



**FACILITY PERMIT TO OPERATE
TESORO REFINING AND MARKETING CO.**

SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS
The operator shall comply with the terms and conditions set forth below:

Description	ID No.	Connected To	RECLAIMSource Type/Monitoring Unit	Emissions And Requirements	Conditions
Process 5: CATALYTIC REFORMING					P13.1
System 4: CATALYTIC REFORMING UNIT NO. 2 HEATERS					
HEATER, H-502, REFINERY GAS, WITH LOW NOX BURNER, AIR PREHEATING, 55.8 MMBTU/HR WITH A/N: 469962 BURNER, REFINERY GAS, WITH LOW NOX BURNER, 55.8 MMBTU/HR	D214	C773 S990	NOX: MAJOR SOURCE; SOX: MAJOR SOURCE	CO: 2000 PPMV (5) [RULE 407, 4-2-1982]; PM: (9) [RULE 404, 2-7-1986]; PM: 0.1 GRAINS/SCF (5) [RULE 409, 8-7-1981]	A63.4, B61.1, D90.7, D328.1, E54.2 , E54.12 , E448.x , H23.3
HEATER, H-503/504, REFINERY GAS, WITH LOW NOX BURNER, AIR PREHEATING, 36.1 MMBTU/HR WITH A/N: 469964 BURNER, REFINERY GAS, WITH LOW NOX BURNER, 36.1 MMBTU/HR	D215	C773 S990	NOX: MAJOR SOURCE; SOX: MAJOR SOURCE	CO: 400 PPMV (5A) [RULE 1146, 11-17-2000; RULE 1146, 9-5-2008]; CO: 2000 PPMV (5) [RULE 407, 4-2-1982]; PM: (9) [RULE 404, 2-7-1986] PM: 0.1 GRAINS/SCF (5) [RULE 409, 8-7-1981]	A63.4, B61.1, D90.7, D328.2, E54.2 , E54.12 , E448.x , H23.3
HEATER, H-501A, REFINERY GAS, WITH LOW NOX BURNER, AIR PREHEATING, 31.4 MMBTU/HR WITH A/N: 470285 ‡ Permit to Construct Issued: 9/06/02 BURNER, SIX BURNERS, JOHN ZINK MODEL NO. LM-116, REFINERY GAS, WITH LOW NOX BURNER, 31.4 MMBTU/HR	D216	C773 S990 D1333 D1343	NOX: MAJOR SOURCE; SOX: MAJOR SOURCE	CO: 400 PPMV (5A) [RULE 1146, 11-17-2000; RULE 1146, 9-5-2008]; CO: 2000 PPMV (5) [RULE 407, 4-2-1982]; PM: (9) [RULE 404, 2-7-1986] PM: 0.1 GRAINS/SCF (5) [RULE 409, 8-7-1981]	A63.4, B61.1, D28.11 , D90.7, D328.2, E54.2 , E54.12 , E448.x , H23.3



**FACILITY PERMIT TO OPERATE
TESORO REFINING AND MARKETING CO.**

SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

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

HEATER, H-501B, REFINERY GAS, WITH LOW NOX BURNER, AIR PREHEATING, 31.4 MMBTU/HR WITH A/N: 470286 ‡Permit to Construct Issued: 9/06/02 BURNER, SIX BURNERS, JOHN ZINK MODEL NO. LM-116, REFINERY GAS, WITH LOW NOX BURNER, 31.4 MMBTU/HR	D217	C773 S990 D1333 D1343	NOX: MAJOR SOURCE; SOX: MAJOR SOURCE	CO: 400 PPMV (5A) [RULE 1146, 11-17-2000; RULE 1146, 9-5-2008]; CO: 2000 PPMV (5) [RULE 407, 4-2-1982; PM: (9) [RULE 404, 2-7-1986] PM: 0.1 GRAINS/SCF (5) [RULE 409, 8-7-1981]	A63.4, B61.1, D28.11 , D90.7, D328.2, E54.2 , E54.12 , E448.x , H23.3
STACK A/N: 469966	S990	D214 D215 D216 D217 C773			

P13.1 All devices under this process are subject to the applicable requirements of the following rules or regulations:

Contaminant	Rule	Rule/Subpart
Benzene	40CFR61, SUBPART	FF

[40CFR 61 Subpart FF, 12-4-2003]

A63.4 The operator shall limit emissions from this equipment as follows:

CONTAMINANT	EMISSIONS LIMIT
NOX	Less than or equal to 583 TONS IN ANY ONE YEAR
SOX	Less than or equal to 430 TONS IN ANY ONE YEAR

For the purposes of this condition, the limit(s) shall be based on the total combined emissions from equipment D112, D120, D146, D214, D215, D216, D217, D218, D722, D723, D724, D725, D770, D810, D812 & D1122.

The operator shall calculate the emission limit(s) of NOx and SOx based on the certified continuous monitor, 365-day period, to demonstrate exemption from PSD requirements. This condition applies only after Clean Fuel Phase 3 fuels are in production.

[RULE 1703 – PSD Analysis, 10-7-1988]

B61.1 The operator shall not use fuel gas containing the following specified compounds:

Compound	ppm by volume
H2S greater than	160



FACILITY PERMIT TO OPERATE TESORO REFINING AND MARKETING CO.

SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

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

The H₂S concentration limit shall be based on a rolling 3-hour averaging period

[40CFR 60 Subpart J, 6-24-2008; CONSENT DECREE, 3-21-2001]

~~D28.11 The operator shall conduct source test(s) in accordance with the following specifications:~~

~~The test shall be conducted within 60 days after achieving maximum production rate, but no later than 180 days after initial start-up.~~

~~Source test shall be conducted when this equipment is operating at 80 percent or greater of the permitted maximum rated capacity.~~

~~The test shall be conducted to determine and report the mass emission rate in pound per hour for NO_x, SO_x, ROG and CO.~~

~~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, 5-10-1996; RULE 1303(b)(2) Offset, 5-10-1996; RULE 3004(a)(4) Periodic Monitoring, 12-12-1997]**~~

D90.7 The operator shall continuously monitor the H₂S concentration in the fuel gases before being burned in this device according to the following specifications:

The operator shall use Gas Chromatograph meeting the requirements of 40CFR60 Subpart J to monitor the parameter.

The operator shall also install and maintain a device to continuously record the parameter being monitored.

The operator may monitor the H₂S concentration at a single location for fuel combustion devices, if monitoring at this location accurately represents the concentration of H₂S in the fuel gas being burned in this device.

[40CFR 60 Subpart J, 6-24-2008]

D328.1 The operator shall determine compliance with the CO emission limit(s) either: (a) conducting a source test at least once every five years using AQMD Method 100.1 or 10.1; or (b) conducting a test at least annually using a portable analyzer and AQMD-approved test method. The test shall be conducted when the equipment is operating under normal conditions to demonstrate compliance with CO emission limit(s). The operator shall comply



FACILITY PERMIT TO OPERATE TESORO REFINING AND MARKETING CO.

SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

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

with all general testing, reporting, and recordkeeping requirements in Sections E and K of this permit.

[RULE 3004(a)(4)-Periodic Monitoring, 12-12-1997; RULE 407, 4-2-1982]

D328.2 The operator shall determine compliance with the CO emission limit(s) either: (a) conducting a source test at least once every five years using AQMD Method 100.1 or 10.1; or (b) conducting a test at least annually using a portable analyzer and AQMD-approved test method. The test shall be conducted when the equipment is operating under normal conditions to demonstrate compliance with CO emission limit(s). The operator shall comply with all general testing, reporting, and recordkeeping requirements in Sections E and K of this permit.

[RULE 1146, 11-17-2000; RULE 1146, 9-5-2008; RULE 3004(a)(4)-Periodic Monitoring, 12-12-1997; RULE 407, 4-2-1982]

~~E54.2 The operator is not required to vent this equipment to the following equipment if any of the requirements listed below are met:~~

~~Device ID: C773 [SELECTIVE CATALYTIC REDUCTION SYSTEM]~~

~~Requirement number 1: The heater is in either start-up or shutdown mode.~~

~~Requirement number 2: The SCR inlet temperature is less than 550 Deg F.~~

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

~~E54.12 The operator is not required to vent this equipment to the following equipment if all of the requirements listed below are met:~~

~~Device ID: C773 [SELECTIVE CATALYTIC REDUCTION]~~

~~Requirement number 1: Bypass is allowed for activities directly related to repair, maintenance, and the resetting of the damper following a stack damper trip~~

~~Requirement number 2: The CEMS shall be fully operational and certified to the levels of emissions with and without bypass~~

~~Requirement number 3: Total periods of bypass do not exceed 240 hours per year~~



**FACILITY PERMIT TO OPERATE
TESORO REFINING AND MARKETING CO.**

SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

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

~~Requirement number 4: The operator shall submit an annual report to the District with a summary of the number of hours the SCR was bypassed, and the description of the reason for each bypass. The annual report is due March 1 of each year~~

~~[RULE 2012, 5-6-2005]~~

E448.x The operator shall comply with the following requirements:

The operator shall maintain the SCR bypass stack dampers for heaters D214, D215, D216 and D217 at a fully closed position such that no emissions will be exhausted through the bypass stacks whenever fuel is supplied to the heaters.

The operator shall install and maintain a damper limit switch or any other equivalent device to accurately indicate the fully closed position of the SCR bypass stack dampers.

The operator shall record the position of the dampers at least once every 15 minutes and any time the damper position changes.

The operator shall install and maintain an automatic fuel shutoff system to cut off the fuel supply to this device whenever any of the bypass stack dampers is not in the fully closed position.

The operator shall maintain records in a manner approved by the District to demonstrate compliance with the requirements specified under this condition.

[RULE 2012, 5-6-2005]

[Devices subject to this condition: D214, D215, D216, D217]

H23.3 This equipment is subject to the applicable requirements of the following rules or regulations:

Contaminant	Rule	Rule/Subpart
H2S	40CFR60, SUBPART	J

[40CFR 60 Subpart J, 6-24-2008; CONSENT DECREE, 3-21-2001]