUILON ENTER. LLC, SHELL OIL PROD. U S

SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

The operator shall comply with the terms and conditions set forth below:

PUMP, SLUDGE DEWATERING, 0.5 HP, 2 TOTAL A/N: 504107	D914				
SYSTEM 4: APC FOR GROUNDWATER BIOREACTOR TREATMENT SYSTEM					S13.4
CARBON ADSORBER, TOTAL OF TWO CONNECTED IN SERIES, VENT SCRUB, MODEL VSC-3000, 3000 LBS A/N: 504107	C915	D907, D908			D90.3, D94.1, E128.1, E153.3, E440.1
BLOWER 1000 CFM. 5 HP, VENTING 2 BIOREACTORS A/N: 504107	D916				E193.3

- (1) Denotes RECLAIM emission factor
 - (2) Denotes RECLAIM emission rate
 - (3) Denotes RECLAIM concentration limit
 - (4) Denotes BACT emission limit
 - (5)(5A)(5B) Denotes command and control emission limit
 - (6) Denotes air toxic control rule limit
 - (7) Denotes NSR applicability limit
 - (8)(8A)(8B) Denotes 40 CFR limit (e.g. NSPS, NESHAPS, etc.)
 - (9) See App B for Emission Limits
 - (10) See Section J for NESHAP/MACT requirements
- ** Refer to Section F and G of this permit to determine the monitoring, recordkeeping and reporting requirements for this device.

S. System Conditions

S13.4

All devices under this system are subject to the applicable requirements of the following rules and regulations.

Contaminant	Rule	Rule/Subpart
HAP's	40CFR63, SUBPART	GGGGG

[40CFR63, SUBPART GGGGG]

[Systems subject to this condition: Process 6, System 1, 2, 3, 4, Process 8, System 6]

D29.1

The operator shall conduct source test(s) for the pollutant(s) identified below.

- (1) Denotes RECLAIM emission factor
 - (2) Denotes RECLAIM emission rate
 - (3) Denotes RECLAIM concentration limit
 - (4) Denotes BACT emission limit
 - (5)(5A)(5B) Denotes command and control emission limit
 - (6) Denotes air toxic control rule limit
 - (7) Denotes NSR applicability limit
 - (8)(8A)(8B) Denotes 40 CFR limit (e.g. NSPS, NESHAPS, etc.)
 - (9) See App B for Emission Limits
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SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

The operator shall comply with the terms and conditions set forth below:

Pollutant(s) to be tested	Required Test Method(s)	Averaging Time	Test Location
ROG emissions	District Method 25.1 or 25.3	District-approved averaging time	outlet of the bioreactor and outlet of the second carbon adsorber

The test shall be conducted to determine the vent gas flow rate in acfm.

The test shall be conducted in accordance with AQMD approved source test protocol. The protocol shall be submitted to the AQMD permitting engineer no later than 45 days before the proposed test date and shall be approved by the AQMD before the test commences. The protocol shall include the proposed operating conditions of the bioreactor during the tests, the identity of the testing lab, a statement from the lab certify that it meets the criteria of R304, and a description of all sampling and analytical procedures.

The facility permit holder shall submit the protocol to the AQMD engineer no later than 45 days prior to the proposed test date, and notify the District of the date and time of the test at least 10 days prior to the test.

The test(s) shall be conducted within 10 days after achieving maximum production rate, but no later than 60 days after initial start-up.

The test shall be conducted after the biocell is established and after each time the biocell is reestablished.

[RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002]

[Devices subject to this condition : D907, D908]

D90.3 The operator shall monitor and record the VOC concentration at the inlet and the outlet of the first carbon canister according to the following specifications:

- (1) Denotes RECLAIM emission factor
- (2) Denotes RECLAIM emission rate
- (3) Denotes RECLAIM concentration limit
- (4) Denotes BACT emission limit
- (5)(5A)(5B) Denotes command and control emission limit
- (6) Denotes air toxic control rule limit
- (7) Denotes NSR applicability limit
- (8)(8A)(8B) Denotes 40 CFR limit (e.g. NSPS, NESHAPS, etc.)
- (9) See App B for Emission Limits
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The operator shall comply with the terms and conditions set forth below:

The operator shall monitor on the day of startup of the bioreactor in accordance with EPA Method 21.

The operator shall monitor once every week during the normal operation of the bioreactor in accordance with EPA Method 21.

[RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002; RULE 3004(a)(4)-Periodic Monitoring, 12-12-1997]

[Devices subject to this condition : C915]

D94.1 The operator shall install, maintain and operate a sampling line at the inlet and the outlet of the carbon canisters to allow measurement of the Volatile organic compounds.

[RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002]

[Devices subject to this condition : C915]

E. Equipment Operation/Construction Requirements

E128.1 The operator shall keep all spent carbon in a tightly covered container which shall remain closed except when it is being transferred into or out of the container.

[RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002]

[Devices subject to this condition : C915]

E153.3 The operator shall change over the carbon in the adsorber whenever breakthrough occurs.

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| (1) Denotes RECLAIM emission factor | (2) Denotes RECLAIM emission rate |
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| (7) Denotes NSR applicability limit | (8)(8A)(8B) Denotes 40 CFR limit (e.g. NSPS, NESHAPS, etc.) |
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The operator shall comply with the terms and conditions set forth below:

For the purpose of this condition, breakthrough occurs when the hydrocarbon monitor reading indicates a concentration of 500 ppmv at the outlet of either carbon canister measured as methane.

The operator shall replace the carbon as follows: the primary carbon canister shall be replaced with either a fresh carbon canister or the secondary carbon canister, and the secondary carbon canister shall be replaced with a fresh carbon.

Records for carbon replacement shall be kept and maintained for this equipment for a period of 5 years.

[RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002; RULE 3004(a)(4)-Periodic Monitoring, 12-12-1997]

[Devices subject to this condition : C915]

~~E193.3 The operator shall operate and maintain this equipment as follows:~~

~~During periods of exhaust blower shutdown as a result of routine maintenance, the aeration blowers may remain in operation as long as the groundwater feed to the bioreactors has been stopped. The exhaust blower shall be repaired within 72 hours each repair period.~~

~~[RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002]~~

~~[Systems subject to this condition: D907, D908, D909, D916]~~

E193.3 The operator shall operate and maintain this equipment as follows:

During periods of routine maintenance, the aeration blower may remain in operation as long as the groundwater feed to the bioreactors has been stopped. Maintenance actions shall not exceed 72 hours for each repair period.

- | | |
|--|---|
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| (7) Denotes NSR applicability limit | (8)(8A)(8B) Denotes 40 CFR limit (e.g. NSPS, NESHAPS, etc.) |
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The operator shall comply with the terms and conditions set forth below:

[RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002]

[Systems subject to this condition: D907, D908, D909, D916]

E440.1 The operator shall operate and maintain this equipment according to the following specifications:

During the carbon change out operation, the spent carbon shall be dropped onto the fabric filters with the use of a chute to minimize carbon particle release.

During the process of loading fresh carbon into the canister, the operator shall use a vacuum device vented to a cyclone around the canister opening to minimize carbon particle release.

The operator shall limit the carbon change out operation to once per month.

[RULE 1303(a)(1)-BACT,5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002; RULE 401, 3-2-1984; RULE 401, 11-9-2001]

[Devices subject to this condition : C915]

K40.1 The operator shall provide to the District a source test report in accordance with the following specifications:

Source test results shall be submitted to the District no later than 60 days after the source test was conducted.

[RULE 1303(a)(1)-BACT, 5-10-1996]

[Devices subject to this condition: D907, D908]

- | | |
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| (3) Denotes RECLAIM concentration limit | (4) Denotes BACT emission limit |
| (5)(SA)(SB) Denotes command and control emission limit | (6) Denotes air toxic control rule limit |
| (7) Denotes NSR applicability limit | (8)(RA)(RB) Denotes 40 CFR limit (e.g. NSPS, NESHAPS, etc.) |
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