

## **FACILITY PERMIT TO OPERATE**

**TESORO REFINING AND MARKETING CO  
2101 E PACIFIC COAST HWY  
WILMINGTON, CA 90744**

### **NOTICE**

IN ACCORDANCE WITH RULE 206, THIS PERMIT TO OPERATE OR A COPY THEREOF MUST BE KEPT AT THE LOCATION FOR WHICH IT IS ISSUED.

THIS PERMIT DOES NOT AUTHORIZE THE EMISSION OF AIR CONTAMINANTS IN EXCESS OF THOSE ALLOWED BY DIVISION 26 OF THE HEALTH AND SAFETY CODE OF THE STATE OF CALIFORNIA OR THE RULES OF THE SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT. THIS PERMIT SHALL NOT BE CONSTRUED AS PERMISSION TO VIOLATE EXISTING LAWS, ORDINANCES, REGULATIONS OR STATUTES OF ANY OTHER FEDERAL, STATE OR LOCAL GOVERNMENTAL AGENCIES.

Barry R. Wallerstein, D. Env.  
EXECUTIVE OFFICER

By \_\_\_\_\_  
Mohsen Nazemi, P.E.  
Deputy Executive Officer  
Engineering & Compliance

## FACILITY PERMIT TO OPERATE TESORO REFINING AND MARKETING CO

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## 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:

Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions * And Requirements	Conditions
<b>Process 1: CRUDE DISTILLATION</b>					P13.1
<b>System 1: CRUDE DISTILLATION UNIT</b>					S13.4, S15.2
FRACTIONATOR, V-1366, CRUDE, HEIGHT: 121 FT ; DIAMETER: 13 FT 6 IN A/N: 469239	D898				
ACCUMULATOR, REFLUX, V-1367, LENGTH: 24 FT ; DIAMETER: 10 FT 6 IN A/N: 469239	D1125				
ACCUMULATOR, V-1368, NAPHTHA, HEIGHT: 18 FT 6 IN; DIAMETER: 8 FT A/N: 469239	D1				
COLUMN, STRIPPER, V-1369, BURNER OIL DISTILLATE, HEIGHT: 46 FT ; DIAMETER: 4 FT A/N: 469239	D1126				
COLUMN, STRIPPER, V-1370, LAGO, HEIGHT: 46 FT ; DIAMETER: 4 FT A/N: 469239	D1127				
COLUMN, STRIPPER, V-1371, HAGO, HEIGHT: 20 FT ; DIAMETER: 4 FT A/N: 469239	D1128				
DRUM, CRUDE FLASH, V-1372, HEIGHT: 31 FT 6 IN; DIAMETER: 13 FT 6 IN A/N: 469239	D1129				
KNOCK OUT POT, V-1376, CRUDE, LENGTH: 21 FT ; DIAMETER: 13 FT 6 IN A/N: 469239	D4				

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

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<b>Process 1: CRUDE DISTILLATION</b>					P13.1
DRUM, DECOKING QUENCH, V-1389, HEIGHT: 12 FT 6 IN; DIAMETER: 6 FT 6 IN A/N: 469239	D1131				
FUGITIVE EMISSIONS, MISCELLANEOUS A/N: 469239	D1354			HAP: (10) [40CFR 63 Subpart CC, #5A, 6-23-2003]	H23.5
<b>System 2: LIGHT ENDS FRACTIONATION</b>					S13.4, S15.2, S15.3
COLUMN, DEBUTANIZER, V-1379, HEIGHT: 80 FT ; DIAMETER: 8 FT A/N: 469240	D5				
ACCUMULATOR, V-1380, DEBUTANIZER OVERHEAD, LENGTH: 15 FT ; DIAMETER: 5 FT A/N: 469240	D6				
COLUMN, SPLITTER, V-1381, NAPHTHA, HEIGHT: 80 FT ; DIAMETER: 6 FT A/N: 469240	D7				
ACCUMULATOR, V-1382, NAPHTHA SPLITTER OVERHEAD, LENGTH: 12 FT ; DIAMETER: 5 FT 6 IN A/N: 469240	D8				
FUGITIVE EMISSIONS, MISCELLANEOUS A/N: 469240	D1355			HAP: (10) [40CFR 63 Subpart CC, #5A, 6-23-2003]	H23.5
<b>System 3: CRUDE DISTILLATION HEATER</b>					

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 (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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Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions * And Requirements	Conditions
<b>Process 1: CRUDE DISTILLATION</b>					P13.1
HEATER, CRUDE, H-1, PROCESS GAS, REFINERY GAS, WITH LOW NOX BURNER, AIR PREHEATING, 175 MMBTU/HR WITH  A/N:  BURNER, REFINERY GAS, WITH LOW NOX BURNER, 175 MMBTU/HR	D9	D76 D77 C764	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]	B61.1, D90.7, D328.1, E54.1, E54.11, H23.3
SELECTIVE CATALYTIC REDUCTION, ENGLEHARD, W/ A FIXED BED REACTOR, VANADIA-TITANIA CATALYST, HONEYCOMB TYPE, 480 CU.FT. WITH  A/N: 469241  INJECTOR, AMMONIA, WITH AMMONIA INJECTION	C764	D9 S1356		NH3: 20 PPMV (4) [RULE 1303(a)(1)-BACT, 5-10-1996]	D12.1, D28.4, E71.7
STACK A/N: 469241	S1356	C764			
<b>Process 2: COKING AND RESIDUAL CONDITIONING</b>					P13.1
<b>System 1: DELAYED COKING UNIT (DCU)</b>					S11.3, S13.4, S15.2, S15.9, S15.10, S31.1
FRACTIONATOR, FC-105 (V-900), HEIGHT: 147 FT 9 IN; DIAMETER: 16 FT A/N:	D10				
COLUMN, STRIPPER, FC-106 (V-902), LIGHT GAS-OIL, HEIGHT: 25 FT ; DIAMETER: 4 FT 6 IN A/N:	D1132				

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| <p>* (1) (1A) (1B) Denotes RECLAIM emission factor<br/>         (3) Denotes RECLAIM concentration limit<br/>         (5) (5A) (5B) Denotes command and control emission limit<br/>         (7) Denotes NSR applicability limit<br/>         (9) See App B for Emission Limits</p> | <p>(2) (2A) (2B) Denotes RECLAIM emission rate<br/>         (4) Denotes BACT emission limit<br/>         (6) Denotes air toxic control rule limit<br/>         (8) (8A) (8B) Denotes 40 CFR limit (e.g. NSPS, NESHAPS, etc.)<br/>         (10) See section J for NESHAP/MACT requirements</p> |
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<b>Process 2: COKING AND RESIDUAL CONDITIONING</b>					P13.1
COLUMN, STRIPPER, FC-107 (V-903), INTERMEDIATE GAS-OIL, HEIGHT: 25 FT ; DIAMETER: 4 FT 6 IN A/N:	D1133				
COLUMN, STRIPPER, FC-108 (V-904), HEAVY GAS-OIL, HEIGHT: 25 FT ; DIAMETER: 4 FT 6 IN A/N:	D1134				
DRUM, FLASH, FC-131 (V-927), FRESH FEED, LENGTH: 33 FT ; DIAMETER: 15 FT A/N:	D11				
DRUM, SURGE, FC-135 (V-931), LGO, HEIGHT: 16 FT ; DIAMETER: 3 FT 6 IN A/N:	D1135				
VESSEL, DESALTER, FC-137 (V-933), LENGTH: 90 FT ; DIAMETER: 12 FT A/N:	D1136				
DRUM, COKER HEATER SURGE, FC-146 (V-901), HEIGHT: 18 FT 6 IN; DIAMETER: 16 FT A/N:	D1137				
SUMP, GLAND OIL, WIDTH: 5 FT ; DEPTH: 7 FT ; LENGTH: 5 FT A/N:	D1141				
ACCUMULATOR, FRACTIONATOR OVERHEAD, FC-109 (V-905), LENGTH: 36 FT ; DIAMETER: 10 FT A/N:	D15				

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| <ul style="list-style-type: none"> <li>* (1) (1A) (1B) Denotes RECLAIM emission factor</li> <li>(3) Denotes RECLAIM concentration limit</li> <li>(5) (5A) (5B) Denotes command and control emission limit</li> <li>(7) Denotes NSR applicability limit</li> <li>(9) See App B for Emission Limits</li> </ul> | <ul style="list-style-type: none"> <li>(2) (2A) (2B) Denotes RECLAIM emission rate</li> <li>(4) Denotes BACT emission limit</li> <li>(6) Denotes air toxic control rule limit</li> <li>(8) (8A) (8B) Denotes 40 CFR limit (e.g. NSPS, NESHAPS, etc.)</li> <li>(10) See section J for NESHAP/MACT requirements</li> </ul> |
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Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions * And Requirements	Conditions
<b>Process 2: COKING AND RESIDUAL CONDITIONING</b>					P13.1
SCRUBBER, COMPRESSOR SUCTION, FC-110 (V-906), HEIGHT: 8 FT ; DIAMETER: 7 FT 6 IN A/N:	D16				
ACCUMULATOR, FIRST STAGE DISCHARGE, FC-111 (V-907), LENGTH: 10 FT ; DIAMETER: 5 FT 6 IN A/N:	D17				
ACCUMULATOR, SECOND STAGE DISCHARGE, FC-112 (V-908), LENGTH: 10 FT ; DIAMETER: 4 FT 6 IN A/N:	D18				
ABSORBER, SPONGE OIL, FC-114 (V-910), HEIGHT: 57 FT 6 IN; DIAMETER: 3 FT 6 IN A/N:	D1143				
VESSEL, WATER COALESCER, FC-148 (V-943), LENGTH: 8 FT ; DIAMETER: 2 FT 6 IN A/N:	D1145				
DRUM, COKE, FC-100-103 (V-895-898), 4 TOTAL, HEIGHT: 68 FT ; DIAMETER: 26 FT A/N:	D20			<b>PM: (9) [RULE 405, 2-7-1986]</b>	E336.3
ACCUMULATOR, FC-126 (V-922), COKE DRUM CONDENSATE, LENGTH: 15 FT ; DIAMETER: 5 FT A/N:	D1147				

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<b>Process 2: COKING AND RESIDUAL CONDITIONING</b>					P13.1
COLUMN, DEBUTANIZER, FC-115 (V-911), HEIGHT: 85 FT 6 IN; DIAMETER: 5 FT 6 IN A/N:	D906				
ACCUMULATOR, DEBUTANIZER OVERHEAD, FC-116 (V-912), LENGTH: 19 FT ; DIAMETER: 6 FT A/N:	D24				
COLUMN, DEPROPANIZER, FC-117 (V-913), HEIGHT: 93 FT 1 IN; DIAMETER: 5 FT A/N:	D25				
ACCUMULATOR, DEPROPANIZER OVERHEAD, FC-118 (V-914), LENGTH: 11 FT ; DIAMETER: 4 FT 4 IN A/N:	D900				
COLUMN, SPLITTER, FC-119 (V-915), NAPHTHA, HEIGHT: 84 FT 1 IN; DIAMETER: 7 FT A/N:	D26				
ACCUMULATOR, NAPHTHA SPLITTER OVERHEAD, FC-120 (V-916), HEIGHT: 14 FT ; DIAMETER: 5 FT 6 IN A/N:	D27				
SCRUBBER, V-917, SPONGE OIL ABSORBER GAS, HEIGHT: 8 FT ; DIAMETER: 3 FT 6 IN A/N:	D1149				

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<b>Process 2: COKING AND RESIDUAL CONDITIONING</b>					P13.1
ABSORBER, AMINE, FC-122 (V-918), RESIDUE GAS, HEIGHT: 40 FT ; DIAMETER: 3 FT A/N:	D28				
SCRUBBER, RESIDUE GAS, FC-123 (V-919), HEIGHT: 8 FT ; DIAMETER: 3 FT A/N:	D1088				
ABSORBER, AMINE, FC-124 (V-920), PROPANE/PROPYLENE, HEIGHT: 30 FT ; DIAMETER: 5 FT A/N:	D29				
VESSEL, SEPARATOR, FC-130 (V-926), AMINE, LENGTH: 10 FT ; DIAMETER: 3 FT 6 IN A/N:	D30				
DRUM, FLASH, FC-147 (V-942), RICH AMINE, LENGTH: 15 FT ; DIAMETER: 8 FT 6 IN A/N:	D31				
PIT, COKE, WITH FOUR COKE DRUM CHUTES, WIDTH: 36 FT ; HEIGHT: 21 FT ; LENGTH: 585 FT A/N:	D1151			<b>PM: (9) [RULE 405, 2-7-1986]</b>	
COMPRESSOR, OVERHEAD, C-145 A/N:	D901				H23.4
VESSEL, H-100/101, FUEL GAS, 2 TOTAL A/N:	D904				
COMPRESSOR, C-87 (PC-100), WITH TANDEM GAS SEALS A/N:	D969				

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<b>Process 2: COKING AND RESIDUAL CONDITIONING</b>					P13.1
DRUM, RICH OIL FLASH DRUM, V-2332, LENGTH: 10 FT ; DIAMETER: 3 FT 6 IN A/N:	D1567				
HEAT EXCHANGER, PROPANE VAPORIZER E-1465 A/N:	D1616				
COLUMN, DEETHANIZER, FC-113 (V-909), HEIGHT: 104 FT 2 IN; DIAMETER: 8 FT 6 IN A/N:	D19				
FUGITIVE EMISSIONS, MISCELLANEOUS A/N:	D1357			<b>HAP: (10) [40CFR 63 Subpart CC, #5A, 6-23-2003]</b>	H23.5
<b>System 2: DCU HEATERS</b>					
HEATER, H-101, REFINERY GAS, WITH LOW NOX BURNER, AIR PREHEATING, 218.4 MMBTU/HR WITH A/N: 470266  BURNER, REFINERY GAS, JOHN ZINK, MODEL PSMR-10, WITH LOW NOX BURNER, 80 TOTAL; 218.4 MMBTU/HR	D32		NOX: MAJOR SOURCE**; SOX: MAJOR SOURCE**	CO: 35 PPMV (5A) [RULE 1303(a)(1)-BACT, 5-10-1996]; CO: 2000 PPMV (5) [RULE 407, 4-2-1982]; NOX: 24.7 LBS/HR (7) [RULE 2005, 5-6-2005]; PM: (9) [RULE 404, 2-7-1986]; PM: 0.1 GRAINS/SCF (5) [RULE 409, 8-7-1981]	A63.2, B61.1, D28.3, D90.7, D328.1, E193.5, H23.3
HEATER, H-100, PROCESS GAS, REFINERY GAS, 252 MMBTU/HR A/N: 469243	D33	D76 D77 C768 S987	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]	B61.1, D90.7, D328.1, E54.9, E54.17, H23.3

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Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions * And Requirements	Conditions
<b>Process 2: COKING AND RESIDUAL CONDITIONING</b>					P13.1
SELECTIVE CATALYTIC REDUCTION, ENGLEHARD, W/ A FXD BED REACTOR, VANADIA-TITANIA CATALYST, HONEYCOMB TYPE, 635 CU.FT. WITH A/N: 469253  INJECTOR, AMMONIA, WITH AMMONIA INJECTION	C768	D33 S987		NH3: 20 PPMV (4) [RULE 1303(a)(1)-BACT, 5-10-1996]	D12.1, D28.4, E71.7
STACK A/N: 469253	S987	D33 C768			
<b>System 3: MEROX TREATING UNIT FOR DCU</b>					S13.4, S15.2, S15.3
VESSEL, CAUSTIC PREWASH, FC-600 (V-881), HEIGHT: 20 FT ; DIAMETER: 5 FT 6 IN A/N: 469263	D52				
VESSEL, EXTRACTOR, FC-601 (V-882), HEIGHT: 48 FT ; DIAMETER: 4 FT 6 IN A/N: 469263	D54				
OXIDIZER, FC-602 (V-883), HEIGHT: 18 FT ; DIAMETER: 3 FT 6 IN A/N: 469263	D907				
VESSEL, SEPARATOR, FC-603 (V-884), DISULFIDE, WITH MIST ELIMINATOR, HEIGHT: 20 FT ; DIAMETER: 6 FT A/N: 469263	D56				
REACTOR, MEROX, FC-605 (V-886), HEIGHT: 25 FT ; DIAMETER: 6 FT A/N: 469263	D58			HAP: (10) [40CFR 63 Subpart CC, #2, 6-23-2003]	

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<b>Process 2: COKING AND RESIDUAL CONDITIONING</b>					P13.1
SETTLING TANK, FC-606 (V-887), CAUSTIC, LENGTH: 22 FT ; DIAMETER: 6 FT A/N: 469263	D60				
FILTER, SAND, FC-607 (V-888), HEIGHT: 14 FT ; DIAMETER: 6 FT A/N: 469263	D62				
POT, LIQUID CATALYST ADDITION, FC-608, HEIGHT: 4 FT ; DIAMETER: 2 FT A/N: 469263	D1154				
FUGITIVE EMISSIONS, MISCELLANEOUS A/N: 469263	D1359			<b>HAP: (10) [40CFR 63 Subpart CC, #5A, 6-23-2003]</b>	H23.5
<b>System 6: DCU BLOWDOWN RECOVERY SYSTEM</b>					S13.4, S15.2, S15.3, S15.11
ACCUMULATOR, BLOWDOWN, FC-127 (V-923), LENGTH: 20 FT ; DIAMETER: 10 FT A/N:	D53				
VESSEL, BLOWDOWN CONTACTOR, FC-128 (V-924), HEIGHT: 40 FT ; DIAMETER: 16 FT A/N:	D1152				
KNOCK OUT POT, DISCHARGE, V-1400, HEIGHT: 7 FT 8 IN; DIAMETER: 3 FT A/N:	D63				
DRUM, FLARE SEAL, V-1613, LENGTH: 19 FT 6 IN; DIAMETER: 6 FT A/N:	D65				

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| <ul style="list-style-type: none"> <li>* (1) (1A) (1B) Denotes RECLAIM emission factor</li> <li>(3) Denotes RECLAIM concentration limit</li> <li>(5) (5A) (5B) Denotes command and control emission limit</li> <li>(7) Denotes NSR applicability limit</li> <li>(9) See App B for Emission Limits</li> </ul> | <ul style="list-style-type: none"> <li>(2) (2A) (2B) Denotes RECLAIM emission rate</li> <li>(4) Denotes BACT emission limit</li> <li>(6) Denotes air toxic control rule limit</li> <li>(8) (8A) (8B) Denotes 40 CFR limit (e.g. NSPS, NESHAPS, etc.)</li> <li>(10) See section J for NESHAP/MACT requirements</li> </ul> |
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## 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:

Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions * And Requirements	Conditions
<b>Process 2: COKING AND RESIDUAL CONDITIONING</b>					P13.1
COMPRESSOR, C-137, BLOWDOWN FLARE GAS RECOVERY A/N:	D68				H23.4
DRUM, V-1613, DCU FLARE SEAL, HEIGHT: 25 FT ; DIAMETER: 5 FT A/N:	D1350				
FUGITIVE EMISSIONS, MISCELLANEOUS A/N:	D1361			<b>HAP: (10) [40CFR 63 Subpart CC, #5A, 6-23-2003]</b>	H23.5
<b>System 7: DECOKING VENT GAS DISPOSAL</b>					S13.4
DRUM, DCU DECOKING QUENCH, V-938, HEIGHT: 12 FT ; DIAMETER: 5 FT A/N: 469266	D76	D9 D33			
DRUM, CRUDE DECOKING QUENCH, V-1389, HEIGHT: 15 FT ; DIAMETER: 10 FT A/N: 469266	D77	D9 D33			
FUGITIVE EMISSIONS, MISCELLANEOUS A/N: 469266	D1367			<b>HAP: (10) [40CFR 63 Subpart CC, #5A, 6-23-2003]</b>	H23.5
<b>System 8: COKE HANDLING, SCREENING AND LOADING</b>					S7.1, S13.3
HOPPER, RECEIVING, QQ-942, PETROLEUM COKE, PORTABLE A/N:	D1155			<b>PM: (9) [RULE 405, 2-7-1986]</b>	A63.6, D323.1
STORAGE BUILDING, PETROLEUM COKE BARN A/N:	D1438			<b>PM: (9) [RULE 405, 2-7-1986]</b>	A63.6, D323.1
FEEDER, SPREADER, QQ-943, PORTABLE, PETROLEUM COKE A/N:	D1160			<b>PM: (9) [RULE 405, 2-7-1986]</b>	A63.6, D323.1

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 (5) (5A) (5B) Denotes command and control emission limit  
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 (8) (8A) (8B) Denotes 40 CFR limit (e.g. NSPS, NESHAPS, etc.)  
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## FACILITY PERMIT TO OPERATE TESORO REFINING AND MARKETING CO

### SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

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Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions * And Requirements	Conditions
<b>Process 2: COKING AND RESIDUAL CONDITIONING</b>					P13.1
CONVEYOR, BELT, QQ-944, PETROLEUM COKE, PORTABLE A/N:	D1156			PM: (9) [RULE 405, 2-7-1986]	A63.6, D323.1
CONVEYOR, BELT, QQ-950, PETROLEUM COKE, WITH AN ENCLOSED TRANSFER POINT, 733 FEET LONG A/N:	D1157			PM: (9) [RULE 405, 2-7-1986]	A63.6, D323.1
CONVEYOR, BELT, QQ-951, PETROLEUM COKE, COVERED, 33 FEET LONG, WITH AN ENCLOSED TRANSFER POINT A/N:	D1158			PM: (9) [RULE 405, 2-7-1986]	A63.6, D323.1
CONVEYOR, BELT, QQ-952, PETROLEUM COKE, COVERED, 414 FEET LONG, WITH AN ENCLOSED TRANSFER POINT A/N:	D1159			PM: (9) [RULE 405, 2-7-1986]	A63.6, D323.1
CONVEYOR, BELT, QQ-968-971, 4 TOTAL, PETROLEUM COKE, COVERED, EACH 14 FEET LONG A/N:	D41			PM: (9) [RULE 405, 2-7-1986]	A63.6, D323.1
SCREEN, CLASSIFYING, QQ-964-967, PETROLEUM COKE, 4 TOTAL, DOUBLE-DECK VIBRATING TYPE, WIDTH: 8 FT ; LENGTH: 20 FT A/N:	D45			PM: (9) [RULE 405, 2-7-1986]	A63.6, D323.1
CONVEYOR, BELT, QQ-954/955, 2 TOTAL, PETROLEUM COKE, COVERED, REVERSIBLE TYPE, EA. W/ AN ENCLOSED TRANSFER POINT, AND EA 61 FT LONG A/N:	D49			PM: (9) [RULE 405, 2-7-1986]	A63.6, D323.1

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|---|---|
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## FACILITY PERMIT TO OPERATE TESORO REFINING AND MARKETING CO

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<b>Process 2: COKING AND RESIDUAL CONDITIONING</b>					P13.1
CONVEYOR, BELT, QQ-959, PETROLEUM COKE, COVERED, WITH AN ENCLOSED TRANSFER POINT, 185 FEET LONG A/N:	D46			PM: (9) [RULE 405, 2-7-1986]	A63.6, D323.1
CONVEYOR, QQ-960, PETROLEUM COKE, COVERED, SHUTTLE BELT TYPE, WITH AN ENCLOSED TRANSFER POINT, 80 FEET LONG A/N:	D47			PM: (9) [RULE 405, 2-7-1986]	A63.6, D323.1
HOPPER, RAIL CAR LOADING, QQ-945, PETROLEUM COKE, THREE 45 TON CAPACITY SECTIONS WITH A/N:  LOADING ARM, RAIL CAR, LOADING CHUTE, 3 TOTAL, PETROLEUM COKE, EACH WITH AN ELEVATION HOIST AND AN EXTENSION DRIVE	D1162			PM: (9) [RULE 405, 2-7-1986]	A63.6, D323.1
CONVEYOR, BELT, QQ-956, PETROLEUM COKE, COVERED, WITH AN ENCLOSED TRANSFER TOWER, 255 FEET LONG A/N:	D1161			PM: (9) [RULE 405, 2-7-1986]	A63.6, D323.1
CONVEYOR, BELT, QQ-957, PETROLEUM COKE, COVERED, WITH AN ENCLOSED TRANSFER POINT, 152 FEET LONG A/N:	D1164			PM: (9) [RULE 405, 2-7-1986]	A63.6, D323.1
CONVEYOR, QQ-958, PETROLEUM COKE, SHUTTLE BELT TYPE, 52 FEET LONG, WITH A FEEDER A/N:	D1165			PM: (9) [RULE 405, 2-7-1986]	A63.6, D323.1

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## FACILITY PERMIT TO OPERATE TESORO REFINING AND MARKETING CO

### SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

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Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions * And Requirements	Conditions
<b>Process 2: COKING AND RESIDUAL CONDITIONING</b>					P13.1
<b>System 9: COKE HANDLING</b>					S7.2, S13.3
LOADING ARM, COKE PIT BRIDGE CRANE, QQ-109, PETROLEUM COKE, WITH A CLAMSHELL LOADER, 6 CU.YD. WITH A/N: 469267  HOPPER, RECEIVING, PETROLEUM COKE  FEEDER, GRIZZLY BAR, PETROLEUM COKE  CRUSHER, DOUBLE-ROLL TYPE, PETROLEUM COKE  FEEDER, VIBRATING TYPE, PETROLEUM COKE	D1170			PM: (9) [RULE 405, 2-7-1986]	A63.6, D323.1
CONVEYOR, BELT, QQ-916, PETROLEUM COKE, WITH AN ENCLOSED TRANSFER POINT, 294 FEET LONG A/N: 469267	D1093			PM: (9) [RULE 405, 2-7-1986]	A63.6, D323.1
CONVEYOR, BELT, QQ-917, PETROLEUM COKE, WITH AN ENCLOSED TRANSFER POINT, 602 FEET LONG A/N: 469267	D1094			PM: (9) [RULE 405, 2-7-1986]	A63.6, D323.1
CONVEYOR, BELT, QQ-918, PETROLEUM COKE, WITH AN ENCLOSED TRANSFER POINT, 422 FEET LONG A/N: 469267	D1173			PM: (9) [RULE 405, 2-7-1986]	A63.6, D323.1

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 (3) Denotes RECLAIM concentration limit  
 (4) Denotes BACT emission limit  
 (5) (5A) (5B) Denotes command and control emission limit  
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 (8) (8A) (8B) Denotes 40 CFR limit (e.g. NSPS, NESHAPS, etc.)  
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## FACILITY PERMIT TO OPERATE TESORO REFINING AND MARKETING CO

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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
<b>Process 2: COKING AND RESIDUAL CONDITIONING</b>					P13.1
CONVEYOR, BELT, QQ-919, PETROLEUM COKE, WITH AN ENCLOSED TRANSFER POINT, 496 FEET LONG A/N: 469267	D1174			PM: (9) [RULE 405, 2-7-1986]	A63.6, D323.1
CONVEYOR, BELT, QQ-920, PETROLEUM COKE, WITH AN ENCLOSED TRANSFER POINT, 1144 FEET LONG A/N: 469267	D1175			PM: (9) [RULE 405, 2-7-1986]	A63.6, D323.1
CONVEYOR, BELT, QQ-921, PETROLEUM COKE, WITH A WIPER SYSTEM AND AN ENCLOSED TRANSFER POINT, 360 FEET LONG A/N: 469267	D1176			PM: (9) [RULE 405, 2-7-1986]	A63.6, D323.1
CONVEYOR, BELT, QQ-940, PETROLEUM COKE, WITH AN ENCLOSED TRANSFER POINT, 129 FEET LONG A/N: 469267	D1177			PM: (9) [RULE 405, 2-7-1986]	A63.6, D323.1
CONVEYOR, QQ-941, PETROLEUM COKE, SHUTTLE BELT TYPE, 170 FEET LONG, WITH A FEEDER A/N: 469267	D1178			PM: (9) [RULE 405, 2-7-1986]	A63.6, D323.1
<b>System 10: VACUUM DISTILLATION</b>					S13.4, S15.2
TOWER, VACUUM, FC-104 (V-899), HEIGHT: 72 FT ; DIAMETER: 16 FT A/N: 469268	D12				
VESSEL, VACUUM JET HOT WELL, FC-132 (V-928), LENGTH: 20 FT ; DIAMETER: 4 FT A/N: 469268	D13				

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## FACILITY PERMIT TO OPERATE TESORO REFINING AND MARKETING CO

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<b>Process 2: COKING AND RESIDUAL CONDITIONING</b>					P13.1
ABSORBER, AMINE, FC-160 (V-937), VACUUM VENT GAS, HEIGHT: 28 FT 6 IN; DIAMETER: 3 FT A/N: 469268	D14				
EJECTOR, E-1568 & E-1569, 1ST STAGE CONDENSER, TWO TOTAL A/N: 469268	D1558				H23.30
EJECTOR, E-1017 & E-1018, 2ND STAGE CONDENSER, TWO TOTAL A/N: 469268	D1559				H23.30
EJECTOR, E-1019 & E-1020, 3RD STAGE CONDENSER, TWO TOTAL A/N: 469268	D1560				H23.30
FUGITIVE EMISSIONS, MISCELLANEOUS A/N: 469268	D1557			<b>HAP: (10) [40CFR 63 Subpart CC, #5A, 6-23-2003]</b>	H23.5
<b>Process 3: FLUID CATALYTIC CRACKING (FCCU)</b>					P13.1
<b>System 1: FCCU RECOVERY SECTION</b>					S13.4, S15.2, S15.12, S31.1
ABSORBER, V-406, HEIGHT: 64 FT 4 IN; DIAMETER: 4 FT 6 IN A/N:	D78				
TOWER, SPLITTER, HEAVY NAPHTHA, V-407, HEIGHT: 47 FT ; DIAMETER: 5 FT 6 IN A/N:	D1267				
TOWER, RERUN, V-408, HEIGHT: 82 FT ; DIAMETER: 7 FT A/N:	D1268				
TOWER, SPLITTER, LIGHT NAPHTHA, V-409, HEIGHT: 60 FT ; DIAMETER: 8 FT 6 IN A/N:	D1269				

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<b>Process 3: FLUID CATALYTIC CRACKING (FCCU)</b>					P13.1
COLUMN, DEPROPANIZER, V-410, HEIGHT: 80 FT ; DIAMETER: 6 FT A/N:	D908				
ACCUMULATOR, V-413, HEIGHT: 10 FT ; DIAMETER: 5 FT A/N:	D79				
DRUM, V-414, RERUN REFLUX A/N:	D915				
ACCUMULATOR, V-415, SPLITTER TOWER REFLUX, HEIGHT: 19 FT ; DIAMETER: 5 FT 7 IN A/N:	D80				
ACCUMULATOR, V-416, DEPROPANIZER TOWER REFLUX, LENGTH: 19 FT ; DIAMETER: 6 FT 6 IN A/N:	D81				
DRUM, DRYING, LOW PRESSURE, V-419, HEIGHT: 20 FT ; DIAMETER: 10 FT A/N:	D82				
VESSEL, SEPARATOR, HIGH PRESSURE, V-422, LENGTH: 19 FT ; DIAMETER: 8 FT A/N:	D83				
VESSEL, SURGE, V-423, AVGAS CHARGE, HEIGHT: 19 FT ; DIAMETER: 7 FT 7 IN A/N:	D84				
DRUM, DRYING, V-424, RERUN TOWER GAS, HEIGHT: 10 FT ; DIAMETER: 3 FT 6 IN A/N:	D85				

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<b>Process 3: FLUID CATALYTIC CRACKING (FCCU)</b>					P13.1
KNOCK OUT POT, FLARE, V-431, LENGTH: 13 FT ; DIAMETER: 6 FT A/N:	D1271				
DRUM, PRESSURE RELIEVING SEAL, V-432, HEIGHT: 43 FT ; DIAMETER: 4 FT 4 IN A/N:	D86			<b>HAP: (10) [40CFR 63 Subpart CC, #2, 6-23-2003]</b>	
POT, DEETHANIZER WATER DRAIN, V-547, HEIGHT: 6 FT ; DIAMETER: 1 FT 6 IN A/N:	D1273				
DRUM, WATER DRAW-OFF, V-675, LENGTH: 4 FT 8 IN; DIAMETER: 4 FT A/N:	D1275				
KNOCK OUT POT, VAPOR RECOVERY, V-676, LENGTH: 4 FT 4 IN; DIAMETER: 2 FT A/N:	D1272				
KNOCK OUT POT, V-1100, NAPHTHA, LENGTH: 12 FT 6 IN; DIAMETER: 3 FT A/N:	D912				
TOWER, DEBUTANIZER, V-1547, HEIGHT: 100 FT 6 IN; DIAMETER: 7 FT A/N:	D1280				
COLUMN, DEETHANIZER, V-1548, HEIGHT: 12 FT 6 IN; DIAMETER: 6 FT A/N:	D910				

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Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions * And Requirements	Conditions
<b>Process 3: FLUID CATALYTIC CRACKING (FCCU)</b>					P13.1
ACCUMULATOR, V-1549, DEBUTANIZER REFLUX, HEIGHT: 20 FT ; DIAMETER: 7 FT A/N:	D913				
KNOCK OUT POT, V-1789, PROPANE/PROPYLENE, HEIGHT: 8 FT 6 IN; DIAMETER: 24 FT A/N:	D909				
COMPRESSOR, RERUN TOWER GAS, C-43/44, 2 TOTAL, 4 CYLINDERS A/N:	D87				
COMPRESSOR, C-142, WET GAS A/N:	D918				H23.4
VESSEL, SEPARATOR, HIGH PRESSURE, V-2343, LENGTH: 22 FT ; DIAMETER: 8 FT A/N:	D1597				
VESSEL, SEPARATOR, SOUR WATER FLASH , V-2344, LENGTH: 25 FT ; DIAMETER: 8 FT 6 IN A/N:	D1598				
FUGITIVE EMISSIONS, MISCELLANEOUS A/N:	D1365			<b>HAP: (10) [40CFR 63 Subpart CC, #5A, 6-23-2003]</b>	H23.16
<b>System 2: FCCU CRACKING SECTION</b>					S13.4, S15.2, S15.3, S15.12
FRACTIONATOR, V-386, WITH PRV TO ATMOSPHERE, HEIGHT: 62 FT ; DIAMETER: 16 FT A/N:	D93				

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- (2) (2A) (2B) Denotes RECLAIM emission rate
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<b>Process 3: FLUID CATALYTIC CRACKING (FCCU)</b>					P13.1
COLUMN, STRIPPER 3, V-387, LIGHT CYCLE GAS OIL, HEIGHT: 18 FT 6 IN; DIAMETER: 3 FT A/N:	D94				
ACCUMULATOR, V-388, FRACTIONATOR REFLUX, HEIGHT: 23 FT ; DIAMETER: 11 FT A/N:	D95			HAP: (10) [40CFR 63 Subpart CC, #2, 6-23-2003]	
HOPPER, FRESH CAT., V-389, HEIGHT: 41 FT 7 IN; DIAMETER: 30 FT A/N:	D1283			PM: (9) [RULE 405, 2-7-1986]	D323.1
HOPPER, USED CAT., V-390, HEIGHT: 41 FT 7 IN; DIAMETER: 30 FT A/N:	D1284			PM: (9) [RULE 405, 2-7-1986]	D323.1
HOPPER, 10-TON SOX CATALYST ADDITIVE, V-1703, HEIGHT: 41 FT 7 IN; DIAMETER: 30 FT A/N:	D1532			PM: (9) [RULE 405, 2-7-1986]	D323.1

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 (10) See section J for NESHAP/MACT requirements

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## 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:

Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions* And Requirements	Conditions
<b>Process 3: FLUID CATALYTIC CRACKING (FCCU)</b>					P13.1
REGENERATOR, V-404, HEIGHT: 42 FT 6 IN; DIAMETER: 42 FT WITH A/N:	D96	C1575 C1576 C1577 D1664	NOX: MAJOR SOURCE**; SOX: MAJOR SOURCE**	CO: 500 PPMV (8) [40CFR 60 Subpart J, 6-24-2008; CONSENT DECREE, 3-21-2001]; CO: 2000 PPMV (5) [RULE 407, 4-2-1982]; HAP: (10) [40CFR 63 Subpart UUU, #2, 4-20-2006]; PM: (9) [RULE 404, 2-7-1986; RULE 405, 2-7-1986]; PM: 0.1 GRAINS/SCF (5) [RULE 409, 8-7-1981]; PM: 2 LBS/TON (8) [40CFR 60 Subpart J, 6-24-2008; CONSENT DECREE, 3-21-2001]; PM10: 2.8 LBS/1000 BBLS (5A) [RULE 1105.1, 11-7-2003]; PM10: 3.6 LBS/HR (5) [RULE 1105.1, 11-7-2003]	A63.7, B61.4, D29.1, D82.2, D90.8, H23.32
BLOWER, B-19, COMBUSTION AIR, 4500 HP					
REACTOR, V-405, HEIGHT: 38 FT 9 IN; DIAMETER: 27 FT A/N:	D97				
DRUM, DRYING, V-426, FUEL GAS, HEIGHT: 10 FT 6 IN; DIAMETER: 4 FT A/N:	D919				
KNOCK OUT POT, FLARE DRUM, V-434, FCCU, LENGTH: 16 FT ; DIAMETER: 8 FT A/N:	D749				
COLUMN, STRIPPER, V-494, INTERMEDIATE GAS OIL, HEIGHT: 18 FT 6 IN; DIAMETER: 3 FT A/N:	D1285				

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

## 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:

Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions * And Requirements	Conditions
<b>Process 3: FLUID CATALYTIC CRACKING (FCCU)</b>					P13.1
DRUM, FRESH CAT. LOADING, V-822, HEIGHT: 1 FT 8 IN; DIAMETER: 1 FT 6 IN A/N:	D1287			PM: (9) [RULE 405, 2-7-1986]	D323.1
DRUM, CO PROMOTER LOADING, V-1355, HEIGHT: 1 FT 8 IN; DIAMETER: 1 FT 6 IN A/N:	D1288			PM: (9) [RULE 405, 2-7-1986]	D323.1
DRUM, HOT CHARGE SURGE, V-1364, HEIGHT: 35 FT 6 IN; DIAMETER: 14 FT A/N:	D1289				
KNOCK OUT POT, V-641, CO BOILER FUEL GAS A/N:	D916				
VESSEL, SEPARATOR, INTERMEDIATE, V-1696, (F-160) A/N:	D917				
FUGITIVE EMISSIONS, MISCELLANEOUS A/N:	D1366			HAP: (10) [40CFR 63 Subpart CC, #5A, 6-23-2003]	H23.5
<b>System 3: FCCU HEATERS</b>					

\* (1) (1A) (1B) Denotes RECLAIM emission factor  
 (2) (2A) (2B) 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 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:

Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions * And Requirements	Conditions
<b>Process 3: FLUID CATALYTIC CRACKING (FCCU)</b>					P13.1
HEATER, H-2, REFINERY GAS, WITH LOW NOX BURNER, 37.4 MMBTU/HR WITH A/N: 469270  BURNER, 4 BURNERS, REFINERY GAS, WITH LOW NOX BURNER, 37.4 MMBTU/HR	D92		NOX: LARGE 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]; NOX: 100.6 PPMV (3) [RULE 2012, 5-6-2005]; PM: (9) [RULE 404, 2-7-1986]; PM: 0.1 GRAINS/SCF (5) [RULE 409, 8-7-1981]	B61.1, D90.7, D328.2, H23.3
HEATER, H-3, REFINERY GAS, 94.7 MMBTU/HR WITH A/N: 470270  BURNER, REFINERY GAS, JOHN ZINK, MODEL HEVD-14, WITH LOW NOX BURNER, 52 TOTAL; 94.7 MMBTU/HR	D89	S50	NOX: MAJOR SOURCE**; SOX: MAJOR SOURCE**	CO: 2000 PPMV (5) [RULE 407, 4-2-1982]; NOX: 0.1 LBS/MMBTU (5) [CONSENT DECREE, 3-21-2001]; PM: (9) [RULE 404, 2-7-1986]; PM: 0.1 GRAINS/SCF (5) [RULE 409, 8-7-1981]	A229.1, B61.1, D90.7, D328.1, H23.3

\* (1) (1A) (1B) Denotes RECLAIM emission factor  
 (2) (2A) (2B) 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 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:

Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions * And Requirements	Conditions
<b>Process 3: FLUID CATALYTIC CRACKING (FCCU)</b>					P13.1
HEATER, H-4, REFINERY GAS, 127.2 MMBTU/HR WITH A/N: 470271  BURNER, REFINERY GAS, JOHN ZINK, MODEL HEVD-14, WITH LOW NOX BURNER, 72 TOTAL; 127.2 MMBTU/HR	D90	S50	NOX: MAJOR SOURCE**; SOX: MAJOR SOURCE**	CO: 2000 PPMV (5) [RULE 407, 4-2-1982]; NOX: 0.1 LBS/MMBTU (5) [ CONSENT DECREE, 3-21-2001]; PM: (9) [RULE 404, 2-7-1986]; PM: 0.1 GRAINS/SCF (5) [RULE 409, 8-7-1981]	A229.1, B61.1, D90.7, D328.1, H23.3
STACK A/N: 470271	S50	D89 D90			
HEATER, H-5, REFINERY GAS, 44 MMBTU/HR A/N: 469272	D91		NOX: LARGE SOURCE**; SOX: MAJOR SOURCE**	CO: 2000 PPMV (5) [RULE 407, 4-2-1982]; NOX: 83.8 PPMV REFINERY GAS (3) [RULE 2012, 5-6-2005]; PM: (9) [RULE 404, 2-7-1986]; PM: 0.1 GRAINS/SCF (5) [RULE 409, 8-7-1981]	B61.1, C1.15, D90.7, D328.1, E313.1, E315.1, H23.3
BOILER, BO-1, CO WASTE HEAT, REFINERY GAS, 300 MMBTU/HR A/N:	D112	S51 C1575 C1576 C1577	NOX: MAJOR SOURCE**; SOX: MAJOR SOURCE**	CO: 2000 PPMV (5) [RULE 407, 4-2-1982]; PM: 0.1 GRAINS/SCF (5) [RULE 409, 8-7-1981]	A63.4, B61.1, D90.7, D328.1, H23.3
STACK, CO BOILER A/N:	S51	D112 C1575 C1576 C1577			
HEATER, START UP, B-1, NATURAL GAS, 84 MMBTU/HR A/N: 473467	D1664	D96	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]	
<b>System 4: FCCU NAPHTHA TREATING</b>					S13.4, S15.3

\* (1) (1A) (1B) Denotes RECLAIM emission factor  
 (2) (2A) (2B) 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 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:

Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions * And Requirements	Conditions
<b>Process 3: FLUID CATALYTIC CRACKING (FCCU)</b>					P13.1
VESSEL, SEPARATOR, PHASE, V-1832, HEIGHT: 24 FT ; DIAMETER: 6 FT 6 IN A/N: 469275	D99				
VESSEL, SEPARATOR, PHASE, V-1833, HEIGHT: 24 FT ; DIAMETER: 5 FT 6 IN A/N: 469275	D100				
POT, V-1835, FILM FIBER CONTACTOR, HEIGHT: 14 FT 6 IN; DIAMETER: 3 FT A/N: 469275	D104				
POT, V-1836, FILM-FIBER CONTACTOR, HEIGHT: 14 FT 6 IN; DIAMETER: 3 FT A/N: 469275	D105				
TANK, INHIBITOR, T-165, HEIGHT: 8 FT 6 IN; DIAMETER: 5 FT A/N: 469275	D1292				
FUGITIVE EMISSIONS, MISCELLANEOUS A/N: 469275	D1443			<b>HAP: (10) [40CFR 63 Subpart CC, #5A, 6-23-2003]</b>	H23.5
<b>System 5: FCCU GAS TREATING</b>					S13.4, S15.2, S18.5
SCRUBBER, H2S GAS, V-1680, LENGTH: 15 FT ; DIAMETER: 3 FT A/N: 469276	D1293				
KNOCK OUT POT, V-278, HEIGHT: 6 FT ; DIAMETER: 3 FT A/N: 469276	D1294				

\* (1) (1A) (1B) Denotes RECLAIM emission factor  
 (2) (2A) (2B) 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 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:

Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions * And Requirements	Conditions
<b>Process 3: FLUID CATALYTIC CRACKING (FCCU)</b>					P13.1
ABSORBER, PROPYLENE, V-1681, HEIGHT: 65 FT 6 IN; DIAMETER: 2 FT 6 IN A/N: 469276	D1295				
ABSORBER, H2S, V-1672, HEIGHT: 65 FT 6 IN; DIAMETER: 2 FT 6 IN A/N: 469276	D1296				
KNOCK OUT POT, V-569, NAPHTHA, HEIGHT: 13 FT ; DIAMETER: 3 FT A/N: 469276	D107				
SCRUBBER, H2S GAS, V-1100, LENGTH: 15 FT ; DIAMETER: 3 FT A/N: 469276	D1297				
VESSEL, COALESCER, V-1551, PROPYLENE, HEIGHT: 7 FT ; DIAMETER: 2 FT A/N: 469276	D103				
FUGITIVE EMISSIONS, MISCELLANEOUS A/N: 469276	D1444			<b>HAP: (10) [40CFR 63 Subpart CC, #5A, 6-23-2003]</b>	H23.5
<b>System 8: FCCU CATALYST ADDITIVE LOADER</b>					
VESSEL, CATALYST, V-2340, GRACE DAVISON, 6 CUFT VOLUME, LENGTH: 2 FT 3 IN; DIAMETER: 2 FT A/N: 469277	D1573			<b>PM: (9) [RULE 404, 2-7-1986; RULE 405, 2-7-1986]</b>	B27.1, E71.13
FILTER, DUST COLLECTOR, V-2342, WITH 2 FILTER CATRIDGE, 590 SQUARE FEET FILTER AREA, WITH AUTOMATIC AIR PULSE CLEANING AFTER EACH INJECTION A/N: 469277	C1574				C6.3, D29.6, D322.2, D323.1, E102.1

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

## 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:

Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions * And Requirements	Conditions
<b>Process 4: HYDROTREATING</b>					P13.1
<b>System 1: HYDROTREATING UNIT NO. 1</b>					S13.4, S15.2, S15.3, S15.13, S31.1
SCRUBBER, DEA, V-598, RERUN ACCUMULATOR OFF-GAS, HEIGHT: 10 FT 8 IN; DIAMETER: 8 FT A/N: 470275	D1180				
TOWER, DEGUMMER, V-619, HEIGHT: 27 FT ; DIAMETER: 5 FT A/N: 470275	D1182				
TOWER, RERUN, V-621, HEIGHT: 55 FT ; DIAMETER: 5 FT A/N: 470275	D1183				
TANK, SURGE, V-2240, LENGTH: 24 FT ; DIAMETER: 8 FT A/N: 470275	D1508				
VESSEL, SEPARATOR, HIGH PRESSURE, V-622, HEIGHT: 16 FT 6 IN; DIAMETER: 6 FT WITH  POT, SEPARATOR, H2S-WATER, HEIGHT: 2 FT ; DIAMETER: 8 IN	D115				
COLUMN, STRIPPER, V-620, HEIGHT: 57 FT ; DIAMETER: 4 FT A/N: 470275	D114				
REACTOR, FC-201 (V-626), HEIGHT: 24 FT ; DIAMETER: 7 FT 6 IN A/N: 470275	D1351				
VESSEL, V-2270, NAPHTHA FEED COALESCER, LENGTH: 14 FT ; DIAMETER: 54 FT A/N: 470275	D1510				

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

## 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:

Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions * And Requirements	Conditions
<b>Process 4: HYDROTREATING</b>					P13.1
ACCUMULATOR, STRIPPER, V-623, HEIGHT: 7 FT ; DIAMETER: 3 FT WITH A/N: 470275  POT, SEPARATOR, H2S-WATER, HEIGHT: 2 FT 7 IN; DIAMETER: 8 IN	D1184				
ACCUMULATOR, V-624, TOWER RERUN, HEIGHT: 12 FT ; DIAMETER: 4 FT A/N: 470275	D117				
POT, V-1137/V-2012, SOUR WATER DRAW OFF A/N: 470275	D1332				
DRUM, DECOKING QUENCH, V-625, HEIGHT: 10 FT ; DIAMETER: 3 FT A/N: 470275	D1343	D194 D216 D217			
FUGITIVE EMISSIONS, MISCELLANEOUS A/N: 470275	D1446			<b>HAP: (10) [40CFR 63 Subpart CC, #5A, 6-23-2003]</b>	H23.16
<b>System 2: HYDROTREATING UNIT NO. 1 HEATERS</b>					
HEATER, H-31, REFINERY GAS, WITH LOW NOX BURNER, FLUE GAS RECIRCULATION, 45 MMBTU/HR WITH A/N: 469279  BURNER, REFINERY GAS, WITH LOW NOX BURNER, 45 MMBTU/HR	D120		NOX: MAJOR SOURCE**; SOX: MAJOR SOURCE**	<b>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]</b>	A63.4, B61.1, D90.7, D328.1, H23.3

\* (1) (1A) (1B) Denotes RECLAIM emission factor  
 (2) (2A) (2B) 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 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:

Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions * And Requirements	Conditions
<b>Process 4: HYDROTREATING</b>					P13.1
<b>System 3: HYDROTREATING UNIT NO. 2</b>					S11.2, S13.4, S15.2, S15.3, S15.13, S31.1
REACTOR, HYDROTREATER REACTOR NO. 1, V-724, HEIGHT: 21 FT 9 IN; DIAMETER: 7 FT 6 IN A/N:	D121				
COLUMN, H2S STRIPPER, V-726, H2S, HEIGHT: 49 FT ; DIAMETER: 6 FT A/N:	D130				
ACCUMULATOR, V-727, STRIPPER OVERHEAD, HEIGHT: 12 FT ; DIAMETER: 3 FT 6 IN A/N:	D131				
DRUM, INHIBITOR BLENDING, V-729, HEIGHT: 5 FT ; DIAMETER: 3 FT 6 IN A/N:	D122				
REACTOR, HYDROTREATER REACTOR NO.2, V-740, HEIGHT: 21 FT 9 IN; DIAMETER: 7 FT 6 IN A/N:	D123				
VESSEL, SEPARATOR, HIGH PRESSURE, V-725, HEIGHT: 20 FT 9 IN; DIAMETER: 6 FT 6 IN A/N:	D129				
DRUM, CHARGE, V-1474, NAPHTHA, HEIGHT: 30 FT ; DIAMETER: 12 FT A/N:	D134				

\* (1) (1A) (1B) Denotes RECLAIM emission factor  
 (2) (2A) (2B) 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 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:

Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions * And Requirements	Conditions
<b>Process 4: HYDROTREATING</b>					P13.1
COMPRESSOR, RECIPROCATING, C-72, HYDROTREATER BOOSTER/RECYCLE GAS A/N:	D140				H23.4
SCRUBBER, V-812, SEP GAS, LENGTH: 4 FT 4 IN; DIAMETER: 1 FT 6 IN A/N:	D1187				
DRUM, LIQUID RECEIVER, V-814, LENGTH: 3 FT ; DIAMETER: 1 FT A/N:	D1188				
VESSEL, DEGASSING, V-728, HEIGHT: 7 FT ; DIAMETER: 3 FT A/N:	D132				
DRUM, DECOKING QUENCH, V-15 A/N:	D1333	D194 D216 D217			
FUGITIVE EMISSIONS, MISCELLANEOUS A/N:	D1447			<b>HAP: (10) [40CFR 63 Subpart CC, #5A, 6-23-2003]</b>	H23.16
<b>System 4: HYDROTREATING UNIT NO. 2 HEATERS</b>					
HEATER, H-500, REFINERY GAS, 69 MMBTU/HR A/N: 469913	D146		NOX: MAJOR SOURCE**; SOX: MAJOR SOURCE**	<b>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]</b>	A63.4, B61.1, D90.7, D328.1, H23.3
<b>System 5: HYDROTREATING UNIT NO. 3</b>					S13.4, S15.2, S15.3, S15.13
VESSEL, SEPARATOR, HIGH PRESSURE, V-767, HEIGHT: 71 FT ; DIAMETER: 6 FT 6 IN A/N: 469915	D147				

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| <ul style="list-style-type: none"> <li>* (1) (1A) (1B) Denotes RECLAIM emission factor</li> <li>(3) Denotes RECLAIM concentration limit</li> <li>(5) (5A) (5B) Denotes command and control emission limit</li> <li>(7) Denotes NSR applicability limit</li> <li>(9) See App B for Emission Limits</li> </ul> | <ul style="list-style-type: none"> <li>(2) (2A) (2B) Denotes RECLAIM emission rate</li> <li>(4) Denotes BACT emission limit</li> <li>(6) Denotes air toxic control rule limit</li> <li>(8) (8A) (8B) Denotes 40 CFR limit (e.g. NSPS, NESHAPS, etc.)</li> <li>(10) See section J for NESHAP/MACT requirements</li> </ul> |
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\*\* Refer to section F and G of this permit to determine the monitoring, recordkeeping and reporting requirements for this device.

## 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:

Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions * And Requirements	Conditions
<b>Process 4: HYDROTREATING</b>					P13.1
DRUM, V-773, SOUR WATER, LENGTH: 26 FT 6 IN; DIAMETER: 4 FT 6 IN A/N: 469915	D159				
DRUM, SURGE, V-774, CONDENSATE, HEIGHT: 9 FT 6 IN; DIAMETER: 3 FT 6 IN A/N: 469915	D148				
REACTOR, V-768/769, 2 TOTAL, HEIGHT: 28 FT ; DIAMETER: 7 FT A/N: 469915	D1189				
VESSEL, SEPARATOR, LOW PRESSURE, V-770, HEIGHT: 25 FT 6 IN; DIAMETER: 4 FT 6 IN A/N: 469915	D149				
VESSEL, FILTER, AVJET, V-1507, HEIGHT: 15 FT ; DIAMETER: 12 FT A/N: 469915	D1668				
VESSEL, SEPARATOR, AVJET, V1508/1509, 2 TOTAL, HEIGHT: 6 FT 9 IN; DIAMETER: 12 FT .75 IN A/N: 469915	D1669				
ACCUMULATOR, V-771, H2S STRIPPER OVERHEAD, LENGTH: 26 FT 6 IN; DIAMETER: 2 FT 6 IN A/N: 469915	D1191				
DRUM, CHARGE, V-1471, DIESEL, HEIGHT: 17 FT 6 IN; DIAMETER: 8 FT 6 IN A/N: 469915	D153				

\* (1) (1A) (1B) Denotes RECLAIM emission factor  
 (2) (2A) (2B) 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 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:

Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions * And Requirements	Conditions
<b>Process 4: HYDROTREATING</b>					P13.1
COLUMN, STRIPPER, V-1475, H2S, HEIGHT: 86 FT 6 IN; DIAMETER: 7 FT A/N: 469915	D155				
COMPRESSOR, C-86, RECYCLE GAS A/N: 469915	D1194				H23.4
COMPRESSOR, C-77, MAKEUP GAS A/N: 469915	D156				H23.4
FUGITIVE EMISSIONS, MISCELLANEOUS A/N: 469915	D1448			<b>HAP: (10) [40CFR 63 Subpart CC, #5A, 6-23-2003]</b>	H23.16
<b>System 6: HYDROTREATING UNIT NO. 3 HEATERS</b>					
HEATER, H-30, REFINERY GAS, WITH LOW NOX BURNER, 48.6 MMBTU/HR WITH A/N: 469917  BURNER, 8 BURNER, REFINERY GAS, WITH LOW NOX BURNER, 48.6 MMBTU/HR	D157		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]	B61.1, D90.7, D328.1, H23.3
HEATER, H-21/H-22, REFINERY GAS, 203.8 MMBTU/HR A/N: 469919	D158		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]	B61.1, D90.7, D328.1, H23.3
<b>System 7: FCCU FEED HYDRODESULFURIZATION UNIT NO. 4</b>					S11.2, S13.2, S13.4, S15.2, S15.3, S15.10, S31.1
REACTOR, GUARD, V-1740, HEIGHT: 21 FT 11 IN; DIAMETER: 12 FT 7 IN A/N:	D1195				

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

\*\* Refer to section F and G of this permit to determine the monitoring, recordkeeping and reporting requirements for this device.

## 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:

Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions * And Requirements	Conditions
<b>Process 4: HYDROTREATING</b>					P13.1
REACTOR, V-1741, HEIGHT: 31 FT 11 IN; DIAMETER: 12 FT 7 IN A/N:	D1326				
COLUMN, H2S STRIPPER, V-1755, HEIGHT: 59 FT 6 IN; DIAMETER: 10 FT 6 IN A/N:	D160				
FRACTIONATOR, V-1757, HEIGHT: 70 FT 6 IN; DIAMETER: 8 FT 6 IN A/N:	D168				
COLUMN, STRIPPER, V-867, HEIGHT: 22 FT 8 IN; DIAMETER: 3 FT 6 IN A/N:	D244				
VESSEL, DRIER, V-1374, LAGO PRODUCT, HEIGHT: 36 FT 6 IN; DIAMETER: 9 FT A/N:	D3				
ABSORBER, AMINE, V-1759, HEIGHT: 49 FT 9 IN; DIAMETER: 2 FT A/N:	D161				
ABSORBER, AMINE, V-1761, HEIGHT: 58 FT ; DIAMETER: 4 FT A/N:	D162				
DRUM, SURGE, V-1751, FEED, HEIGHT: 43 FT ; DIAMETER: 13 FT 6 IN A/N:	D163				
VESSEL, SEPARATOR, LOW PRESSURE, V-1753, HEIGHT: 30 FT 6 IN; DIAMETER: 8 FT 10 IN A/N:	D165				

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|--|--|
| <ul style="list-style-type: none"> <li>* (1) (1A) (1B) Denotes RECLAIM emission factor</li> <li>(3) Denotes RECLAIM concentration limit</li> <li>(5) (5A) (5B) Denotes command and control emission limit</li> <li>(7) Denotes NSR applicability limit</li> <li>(9) See App B for Emission Limits</li> </ul> | <ul style="list-style-type: none"> <li>(2) (2A) (2B) Denotes RECLAIM emission rate</li> <li>(4) Denotes BACT emission limit</li> <li>(6) Denotes air toxic control rule limit</li> <li>(8) (8A) (8B) Denotes 40 CFR limit (e.g. NSPS, NESHAPS, etc.)</li> <li>(10) See section J for NESHAP/MACT requirements</li> </ul> |
|--|--|

\*\* Refer to section F and G of this permit to determine the monitoring, recordkeeping and reporting requirements for this device.

## 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:

Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions * And Requirements	Conditions
<b>Process 4: HYDROTREATING</b>					P13.1
DRUM, V-1816, WWS REBOILER CONDENSATE A/N:	D1334				
DRUM, V-1684, OFFGAS DCU CONDITIONER A/N:	D1335				
ACCUMULATOR, V-2161, STRIPPER OVERHEAD A/N:	D106				
ACCUMULATOR, V-1758, FRACTIONATOR OVERHEAD, HEIGHT: 12 FT ; DIAMETER: 4 FT 6 IN A/N:	D167			<b>HAP: (10) [40CFR 63 Subpart CC, #2, 6-23-2003]</b>	
KNOCK OUT POT, V-1760, AMINE ABSORBER FEED, HEIGHT: 10 FT ; DIAMETER: 3 FT A/N:	D169				
KNOCK OUT POT, V-1762, AMINE ABSORBER OVERHEAD, HEIGHT: 10 FT ; DIAMETER: 3 FT A/N:	D170				
DRUM, V-1765, WASH WATER, LENGTH: 13 FT 6 IN; DIAMETER: 5 FT 6 IN A/N:	D173				
DRUM, FLASH, V-1766, SOUR WATER, HEIGHT: 17 FT ; DIAMETER: 5 FT 6 IN A/N:	D174				
DRUM, V-1815, WWS CONDENSATE A/N:	D1336				

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

\*\* Refer to section F and G of this permit to determine the monitoring, recordkeeping and reporting requirements for this device.

## 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:

Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions * And Requirements	Conditions
<b>Process 4: HYDROTREATING</b>					P13.1
COMPRESSOR, C-134, RECYCLE GAS, 3000 HP A/N:	D176				H23.4
VESSEL, SEPARATOR, V-2049, HOT HIGH PRESSURE, HEIGHT: 18 FT ; DIAMETER: 7 FT 6 IN A/N:	D1112				
DRUM, V-1814, WWS, HEIGHT: 30 FT 9 IN; DIAMETER: 12 FT A/N:	D502				
COLUMN, STRIPPER, V-2350, WASH WATER A/N:	D188				
FILTER, FEED, V-1808/09, 2 TOTAL, HEIGHT: 6 FT 9 IN; DIAMETER: 3 FT 6 IN A/N:	D1566				
FUGITIVE EMISSIONS, MISCELLANEOUS A/N:	D1449			<b>HAP: (10) [40CFR 63 Subpart CC, #5A, 6-23-2003]</b>	H23.16
<b>System 8: FCCU FEED HYDRODESULFURIZATION UNIT NO. 4 HEATERS</b>					
HEATER, H-41, REFINERY GAS, WITH LOW NOX BURNER, 63.2 MMBTU/HR WITH A/N: 469929  BURNER, REFINERY GAS, WITH LOW NOX BURNER, 63.2 MMBTU/HR	D770	C771	NOX: MAJOR SOURCE**; SOX: MAJOR SOURCE**	<b>CO: 2000 PPMV (5) [RULE 407, 4-2-1982]; NOX: 12 PPMV (4) [RULE 2005, 5-6-2005]; PM: (9) [RULE 404, 2-7-1986]; PM: 0.1 GRAINS/SCF (5) [RULE 409, 8-7-1981]</b>	A63.4, B61.1, D90.7, D328.1, E54.7, H23.3

\* (1) (1A) (1B) Denotes RECLAIM emission factor  
 (2) (2A) (2B) 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 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:

Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions * And Requirements	Conditions
<b>Process 4: HYDROTREATING</b>					P13.1
SELECTIVE CATALYTIC REDUCTION, HALDOR TOPSOE DNX 930, FIXED BED REACTOR, VANADIA-TITANIA CATALYST, PLATE TYPE, 144.8 CU.FT. WITH A/N: 469930  INJECTOR, AMMONIA, WITH AMMONIA INJECTION	C771	D770 S989		NH3: 20 PPMV (4) [RULE 1303(a)(1)-BACT, 5-10-1996]	D12.1, D28.4, D29.7, E71.7
STACK A/N: 469930	S989	C771			
<b>System 9: FUEL GAS TREATING SYSTEM</b>					S13.4, S15.2, S18.4
TOWER, V-598, GAS WASH, HEIGHT: 69 FT ; DIAMETER: 5 FT A/N:	D192				
FUGITIVE EMISSIONS, MISCELLANEOUS A/N:	D1380				H23.16
<b>Process 5: CATALYTIC REFORMING</b>					P13.1
<b>System 1: BENSAT</b>					S13.4, S15.2, S15.3, S31.1
DRUM, SURGE, V-2070, FEED A/N: 470280	D976				
VESSEL, V-606, SULFUR GUARD BED, HEIGHT: 12 FT ; DIAMETER: 5 FT A/N: 470280	D977				
REACTOR, V-607, HEIGHT: 24 FT ; DIAMETER: 5 FT A/N: 470280	D1061				

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

Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions * And Requirements	Conditions
<b>Process 5: CATALYTIC REFORMING</b>					P13.1
GAS SEPARATOR, V-611, REACTOR EFFLUENT A/N: 470280	D979				
COLUMN, STABILIZER, V-595 A/N: 470280	D980				
ACCUMULATOR, STABILIZER, V-608, HEIGHT: 18 FT ; DIAMETER: 3 FT 6 IN A/N: 470280	D1071				
POT, V-1999, STABILIZER REBOILER CONDENSATE, HEIGHT: 4 FT 11 IN; DIAMETER: 2 FT A/N: 470280	D1337				
COMPRESSOR, C-152, H2 MAKE-UP A/N: 470280	D1338				H23.4
FUGITIVE EMISSIONS, MISCELLANEOUS A/N: 470280	D1381			<b>HAP: (10) [40CFR 63 Subpart CC, #5A, 6-23-2003]</b>	H23.16
<b>System 2: CATALYTIC REFORMING UNIT NO. 1 HEATERS</b>					
HEATER, H-11, PROCESS GAS, WITH LOW NOX BURNER, 81 MMBTU/HR WITH A/N: 469957  BURNER, REFINERY GAS, JOHN ZINK, PSFFG-30, WITH LOW NOX BURNER, 81 MMBTU/HR	D194	D1333 D1343	NOX: LARGE SOURCE**, SOX: MAJOR SOURCE**	<b>CO: 2000 PPMV (5) [RULE 407, 4-2-1982]; NOX: 83.8 PPMV (3) [RULE 2012, 5-6-2005]; PM: (9) [RULE 404, 2-7-1986]; PM: 0.1 GRAINS/SCF (5) [RULE 409, 8-7-1981]</b>	B61.1, C1.15, D90.7, D328.1, E313.1, E315.1, H23.3

\* (1) (1A) (1B) Denotes RECLAIM emission factor  
 (2) (2A) (2B) 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 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:

Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions * And Requirements	Conditions
<b>Process 5: CATALYTIC REFORMING</b>					P13.1
HEATER, H-20, REFINERY GAS, WITH LOW NOX BURNER, 76.8 MMBTU/HR WITH  A/N: 469958          BURNER, REFINERY GAS, JOHN ZINK, PSFGG-30A AND PSFGG-10A, WITH LOW NOX BURNER, 76.8 MMBTU/HR	D196		NOX: LARGE SOURCE**; SOX: MAJOR SOURCE**	CO: 2000 PPMV (5) [RULE 407, 4-2-1982]; NOX: 83.8 PPMV (3) [RULE 2012, 5-6-2005]; PM: (9) [RULE 404, 2-7-1986]; PM: 0.1 GRAINS/SCF (5) [RULE 409, 8-7-1981]	B61.1, C1.15, D90.7, D328.1, E313.1, E315.1, H23.3
<b>System 3: CATALYTIC REFORMING UNIT NO. 2</b>					S13.4, S15.2, S15.3, S31.1
REACTOR, NO. 1, V-735, HEIGHT: 14 FT ; DIAMETER: 12 FT 6 IN A/N: 470283	D1197			HAP: (10) [40CFR 63 Subpart UUU, #1, 4-20-2006]	
REACTOR, NO. 2, V-736, HEIGHT: 21 FT ; DIAMETER: 12 FT 6 IN A/N: 470283	D1198			HAP: (10) [40CFR 63 Subpart UUU, #1, 4-20-2006]	
REACTOR, NO. 3A, V-737, HEIGHT: 20 FT ; DIAMETER: 12 FT 6 IN A/N: 470283	D1199			HAP: (10) [40CFR 63 Subpart UUU, #1, 4-20-2006]	
REACTOR, NO. 3B, V-738, HEIGHT: 14 FT ; DIAMETER: 12 FT 6 IN A/N: 470283	D1200			HAP: (10) [40CFR 63 Subpart UUU, #1, 4-20-2006]	
VESSEL, SEPARATOR, V-739, REACTOR PRODUCT, LENGTH: 24 FT ; DIAMETER: 9 FT 6 IN A/N: 470283	D197				
COLUMN, DEBUTANIZER, V-741, HEIGHT: 75 FT ; DIAMETER: 7 FT A/N: 470283	D198				

\* (1) (1A) (1B) Denotes RECLAIM emission factor  
 (2) (2A) (2B) 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 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:

Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions * And Requirements	Conditions
<b>Process 5: CATALYTIC REFORMING</b>					P13.1
VESSEL, RECEIVER, V-742, DEBUTANIZER PRODUCT, LENGTH: 20 FT ; DIAMETER: 5 FT A/N: 470283	D199				
COLUMN, SPLITTER, V-743, HEIGHT: 72 FT 6 IN; DIAMETER: 8 FT A/N: 470283	D200				
VESSEL, RECEIVER, V-744, SPLITTER PRODUCT, LENGTH: 20 FT ; DIAMETER: 5 FT A/N: 470283	D201				
DRUM, HALIDE, V-746/747, 2 TOTAL, INJECTION CHEMICAL, HEIGHT: 5 FT ; DIAMETER: 1 FT 6 IN A/N: 470283	D203				
TANK, PERCHLOROETHYLENE, 300 GALS; WIDTH: 4 FT ; HEIGHT: 3 FT 6 IN; LENGTH: 3 FT 6 IN A/N: 470283	D1120				C1.2, D90.19
DRUM, SURGE, V-2071, FEED PREP, HEAVY NAPHTHA, HEIGHT: 15 FT ; DIAMETER: 6 FT A/N: 470283	D1203				
VESSEL, V-2235, SULFUR GUARD BED, HEIGHT: 17 FT ; DIAMETER: 6 FT 5 IN A/N: 470283	D1501				
TOWER, FEED PREP, V-732, HEIGHT: 87 FT ; DIAMETER: 13 FT A/N: 470283	D1204				

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

Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions * And Requirements	Conditions
<b>Process 5: CATALYTIC REFORMING</b>					P13.1
TOWER, SIDE SPLITTER, V-733, HEIGHT: 29 FT ; DIAMETER: 6 FT A/N: 470283	D1205				
POT, V-1992, SPLITTER REBOILER CONDENSATE, HEIGHT: 6 FT ; DIAMETER: 3 FT A/N: 470283	D1206				
DRUM, V-2005, SPLITTER WATER DRAW, HEIGHT: 5 FT ; DIAMETER: 1 FT 6 IN A/N: 469959	D1207				
COMPRESSOR, C-73, RECYCLE GAS, CENTRIFUGAL, (VH-504) A/N: 470283	D209				
ACCUMULATOR, V-734, FEED PREP OVERHEAD, HEIGHT: 37 FT ; DIAMETER: 7 FT A/N: 470283	D210				
FUGITIVE EMISSIONS, MISCELLANEOUS A/N: 470283	D1451			<b>HAP: (10) [40CFR 63 Subpart CC, #5A, 6-23-2003]</b>	H23.5
<b>System 4: CATALYTIC REFORMING UNIT NO. 2 HEATERS</b>					
HEATER, H-510, REFINERY GAS, WITH LOW NOX BURNER, 60 MMBTU/HR WITH A/N: 469960  BURNER, 6 BURNERS, REFINERY GAS, WITH LOW NOX BURNER, 60 MMBTU/HR	D218		NOX: MAJOR SOURCE**; SOX: MAJOR SOURCE**	<b>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]</b>	A63.4, B61.1, D90.7, D328.1, H23.3

\* (1) (1A) (1B) Denotes RECLAIM emission factor  
 (2) (2A) (2B) 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 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:

Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions * And Requirements	Conditions
<b>Process 5: CATALYTIC REFORMING</b>					P13.1
HEATER, H-501A, REFINERY GAS, WITH LOW NOX BURNER, AIR PREHEATING, 31.4 MMBTU/HR WITH  A/N: 470285  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, D90.7, D328.2, E448.1, H23.3
HEATER, H-501B, REFINERY GAS, WITH LOW NOX BURNER, AIR PREHEATING, 31.4 MMBTU/HR WITH  A/N: 470286  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, D90.7, D328.2, E448.1, H23.3
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, E448.1, H23.3

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

Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions * And Requirements	Conditions
<b>Process 5: CATALYTIC REFORMING</b>					P13.1
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, E448.1, H23.3
SELECTIVE CATALYTIC REDUCTION, HALDOR TOPSOE DNX 930, FIXED BED REACTOR, VANADIA-TITANIA CATALYST HONEYCOMB TYPE, 78 CU.FT. WITH  A/N: 469966  INJECTOR, AMMONIA, WITH AMMONIA INJECTION	C773	D214 D215 D216 D217 S990		NH3: 20 PPMV (4) [RULE 1303(a)(1)-BACT, 5-10-1996]	D12.1, D28.4, D29.7, E71.7
STACK A/N: 469966	S990	D214 D215 D216 D217 C773			
<b>System 5: CATALYTIC REFORMING UNIT NO. 3</b>					S13.4, S15.2, S15.3, S31.1
DRUM, SURGE, V-855, PLATFORMER CHARGE, LENGTH: 30 FT ; DIAMETER: 10 FT A/N: 470287	D219				
REACTOR, NO. 1, V-856, HEIGHT: 21 FT ; DIAMETER: 7 FT A/N: 470287	D1208			HAP: (10) [40CFR 63 Subpart UUU, #1, 4-20-2006]	

\* (1) (1A) (1B) Denotes RECLAIM emission factor  
 (2) (2A) (2B) 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 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:

Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions * And Requirements	Conditions
<b>Process 5: CATALYTIC REFORMING</b>					P13.1
REACTOR, NO. 2, V-857, HEIGHT: 21 FT 6 IN; DIAMETER: 8 FT A/N: 470287	D1209			HAP: (10) [40CFR 63 Subpart UUU, #1, 4-20-2006]	
REACTOR, NO. 3, V-858, HEIGHT: 21 FT 6 IN; DIAMETER: 9 FT A/N: 470287	D1210			HAP: (10) [40CFR 63 Subpart UUU, #1, 4-20-2006]	
VESSEL, SEPARATOR, V-859, REACTOR PRODUCT, HEIGHT: 18 FT ; DIAMETER: 8 FT A/N: 470287	D220				
DRUM, FLASH, V-861, HEIGHT: 16 FT ; DIAMETER: 7 FT A/N: 470287	D221				
COLUMN, DEBUTANIZER, V-862, HEIGHT: 89 FT ; DIAMETER: 10 FT 6 IN A/N: 470287	D222				
VESSEL, RECEIVER, V-863, DEBUTANIZER PRODUCT, LENGTH: 20 FT ; DIAMETER: 6 FT A/N: 470287	D223				
COLUMN, DEPROPANIZER, V-864, HEIGHT: 92 FT ; DIAMETER: 4 FT A/N: 470287	D224				
VESSEL, RECEIVER, V-865, DEPROPANIZER PRODUCT, HEIGHT: 16 FT ; DIAMETER: 4 FT 6 IN A/N: 470287	D225				
COLUMN, DEPENTANIZER, V-866, HEIGHT: 98 FT ; DIAMETER: 10 FT A/N: 470287	D226				

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

Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions * And Requirements	Conditions
<b>Process 5: CATALYTIC REFORMING</b>					P13.1
VESSEL, DEPENTANIZER COLUMN RECEIVER, V-868, LENGTH: 20 FT ; DIAMETER: 8 FT A/N: 470287	D227			HAP: (10) [40CFR 63 Subpart CC, #1, 6-23-2003]	
TANK, PERCHLOROETHYLENE, 300 GALS; WIDTH: 4 FT ; HEIGHT: 3 FT 6 IN; LENGTH: 3 FT 6 IN A/N: 469967	D1121				C1.2, D90.19
DRUM, CHEMICAL INJECTION, V-870, HEIGHT: 4 FT ; DIAMETER: 1 FT A/N: 470287	D1212				
ABSORBER, CHLORIDE, V-1485, HEIGHT: 20 FT ; DIAMETER: 6 FT A/N: 470287	D1213			HAP: (10) [40CFR 63 Subpart UUU, #1, 4-20-2006]	
COMPRESSOR, C-89, RECYCLE GAS A/N: 470287	D229				
FUGITIVE EMISSIONS, MISCELLANEOUS A/N: 470287	D1384			HAP: (10) [40CFR 63 Subpart CC, #5A, 6-23-2003]	H23.5
<b>System 6: CATALYTIC REFORMING UNIT NO. 3 HEATERS</b>					
HEATER, H-200, REFINERY GAS, WITH LOW NOX BURNER, AIR PREHEATING, 82.2 MMBTU/HR WITH A/N: 469970  BURNER, REFINERY GAS, WITH LOW NOX BURNER, 82.2 MMBTU/HR	D247	C775 S992	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]	B61.1, D90.7, D328.1, E54.6, E54.16, H23.3

\* (1) (1A) (1B) Denotes RECLAIM emission factor  
 (2) (2A) (2B) 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 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:

Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions * And Requirements	Conditions
<b>Process 5: CATALYTIC REFORMING</b>					P13.1
HEATER, H-201, REFINERY GAS, WITH LOW NOX BURNER, AIR PREHEATING, 49.9 MMBTU/HR WITH  A/N: 469974  BURNER, REFINERY GAS, WITH LOW NOX BURNER, 49.9 MMBTU/HR	D248	C775 S992	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]	B61.1, D90.7, D328.1, E54.6, E54.16, H23.3
HEATER, H-202, REFINERY GAS, WITH LOW NOX BURNER, AIR PREHEATING, 28.5 MMBTU/HR WITH  A/N: 469976  BURNER, REFINERY GAS, MCGILL, MODEL PSRGR-7, WITH LOW NOX BURNER, 28.5 MMBTU/HR	D249	C775 S992	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]	B61.1, D90.7, D328.2, E54.6, E54.16, H23.3
SELECTIVE CATALYTIC REDUCTION, HALDOR TOPSOE DNX 940, FIXED BED REACTOR, VANADIA-TITANIA CATALYST, HONEYCOMB TYPE, 128 CU.FT. WITH  A/N: 469985  INJECTOR, AMMONIA, WITH AMMONIA INJECTION	C775	D247 D248 D249 S992		NH3: 20 PPMV (4) [RULE 1303(a)(1)-BACT, 5-10-1996]	D12.1, D28.4, D29.7, E71.7
STACK  A/N: 469985	S992	D247 D248 D249 C775			

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

Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions * And Requirements	Conditions
<b>Process 5: CATALYTIC REFORMING</b>					P13.1
HEATER, H-203, REFINERY GAS, WITH LOW NOX BURNER, 35 MMBTU/HR WITH A/N: 469986  BURNER, REFINERY GAS, JOHN ZINK, MODEL PNDR-20M, WITH LOW NOX BURNER, 35 MMBTU/HR	D250		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]	B61.1, D90.7, D328.2, H23.3
HEATER, H-204, REFINERY GAS, 69 MMBTU/HR WITH A/N: 469987  BURNER, REFINERY GAS, JOHN ZINK, MODEL SMR-20, 4 TOTAL, WITH LOW NOX BURNER, 69 MMBTU/HR	D251		NOX: LARGE SOURCE**, SOX: MAJOR SOURCE**	CO: 2000 PPMV (5) [RULE 407, 4-2-1982]; NOX: 41.6 PPMV REFINERY GAS (3) [RULE 2012, 5-6-2005]; PM: (9) [RULE 404, 2-7-1986]; PM: 0.1 GRAINS/SCF (5) [RULE 409, 8-7-1981]	B59.1, B61.1, C1.15, D90.7, D328.1, H23.3
<b>Process 6: HYDROGEN GENERATION</b>					P13.1
<b>System 1: HYDROGEN GENERATION UNIT NO. 1</b>					S2.1, S11.1, S13.4, S15.2, S15.3, S31.1
TANK, CONDENSATE, TK-7203, HEIGHT: 32 FT ; DIAMETER: 42 FT A/N: 470288	D1217				

\* (1) (1A) (1B) Denotes RECLAIM emission factor  
 (2) (2A) (2B) 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 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:

Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions * And Requirements	Conditions
<b>Process 6: HYDROGEN GENERATION</b>					P13.1
COLUMN, WASHING/STRIPPING, V-1042, HEIGHT: 68 FT ; DIAMETER: 7 FT 6 IN A/N: 470288	D276				
COMPRESSOR, C-82 A/N: 470288	D922				H23.16
COMPRESSOR, C-83, DCU OFF GAS A/N: 470288	D923				H23.16
COMPRESSOR, C-84/85, HYDROGEN, 2 TOTAL A/N: 470288	D305				
SCRUBBER, V-987, COPPER LIQUOR, HEIGHT: 96 FT ; DIAMETER: 5 FT A/N: 470288	D307				
KNOCK OUT POT, V-1969, HEIGHT: 7 FT ; DIAMETER: 4 FT A/N: 470288	D780				
SCRUBBER, V-1890, AMMONIA, HEIGHT: 8 FT ; DIAMETER: 6 FT A/N: 470288	D781				
<b>System 3: HYDROGEN GENERATION UNIT NO. 2</b>					S2.1, S13.2, S13.4, S15.2
ABSORBER, PSA, V-1769/78, 10 TOTAL A/N: 469989	D317				
VESSEL, SEPARATOR, V-1782, PROCESS CONDENSATE A/N: 469989	D319				
REACTOR, DESULFURIZATION, V-1783 A/N: 469989	D320				

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| <ul style="list-style-type: none"> <li>* (1) (1A) (1B) Denotes RECLAIM emission factor</li> <li>(3) Denotes RECLAIM concentration limit</li> <li>(5) (5A) (5B) Denotes command and control emission limit</li> <li>(7) Denotes NSR applicability limit</li> <li>(9) See App B for Emission Limits</li> </ul> | <ul style="list-style-type: none"> <li>(2) (2A) (2B) Denotes RECLAIM emission rate</li> <li>(4) Denotes BACT emission limit</li> <li>(6) Denotes air toxic control rule limit</li> <li>(8) (8A) (8B) Denotes 40 CFR limit (e.g. NSPS, NESHAPS, etc.)</li> <li>(10) See section J for NESHAP/MACT requirements</li> </ul> |
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\*\* Refer to section F and G of this permit to determine the monitoring, recordkeeping and reporting requirements for this device.

## 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:

Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions * And Requirements	Conditions
<b>Process 6: HYDROGEN GENERATION</b>					P13.1
REACTOR, ZINC OXIDE, V-1784/1785, 2 TOTAL A/N: 469989	D321				
REACTOR, HIGH TEMP/SHIFT, V-1786 A/N: 469989	D323				
DRUM, BLOWDOWN FLASH, V-1787 A/N: 469989	D1255				
DRUM, CONDENSATE DEGASER, V-1795 A/N: 469989	D1256				
COMPRESSOR, C-146/147, FEED GAS, 2 TOTAL, EACH 400 HP A/N: 469989	D333				H23.4
COMPRESSOR, C-148, HYDROGEN PRODUCT, 1750 HP A/N: 469989	D335				
FILTER, V-1845/1846, FEED GAS COMP DUPLEX A/N: 469989	D1257				
FILTER, V-1847, HYDROGEN PRODUCT COMP DUPLEX A/N: 469989	D1258				
DRUM, PURGE GAS SURGE, V-1779 A/N: 469989	D1339				
FUGITIVE EMISSIONS, MISCELLANEOUS A/N: 469989	D1453				H23.16
<b>System 4: HYDROGEN GENERATION UNIT NO. 2 HEATERS</b>					

\* (1) (1A) (1B) Denotes RECLAIM emission factor  
 (2) (2A) (2B) 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 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:

Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions * And Requirements	Conditions
<b>Process 6: HYDROGEN GENERATION</b>					P13.1
FURNACE, H-42, PSA GAS, REFINERY GAS, STEAM METHANE REFORMER FURNACE, 145.97 MMBTU/HR WITH A/N: 469990  GENERATOR, ELECTRICITY, STEAM TURBINE, 22.85 MW  HEATER, CC-2, MIXED FEED PREHEATER  HEATER, CC-3, STEAM SUPERHEATER	D777	C778	NOX: MAJOR SOURCE**; SOX: MAJOR SOURCE**	CO: 2000 PPMV (5) [RULE 407, 4-2-1982]; NOX: 12 PPMV (4) [RULE 2005, 5-6-2005]; PM: (9) [RULE 404, 2-7-1986]; PM: 0.1 GRAINS/SCF (5) [RULE 409, 8-7-1981]	B61.1, D90.7, D90.16, D328.1, E54.8, H23.3
SELECTIVE CATALYTIC REDUCTION, CORMETECH, W/A FIXED BED REACTOR, VANADIA-TITANIA CATALYST, 325 CU.FT. WITH A/N: 469991  INJECTOR, AMMONIA, WITH AMMONIA INJECTION	C778	D777 S993 D1122		NH3: 20 PPMV (4) [RULE 1303(a)(1)-BACT, 5-10-1996]	D12.1, D28.4, D29.7, E71.7

\* (1) (1A) (1B) Denotes RECLAIM emission factor  
 (2) (2A) (2B) 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 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:

Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions * And Requirements	Conditions
<b>Process 6: HYDROGEN GENERATION</b>					P13.1
BOILER, H-43, AUXILIARY, NATURAL GAS, REFINERY GAS, 139.5 MMBTU/HR WITH A/N: 469992  BURNER, NATURAL GAS, REFINERY GAS, COEN, MODEL 675, 139.5 MMBTU/HR, AND 4 JOHN ZINK TRIM BRNRS, EA 9.4 MMBTU/HR, WITH LOW NOX BURNER, 139.5 MMBTU/HR	D1122	C778	NOX: MAJOR SOURCE**; SOX: MAJOR SOURCE**	CO: 2000 PPMV (5) [RULE 407, 4-2-1982]; NOX: 0.1 LBS/MMBTU (8) [40CFR 60 Subpart Db, 1-28-2009]; NOX: 12 PPMV (4) [RULE 2005, 5-6-2005]; PM: 0.1 GRAINS/SCF (5) [RULE 409, 8-7-1981]	A63.4, B61.1, D90.7, D90.16, D328.1, E54.10, H23.29
STACK A/N: 469993	S993	C778			
<b>Process 8: HYDROCRACKING</b>					P13.1
<b>System 1: HYDROCRACKING UNIT</b>					S11.3, S13.4, S15.2, S15.3, S15.10, S31.1
REACTOR, V-993, HEIGHT: 58 FT 3 IN; DIAMETER: 10 FT A/N:	D371				
REACTOR, V-994, HEIGHT: 68 FT 10 IN; DIAMETER: 10 FT A/N:	D372				
REACTOR, V-995, HEIGHT: 74 FT 10 IN; DIAMETER: 8 FT 6 IN A/N:	D373				
DRUM, SURGE, V-996, HEIGHT: 28 FT ; DIAMETER: 11 FT 6 IN A/N:	D340				

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| <ul style="list-style-type: none"> <li>* (1) (1A) (1B) Denotes RECLAIM emission factor</li> <li>(3) Denotes RECLAIM concentration limit</li> <li>(5) (5A) (5B) Denotes command and control emission limit</li> <li>(7) Denotes NSR applicability limit</li> <li>(9) See App B for Emission Limits</li> </ul> | <ul style="list-style-type: none"> <li>(2) (2A) (2B) Denotes RECLAIM emission rate</li> <li>(4) Denotes BACT emission limit</li> <li>(6) Denotes air toxic control rule limit</li> <li>(8) (8A) (8B) Denotes 40 CFR limit (e.g. NSPS, NESHAPS, etc.)</li> <li>(10) See section J for NESHAP/MACT requirements</li> </ul> |
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\*\* Refer to section F and G of this permit to determine the monitoring, recordkeeping and reporting requirements for this device.

## 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:

Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions * And Requirements	Conditions
<b>Process 8: HYDROCRACKING</b>					P13.1
VESSEL, SEPARATOR, HIGH PRESSURE, V-997, HEIGHT: 34 FT ; DIAMETER: 10 FT A/N:	D341				
VESSEL, SEPARATOR, LOW PRESSURE, V-998, HEIGHT: 26 FT ; DIAMETER: 7 FT 6 IN A/N:	D342				
FRACTIONATOR, V-1001, HEIGHT: 144 FT ; DIAMETER: 15 FT A/N:	D344				
VESSEL, STRIPPER, V-1002, HEAVY NAPHTHA, HEIGHT: 33 FT 6 IN; DIAMETER: 6 FT A/N:	D345				
VESSEL, STRIPPER, V-1003, MEDIUM NAPHTHA, HEIGHT: 31 FT 6 IN; DIAMETER: 6 FT A/N:	D1259				
ACCUMULATOR, V-1004, FRACTIONATOR REFLUX, LENGTH: 22 FT 6 IN; DIAMETER: 9 FT A/N:	D1260				
ACCUMULATOR, V-1005, FRACTIONATOR OVERHEAD, LENGTH: 18 FT ; DIAMETER: 7 FT A/N:	D346			<b>HAP: (10) [40CFR 63 Subpart CC, #2, 6-23-2003]</b>	
ABSORBER, V-1006, LEAN OIL, HEIGHT: 50 FT ; DIAMETER: 3 FT A/N:	D374				

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

Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions * And Requirements	Conditions
<b>Process 8: HYDROCRACKING</b>					P13.1
COLUMN, DEPROPANIZER, V-1007, HEIGHT: 106 FT ; DIAMETER: 7 FT 6 IN A/N:	D347				
DRUM, V-1008, DEPROPANIZER REFLUX, LENGTH: 13 FT 6 IN; DIAMETER: 4 FT 6 IN A/N:	D348				
COLUMN, DEBUTANIZER, V-1009, HEIGHT: 93 FT 6 IN; DIAMETER: 5 FT 6 IN A/N:	D349				
DRUM, V-1010, DEBUTANIZER REFLUX, HEIGHT: 14 FT ; DIAMETER: 5 FT A/N:	D350				
SCRUBBER, V-1011, AMINE, HEIGHT: 51 FT ; DIAMETER: 5 FT 6 IN A/N:	D351				
DRUM, FLASH, V-1012, CONDENSATE, LENGTH: 10 FT ; DIAMETER: 3 FT 6 IN A/N:	D375				
DRUM, FRACTIONATOR COMPRESSOR SUCTION, V-1695, HEIGHT: 8 FT ; DIAMETER: 5 FT A/N:	D352				
POT, V-1025, DEPROPANIZER REBOILER CONDENSATE, LENGTH: 12 FT ; DIAMETER: 1 FT 5 IN A/N:	D376				

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

## 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:

Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions * And Requirements	Conditions
<b>Process 8: HYDROCRACKING</b>					P13.1
POT, V-1026, DEBUTANIZER REBOILER CONDENSATE, LENGTH: 12 FT ; DIAMETER: 1 FT 5 IN A/N:	D928				
VESSEL, SEPARATOR, V-2036, COKER GAS OIL, HEIGHT: 5 FT 2 IN; DIAMETER: 1 FT A/N:	D355				
VESSEL, SEPARATOR, V-1087, FCC GAS OIL SOLIDS, HEIGHT: 5 FT 2 IN; DIAMETER: 1 FT A/N:	D356				
VESSEL, COALESCER, V-1088, FCC GAS OIL, LENGTH: 10 FT ; DIAMETER: 3 FT A/N:	D357				
VESSEL, COALESCER, V-1089, COKER GAS OIL, LENGTH: 10 FT ; DIAMETER: 3 FT A/N:	D358				
VESSEL, EFFLUENT COALESCER, V-1090, LENGTH: 15 FT ; DIAMETER: 5 FT A/N:	D1265				
DRUM, INJECTION, V-1122, DIMETHYL DISULFIDE, LENGTH: 10 FT ; DIAMETER: 3 FT A/N:	D359				
COMPRESSOR, C-93, RECYCLE GAS A/N:	D364				

\* (1) (1A) (1B) Denotes RECLAIM emission factor  
 (2) (2A) (2B) 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 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:

Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions * And Requirements	Conditions
<b>Process 8: HYDROCRACKING</b>					P13.1
COMPRESSOR, FRACTIONATOR NO.1 & 2, C-94/95, 2 TOTAL, RECIPROCATING TYPE A/N:	D930				
TOWER, DEA, V-1621, HEIGHT: 37 FT 6 IN; DIAMETER: 3 FT A/N:	D932				
KNOCK OUT POT, V-1622, LIQUID, HEIGHT: 7 FT 3 IN; DIAMETER: 1 FT 2 IN A/N:	D1266				
MIST ELIMINATOR, V-1623, HEIGHT: 9 FT ; DIAMETER: 2 FT 6 IN A/N:	D933				
VESSEL, SEPARATOR, MEMBRANE, V-1624-38, 15 TOTAL, HEIGHT: 12 FT 5 IN; DIAMETER: 8 FT A/N:	D934				
COMPRESSOR, C-141, RECIPROCATING TYPE A/N:	D377				H23.4
DRUM, SECOND STAGE CHARGE, V-1965, LENGTH: 10 FT ; DIAMETER: 3 FT A/N:	D1340				
KNOCK OUT POT, LIQUID, V-1995, LENGTH: 10 FT ; DIAMETER: 3 FT A/N:	D1341				
FILTER, V-1967, STRIPPED WATER, LENGTH: 10 FT ; DIAMETER: 3 FT A/N:	D1342				

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

\*\* Refer to section F and G of this permit to determine the monitoring, recordkeeping and reporting requirements for this device.

## 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:

Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions * And Requirements	Conditions
<b>Process 8: HYDROCRACKING</b>					P13.1
DRUM, SURGE, V-1966, WASH WATER, HEIGHT: 13 FT 6 IN; DIAMETER: 5 FT 6 IN A/N:	D1530				
DRUM, V-1972, FLASH, FOUL WATER, LENGTH: 10 FT ; DIAMETER: 6 FT A/N:	D1531				
COMPRESSOR, HYDROGEN, C-91/92, 2 TOTAL, RECIPROCATING TYPE A/N:	D245				
COMPRESSOR, C-98 A/N:	D102				
FUGITIVE EMISSIONS, MISCELLANEOUS A/N:	D1454			<b>HAP: (10) [40CFR 63 Subpart CC, #5A, 6-23-2003]</b>	H23.5
<b>System 2: HYDROCRACKING HEATERS</b>					
HEATER, H-300, REFINERY GAS, WITH LOW NOX BURNER, 47.6 MMBTU/HR WITH A/N: 469994  BURNER, 16 BURNERS, REFINERY GAS, WITH LOW NOX BURNER, 47.6 MMBTU/HR	D384	C784 S994	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]	B61.1, D90.7, D328.1, E54.5, E54.15, H23.3

\* (1) (1A) (1B) Denotes RECLAIM emission factor  
 (2) (2A) (2B) 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 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:

Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions * And Requirements	Conditions
<b>Process 8: HYDROCRACKING</b>					P13.1
HEATER, H-301, REFINERY GAS, WITH LOW NOX BURNER, 23.5 MMBTU/HR WITH  A/N: 469995          BURNER, 6 BURNERS, REFINERY GAS, WITH LOW NOX BURNER, 23.5 MMBTU/HR	D385	C784 S994	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]	B61.1, D90.7, D328.2, E54.5, E54.15, H23.3
SELECTIVE CATALYTIC REDUCTION, ENGLEHARD, W/ A FIXED BED REACTOR, VANADIA-TITANIA CATALYST, HONEYCOMB TYPE, 59 CU.FT. WITH  A/N: 469996          INJECTOR, AMMONIA, WITH AMMONIA INJECTION	C784	D384 D385 S994		NH3: 20 PPMV (4) [RULE 1303(a)(1)-BACT, 5-10-1996]	D12.1, D28.4, E71.7
STACK A/N: 469996	S994	D384 D385 C784			
HEATER, H-302, REFINERY GAS, WITH LOW NOX BURNER, 47.6 MMBTU/HR WITH  A/N: 469997          BURNER, 16 BURNERS, REFINERY GAS, WITH LOW NOX BURNER, 47.6 MMBTU/HR	D386	S692 C786	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]	B61.1, D90.7, D328.1, E54.4, E54.14, H23.3

\* (1) (1A) (1B) Denotes RECLAIM emission factor  
 (2) (2A) (2B) 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 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:

Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions * And Requirements	Conditions
<b>Process 8: HYDROCRACKING</b>					P13.1
HEATER, H-303, REFINERY GAS, WITH LOW NOX BURNER, 71.4 MMBTU/HR WITH  A/N: 469998  BURNER, 8 BURNERS, REFINERY GAS, WITH LOW NOX BURNER, 71.4 MMBTU/HR	D387	S692 C786	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]	B61.1, D90.7, D328.1, E54.4, E54.14, H23.3
SELECTIVE CATALYTIC REDUCTION, ENGLEHARD, W/ A FIXED BED REACTOR, VANADIA-TITANIA CATALYST, HONEYCOMB TYPE, 78 CU.FT. WITH  A/N: 469999  INJECTOR, AMMONIA, WITH AMMONIA INJECTION	C786	D386 D387 S692		NH3: 20 PPMV (4) [RULE 1303(a)(1)-BACT, 5-10-1996]	D12.1, D28.4, D29.3, E71.7
STACK A/N: 469999	S692	D386 D387 C786			
HEATER, H-304, REFINERY GAS, WITH LOW NOX BURNER, 147 MMBTU/HR WITH  A/N: 470000  BURNER, 10 BURNERS, REFINERY GAS, MCGILL, MODEL STR-13T, WITH LOW NOX BURNER, 147 MMBTU/HR	D388	C788 S995	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]	B61.1, D90.7, D328.1, E54.3, E54.13, H23.3

\* (1) (1A) (1B) Denotes RECLAIM emission factor  
 (2) (2A) (2B) 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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## 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:

Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions * And Requirements	Conditions
<b>Process 8: HYDROCRACKING</b>					P13.1
SELECTIVE CATALYTIC REDUCTION, ENGLEHARD, W/ A FIXED BED REACTOR, VANADIA-TITANIA CATALYST, HONEYCOMB TYPE, 104 CU.FT. WITH  A/N: 470001  INJECTOR, AMMONIA, WITH AMMONIA INJECTION	C788	D388 S995		NH3: 20 PPMV (4) [RULE 1303(a)(1)-BACT, 5-10-1996]	D12.1, D28.4, E71.7
STACK A/N: 470001	S995	D388 C788			
<b>Process 9: ALKYLATION</b>					P13.1
<b>System 1: ALKYLATION UNIT</b>					S13.4, S15.2, S15.5, S31.1
FILTER, SALT, V-579, PROPANE, LENGTH: 25 FT 4 IN; DIAMETER: 5 FT A/N: 470290	D390				
VESSEL, SALT DRIER, V-582, LENGTH: 15 FT 8 IN; DIAMETER: 4 FT A/N: 470290	D391				
VESSEL, V-1407, BUTYLENE COALESCER, LENGTH: 13 FT 2 IN; DIAMETER: 3 FT 6 IN A/N: 470290	D392				
VESSEL, COALESCER, V-1408, OLEFIN, LENGTH: 10 FT 5 IN; DIAMETER: 1 FT 8 IN A/N: 470290	D393				

\* (1) (1A) (1B) Denotes RECLAIM emission factor  
 (2) (2A) (2B) 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 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:

Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions * And Requirements	Conditions
<b>Process 9: ALKYLATION</b>					P13.1
SETTLING TANK, 1ST STAGE, V-1409, ACID, LENGTH: 50 FT ; DIAMETER: 12 FT 6 IN A/N: 470290	D394				
SETTLING TANK, 2ND STAGE, V-1410, ACID, LENGTH: 50 FT ; DIAMETER: 12 FT 6 IN A/N: 470290	D395				
TANK, FLASH, V-1411, REACTOR EFFLUENT, LENGTH: 30 FT 6 IN; DIAMETER: 8 FT 6 IN A/N: 470290	D396				
TANK, FLASH, V-1414, REFRIGERANT, LENGTH: 24 FT ; DIAMETER: 6 FT 6 IN A/N: 470290	D397				
ACCUMULATOR, V-1416, REFRIGERANT, LENGTH: 18 FT ; DIAMETER: 5 FT A/N: 470290	D399				
ACCUMULATOR, V-1953, DEPROPANIZER FEED, LENGTH: 20 FT ; DIAMETER: 4 FT 6 IN A/N: 470290	D400				
DRUM, BLOWDOWN, V-1418, ACID, LENGTH: 27 FT ; DIAMETER: 10 FT A/N: 470290	D401				
SCRUBBER, CAUSTIC, V-1419, ACID VAPOR, LENGTH: 16 FT ; DIAMETER: 8 FT A/N: 470290	D402				

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| <ul style="list-style-type: none"> <li>* (1) (1A) (1B) Denotes RECLAIM emission factor</li> <li>(3) Denotes RECLAIM concentration limit</li> <li>(5) (5A) (5B) Denotes command and control emission limit</li> <li>(7) Denotes NSR applicability limit</li> <li>(9) See App B for Emission Limits</li> </ul> | <ul style="list-style-type: none"> <li>(2) (2A) (2B) Denotes RECLAIM emission rate</li> <li>(4) Denotes BACT emission limit</li> <li>(6) Denotes air toxic control rule limit</li> <li>(8) (8A) (8B) Denotes 40 CFR limit (e.g. NSPS, NESHAPS, etc.)</li> <li>(10) See section J for NESHAP/MACT requirements</li> </ul> |
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\*\* Refer to section F and G of this permit to determine the monitoring, recordkeeping and reporting requirements for this device.

## 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:

Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions * And Requirements	Conditions
<b>Process 9: ALKYLATION</b>					P13.1
COLUMN, DEETHANIZER, V-1420, LENGTH: 81 FT 6 IN; DIAMETER: 5 FT A/N: 470290	D403				
ACCUMULATOR, V-1421, DEETHANIZER OVERHEAD, LENGTH: 80 FT ; DIAMETER: 5 FT A/N: 470290	D404				
POT, V-1422, DEETHANIZER REBOILER CONDENSATE, LENGTH: 3 FT ; DIAMETER: 1 FT 6 IN A/N: 470290	D405				
SETTLING TANK, V-1423, DEPROPANIZER CAUSTIC WASH, LENGTH: 30 FT ; DIAMETER: 6 FT 6 IN A/N: 470290	D406				
SETTLING TANK, V-1424, DEPROPANIZER WATER WASH, LENGTH: 26 FT ; DIAMETER: 6 FT A/N: 470290	D407				
VESSEL, PRECIPITATOR, V-1425, DEPROPANIZER FEED, HEIGHT: 12 FT ; DIAMETER: 6 FT A/N: 470290	D408				
COLUMN, DEPROPANIZER, V-1426, HEIGHT: 118 FT 6 IN; DIAMETER: 7 FT A/N: 470290	D409				
POT, V-1427, DEPROPANIZER REBOILER CONDENSATE, LENGTH: 3 FT ; DIAMETER: 1 FT 6 IN A/N: 470290	D410				

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

\*\* Refer to section F and G of this permit to determine the monitoring, recordkeeping and reporting requirements for this device.

## 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:

Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions * And Requirements	Conditions
<b>Process 9: ALKYLATION</b>					P13.1
ACCUMULATOR, V-1428, DEPROPANIZER OVERHEAD, LENGTH: 15 FT ; DIAMETER: 6 FT A/N: 470290	D411				
VESSEL, DEGASER, V-1429, ALKALINE WATER, LENGTH: 8 FT ; DIAMETER: 4 FT A/N: 470290	D949			HAP: (10) [40CFR 63 Subpart CC, #1, 6-23-2003]	
VESSEL, DEGASER, V-1430, SPENT CAUSTIC, LENGTH: 8 FT ; DIAMETER: 4 FT A/N: 470290	D950				
DRUM, FLASH, V-1432, HP CONDENSATE, LENGTH: 5 FT ; DIAMETER: 3 FT A/N: 470290	D413				
DRUM, FLASH, V-1433, LP CONDENSATE, LENGTH: 37 FT 4 IN; DIAMETER: 11 FT A/N: 470290	D414				
POT, V-1434, ALKY DIB. CAUSTIC HEATER CONDENSATE, LENGTH: 3 FT ; DIAMETER: 1 FT 6 IN A/N: 470290	D415				
TANK, WASH, V-1435, ALKY DIB. CAUSTIC SETTLER, LENGTH: 43 FT ; DIAMETER: 9 FT A/N: 470290	D416				
TANK, WASH, V-1436, ALKY DIB. WATER SETTLER, LENGTH: 40 FT ; DIAMETER: 8 FT A/N: 470290	D417				

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

Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions * And Requirements	Conditions
<b>Process 9: ALKYLATION</b>					P13.1
VESSEL, PRECIPITATOR, V-1437, ALKY DIB. FEED, LENGTH: 10 FT ; DIAMETER: 10 FT A/N: 470290	D418				
DRUM, V-1438, ALKY DIB. TEA, LENGTH: 9 FT ; DIAMETER: 3 FT A/N: 470290	D419				
COLUMN, ALKY DIB, V-1439, HEIGHT: 165 FT ; DIAMETER: 11 FT A/N: 470290	D420				
POT, V-1440A/B/C/D, ALKY DIB. REBOILER CONDENSATE, 4 TOTAL, LENGTH: 3 FT ; DIAMETER: 1 FT 6 IN A/N: 470290	D421				
ACCUMULATOR, V-1441, ALKY DIB. OVERHEAD, LENGTH: 42 FT ; DIAMETER: 10 FT 6 IN A/N: 470290	D422				
COLUMN, ALKY DEBUTANIZER, V-1442, HEIGHT: 94 FT 9 IN; DIAMETER: 5 FT A/N: 470290	D423				
POT, V-1443, ALKY DEBUTANIZER REBOILER CONDENSATE, LENGTH: 3 FT ; DIAMETER: 1 FT 6 IN A/N: 470290	D424				
ACCUMULATOR, V-1444, ALKY DEBUTANIZER OVERHEAD, LENGTH: 15 FT ; DIAMETER: 4 FT 6 IN A/N: 470290	D425				

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

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## 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:

Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions * And Requirements	Conditions
<b>Process 9: ALKYLATION</b>					P13.1
ACCUMULATOR, V-1449, V-1450 AND V-2103, S.O. AT E-1277, E1276 AND E-1721, 3 TOTAL, HEIGHT: 2 FT 3 IN; DIAMETER: 1 FT 7 IN A/N: 470290	D431				
KNOCK OUT POT, FLARE, V-1694, LENGTH: 23 FT ; DIAMETER: 8 FT A/N: 470290	D432				
DRUM, FLASH, V-1583, MIXED BUTANE TREATER, CAUSTIC A/N: 470290	D953				
VESSEL, V-1156/7/8/9, K.O. POTS 12001/2/3/4, 4 TOTAL A/N: 470290	D954				
VESSEL, PRECIPITATOR, V-1412, ACID A/N: 470290	D960				
VESSEL, V-1413, SPENT ACID A/N: 470290	D961				
SETTLING TANK, 3RD STAGE, V-2090, ACID, LENGTH: 50 FT ; DIAMETER: 12 FT A/N: 470290	D1080				
VESSEL, CONTACTOR, E-1721, 9800 SQ.FT., LENGTH: 92 FT ; DIAMETER: 63 FT A/N: 470290	D1081				
COMPRESSOR, C-155, REFRIGERANT, CENTRIFUGAL, BARREL TYPE, 4000 H.P. A/N: 470290	D1082				H23.4

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| <ul style="list-style-type: none"> <li>* (1) (1A) (1B) Denotes RECLAIM emission factor</li> <li>(3) Denotes RECLAIM concentration limit</li> <li>(5) (5A) (5B) Denotes command and control emission limit</li> <li>(7) Denotes NSR applicability limit</li> <li>(9) See App B for Emission Limits</li> </ul> | <ul style="list-style-type: none"> <li>(2) (2A) (2B) Denotes RECLAIM emission rate</li> <li>(4) Denotes BACT emission limit</li> <li>(6) Denotes air toxic control rule limit</li> <li>(8) (8A) (8B) Denotes 40 CFR limit (e.g. NSPS, NESHAPS, etc.)</li> <li>(10) See section J for NESHAP/MACT requirements</li> </ul> |
|--|--|

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## 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:

Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions * And Requirements	Conditions
<b>Process 9: ALKYLATION</b>					P13.1
TANK, SETTLING, V-2241, ACID, LENGTH: 50 FT ; DIAMETER: 12 FT 6 IN A/N: 470290	D1504				
VESSEL, V-2242, ISOBUTANE COALESCER, LENGTH: 7 FT 6 IN; DIAMETER: 5 FT A/N: 470290	D1505				
TANK, WASH, V-2250, ACID, LENGTH: 20 FT ; DIAMETER: 12 FT A/N: 470290	D1506				
VESSEL, CONTACTORS NOS. 1 & 2, E-1276 & 1277 A/N: 470290	D959				
VESSEL, CONTACTOR NO. 4, E-1827 A/N: 470290	D1507				
COMPRESSOR, C-164, PROPANE, 1455-HP A/N: 470290	D1509				
FUGITIVE EMISSIONS, MISCELLANEOUS A/N: 470290	D1392			<b>HAP: (10) [40CFR 63 Subpart CC, #5A, 6-23-2003]</b>	H23.16
<b>System 2: MIXED BUTANE TREATING UNIT</b>					S13.4, S15.2, S15.3
TOWER, DEBUTANIZER ACCUMULATOR , V-272, HEIGHT: 138 FT 9 IN; DIAMETER: 6 FT A/N: 470002	D434				
ACCUMULATOR, V-1441, DEISOBUTANIZER, LENGTH: 12 FT ; DIAMETER: 6 FT A/N: 470002	D435				

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| <ul style="list-style-type: none"> <li>* (1) (1A) (1B) Denotes RECLAIM emission factor</li> <li>(3) Denotes RECLAIM concentration limit</li> <li>(5) (5A) (5B) Denotes command and control emission limit</li> <li>(7) Denotes NSR applicability limit</li> <li>(9) See App B for Emission Limits</li> </ul> | <ul style="list-style-type: none"> <li>(2) (2A) (2B) Denotes RECLAIM emission rate</li> <li>(4) Denotes BACT emission limit</li> <li>(6) Denotes air toxic control rule limit</li> <li>(8) (8A) (8B) Denotes 40 CFR limit (e.g. NSPS, NESHAPS, etc.)</li> <li>(10) See section J for NESHAP/MACT requirements</li> </ul> |
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## 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:

Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions * And Requirements	Conditions
<b>Process 9: ALKYLATION</b>					P13.1
KNOCK OUT POT, V-273, LIQUID, LENGTH: 12 FT ; DIAMETER: 4 FT A/N: 470002	D436				
DRUM, V-285, DIB CONDENSATE, LENGTH: 4 FT ; DIAMETER: 2 FT A/N: 470002	D437				
DRUM, CAUSTIC WASH, V-294, LENGTH: 40 FT ; DIAMETER: 4 FT 10 IN A/N: 470002	D1298				
DRUM, SURGE, V-1528, LENGTH: 46 FT ; DIAMETER: 8 FT A/N: 470002	D445				
FUGITIVE EMISSIONS, MISCELLANEOUS A/N: 470002	D1455			<b>HAP: (10) [40CFR 63 Subpart CC, #5A, 6-23-2003]</b>	H23.16
<b>System 3: ALKYLATION FEED TREATMENT UNIT</b>					S13.4, S15.2
DRUM, SURGE, V-1455, PROPYLENE, LENGTH: 46 FT ; DIAMETER: 8 FT A/N: 470003	D440				
VESSEL, PHASE SEPARATOR, V-1685 TO V-1690, 6 TOTAL, LENGTH: 16 FT ; DIAMETER: 4 FT 6 IN A/N: 470003	D442				
OXIDIZER, V-1692, HEIGHT: 50 FT ; DIAMETER: 6 FT 6 IN A/N: 470003	D449	D722 D723 D724 D725			
VESSEL, SEPARATOR, V-2157, DISULFIDE OIL/CAUSTIC, LENGTH: 30 FT ; DIAMETER: 7 FT 6 IN A/N: 470003	D450	D722 D723 D724 D725		<b>HAP: (10) [40CFR 63 Subpart CC, #1, 6-23-2003]</b>	

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

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## 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:

Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions * And Requirements	Conditions
<b>Process 9: ALKYLATION</b>					P13.1
VESSEL, SAND FILTER, V-1691, HEIGHT: 15 FT 8 IN; DIAMETER: 4 FT A/N: 470003	D439				
FUGITIVE EMISSIONS, MISCELLANEOUS A/N: 470003	D1456			HAP: (10) [40CFR 63 Subpart CC, #5A, 6-23-2003]	H23.16
<b>Process 11: IN-LINE GASOLINE BLENDING</b>					P13.1
<b>System 1: IN-LINE GASOLINE BLENDING UNIT</b>					
TANK, TK-95, CORROSION INHIBITOR, WITH NITROGEN BLANKET, 4000 GALS; DIAMETER: 6 FT 4 IN; HEIGHT: 17 FT 3 IN A/N: 470004	D453				
DRUM, V-1727/1728, DYE ADDITIVE, 2 TOTAL, WITH NITROGEN BLANKET, 250 GALS; DIAMETER: 3 FT ; HEIGHT: 5 FT A/N: 470004	D454				
VESSEL, PRESSURIZED, V-1720-24 AND V-1729, PROTO FUEL, 6 TOTAL, WITH NITROGEN BLANKET, 300 GALS A/N: 470004	D457				
DRUM, V-1725, SPENT/EXCESS PROTO FUEL, WITH NITROGEN BLANKET, 300 GALS A/N: 470004	D1301				
FUGITIVE EMISSIONS, MISCELLANEOUS A/N: 470004	D1458			HAP: (10) [40CFR 63 Subpart CC, #5A, 6-23-2003]	H23.16
<b>Process 12: TREATING /STRIPPING</b>					P13.1

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

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## 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:

Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions * And Requirements	Conditions
<b>Process 12: TREATING /STRIPPING</b>					P13.1
<b>System 1: HCOD TREATING UNIT</b>					S13.2, S13.5
TANK, HOLDING, TK-7001, COKER BLOWDOWN, HEIGHT: 32 FT ; DIAMETER: 40 FT A/N: 470005	D466			<b>BENZENE:</b> (10) [40CFR 61 Subpart FF, #1, 12-4-2003]; <b>HAP:</b> (10) [40CFR 63 Subpart CC, #4, 6-23-2003]; <b>VOC:</b> 500 PPMV (8) [40CFR 61 Subpart FF, 12-4-2003]	E336.2, H23.40
OIL WATER SEPARATOR, V-1743, COKER SLOP WATER CPI, 300 GPM A/N: 470005	D460			<b>BENZENE:</b> (10) [40CFR 61 Subpart FF, #1, 12-4-2003]; <b>HAP:</b> (10) [40CFR 63 Subpart CC, #4, 6-23-2003]; <b>VOC:</b> 500 PPMV (8) [40CFR 61 Subpart FF, 12-4-2003]	E336.2, H23.40
OIL WATER SEPARATOR, V-1768, SLOP WATER CPI, 300 GPM A/N: 470005	D461			<b>BENZENE:</b> (10) [40CFR 61 Subpart FF, #1, 12-4-2003]; <b>HAP:</b> (10) [40CFR 63 Subpart CC, #4, 6-23-2003]; <b>VOC:</b> 500 PPMV (8) [40CFR 61 Subpart FF, 12-4-2003]	E336.2, H23.40
FLOATATION UNIT, V-1168, IGFU SOUTH, 700 GPM CAPACITY A/N: 470005	D458			<b>BENZENE:</b> (10) [40CFR 61 Subpart FF, #1, 12-4-2003]; <b>HAP:</b> (10) [40CFR 63 Subpart CC, #4, 6-23-2003]; <b>VOC:</b> 500 PPMV (8) [40CFR 61 Subpart FF, 12-4-2003]	E336.2, H23.40
FLOATATION UNIT, V-1166, IGFU NORTH, 300 GPM CAPACITY A/N: 470005	D459			<b>BENZENE:</b> (10) [40CFR 61 Subpart FF, #1, 12-4-2003]; <b>HAP:</b> (10) [40CFR 63 Subpart CC, #4, 6-23-2003]; <b>VOC:</b> 500 PPMV (8) [40CFR 61 Subpart FF, 12-4-2003]	E336.2, H23.40

\* (1) (1A) (1B) Denotes RECLAIM emission factor (2) (2A) (2B) 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 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:

Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions * And Requirements	Conditions
<b>Process 12: TREATING /STRIPPING</b>					P13.1
AIR FLOATATION UNIT, DISSOLVED AIR FLOATATION (DAF), TK-158, EFFLUENT WATER DAF, HEIGHT: 11 FT 4 IN; DIAMETER: 45 FT A/N: 470005	D463	C472 C473		<b>BENZENE:</b> (10) [40CFR 61 Subpart FF, #1, 12-4-2003]; <b>HAP:</b> (10) [40CFR 63 Subpart CC, #4, 6-23-2003]; <b>VOC:</b> 500 PPMV (5) [RULE 1176, 9-13-1996]; <b>VOC:</b> 500 PPMV (8) [40CFR 61 Subpart FF, 12-4-2003]	H23.40
TANK, SURGE, TK-159A, DAF EFFLUENT, HEIGHT: 10 FT ; DIAMETER: 16 FT A/N: 470005	D464	C472 C473		<b>BENZENE:</b> (10) [40CFR 61 Subpart FF, #1, 12-4-2003]; <b>HAP:</b> (10) [40CFR 63 Subpart CC, #4, 6-23-2003]; <b>VOC:</b> 500 PPMV (5) [RULE 1176, 9-13-1996]; <b>VOC:</b> 500 PPMV (8) [40CFR 61 Subpart FF, 12-4-2003]	H23.40
TANK, TK-149, CPI OIL SLUDGE, HEIGHT: 9 FT ; DIAMETER: 9 FT A/N: 470005	D462			<b>BENZENE:</b> (10) [40CFR 61 Subpart FF, #1, 12-4-2003]; <b>VOC:</b> 500 PPMV (8) [40CFR 61 Subpart FF, 12-4-2003]	E336.2, H23.40
TANK, FLOCCULATION, TK-267, HEIGHT: 14 FT ; DIAMETER: 12 FT A/N: 470005	D465	C472 C473		<b>BENZENE:</b> (10) [40CFR 61 Subpart FF, #1, 12-4-2003]; <b>HAP:</b> (10) [40CFR 63 Subpart CC, #4, 6-23-2003]; <b>VOC:</b> 500 PPMV (5) [RULE 1176, 9-13-1996]; <b>VOC:</b> 500 PPMV (8) [40CFR 61 Subpart FF, 12-4-2003]	H23.40
TANK, COLLECTION, TK-148, OILY SLUDGE, 100 BBL A/N: 470005	D467			<b>BENZENE:</b> (10) [40CFR 61 Subpart FF, #1, 12-4-2003]; <b>VOC:</b> 500 PPMV (8) [40CFR 61 Subpart FF, 12-4-2003]	E336.2, H23.40

\* (1) (1A) (1B) Denotes RECLAIM emission factor (2) (2A) (2B) 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 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:

Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions * And Requirements	Conditions
<b>Process 12: TREATING /STRIPPING</b>					P13.1
TANK, NO. 47, DAF FLOAT, 2000 GALS; DIAMETER: 6 FT 4 IN; HEIGHT: 8 FT 8 IN A/N: 470005	D471	C472 C473		<b>BENZENE:</b> (10) [40CFR 61 Subpart FF, #1, 12-4-2003]; <b>HAP:</b> (10) [40CFR 63 Subpart CC, #4, 6-23-2003]; <b>VOC:</b> 500 PPMV (5) [RULE 1176, 9-13-1996]; <b>VOC:</b> 500 PPMV (8) [40CFR 61 Subpart FF, 12-4-2003]	H23.40
VESSEL, V-1748, DAF AIR PRESSURIZATION, WITH NITROGEN BLANKET A/N: 470005	D1304			<b>BENZENE:</b> (10) [40CFR 61 Subpart FF, #1, 12-4-2003]; <b>HAP:</b> (10) [40CFR 63 Subpart CC, #4, 6-23-2003]; <b>VOC:</b> 500 PPMV (8) [40CFR 61 Subpart FF, 12-4-2003]	H23.40
ADSORBER, V-2315/V-2316, ACTIVATED CARBON, CONNECTED IN SERIES, EACH 1000 POUNDS, 2,000 POUNDS TOTAL A/N: 470005	C472	D463 D464 D465 D471		<b>BENZENE:</b> (10) [40CFR 61 Subpart FF, #1, 12-4-2003]; <b>HAP:</b> (10) [40CFR 63 Subpart CC, #4, 6-23-2003]; <b>VOC:</b> 50 PPMV (8A) [ CONSENT DECREE, 3-21-2001]; <b>VOC:</b> 500 PPMV (8) [40CFR 61 Subpart FF, 12-4-2003]	D90.4, E153.1, H23.40
ADSORBER, V-2313/V-2314, ACTIVATED CARBON (SPARE), CONNECTED IN SERIES, EACH 1,000 POUNDS, 2,000 POUNDS TOTAL A/N: 470005	C473	D463 D464 D465 D471		<b>BENZENE:</b> (10) [40CFR 61 Subpart FF, #1, 12-4-2003]; <b>HAP:</b> (10) [40CFR 63 Subpart CC, #4, 6-23-2003]; <b>VOC:</b> 50 PPMV (8A) [ CONSENT DECREE, 3-21-2001]; <b>VOC:</b> 500 PPMV (8) [40CFR 61 Subpart FF, 12-4-2003]	D90.4, E153.1, H23.40

\* (1) (1A) (1B) Denotes RECLAIM emission factor  
 (2) (2A) (2B) Denotes RECLAIM emission rate  
 (3) Denotes RECLAIM concentration limit  
 (4) Denotes BACT emission limit  
 (5) (5A) (5B) Denotes command and control emission limit  
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 (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 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:

Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions * And Requirements	Conditions
<b>Process 12: TREATING /STRIPPING</b>					P13.1
TANK, COLLECTION, TK-6002/6003, SLUDGE, 2 TOTAL, 6000 BBL A/N: 470005	D469			<b>BENZENE:</b> (10) [40CFR 61 Subpart FF, #1, 12-4-2003]; <b>HAP:</b> (10) [40CFR 63 Subpart CC, #4, 6-23-2003]; <b>VOC:</b> 500 PPMV (8) [40CFR 60 Subpart Kb, 10-15-2003; 40CFR 61 Subpart FF, 12-4-2003]	E336.1, H23.1, H23.40
TANK, TK-156, SLUDGE FEED TANK, 2600 GALS A/N: 470005	D709			<b>BENZENE:</b> (10) [40CFR 61 Subpart FF, #1, 12-4-2003]; <b>VOC:</b> 500 PPMV (8) [40CFR 61 Subpart FF, 12-4-2003]	H23.40
OIL WATER SEPARATOR, V-1745, FILTRATE CPI, 150 GPM A/N: 470005	D703			<b>BENZENE:</b> (10) [40CFR 61 Subpart FF, #1, 12-4-2003]; <b>HAP:</b> (10) [40CFR 63 Subpart CC, #4, 6-23-2003]; <b>VOC:</b> 500 PPMV (8) [40CFR 61 Subpart FF, 12-4-2003]	E71.3, H23.40
SUMP, UNDERGROUND, FIXED COVER, PUMP STATION, TK-125A, WATER DRAW COLLECTION, 3000 BBL A/N: 470006	D807			<b>HAP:</b> (10) [40CFR 63 Subpart CC, #4, 6-23-2003]	E336.2
SUMP, UNDERGROUND, FIXED COVER, PUMP STATION, TK-125B, WATER DRAW COLLECTION, 3000 BBL A/N: 470007	D808			<b>HAP:</b> (10) [40CFR 63 Subpart CC, #4, 6-23-2003]	E336.2
SUMP, UNDERGROUND, FIXED COVER, PUMP STATION, TK-125C, WATER DRAW COLLECTION, 3000 BBL A/N: 470008	D809			<b>HAP:</b> (10) [40CFR 63 Subpart CC, #4, 6-23-2003]	E336.2

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

Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions * And Requirements	Conditions
<b>Process 12: TREATING /STRIPPING</b>					P13.1
TANK, VTK-01, IGFU POLYMER, WITH NITROGEN BLANKET, 2100 GALS A/N: 470005	D1305				
TANK, VTK-02, PEROXIDE, WITH NITROGEN BLANKET, 7000 GALS A/N: 470005	D1306				
TANK, VTK-03, DAF POLYMER, WITH NITROGEN BLANKET, 2100 GALS A/N: 470005	D1307				
TANK, V-56X-MKT, HYDROGEN PEROXIDE, WITH NITROGEN BLANKET, 7000 GALS A/N: 470005	D1308				
FUGITIVE EMISSIONS, MISCELLANEOUS A/N: 470005	D1459				H23.5
DRAIN SYSTEM COMPONENT A/N: 470005	D1495			<b>HAP: (10) [40CFR 63 Subpart CC, #4, 6-23-2003]</b>	H23.17
<b>System 2: LCOD TREATING UNIT</b>					S13.2, S13.5
STORAGE TANK, EXTERNAL FLOATING ROOF, NO. 80218, 80000 BBL; DIAMETER: 120 FT ; HEIGHT: 40 FT WITH A/N: 470009  FLOATING ROOF, PONTOON, WELDED SHELL  PRIMARY SEAL, CATEGORY B OR BETTER PER RULE 219(C)(4)	D657			<b>HAP: (10) [40CFR 63 Subpart CC, #2, 6-23-2003]</b>	B22.1, C1.25, D90.18, D90.19, H23.25

\* (1) (1A) (1B) Denotes RECLAIM emission factor  
 (2) (2A) (2B) 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 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:

Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions * And Requirements	Conditions
<b>Process 12: TREATING /STRIPPING</b>					P13.1
STORAGE TANK, FIXED ROOF, TK-15001, WASTE WATER, 15000 BBL; DIAMETER: 52 FT ; HEIGHT: 40 FT A/N: 470010	D1001			HAP: (10) [40CFR 63 Subpart CC, #2, 6-23-2003]; VOC: 500 PPMV (8) [40CFR 60 Subpart Kb, 10-15-2003]	E336.2, H23.1, H23.25, K67.2
STORAGE TANK, FIXED ROOF, TK-15002, WASTE WATER, 15000 BBL; DIAMETER: 52 FT ; HEIGHT: 40 FT A/N: 470011	D1002			HAP: (10) [40CFR 63 Subpart CC, #2, 6-23-2003]; VOC: 500 PPMV (8) [40CFR 60 Subpart Kb, 10-15-2003]	E336.2, H23.1, H23.25, K67.2
STORAGE TANK, EXTERNAL FLOATING ROOF, HOLDING, NO. 143000, 143000 BBL; DIAMETER: 140 FT ; HEIGHT: 52 FT WITH A/N: 470012  FLOATING ROOF, PONTOON, WELDED SHELL  PRIMARY SEAL, CATEGORY A, WIPER TYPE	D688			HAP: (10) [40CFR 63 Subpart CC, #2, 6-23-2003]	C1.24, D90.19, E71.1, H23.25
SKIMMING POND, NO. 2, 50 ACRE FT. CAP., STORM WATER, UNLINED A/N: 470013	D696			HAP: (10) [40CFR 63 Subpart CC, #2, 6-23-2003]	
FLOATATION UNIT, INDUCED-GAS TYPE, V-2076/2077/2078, 3 TOTAL, HEIGHT: 10 FT ; DIAMETER: 12 FT A/N: 470013	D998			HAP: (10) [40CFR 63 Subpart CC, #2, 6-23-2003]; VOC: 500 PPMV (5) [RULE 1176, 9-13-1996]	E336.2

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

\*\* Refer to section F and G of this permit to determine the monitoring, recordkeeping and reporting requirements for this device.

## 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:

Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions * And Requirements	Conditions
<b>Process 12: TREATING /STRIPPING</b>					P13.1
SKIMMING POND, AFU BASIN NO.1, W/ FLOCCULATOR, SURFACE SKIMMER, 2 SCREW CONVEYORS AND BOTTOM SCRAPER, WIDTH: 25 FT ; DEPTH: 15 FT ; LENGTH: 100 FT A/N: 470013	D1022			HAP: (10) [40CFR 63 Subpart CC, #2, 6-23-2003]	
SKIMMING POND, AFU BASIN NO.2, W/ A FLOCCULATOR, A SURFACE SKIMMER, AND A SCREW CONVEYOR, WIDTH: 25 FT ; DEPTH: 15 FT ; LENGTH: 100 FT A/N: 470013	D1023			HAP: (10) [40CFR 63 Subpart CC, #2, 6-23-2003]	
VESSEL, PRESSURE RETENTION FOR AFU NOS. 1 & 2, V-1106/1121, 2 TOTAL, HEIGHT: 7 FT 6 IN; DIAMETER: 4 FT A/N: 470013	D498			HAP: (10) [40CFR 63 Subpart CC, #2, 6-23-2003]	
OIL WATER SEPARATOR, NO. 6, LAMELLA 2, CONSISTING OF TWO UNITS, V2087 & V2088, WIDTH: 15 FT ; LENGTH: 45 FT A/N: 470013	D693			HAP: (10) [40CFR 63 Subpart CC, #2, 6-23-2003]	
OIL WATER SEPARATOR, NO. 3, LAMELLA 2, CONSISTING OF TWO UNITS, V1980 & V1979, WIDTH: 13 FT ; LENGTH: 60 FT A/N: 470013	D689			HAP: (10) [40CFR 63 Subpart CC, #2, 6-23-2003]	
FUGITIVE EMISSIONS, MISCELLANEOUS A/N: 470013	D1460				H23.5
DRAIN SYSTEM COMPONENT A/N: 470013	D1496			HAP: (10) [40CFR 63 Subpart CC, #2, 6-23-2003]	H23.17

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

Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions * And Requirements	Conditions
<b>Process 12: TREATING /STRIPPING</b>					P13.1
<b>System 3: OIL/WATER SEPARATOR NO. 7</b>					S13.5
OIL WATER SEPARATOR, NO. 7, COVERED, WITH SLOTTED PIPE SKIMMER, WIDTH: 10 FT ; HEIGHT: 6 FT 9 IN; LENGTH: 44 FT 8 IN A/N: 470014	D697	C699		HAP: (10) [40CFR 63 Subpart CC, #2, 6-23-2003]; VOC: 500 PPMV (5) [RULE 1176, 9-13-1996]	E71.8
SUMP, SKIM-OIL SUMP A/N: 470014	D698				
CARBON ADSORBER, AND SPARE, EACH CONTAINS 200 LBS OF ACTIVATED CARBON A/N: 470014	C699	D697			D90.5, E153.1
FUGITIVE EMISSIONS, MISCELLANEOUS A/N: 470014	D1399				H23.5
<b>System 4: OIL/WATER SEPARATOR NO. 8</b>					S13.5
OIL WATER SEPARATOR, NO. 8, COVERED, WITH A SLOTTED PIPE SKIMMER, WIDTH: 10 FT ; DIAMETER: 6 FT 9 IN; LENGTH: 44 FT 8 IN A/N: 470015	D700	C702		HAP: (10) [40CFR 63 Subpart CC, #2, 6-23-2003]; VOC: 500 PPMV (5) [RULE 1176, 9-13-1996]	E71.8
SUMP, WITH A 10 HP MOTOR A/N: 470015	D701				
CARBON ADSORBER, AND SPARE, EACH CONTAINS 200 LBS OF ACTIVATED CARBON A/N: 470015	C702	D700			D90.5, E153.1
FUGITIVE EMISSIONS, MISCELLANEOUS A/N: 470015	D1461				H23.5

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

Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions * And Requirements	Conditions
<b>Process 12: TREATING /STRIPPING</b>					P13.1
<b>System 8: FUEL GAS TREATING SYSTEM</b>					S13.4, S15.2, S18.4
ABSORBER, AMINE, V-1640, HEIGHT: 66 FT ; DIAMETER: 4 FT A/N: 470016	D66				
KNOCK OUT POT, V-1641, AMINE, HEIGHT: 10 FT ; DIAMETER: 3 FT 6 IN A/N: 470016	D67				
FUGITIVE EMISSIONS, MISCELLANEOUS A/N: 470016	D1561				H23.5
<b>Process 14: LOADING AND UNLOADING</b>					
<b>System 1: INORGANIC CHEMICAL LOADING AND UNLOADING</b>					S15.7
BULK MATERIAL LOAD/UNLOAD STATION, TANK TRUCK, FRESH AND SPENT ACID WITH A/N: 470017  LOADING AND UNLOADING ARM, FRESH AND SPENT ACID, 2 TOTAL; DIAMETER: 3 IN	D505				E57.1, E131.1
SCRUBBER, V-311, CAUSTIC, STANDBY, HEIGHT: 10 FT 7 IN; DIAMETER: 3 FT 6 IN A/N: 470017	C232				D90.3, E71.5, E71.11
<b>System 2: TWO-POSITION PROPANE TRUCK LOADING</b>					S15.8

\* (1) (1A) (1B) Denotes RECLAIM emission factor  
 (2) (2A) (2B) 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 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:

Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions * And Requirements	Conditions
<b>Process 14: LOADING AND UNLOADING</b>					
BULK MATERIAL LOAD/UNLOAD STATION, TANK TRUCK, PROPANE WITH A/N: 470018  LOADING AND UNLOADING ARM, BOTTOM, 4 TOTAL, PROPANE  VAPOR RETURN LINE, 4 TOTAL	D507				
FUGITIVE EMISSIONS, MISCELLANEOUS A/N: 470018	D1465				H23.5
<b>System 3: TWO-POSITION BUTANE LOADING/UNLOADING</b>					S15.8
BULK MATERIAL LOAD/UNLOAD STATION, TANK TRUCK, BUTANE WITH A/N: 470019  LOADING AND UNLOADING ARM, BOTTOM, BUTANE, 4 TOTAL; DIAMETER: 2 IN  VAPOR RETURN LINE, 1" DIA., 4 TOTAL	D513				
FUGITIVE EMISSIONS, MISCELLANEOUS A/N: 470019	D1466				H23.5
<b>System 4: BUTANE TANK CAR LOADING/UNLOADING SYSTEM</b>					S1.1, S15.6

\* (1) (1A) (1B) Denotes RECLAIM emission factor  
 (2) (2A) (2B) 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 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:

Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions * And Requirements	Conditions
<b>Process 14: LOADING AND UNLOADING</b>					
BULK MATERIAL LOAD/UNLOAD STATION, STATIONS NOS. 1 - 6, 6 TOTAL, EACH WITH A/N: 470020  LOADING AND UNLOADING ARM, 2 TOTAL; DIAMETER: 2 IN  VAPOR RETURN LINE, 1" DIA.	D790				
FUGITIVE EMISSIONS, MISCELLANEOUS A/N: 470020	D1467				H23.5
<b>System 5: LPG/SPENT CAUSTIC LOADING/UNLOADING SYSTEM</b>					S1.1, S15.6
BULK MATERIAL LOADING STATION, SPENT CAUSTIC, WITH A 1" VAPOR RETURN HOSE A/N: 470021	D798				D90.2, E71.6
BULK MATERIAL LOAD/UNLOAD STATION, STATIONS NOS. 1 - 6, 6 TOTAL, EACH, LPG WITH A/N: 470021  LOADING AND UNLOADING ARM, LPG, 2 TOTAL  VAPOR RETURN LINE, 3" DIA.	D1040				C1.46
FUGITIVE EMISSIONS, MISCELLANEOUS A/N: 470021	D1553				H23.5
<b>System 9: ONE-POSITION DIESEL LOADING</b>					

\* (1) (1A) (1B) Denotes RECLAIM emission factor  
 (2) (2A) (2B) 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 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:

Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions * And Requirements	Conditions
<b>Process 14: LOADING AND UNLOADING</b>					
LOADING ARM, TANK TRUCK, DIESEL FUEL, DIAMETER: 2 IN A/N: 470022	D515				B22.2, C1.3
FUGITIVE EMISSIONS, MISCELLANEOUS A/N: 470022	D1469				H23.5
<b>Process 15: STORAGE TANKS</b>					P13.1
<b>System 1: FIXED ROOF STORAGE TANKS</b>					S13.7
STORAGE TANK, FIXED ROOF, NO. 280, METHANOL, 11720 GALS; DIAMETER: 10 FT ; HEIGHT: 20 FT A/N: 470023	D520				E336.2, K67.2
STORAGE TANK, FIXED ROOF, T-1713, METHANOL, 71000 GALS; DIAMETER: 20 FT ; HEIGHT: 30 FT A/N: 470024	D521				E336.2, K67.2
STORAGE TANK, FIXED ROOF, T-122, TFA ADDITIVE, TFA IMPROVER ADDITIVE, 5000 GALS; DIAMETER: 10 FT ; HEIGHT: 10 FT A/N: 470026	D523				C1.21
STORAGE TANK, FIXED ROOF, T-476, CETANE IMPROVER ADDITIVE, CETANE ADDITIVE, 20000 GALS; DIAMETER: 16 FT ; HEIGHT: 15 FT A/N: 470026	D524			VOC: 500 PPMV (8) [40CFR 60 Subpart Kb, 10-15-2003]	C1.22, H23.1
STORAGE TANK, FIXED ROOF, NO. 240, 10080 GALS; DIAMETER: 18 FT ; HEIGHT: 5 FT A/N: 470034	D640				E336.2, K67.2

\* (1) (1A) (1B) Denotes RECLAIM emission factor  
 (2) (2A) (2B) 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 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:

Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions * And Requirements	Conditions
<b>Process 15: STORAGE TANKS</b>					P13.1
STORAGE TANK, FIXED ROOF, NO. 2515, 2551 BBL; DIAMETER: 40 FT ; HEIGHT: 12 FT A/N: 470035	D531				E336.2, K67.2
STORAGE TANK, FIXED ROOF, NO. 2530, 2652 BBL; DIAMETER: 40 FT ; HEIGHT: 11 FT 11 IN A/N: 470036	D533				E336.2, K67.2
STORAGE TANK, FIXED ROOF, NO. 2531, 2700 BBL; DIAMETER: 40 FT ; HEIGHT: 11 FT 11 IN A/N: 470037	D534				E336.2, K67.2
STORAGE TANK, FIXED ROOF, NO. 7200, 7225 BBL; DIAMETER: 42 FT ; HEIGHT: 29 FT 4 IN A/N: 470038	D543				B22.1, D90.18, K67.2
STORAGE TANK, FIXED ROOF, NO. 7201, WITH A MIXER, 7221 BBL; DIAMETER: 42 FT ; HEIGHT: 29 FT 4 IN A/N: 470039	D544			<b>BENZENE: (10) [40CFR 61 Subpart FF, #1, 12-4-2003]; VOC: 500 PPMV (8) [40CFR 61 Subpart FF, 12-4-2003]</b>	E336.2, H23.40, K67.2
STORAGE TANK, FIXED ROOF, NO. 7501, WASTEWATER SLUDGE, WITH A MIXER, 7423 BBL; DIAMETER: 34 FT 8 IN; HEIGHT: 30 FT 3 IN A/N: 470040	D546			<b>BENZENE: (10) [40CFR 61 Subpart FF, #1, 12-4-2003]; VOC: 500 PPMV (8) [40CFR 61 Subpart FF, 12-4-2003]</b>	C1.27, D90.19, E336.2, H23.40, K67.2
STORAGE TANK, FIXED ROOF, NO. 11000, 11259 BBL; DIAMETER: 52 FT 5 IN; HEIGHT: 29 FT 3 IN A/N: 498928	D547				B22.4, C1.49, C1.51, D90.18, E336.2, K67.16

\* (1) (1A) (1B) Denotes RECLAIM emission factor  
 (2) (2A) (2B) 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 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:

Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions * And Requirements	Conditions
<b>Process 15: STORAGE TANKS</b>					P13.1
STORAGE TANK, FIXED ROOF, NO. 11001, DIESEL FUEL, 11259 BBL; DIAMETER: 52 FT 5 IN; HEIGHT: 29 FT 3 IN A/N: 470045	D548				E336.2, K67.2
STORAGE TANK, FIXED ROOF, NO. 11002, DIESEL FUEL, 11259 BBL; DIAMETER: 52 FT 4 IN; HEIGHT: 29 FT 1 IN A/N: 470046	D549			HAP: (10) [40CFR 63 Subpart CC, #2, 6-23-2003]	B22.1, D90.18, K67.2
STORAGE TANK, FIXED ROOF, NO. 11003, 11259 BBL; DIAMETER: 52 FT 5 IN; HEIGHT: 29 FT 3 IN A/N: 470048	D550				B22.4, C1.7, D90.18, D90.19, E336.2
STORAGE TANK, FIXED ROOF, NO. 11004, 11259 BBL; DIAMETER: 52 FT 5 IN; HEIGHT: 29 FT 3 IN A/N: 499094	D551				B22.4, C1.49, C1.51, D90.18, E336.2, K67.16
STORAGE TANK, FIXED ROOF, NO. 13501, WITH A MIXER, 13632 BBL; DIAMETER: 52 FT 9 IN; HEIGHT: 35 FT 1 IN A/N: 470050	D552				E336.2, E440.1, E440.2, K67.11
STORAGE TANK, FIXED ROOF, NO. 13500, WITH A MIXER, 13632 BBL; DIAMETER: 52 FT 8 IN; HEIGHT: 35 FT A/N: 470051	D553				E336.2, E440.1, E440.2, K67.11
STORAGE TANK, FIXED ROOF, NO. 13502, 13609 BBL; DIAMETER: 52 FT 9 IN; HEIGHT: 35 FT 1 IN A/N: 470053	D554				E336.2, K67.2

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

\*\* Refer to section F and G of this permit to determine the monitoring, recordkeeping and reporting requirements for this device.

## 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:

Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions * And Requirements	Conditions
<b>Process 15: STORAGE TANKS</b>					P13.1
STORAGE TANK, FIXED ROOF, NO. 13503, 13508 BBL; DIAMETER: 52 FT 6 IN; HEIGHT: 35 FT 1 IN A/N: 470054	D555				E336.2, K67.2
STORAGE TANK, FIXED ROOF, NO. 13504, 13510 BBL; DIAMETER: 52 FT 6 IN; HEIGHT: 35 FT 1 IN A/N: 470055	D556				E336.2, K67.2
STORAGE TANK, FIXED ROOF, NO. 13505, 13313 BBL; DIAMETER: 52 FT 6 IN; HEIGHT: 35 FT 1 IN A/N: 470057	D557				B22.8, C1.26, D90.18, E336.2, K67.8
STORAGE TANK, FIXED ROOF, NO. 13506, 13489 BBL; DIAMETER: 52 FT 4 IN; HEIGHT: 35 FT 1 IN A/N: 470059	D558				E336.2, K67.2
STORAGE TANK, FIXED ROOF, NO. 13507, 13489 BBL; DIAMETER: 52 FT 5 IN; HEIGHT: 35 FT 1 IN A/N: 470060	D559				E336.2, K67.2
STORAGE TANK, FIXED ROOF, NO. 13508, 13434 BBL; DIAMETER: 52 FT 5 IN; HEIGHT: 34 FT 11 IN A/N: 470061	D560				E336.2, K67.2
STORAGE TANK, FIXED ROOF, NO. 13509, 13463 BBL; DIAMETER: 52 FT 5 IN; HEIGHT: 35 FT 1 IN A/N: 470062	D561				B22.8, C1.8, D90.18, E336.2, H23.33, K67.8
STORAGE TANK, FIXED ROOF, NO. 13510, BRINE WATER, 13500 BBL; DIAMETER: 52 FT 9 IN; HEIGHT: 35 FT 6 IN A/N:	D562			<b>VOC: 500 PPMV (8) [40CFR 61 Subpart FF, 12-4-2003]</b>	E336.2, H23.40, K67.2

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

## 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:

Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions * And Requirements	Conditions
<b>Process 15: STORAGE TANKS</b>					P13.1
STORAGE TANK, FIXED ROOF, NO. 13511, 13475 BBL; DIAMETER: 52 FT 2 IN; HEIGHT: 35 FT 1 IN A/N:	D563			<b>VOC: 500 PPMV (8) [40CFR 61 Subpart FF, 12-4-2003]</b>	E336.2, H23.40, K67.2
STORAGE TANK, FIXED ROOF, NO. 13512, 13488 BBL; DIAMETER: 52 FT 5 IN; HEIGHT: 35 FT 1 IN A/N: 470070	D564				B22.8, C1.8, D90.18, E336.2, H23.33, K67.8
STORAGE TANK, FIXED ROOF, NO. 13513, 13283 BBL; DIAMETER: 52 FT ; HEIGHT: 35 FT A/N: 470071	D565			<b>BENZENE: (10) [40CFR 61 Subpart FF, #1, 12-4-2003]; VOC: 500 PPMV (8) [40CFR 61 Subpart FF, 12-4-2003]</b>	E336.2, H23.40, K67.2
STORAGE TANK, FIXED ROOF, NO. 13514, 13286 BBL; DIAMETER: 52 FT ; HEIGHT: 35 FT A/N: 470072	D566				E336.2, K67.2
STORAGE TANK, FIXED ROOF, NO. 13515, 13475 BBL; DIAMETER: 52 FT 5 IN; HEIGHT: 35 FT A/N: 470073	D567			<b>BENZENE: (10) [40CFR 61 Subpart FF, #1, 12-4-2003]; VOC: 500 PPMV (8) [40CFR 61 Subpart FF, 12-4-2003]</b>	E336.2, H23.40, K67.2
STORAGE TANK, FIXED ROOF, NO. 13525, 13425 BBL; DIAMETER: 52 FT 3 IN; HEIGHT: 35 FT A/N: 470076	D569				E336.2, K67.2
STORAGE TANK, FIXED ROOF, NO. 13528, 13239 BBL; DIAMETER: 52 FT ; HEIGHT: 35 FT A/N: 470077	D571				E336.2, K67.2
STORAGE TANK, FIXED ROOF, NO. 13529, 13500 BBL; DIAMETER: 52 FT 4 IN; HEIGHT: 35 FT A/N: 470078	D572			<b>BENZENE: (10) [40CFR 61 Subpart FF, #1, 12-4-2003]; VOC: 500 PPMV (8) [40CFR 61 Subpart FF, 12-4-2003]</b>	E336.2, H23.40, K67.2

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

Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions * And Requirements	Conditions
<b>Process 15: STORAGE TANKS</b>					P13.1
STORAGE TANK, FIXED ROOF, NO. 13530, 13225 BBL; DIAMETER: 52 FT ; HEIGHT: 35 FT A/N: 470081	D573			<b>BENZENE: (10) [40CFR 61 Subpart FF, #1, 12-4-2003]; VOC: 500 PPMV (8) [40CFR 61 Subpart FF, 12-4-2003]</b>	E336.2, H23.40, K67.2
STORAGE TANK, FIXED ROOF, NO. 25013, STRIPPED WATER, 24924 BBL; DIAMETER: 71 FT 10 IN; HEIGHT: 35 FT 1 IN A/N: 470295	D574				E336.2
STORAGE TANK, FIXED ROOF, NO. 25014, 24775 BBL; DIAMETER: 75 FT ; HEIGHT: 35 FT A/N: 470082	D575			<b>BENZENE: (10) [40CFR 61 Subpart FF, #1, 12-4-2003]; VOC: 500 PPMV (8) [40CFR 61 Subpart FF, 12-4-2003]</b>	E336.2, H23.40, K67.2
STORAGE TANK, FIXED ROOF, NO. 25015, 25000 BBL; DIAMETER: 71 FT 10 IN; HEIGHT: 35 FT 1 IN A/N: 470083	D576			<b>BENZENE: (10) [40CFR 61 Subpart FF, #1, 12-4-2003]; VOC: 500 PPMV (8) [40CFR 61 Subpart FF, 12-4-2003]</b>	E336.2, H23.40, K67.2
STORAGE TANK, FIXED ROOF, NO. 25017, 25753 BBL; DIAMETER: 71 FT 1 IN; HEIGHT: 71 FT A/N: 470084	D577			<b>BENZENE: (10) [40CFR 61 Subpart FF, #1, 12-4-2003]; VOC: 500 PPMV (8) [40CFR 61 Subpart FF, 12-4-2003]</b>	E336.2, H23.40, K67.2
STORAGE TANK, FIXED ROOF, NO. 25018, 25340 BBL; DIAMETER: 71 FT 1 IN; HEIGHT: 35 FT 1 IN A/N: 470085	D578			<b>BENZENE: (10) [40CFR 61 Subpart FF, #1, 12-4-2003]; VOC: 500 PPMV (8) [40CFR 61 Subpart FF, 12-4-2003]</b>	E336.2, H23.40, K67.2
STORAGE TANK, FIXED ROOF, NO. 25019, 25000 BBL; DIAMETER: 71 FT ; HEIGHT: 35 FT A/N: 470086	D579			<b>BENZENE: (10) [40CFR 61 Subpart FF, #1, 12-4-2003]; VOC: 500 PPMV (8) [40CFR 61 Subpart FF, 12-4-2003]</b>	E336.2, H23.40, K67.2
STORAGE TANK, FIXED ROOF, NO. 36002, 36932 BBL; DIAMETER: 95 FT ; HEIGHT: 29 FT A/N: 470087	D581				B22.12, H23.2, K67.2

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| <ul style="list-style-type: none"> <li>* (1) (1A) (1B) Denotes RECLAIM emission factor</li> <li>(3) Denotes RECLAIM concentration limit</li> <li>(5) (5A) (5B) Denotes command and control emission limit</li> <li>(7) Denotes NSR applicability limit</li> <li>(9) See App B for Emission Limits</li> </ul> | <ul style="list-style-type: none"> <li>(2) (2A) (2B) Denotes RECLAIM emission rate</li> <li>(4) Denotes BACT emission limit</li> <li>(6) Denotes air toxic control rule limit</li> <li>(8) (8A) (8B) Denotes 40 CFR limit (e.g. NSPS, NESHAPS, etc.)</li> <li>(10) See section J for NESHAP/MACT requirements</li> </ul> |
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\*\* Refer to section F and G of this permit to determine the monitoring, recordkeeping and reporting requirements for this device.

## 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:

Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions * And Requirements	Conditions
<b>Process 15: STORAGE TANKS</b>					P13.1
STORAGE TANK, FIXED ROOF, NO. 80033, DIESEL FUEL, WITH A MIXER, 80000 BBL; DIAMETER: 117 FT 10 IN; HEIGHT: 41 FT 10 IN A/N: 470088	D582			HAP: (10) [40CFR 63 Subpart CC, #2, 6-23-2003]	B22.1, D90.18, K67.2
STORAGE TANK, FIXED ROOF, NO. 80034, DIESEL FUEL, WITH A MIXER, 80000 BBL; DIAMETER: 117 FT 2 IN; HEIGHT: 41 FT 8 IN A/N: 470089	D583			HAP: (10) [40CFR 63 Subpart CC, #2, 6-23-2003]	B22.1, D90.18, K67.2
STORAGE TANK, FIXED ROOF, NO. 80035, DIESEL OIL, INTERMEDIATE GAS OIL, 80000 BBL; DIAMETER: 117 FT ; HEIGHT: 41 FT A/N:	D584				B22.13, C1.53, K67.2
STORAGE TANK, FIXED ROOF, NO. 80036, 80000 BBL; DIAMETER: 117 FT ; HEIGHT: 41 FT A/N: 498995	D585				E336.2, K67.2
STORAGE TANK, FIXED ROOF, NO. 80038, DIESEL DISTILLATE, 80000 BBL; DIAMETER: 117 FT 2 IN; HEIGHT: 41 FT 8 IN A/N: 470091	D587			HAP: (10) [40CFR 63 Subpart CC, #2, 6-23-2003]	B22.1, D90.18, K67.2
STORAGE TANK, FIXED ROOF, NO. 80039, 80122 BBL; DIAMETER: 117 FT 2 IN; HEIGHT: 41 FT 8 IN A/N: 470092	D588			HAP: (10) [40CFR 63 Subpart CC, #2, 6-23-2003]	B22.1, D90.18, K67.2
STORAGE TANK, NO. 80042, HEAVY CRACKED NAPHTHA, WITH 2 MIXERS, 79976 BBL; DIAMETER: 117 FT ; HEIGHT: 41 FT 10 IN A/N: 470093	D589				C1.29, E336.2

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| <ul style="list-style-type: none"> <li>* (1) (1A) (1B) Denotes RECLAIM emission factor</li> <li>(3) Denotes RECLAIM concentration limit</li> <li>(5) (5A) (5B) Denotes command and control emission limit</li> <li>(7) Denotes NSR applicability limit</li> <li>(9) See App B for Emission Limits</li> </ul> | <ul style="list-style-type: none"> <li>(2) (2A) (2B) Denotes RECLAIM emission rate</li> <li>(4) Denotes BACT emission limit</li> <li>(6) Denotes air toxic control rule limit</li> <li>(8) (8A) (8B) Denotes 40 CFR limit (e.g. NSPS, NESHAPS, etc.)</li> <li>(10) See section J for NESHAP/MACT requirements</li> </ul> |
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\*\* Refer to section F and G of this permit to determine the monitoring, recordkeeping and reporting requirements for this device.

## 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:

Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions * And Requirements	Conditions
<b>Process 15: STORAGE TANKS</b>					P13.1
STORAGE TANK, FIXED ROOF, NO. 80043, WASTE WATER, 79453 BBL; DIAMETER: 117 FT ; HEIGHT: 41 FT 10 IN A/N: 470095	D591				B22.1, K67.2
STORAGE TANK, FIXED ROOF, NO. 80044, WITH TWO MIXER, 79847 BBL; DIAMETER: 117 FT ; HEIGHT: 41 FT 8 IN A/N: 470096	D592				E336.2, K67.2
STORAGE TANK, FIXED ROOF, NO. 80045, WITH A MIXER, 80000 BBL; DIAMETER: 117 FT ; HEIGHT: 42 FT A/N: 470097	D593				E336.2, K67.2
STORAGE TANK, FIXED ROOF, NO. 80049, WITH A MIXER, 80032 BBL; DIAMETER: 117 FT ; HEIGHT: 41 FT 10 IN A/N: 470098	D594				E336.2, K67.2
STORAGE TANK, FIXED ROOF, NO. 80050, NAPHTHA, GASOLINE, CRUDE OIL, GAS OIL, DC CHARGE, WITH A MIXER, 80106 BBL; DIAMETER: 117 FT ; HEIGHT: 41 FT 10 IN A/N: 470099	D595				B22.10, C1.5, D90.18, E336.2, K67.8
STORAGE TANK, FIXED ROOF, NO. 80051, WITH A MIXER, 80105 BBL; DIAMETER: 117 FT ; HEIGHT: 41 FT 10 IN A/N: 470100	D596				E336.2, K67.2

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

Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions * And Requirements	Conditions
<b>Process 15: STORAGE TANKS</b>					P13.1
STORAGE TANK, FIXED ROOF, NO. 80055, 80064 BBL; DIAMETER: 117 FT ; HEIGHT: 41 FT 10 IN A/N: 470101	D597				E336.2, K67.2
STORAGE TANK, FIXED ROOF, NO. 80057, WITH A MIXER, 80011 BBL; DIAMETER: 117 FT ; HEIGHT: 41 FT 10 IN A/N: 470103	D599				E336.2, K67.2
STORAGE TANK, FIXED ROOF, NO. 80058, HTU-4 CHARGE, WITH INTERNAL HEATING COILS, 80000 BBL; DIAMETER: 117 FT ; HEIGHT: 41 FT 8 IN A/N: 470104	D600				C1.29, E336.2
STORAGE TANK, FIXED ROOF, NO. 80060, GAS OIL, DC CHARGE, BUNKER OIL, CRUDE OIL, WITH A MIXER AND INTERNAL HEATING COILS, 76300 BBL; DIAMETER: 117 FT ; HEIGHT: 41 FT 10 IN A/N: 470105	D602			<b>BENZENE: (10) [40CFR 61 Subpart FF, #1, 12-4-2003]; VOC: 500 PPMV (8) [40CFR 61 Subpart FF, 12-4-2003]</b>	B22.9, C1.4, D90.18, E336.2
STORAGE TANK, FIXED ROOF, NO. 80061, 80074 BBL; DIAMETER: 117 FT ; HEIGHT: 41 FT 10 IN A/N: 470106	D603				E336.2, K67.2
STORAGE TANK, FIXED ROOF, NO. 80062, 80066 BBL; DIAMETER: 117 FT ; HEIGHT: 41 FT 10 IN A/N: 470107	D604				E336.2, K67.2

\* (1) (1A) (1B) Denotes RECLAIM emission factor  
 (2) (2A) (2B) 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 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:

Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions * And Requirements	Conditions
<b>Process 15: STORAGE TANKS</b>					P13.1
STORAGE TANK, FIXED ROOF, NO. 80063, WITH A MIXER AND INTERNAL HEATING COILS, 80000 BBL; DIAMETER: 117 FT ; HEIGHT: 41 FT A/N: 470108	D605			<b>HAP: (10) [40CFR 63 Subpart CC, #2, 6-23-2003]</b>	B22.1, D90.18, K67.2
STORAGE TANK, FIXED ROOF, HEATED, NO. 80064, GAS OIL, DC CHARGE, BUNKER OIL, CRUDE OIL, WITH A MIXER AND INTERNAL HEATING COILS, 76500 BBL; DIAMETER: 117 FT ; HEIGHT: 41 FT 10 IN A/N: 470109	D606			<b>BENZENE: (10) [40CFR 61 Subpart FF, #1, 12-4-2003]; VOC: 500 PPMV (8) [40CFR 61 Subpart FF, 12-4-2003]</b>	B22.11, C1.37, D90.18, E336.2, K67.8
STORAGE TANK, FIXED ROOF, HEATED, NO. 80065, DC CHARGE, BUNKER OIL, CRUDE OIL, WITH A MIXER AND INTERNAL HEATING COILS, 76500 BBL; DIAMETER: 117 FT ; HEIGHT: 41 FT 10 IN A/N: 470110	D607			<b>BENZENE: (10) [40CFR 61 Subpart FF, #1, 12-4-2003]; VOC: 500 PPMV (8) [40CFR 61 Subpart FF, 12-4-2003]</b>	B22.11, C1.37, D90.18, E336.2, K67.8
STORAGE TANK, FIXED ROOF, HEATED, NO. 80066, DC CHARGE, BUNKER OIL, CRUDE OIL, WITH A MIXER AND INTERNAL HEATING COILS, 75500 BBL; DIAMETER: 117 FT ; HEIGHT: 41 FT 10 IN A/N: 470112	D608			<b>BENZENE: (10) [40CFR 61 Subpart FF, #1, 12-4-2003]; VOC: 500 PPMV (8) [40CFR 61 Subpart FF, 12-4-2003]</b>	B22.9, C1.4, D90.18, E336.2, H23.40
STORAGE TANK, FIXED ROOF, HEATED, NO. 80067, WITH A MIXER AND INTERNAL HEATING COILS, 75000 BBL; DIAMETER: 117 FT ; HEIGHT: 41 FT 5 IN A/N: 470111	D609			<b>HAP: (10) [40CFR 63 Subpart CC, #2, 6-23-2003]</b>	B22.1, D90.18, K67.2

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

\*\* Refer to section F and G of this permit to determine the monitoring, recordkeeping and reporting requirements for this device.

## 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:

Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions * And Requirements	Conditions
<b>Process 15: STORAGE TANKS</b>					P13.1
STORAGE TANK, FIXED ROOF, NO. 80069, 79836 BBL; DIAMETER: 117 FT ; HEIGHT: 41 FT 10 IN A/N: 470114	D611			<b>BENZENE:</b> (10) [40CFR 61 Subpart FF, #1, 12-4-2003]; <b>VOC:</b> 500 PPMV (8) [40CFR 61 Subpart FF, 12-4-2003]	E336.2, H23.40, K67.2
STORAGE TANK, FIXED ROOF, NO. 80070, DIESEL FUEL, 80000 BBL; DIAMETER: 117 FT ; HEIGHT: 41 FT 2 IN A/N: 470115	D612			<b>HAP:</b> (10) [40CFR 63 Subpart CC, #2, 6-23-2003]	K67.2
STORAGE TANK, FIXED ROOF, NO. 80072, 79965 BBL; DIAMETER: 117 FT ; HEIGHT: 41 FT 10 IN A/N: 470117	D614			<b>BENZENE:</b> (10) [40CFR 61 Subpart FF, #1, 12-4-2003]; <b>VOC:</b> 500 PPMV (8) [40CFR 61 Subpart FF, 12-4-2003]	E336.2, K67.2
STORAGE TANK, FIXED ROOF, NO. 80073, WITH INTERNAL HEATING COILS, 79980 BBL; DIAMETER: 117 FT ; HEIGHT: 41 FT 10 IN A/N: 470118	D615			<b>BENZENE:</b> (10) [40CFR 61 Subpart FF, #1, 12-4-2003]; <b>VOC:</b> 500 PPMV (8) [40CFR 61 Subpart FF, 12-4-2003]	E336.2, K67.2
STORAGE TANK, FIXED ROOF, NO. 80074, WITH A MIXER, 79675 BBL; DIAMETER: 117 FT ; HEIGHT: 41 FT 9 IN A/N: 470119	D616			<b>BENZENE:</b> (10) [40CFR 61 Subpart FF, #1, 12-4-2003]; <b>VOC:</b> 500 PPMV (8) [40CFR 61 Subpart FF, 12-4-2003]	E336.2, K67.2
STORAGE TANK, FIXED ROOF, NO. 80075, 79812 BBL; DIAMETER: 117 FT ; HEIGHT: 41 FT 10 IN A/N: 470120	D617			<b>BENZENE:</b> (10) [40CFR 61 Subpart FF, #1, 12-4-2003]; <b>VOC:</b> 500 PPMV (8) [40CFR 61 Subpart FF, 12-4-2003]	E336.2, K67.2
STORAGE TANK, FIXED ROOF, NO. 80077, 79973 BBL; DIAMETER: 117 FT ; HEIGHT: 41 FT 9 IN A/N: 470122	D619			<b>BENZENE:</b> (10) [40CFR 61 Subpart FF, #1, 12-4-2003]; <b>VOC:</b> 500 PPMV (8) [40CFR 61 Subpart FF, 12-4-2003]	E336.2, K67.2

\* (1) (1A) (1B) Denotes RECLAIM emission factor (2) (2A) (2B) 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 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:

Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions * And Requirements	Conditions
<b>Process 15: STORAGE TANKS</b>					P13.1
STORAGE TANK, FIXED ROOF, NO. 80078, WITH INTERNAL HEATING COILS, 79864 BBL; DIAMETER: 117 FT ; HEIGHT: 41 FT 10 IN A/N: 470123	D620			<b>BENZENE: (10) [40CFR 61 Subpart FF, #1, 12-4-2003]; VOC: 500 PPMV (8) [40CFR 61 Subpart FF, 12-4-2003]</b>	E336.2, K67.2
STORAGE TANK, FIXED ROOF, NO. 80080, WITH A MIXER AND INTERNAL HEATING COILS, 79808 BBL; DIAMETER: 117 FT ; HEIGHT: 41 FT 9 IN A/N: 470125	D622				E336.2, K67.2
STORAGE TANK, FIXED ROOF, NO. 80081, WITH A MIXER AND INTERNAL HEATING COILS, 80093 BBL; DIAMETER: 117 FT ; HEIGHT: 41 FT 10 IN A/N: 470126	D623			<b>BENZENE: (10) [40CFR 61 Subpart FF, #1, 12-4-2003]; VOC: 500 PPMV (8) [40CFR 61 Subpart FF, 12-4-2003]</b>	E336.2, H23.40, K67.2
STORAGE TANK, FIXED ROOF, HEATED, NO. 80082, HARVEST BLEND, WITH A SIDE MIXER, 76000 BBL; DIAMETER: 117 FT ; HEIGHT: 41 FT 10 IN A/N: 470127	D624				C1.30, E336.2
STORAGE TANK, FIXED ROOF, NO. 80083, WITH INTERNAL HEATING COILS, 80189 BBL; DIAMETER: 117 FT ; HEIGHT: 41 FT 6 IN A/N: 470128	D625			<b>BENZENE: (10) [40CFR 61 Subpart FF, #1, 12-4-2003]; VOC: 500 PPMV (8) [40CFR 61 Subpart FF, 12-4-2003]</b>	E336.2, H23.40, K67.2
STORAGE TANK, FIXED ROOF, NO. 80084, WITH A MIXER AND INTERNAL HEATING COILS, 80000 BBL; DIAMETER: 117 FT 2 IN; HEIGHT: 41 FT 9 IN A/N: 470129	D626			<b>BENZENE: (10) [40CFR 61 Subpart FF, #1, 12-4-2003]; VOC: 500 PPMV (8) [40CFR 61 Subpart FF, 12-4-2003]</b>	E336.2, H23.40, K67.2

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| * (1) (1A) (1B) Denotes RECLAIM emission factor<br>(3) Denotes RECLAIM concentration limit<br>(5) (5A) (5B) Denotes command and control emission limit<br>(7) Denotes NSR applicability limit<br>(9) See App B for Emission Limits | (2) (2A) (2B) Denotes RECLAIM emission rate<br>(4) Denotes BACT emission limit<br>(6) Denotes air toxic control rule limit<br>(8) (8A) (8B) Denotes 40 CFR limit (e.g. NSPS, NESHAPS, etc.)<br>(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 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:

Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions * And Requirements	Conditions
<b>Process 15: STORAGE TANKS</b>					P13.1
STORAGE TANK, FIXED ROOF, NO. 80085, WITH A MIXER AND INTERNAL HEATING COILS, 80175 BBL; DIAMETER: 117 FT 2 IN; HEIGHT: 41 FT 9 IN A/N: 470130	D627			<b>BENZENE: (10) [40CFR 61 Subpart FF, #1, 12-4-2003]; VOC: 500 PPMV (8) [40CFR 61 Subpart FF, 12-4-2003]</b>	E336.2, H23.40, K67.2
STORAGE TANK, FIXED ROOF, NO. 80087, WITH INTERNAL HEATING COILS AND A MIXER, 80175 BBL; DIAMETER: 117 FT 2 IN; HEIGHT: 41 FT 10 IN A/N: 470131	D628			<b>BENZENE: (10) [40CFR 61 Subpart FF, #1, 12-4-2003]; VOC: 500 PPMV (8) [40CFR 61 Subpart FF, 12-4-2003]</b>	E336.2, H23.40, K67.2
STORAGE TANK, FIXED ROOF, NO. 80089, FC HEAVY GAS OIL, WITH TWO MIXERS AND INTERNAL HEATING COILS, 80000 BBL; DIAMETER: 119 FT 10 IN; HEIGHT: 41 FT 2 IN A/N: 470132	D629			<b>HAP: (10) [40CFR 63 Subpart CC, #2, 6-23-2003]</b>	K67.2
STORAGE TANK, FIXED ROOF, NO. 80091, 80000 BBL; DIAMETER: 117 FT ; HEIGHT: 41 FT A/N: 498996	D631				E336.2, K67.2
STORAGE TANK, FIXED ROOF, NO. 80219, 80131 BBL; DIAMETER: 117 FT 1 IN; HEIGHT: 41 FT 9 IN A/N: 470136	D633			<b>BENZENE: (10) [40CFR 61 Subpart FF, #1, 12-4-2003]; VOC: 500 PPMV (8) [40CFR 61 Subpart FF, 12-4-2003]</b>	E336.2, H23.10, H23.40, K67.2
STORAGE TANK, FIXED ROOF, NO. 80220, WITH ONE MIXER, 80021 BBL; DIAMETER: 117 FT 2 IN; HEIGHT: 41 FT 10 IN A/N: 470137	D634				E336.2, H23.9, K67.2

- \* (1) (1A) (1B) Denotes RECLAIM emission factor  
 (2) (2A) (2B) 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 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:

Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions * And Requirements	Conditions
<b>Process 15: STORAGE TANKS</b>					P13.1
STORAGE TANK, FIXED ROOF, NO. 80221, WITH TWO MIXERS, 80025 BBL; DIAMETER: 117 FT ; HEIGHT: 42 FT A/N: 470141	D598			<b>VOC: 500 PPMV (8) [40CFR 60 Subpart Kb, 10-15-2003]</b>	E336.2, H23.1, K67.2
STORAGE TANK, FIXED ROOF, HEATED, NO. 125000, WITH INTERNAL HEATING COILS, 112000 BBL; DIAMETER: 148 FT 6 IN; HEIGHT: 40 FT 9 IN A/N: 470143	D636				E336.2, K67.2
STORAGE TANK, FIXED ROOF, HEATED, NO. 125001, WITH INTERNAL HEATING COILS, 112000 BBL; DIAMETER: 148 FT 6 IN; HEIGHT: 40 FT 9 IN A/N: 470144	D637				E336.2, K67.2
STORAGE TANK, FIXED ROOF, NO. 20426, WITH OIL SKIMMER, HEIGHT: 40 FT ; DIAMETER: 60 FT A/N: 470145	D639			<b>BENZENE: (10) [40CFR 61 Subpart FF, #1, 12-4-2003]; VOC: 500 PPMV (8) [40CFR 61 Subpart FF, 12-4-2003]</b>	B22.3, C1.19, D90.18, E336.2, H23.33, H23.40
STORAGE TANK, FIXED ROOF, NO. 96059, WITH TWO MIXERS, 96000 BBL; DIAMETER: 120 FT ; HEIGHT: 48 FT A/N: 470146	D982			<b>BENZENE: (10) [40CFR 61 Subpart FF, #1, 12-4-2003]; VOC: 500 PPMV (8) [40CFR 61 Subpart FF, 12-4-2003]</b>	B22.8, C1.40, D90.18, E336.2, H23.1, K67.8
STORAGE TANK, FIXED ROOF, NO. 107, STRIPPED SOUR WATER, 100 BBL; DIAMETER: 8 FT ; HEIGHT: 12 FT A/N: 470148	D1500				C1.28, D90.19, E336.2, K67.2

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

Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions * And Requirements	Conditions
<b>Process 15: STORAGE TANKS</b>					P13.1
STORAGE TANK, FIXED ROOF, NO. 36001, DIESEL FUEL, 36000 BBL; DIAMETER: 95 FT ; HEIGHT: 29 FT A/N: 470149	D1555			HAP: (10) [40CFR 63 Subpart CC, #2, 6-23-2003]	B22.1, D90.18, K67.2
STORAGE TANK, FIXED ROOF, NO. 13516, LIGHT CYCLE GAS OIL, HYDROTREATED COKER GAS OIL, HYDRODESULFURIZED GAS OIL, COKER HEAVY GAS OIL, 13000 BBL; DIAMETER: 52 FT ; HEIGHT: 35 FT A/N: 470142	D568			HAP: (10) [40CFR 63 Subpart CC, #2, 6-23-2003]	B22.1, D90.18, K67.2
STORAGE TANK, FIXED ROOF, NO. 80037, LIGHT CYCLE GAS OIL, HYDROTREATED COKER GAS OIL, HYDRODESULFURIZED GAS OIL, COKER HEAVY GAS OIL, 80000 BBL; DIAMETER: 117 FT ; HEIGHT: 41 FT A/N: 470090	D586			HAP: (10) [40CFR 63 Subpart CC, #2, 6-23-2003]	B22.1, D90.18, K67.2
STORAGE TANK, FIXED ROOF, NO. 80092, LIGHT CYCLE GAS OIL, HYDROTREATED COKER GAS OIL, HYDRODESULFURIZED GAS OIL, COKER HEAVY GAS OIL, 80000 BBL; DIAMETER: 117 FT ; HEIGHT: 41 FT A/N: 470135	D632			HAP: (10) [40CFR 63 Subpart CC, #2, 6-23-2003]	B22.1, D90.18, K67.2
STORAGE TANK, FIXED ROOF, NO. 118066, LIGHT CYCLE GAS OIL, HYDROTREATED COKER GAS OIL, HYDRODESULFURIZED GAS OIL, COKER HEAVY GAS OIL, 118000 BBL; DIAMETER: 150 FT ; HEIGHT: 42 FT A/N: 470074	D635			HAP: (10) [40CFR 63 Subpart CC, #2, 6-23-2003]	B22.1, D90.18, K67.2

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

Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions * And Requirements	Conditions
<b>Process 15: STORAGE TANKS</b>					P13.1
FUGITIVE EMISSIONS, MISCELLANEOUS A/N: 470149	D1470				H23.5
<b>System 2: EXTERNAL FLOATING ROOF STORAGE TANKS</b>					S13.7
STORAGE TANK, EXTERNAL FLOATING ROOF, NO. 76000, WITH A MIXER, 76000 BBL; DIAMETER: 115 FT ; HEIGHT: 41 FT WITH A/N: 470150  FLOAING ROOF, PONTOON, RIVETED SHELL  PRIMARY SEAL	D647			<b>HAP: (10) [40CFR 63 Subpart CC, #3A, 6-23-2003]</b>	B22.1, D90.18, K67.2
FUGITIVE EMISSIONS, MISCELLANEOUS A/N: 470150	D1471				H23.5
<b>System 3: PRESSURIZED STORAGE TANKS</b>					S13.6, S15.1, S31.1
STORAGE TANK, PRESSURIZED, NO. 776, LIQUIFIED PETROLEUM GAS, 30000 GALS; DIAMETER: 9 FT 11 IN; LENGTH: 57 FT 1 IN A/N: 470153	D662				
STORAGE TANK, PRESSURIZED, NO. 777, LIQUIFIED PETROLEUM GAS, 30000 GALS; DIAMETER: 9 FT 11 IN; LENGTH: 57 FT 1 IN A/N: 470154	D663				

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

Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions * And Requirements	Conditions
<b>Process 15: STORAGE TANKS</b>					P13.1
STORAGE TANK, PRESSURIZED, NO. 778, LIQUIFIED PETROLEUM GAS, 30000 GALS; DIAMETER: 9 FT 11 IN; LENGTH: 57 FT 1 IN A/N: 470155	D664				
STORAGE TANK, PRESSURIZED, NO. 779, LIQUIFIED PETROLEUM GAS, 30000 GALS; DIAMETER: 9 FT 11 IN; LENGTH: 57 FT 1 IN A/N: 470156	D665				
STORAGE TANK, PRESSURIZED, NO. 780, LIQUIFIED PETROLEUM GAS, 30000 GALS; DIAMETER: 9 FT 11 IN; LENGTH: 57 FT 1 IN A/N: 470157	D666				
STORAGE TANK, PRESSURIZED, NO. 1501, LIQUIFIED PETROLEUM GAS, 62515 GALS; DIAMETER: 11 FT ; HEIGHT: 80 FT 6 IN A/N: 470158	D667				
STORAGE TANK, PRESSURIZED, NO. 1502, LIQUIFIED PETROLEUM GAS, 62515 GALS; DIAMETER: 11 FT ; LENGTH: 80 FT 6 IN A/N: 470159	D669				
STORAGE TANK, PRESSURIZED, NO. 1503, LIQUIFIED PETROLEUM GAS, 62525 GALS; DIAMETER: 12 FT ; LENGTH: 80 FT 6 IN A/N: 470160	D670				

\* (1) (1A) (1B) Denotes RECLAIM emission factor  
 (2) (2A) (2B) 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 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:

Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions * And Requirements	Conditions
<b>Process 15: STORAGE TANKS</b>					P13.1
STORAGE TANK, PRESSURIZED, NO. 6000, LIQUIFIED PETROLEUM GAS, SPHERICAL, 251250 GALS; DIAMETER: 40 FT 6 IN A/N: 470161	D671				
STORAGE TANK, PRESSURIZED, NO. 6001, LIQUIFIED PETROLEUM GAS, SPHERICAL, 249186 GALS; DIAMETER: 40 FT 6 IN A/N: 470162	D672				
STORAGE TANK, PRESSURIZED, NO. 600, LIQUIFIED PETROLEUM GAS, 24570 GALS; DIAMETER: 7 FT ; LENGTH: 90 FT 1 IN A/N: 470163	D673				
STORAGE TANK, PRESSURIZED, NO. 1545, LIQUIFIED PETROLEUM GAS, 72100 GALS; DIAMETER: 12 FT ; LENGTH: 77 FT 6 IN A/N: 470164	D674				
STORAGE TANK, PRESSURIZED, NO. 1546, LIQUIFIED PETROLEUM GAS, 72100 GALS; DIAMETER: 12 FT ; LENGTH: 77 FT 6 IN A/N: 470167	D675				
STORAGE TANK, PRESSURIZED, NO. 1547, LIQUIFIED PETROLEUM GAS, 72100 GALS; DIAMETER: 12 FT ; LENGTH: 77 FT 6 IN A/N: 470169	D676				

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

Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions * And Requirements	Conditions
<b>Process 15: STORAGE TANKS</b>					P13.1
STORAGE TANK, PRESSURIZED, NO. 1703, LIQUIFIED PETROLEUM GAS, 71600 GALS; DIAMETER: 12 FT ; LENGTH: 90 FT 1 IN A/N: 470170	D677				
STORAGE TANK, PRESSURIZED, NO. 1705, LIQUIFIED PETROLEUM GAS, 71736 GALS; DIAMETER: 12 FT ; LENGTH: 90 FT 1 IN A/N: 470171	D678				
STORAGE TANK, PRESSURIZED, NO. 1709, LIQUIFIED PETROLEUM GAS, 71736 GALS; DIAMETER: 12 FT ; LENGTH: 90 FT 1 IN A/N: 470172	D679				
STORAGE TANK, PRESSURIZED, NO. 1710, LIQUIFIED PETROLEUM GAS, 71736 GALS; DIAMETER: 12 FT ; LENGTH: 90 FT 1 IN A/N: 470173	D680				
STORAGE TANK, PRESSURIZED, NO. 5009, LIQUIFIED PETROLEUM GAS, SPHERICAL, 207000 GALS; DIAMETER: 38 FT A/N: 470174	D681				
STORAGE TANK, PRESSURIZED, NO. 5010, LIQUIFIED PETROLEUM GAS, SPHERICAL, 206052 GALS; DIAMETER: 36 FT A/N: 470175	D682				

\* (1) (1A) (1B) Denotes RECLAIM emission factor  
 (2) (2A) (2B) 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 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:

Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions * And Requirements	Conditions
<b>Process 15: STORAGE TANKS</b>					P13.1
STORAGE TANK, PRESSURIZED, NO. 12001, LIQUIFIED PETROLEUM GAS, SPHERICAL, 507570 GALS; DIAMETER: 51 FT A/N: 470176	D683				
STORAGE TANK, PRESSURIZED, NO. 12002, LIQUIFIED PETROLEUM GAS, SPHERICAL, 507192 GALS; DIAMETER: 51 FT A/N: 470177	D684				
STORAGE TANK, PRESSURIZED, NO. 12003, LIQUIFIED PETROLEUM GAS, SPHERICAL, 504882 GALS; DIAMETER: 51 FT A/N: 470179	D685				
STORAGE TANK, PRESSURIZED, NO. 12004, LIQUIFIED PETROLEUM GAS, SPHERICAL, 504882 GALS; DIAMETER: 51 FT A/N: 470207	D686				
STORAGE TANK, PRESSURIZED, NO. 50000, SPHERICAL, PENTANE, 50000 BBL; DIAMETER: 82 FT A/N: 470296	D1502				
FUGITIVE EMISSIONS, MISCELLANEOUS A/N: 470207	D1472				H23.5
<b>System 4: FRESH/SPENT H2SO4 STORAGE TANKS</b>					S15.7
STORAGE TANK, FIXED ROOF, NO. 4010, 4000 BBL; DIAMETER: 36 FT ; HEIGHT: 22 FT A/N: 470211	D527				

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| <ul style="list-style-type: none"> <li>* (1) (1A) (1B) Denotes RECLAIM emission factor</li> <li>(3) Denotes RECLAIM concentration limit</li> <li>(5) (5A) (5B) Denotes command and control emission limit</li> <li>(7) Denotes NSR applicability limit</li> <li>(9) See App B for Emission Limits</li> </ul> | <ul style="list-style-type: none"> <li>(2) (2A) (2B) Denotes RECLAIM emission rate</li> <li>(4) Denotes BACT emission limit</li> <li>(6) Denotes air toxic control rule limit</li> <li>(8) (8A) (8B) Denotes 40 CFR limit (e.g. NSPS, NESHAPS, etc.)</li> <li>(10) See section J for NESHAP/MACT requirements</li> </ul> |
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\*\* Refer to section F and G of this permit to determine the monitoring, recordkeeping and reporting requirements for this device.

## 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:

Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions * And Requirements	Conditions
<b>Process 15: STORAGE TANKS</b>					P13.1
STORAGE TANK, FIXED ROOF, NO. 4011, 4000 BBL; DIAMETER: 36 FT ; HEIGHT: 22 FT A/N: 470212	D528				
<b>System 5: DOMED EXTERNAL FLOATING ROOF STORAGE TANKS</b>					S13.9
STORAGE TANK, DOMED EXTERNAL FLOATING ROOF, NO. 80209, WITH A MIXER, 80000 BBL; DIAMETER: 120 FT ; HEIGHT: 40 FT WITH A/N: 470297  DOME COVER, GEODESIC  FLOATING ROOF, PONTOON, WELDED SHELL  PRIMARY SEAL, CATEGORY A, MECHANICAL SHOE  SECONDARY SEAL, CATEGORY A, RIM MOUNTED, WIPER TYPE  GUIDEPOLE, GASKETED COVER, UNSLOTTED	D648			HAP: (10) [40CFR 63 Subpart CC, #3A, 6-23-2003]	C1.33, D90.19, H23.1, H23.31, K67.2

\* (1) (1A) (1B) Denotes RECLAIM emission factor  
 (2) (2A) (2B) 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 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:

Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions * And Requirements	Conditions
<b>Process 15: STORAGE TANKS</b>					P13.1
STORAGE TANK, EXTERNAL FLOATING ROOF, NO. 80211, WITH TWO MIXERS, 80000 BBL; DIAMETER: 117 FT ; HEIGHT: 42 FT WITH A/N: 470213  FLOATING ROOF, DOUBLE DECK, WELDED SHELL  DOME COVER, GEODESIC  PRIMARY SEAL, CATEGORY A, METALLIC SHOE  SECONDARY SEAL, CATEGORY A, WIPER TYPE  GUIDEPOLE, GASKETED COVER, UNSLOTTED	D650			HAP: (10) [40CFR 63 Subpart CC, #3A, 6-23-2003]	K67.2

\* (1) (1A) (1B) Denotes RECLAIM emission factor  
 (2) (2A) (2B) 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 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:

Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions * And Requirements	Conditions
<b>Process 15: STORAGE TANKS</b>					P13.1
STORAGE TANK, EXTERNAL FLOATING ROOF, NO. 80213, ALKYLATE, WITH TWO MIXERS, 80000 BBL; DIAMETER: 117 FT ; HEIGHT: 42 FT WITH A/N: 470215  FLOATING ROOF, DOUBLE DECK, WELDED SHELL  DOME COVER, GEODESIC  PRIMARY SEAL, CATEGORY A, METALLIC SHOE  SECONDARY SEAL, CATEGORY A, WIPER TYPE  GUIDEPOLE, GASKETED COVER, UNSLOTTED	D652			HAP: (10) [40CFR 63 Subpart CC, #3A, 6-23-2003]	C1.31, K67.2

\* (1) (1A) (1B) Denotes RECLAIM emission factor  
 (2) (2A) (2B) 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 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:

Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions * And Requirements	Conditions
<b>Process 15: STORAGE TANKS</b>					P13.1
STORAGE TANK, EXTERNAL FLOATING ROOF, NO. 80214, WITH TWO MIXERS, 80000 BBL; DIAMETER: 120 FT ; HEIGHT: 40 FT WITH A/N: 470217  FLOATING ROOF, PONTOON, WELDED SHELL  DOME COVER, GEODESIC  PRIMARY SEAL, CATEGORY A, WIPER TYPE  SECONDARY SEAL, CATEGORY A, WIPER TYPE	D653			HAP: (10) [40CFR 63 Subpart CC, #3A, 6-23-2003]	C1.35, K67.2

\* (1) (1A) (1B) Denotes RECLAIM emission factor  
 (2) (2A) (2B) 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 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:

Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions * And Requirements	Conditions
<b>Process 15: STORAGE TANKS</b>					P13.1
STORAGE TANK, EXTERNAL FLOATING ROOF, NO. 80217, WITH TWO MIXERS, 80000 BBL; DIAMETER: 120 FT ; HEIGHT: 40 FT WITH A/N: 470218  FLOATING ROOF, PONTOON, WELDED SHELL  DOME COVER, GEODESIC  PRIMARY SEAL, CATEGORY A, METALLIC SHOE  SECONDARY SEAL, CATEGORY A, WIPER TYPE  GUIDEPOLE, GASKETED COVER, UNSLOTTED	D656			HAP: (10) [40CFR 63 Subpart CC, #3A, 6-23-2003]	K67.2

\* (1) (1A) (1B) Denotes RECLAIM emission factor  
 (2) (2A) (2B) 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 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:

Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions * And Requirements	Conditions
<b>Process 15: STORAGE TANKS</b>					P13.1
STORAGE TANK, EXTERNAL FLOATING ROOF, NO. 125002, ALKYLATE/GASOLINE, 125000 BBL; DIAMETER: 150 FT ; HEIGHT: 40 FT WITH A/N: 470298  FLOATING ROOF, PONTOON, WELDED SHELL  DOME COVER, GEODESIC  PRIMARY SEAL, CATEGORY A, METALLIC SHOE  SECONDARY SEAL, CATEGORY A, WIPER TYPE  GUIDEPOLE, GASKETED COVER, UNSLOTTED	D659			HAP: (10) [40CFR 63 Subpart CC, #3A, 6-23-2003]	C1.36, C6.2, H23.33, K67.9

\* (1) (1A) (1B) Denotes RECLAIM emission factor  
 (2) (2A) (2B) 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 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:

Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions * And Requirements	Conditions
<b>Process 15: STORAGE TANKS</b>					P13.1
STORAGE TANK, EXTERNAL FLOATING ROOF, NO. 125004, ALKYLATE, 125000 BBL; DIAMETER: 134 FT ; HEIGHT: 50 FT WITH A/N: 470219  FLOATING ROOF, PONTOON, WELDED SHELL, WITH GEODESIC DOME COVER  PRIMARY SEAL, CATEGORY A, METALLIC SHOE  SECONDARY SEAL, CATEGORY A, WIPER TYPE  GUIDEPOLE, GASKETED COVER, UNSLOTTED	D1078			HAP: (10) [40CFR 63 Subpart CC, #3A, 6-23-2003]	B22.8, C1.32, D90.18, H23.1
STORAGE TANK, EXTERNAL FLOATING ROOF, NO. 80210, WITH A MIXER, 80000 BBL; DIAMETER: 120 FT ; HEIGHT: 60 FT WITH A/N: 470299  FLOATING ROOF, PONTOON, WELDED SHELL  PRIMARY SEAL, CATEGORY A, METALLIC SHOE  SECONDARY SEAL, CATEGORY A, WIPER TYPE	D649			HAP: (10) [40CFR 63 Subpart CC, #3A, 6-23-2003]	C1.41, D90.19, K67.2

\* (1) (1A) (1B) Denotes RECLAIM emission factor  
 (2) (2A) (2B) 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 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:

Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions * And Requirements	Conditions
<b>Process 15: STORAGE TANKS</b>					P13.1
STORAGE TANK, EXTERNAL FLOATING ROOF, NO. 125003, WITH TWO MIXERS, 125000 BBL; DIAMETER: 150 FT ; HEIGHT: 40 FT WITH A/N: 470300  FLOATING ROOF, PONTOON, WELDED SHELL  DOME COVER, GEODESIC  PRIMARY SEAL, CATEGORY A, METALLIC SHOE  SECONDARY SEAL, CATEGORY A, WIPER TYPE	D660			HAP: (10) [40CFR 63 Subpart CC, #3A, 6-23-2003]	C6.2, K67.9

\* (1) (1A) (1B) Denotes RECLAIM emission factor  
 (2) (2A) (2B) 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 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:

Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions * And Requirements	Conditions
<b>Process 15: STORAGE TANKS</b>					P13.1
STORAGE TANK, EXTERNAL FLOATING ROOF, NO. 80215, WITH TWO MIXERS, 80000 BBL; DIAMETER: 120 FT ; HEIGHT: 40 FT WITH A/N: 470220  DOME COVER, GEODESIC  FLOATING ROOF, PONTOON, WELDED SHELL  PRIMARY SEAL, CATEGORY A, WIPER TYPE  SECONDARY SEAL, CATEGORY A, WIPER TYPE  GUIDEPOLE, GASKETED COVER, UNSLOTTED	D654			HAP: (10) [40CFR 63 Subpart CC, #3A, 6-23-2003]	B22.8, C1.18, D90.18, K67.2

\* (1) (1A) (1B) Denotes RECLAIM emission factor  
 (2) (2A) (2B) 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 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:

Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions * And Requirements	Conditions
<b>Process 15: STORAGE TANKS</b>					P13.1
STORAGE TANK, EXTERNAL FLOATING ROOF, NO. 80216, GASOLINE, WITH TWO MIXERS, 80000 BBL; DIAMETER: 120 FT ; HEIGHT: 40 FT WITH A/N: 470221  FLOATING ROOF, PONTOON, WELDED SHELL  DOME COVER, GEODESIC  PRIMARY SEAL, CATEGORY A, METALLIC SHOE  SECONDARY SEAL, CATEGORY A, WIPER TYPE  GUIDEPOLE, GASKETED COVER, UNSLOTTED	D655			HAP: (10) [40CFR 63 Subpart CC, #3A, 6-23-2003]	C1.32, K67.2

\* (1) (1A) (1B) Denotes RECLAIM emission factor  
 (2) (2A) (2B) 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 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:

Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions * And Requirements	Conditions
<b>Process 15: STORAGE TANKS</b>					P13.1
STORAGE TANK, DOMED EXTERNAL FLOATING ROOF, NO. 80212,, WITH TWO MIXERS, 80000 BBL; DIAMETER: 117 FT 2 IN; HEIGHT: 42 FT WITH A/N: 470222  DOME COVER, GEODESIC  FLOATING ROOF, DOUBLE DECK, WELDED SHELL  PRIMARY SEAL, CATEGORY A, METALLIC SHOE  SECONDARY SEAL, CATEGORY A, WIPER TYPE  GUIDEPOLE, GASKETED COVER, UNSLOTTED	D651			HAP: (10) [40CFR 63 Subpart CC, #3A, 6-23-2003]	K67.2, K171.2

\* (1) (1A) (1B) Denotes RECLAIM emission factor  
 (2) (2A) (2B) 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 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:

Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions * And Requirements	Conditions
<b>Process 15: STORAGE TANKS</b>					P13.1
STORAGE TANK, DOMED EXTERNAL FLOATING ROOF, NO. 96000,, GASOLINE, WITH TWO MIXERS, 96000 BBL; DIAMETER: 120 FT ; HEIGHT: 48 FT WITH A/N: 470223  DOME COVER, GEODESIC  FLOATING ROOF, PONTOON, WELDED SHELL  PRIMARY SEAL, CATEGORY A, METALLIC SHOE  SECONDARY SEAL, CATEGORY A, WIPER TYPE  GUIDEPOLE, GASKETED COVER, UNSLOTTED	D658			HAP: (10) [40CFR 63 Subpart CC, #3A, 6-23-2003]	C1.33, K67.2, K171.2
FUGITIVE EMISSIONS, MISCELLANEOUS A/N: 470223	D1362				H23.5
<b>System 6: STORAGE TANKS, OTHERS</b>					
STORAGE TANK, FIXED ROOF, NO. 1000, PERCHLOROETHYLENE, 1000 GALS; DIAMETER: 5 FT 4 IN; HEIGHT: 6 FT A/N: 470301	D1533				B59.2, C1.34, K67.17
<b>System 7: INTERNAL FLOATING ROOF TANKS</b>					S13.7

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

Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions * And Requirements	Conditions
<b>Process 15: STORAGE TANKS</b>					P13.1
STORAGE TANK, INTERNAL FLOATING ROOF, NO. 80068, WITH A MIXER AND INTERNAL HEATING COILS, 76800 BBL; DIAMETER: 117 FT ; HEIGHT: 44 FT WITH A/N: 476396  FLOATING ROOF, PONTOON, WELDED SHELL  PRIMARY SEAL, CATEGORY A, METALLIC SHOE  SECONDARY SEAL, CATEGORY A, MULTIPLE WIPERS, RIM MOUNTED	D610			HAP: (10) [40CFR 63 Subpart CC, #3A, 6-23-2003]	B59.4, C1.42, C6.4, H23.1, K67.12
STORAGE TANK, INTERNAL FLOATING ROOF, NO. 80076, WITH INTERNAL HEATING COILS, 79727 BBL; DIAMETER: 117 FT ; HEIGHT: 41 FT 9 IN WITH A/N: 495451  FLOATING ROOF, PONTOON, WELDED SHELL  PRIMARY SEAL, CATEGORY A, METALLIC SHOE  SECONDARY SEAL, CATEGORY A, MULTIPLE WIPERS, RIM MOUNTED	D618			BENZENE: (10) [40CFR 61 Subpart FF, #1, 12-4-2003]; HAP: (10) [40CFR 63 Subpart CC, #3A, 6-23-2003]; VOC: 500 PPMV (8) [40CFR 61 Subpart FF, 12-4-2003]	B59.5, C1.47, C6.4, K67.15, K171.3

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

Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions * And Requirements	Conditions
<b>Process 15: STORAGE TANKS</b>					P13.1
STORAGE TANK, INTERNAL FLOATING ROOF, NO. 80079, WITH A MIXER AND INTERNAL HEATING COILS, 79739 BBL; DIAMETER: 117 FT ; HEIGHT: 42 FT WITH A/N: 495452  FLOATING ROOF, PONTOON, WELDED SHELL  PRIMARY SEAL, CATEGORY A, METALLIC SHOE  SECONDARY SEAL, CATEGORY A, MULTIPLE WIPERS, RIM MOUNTED	D621			<b>BENZENE:</b> (10) [40CFR 61 Subpart FF, #1, 12-4-2003]; <b>HAP:</b> (10) [40CFR 63 Subpart CC, #3A, 6-23-2003]; <b>VOC:</b> 500 PPMV (8) [40CFR 61 Subpart FF, 12-4-2003]	B59.5, C1.47, C6.4, K67.15, K171.3
STORAGE TANK, INTERNAL FLOATING ROOF, NO. 80090, WITH TWO MIXERS AND INTERNAL HEATING COILS, 80000 BBL; DIAMETER: 120 FT ; HEIGHT: 43 FT WITH A/N: 476389  FLOATING ROOF, PONTOON, WELDED SHELL  PRIMARY SEAL, CATEGORY A, METALLIC SHOE  SECONDARY SEAL, CATEGORY A, MULTIPLE WIPERS, RIM MOUNTED	D630			<b>HAP:</b> (10) [40CFR 63 Subpart CC, #3A, 6-23-2003]	B59.4, C1.42, C6.4, H23.1, K67.12

\* (1) (1A) (1B) Denotes RECLAIM emission factor  
 (2) (2A) (2B) 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 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:

Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions * And Requirements	Conditions
<b>Process 15: STORAGE TANKS</b>					P13.1
FUGITIVE EMISSIONS, MISCELLANEOUS A/N: 476389	D1363				H23.5
STORAGE TANK, FIXED ROOF, NO. 80071, 79774 BBL; DIAMETER: 117 FT ; HEIGHT: 41 FT 9 IN WITH A/N: 509883  FLOATING ROOF, PONTOON, WELDED SHELL  PRIMARY SEAL, CATEGORY A, METALLIC SHOE  SECONDARY SEAL, CATEGORY A, MULTIPLE WIPERS, RIM MOUNTED	D613			<b>BENZENE: (10) [40CFR 61 Subpart FF, #1, 12-4-2003]; HAP: (10) [40CFR 63 Subpart CC, #2, 6-23-2003]; VOC: 500 PPMV (8) [40CFR 60 Subpart Kb, 10-15-2003; 40CFR 61 Subpart FF, 12-4-2003]</b>	B59.4, C1.47, C6.4, H23.1, K67.15, K171.3
<b>Process 17: ELECTRIC GENERATION</b>					
<b>System 1: EMERGENCY INTERNAL COMBUSTION ENGINES</b>					
INTERNAL COMBUSTION ENGINE, EMERGENCY FIRE, DIESEL FUEL, VOLVO-PENTA, MODEL TD61, PORTABLE, 146 HP A/N: 470224	D713		NOX: PROCESS UNIT**; SOX: PROCESS UNIT**	<b>NOX: 469 LBS/1000 GAL DIESEL (1) [RULE 2012, 5-6-2005]; PM: (9) [RULE 404, 2-7-1986]; SOX: 6.24 LBS/1000 GAL DIESEL (1) [RULE 2011, 5-6-2005]</b>	B61.2, C1.17, C177.1, D12.2, D135.1, K67.1

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

Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions * And Requirements	Conditions
<b>Process 17: ELECTRIC GENERATION</b>					
INTERNAL COMBUSTION ENGINE, C-161, DIESEL FUEL, JOHN DEERE, MODEL 31791R, 2 CYLINDERS, FOUR CYCLE, NATURALLY ASPIRATED, 55 HP A/N: 470225	D714		NOX: PROCESS UNIT**; SOX: PROCESS UNIT**	NOX: 469 LBS/1000 GAL DIESEL (1) [RULE 2012, 5-6-2005]; PM: (9) [RULE 404, 2-7-1986]; SOX: 6.24 LBS/1000 GAL DIESEL (1) [RULE 2011, 5-6-2005]	B61.2, C1.17, D12.2, D135.1, K67.1
INTERNAL COMBUSTION ENGINE, C-156, EMERGENCY AIR, DIESEL FUEL, CUMMINS, MODEL NTA-855, 6 CYLINDERS, FOUR CYCLE, SERIAL NO. 11642155, WITH AFTERCOOLER, TURBOCHARGER, 435 BHP A/N: 484957	D1100		NOX: PROCESS UNIT**; SOX: PROCESS UNIT**	NOX: 469 LBS/1000 GAL DIESEL (1) [RULE 2012, 5-6-2005]; PM: (9) [RULE 404, 2-7-1986]; SOX: 6.24 LBS/1000 GAL DIESEL (1) [RULE 2011, 5-6-2005]	B61.2, C1.17, D12.2, K67.1
INTERNAL COMBUSTION ENGINE, C-157, EMERGENCY AIR, DIESEL FUEL, CUMMINS, MODEL NTA-855, 6 CYLINDERS, FOUR CYCLE, SERIAL NO. 11680463, WITH AFTERCOOLER, TURBOCHARGER, 435 BHP A/N: 484958	D1101		NOX: PROCESS UNIT**; SOX: PROCESS UNIT**	NOX: 469 LBS/1000 GAL DIESEL (1) [RULE 2012, 5-6-2005]; PM: (9) [RULE 404, 2-7-1986]; SOX: 6.24 LBS/1000 GAL DIESEL (1) [RULE 2011, 5-6-2005]	B61.2, C1.17, D12.2, K67.1
INTERNAL COMBUSTION ENGINE, C-158, EMERGENCY AIR, DIESEL FUEL, CUMMINS, MODEL NTA-855, 6 CYLINDERS, FOUR CYCLE, SERIAL NO. 11661695, WITH AFTERCOOLER, TURBOCHARGER, 435 BHP A/N: 484959	D1102		NOX: PROCESS UNIT**; SOX: PROCESS UNIT**	NOX: 469 LBS/1000 GAL DIESEL (1) [RULE 2012, 5-6-2005]; PM: (9) [RULE 404, 2-7-1986]; SOX: 6.24 LBS/1000 GAL DIESEL (1) [RULE 2011, 5-6-2005]	B61.2, C1.17, D12.2, K67.1
INTERNAL COMBUSTION ENGINE, C-159, EMERGENCY AIR, DIESEL FUEL, CUMMINS, MODEL NTA-855, 6 CYLINDERS, FOUR CYCLE, SERIAL NO. 11661698, WITH AFTERCOOLER, TURBOCHARGER, 435 BHP A/N: 484960	D1103		NOX: PROCESS UNIT**; SOX: PROCESS UNIT**	NOX: 469 LBS/1000 GAL DIESEL (1) [RULE 2012, 5-6-2005]; PM: (9) [RULE 404, 2-7-1986]; SOX: 6.24 LBS/1000 GAL DIESEL (1) [RULE 2011, 5-6-2005]	B61.2, C1.17, D12.2, K67.1

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

## 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:

Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions * And Requirements	Conditions
<b>Process 17: ELECTRIC GENERATION</b>					
INTERNAL COMBUSTION ENGINE, C-160, EMERGENCY AIR, DIESEL FUEL, CUMMINS, MODEL NTA-855, 6 CYLINDERS, FOUR CYCLE, SERIAL NO. 11671783, WITH AFTERCOOLER, TURBOCHARGER, 435 BHP A/N: 484961	D1104		NOX: PROCESS UNIT**; SOX: PROCESS UNIT**	<b>NOX:</b> 469 LBS/1000 GAL DIESEL (1) [RULE 2012, 5-6-2005]; <b>PM:</b> (9) [RULE 404, 2-7-1986]; <b>SOX:</b> 6.24 LBS/1000 GAL DIESEL (1) [RULE 2011, 5-6-2005]	B61.2, C1.17, D12.2, K67.1
INTERNAL COMBUSTION ENGINE, EMERGENCY FIRE, 6 CYLINDERS, DIESEL FUEL, DETROIT DIESEL, MODEL DDFP-L6FA, SERIAL NO. 6VF-213457, WITH AFTERCOOLER, TURBOCHARGER, 287 BHP A/N: 484513	D1123		NOX: PROCESS UNIT**; SOX: PROCESS UNIT**	<b>NOX:</b> 469 LBS/1000 GAL DIESEL (1) [RULE 2012, 5-6-2005]; <b>PM:</b> (9) [RULE 404, 2-7-1986]; <b>SOX:</b> 6.24 LBS/1000 GAL DIESEL (1) [RULE 2011, 5-6-2005]	B61.2, C1.17, C1.44, C1.48, D12.2, K67.1
INTERNAL COMBUSTION ENGINE, EMERGENCY FIRE WATER, ENG-76, 6 CYLINDERS, DIESEL FUEL, CATERPILLAR, MODEL C15ACERT, SERIAL NO. JRE06392, WITH AFTERCOOLER, TURBOCHARGER, 475 BHP A/N: 481814	D1617		NOX: PROCESS UNIT**; SOX: PROCESS UNIT**	<b>CO:</b> 2.6 GRAM/BHP-HR DIESEL (4) [RULE 1303(a)(1) -BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002]; <b>NOX:</b> 469 LBS/1000 GAL DIESEL (1) [RULE 2012, 5-6-2005]; <b>NOX + ROG:</b> 3 GRAM/BHP-HR DIESEL (4) [RULE 1303(a)(1) -BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002]; <b>PM:</b> (9) [RULE 404, 2-7-1986]; <b>PM10:</b> 0.15 GRAM/BHP-HR DIESEL (4) [RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002]; <b>SOX:</b> 6.24 LBS/1000 GAL DIESEL (1) [RULE 2011, 5-6-2005]	B61.6, C1.43, C1.44, C1.45, D12.13, H23.36, I296.1, K67.13

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

Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions * And Requirements	Conditions
<b>Process 17: ELECTRIC GENERATION</b>					
INTERNAL COMBUSTION ENGINE, EMERGENCY FIRE WATER, ENG-78, 6 CYLINDERS, DIESEL FUEL, CATERPILLAR, MODEL C15ACERT, SERIAL NO. JRE06395, WITH AFTERCOOLER, TURBOCHARGER, 475 BHP A/N: 481815	D1618		NOX: PROCESS UNIT**; SOX: PROCESS UNIT**	CO: 2.6 GRAM/BHP-HR DIESEL (4) [RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002]; NOX: 469 LBS/1000 GAL DIESEL (1) [RULE 2012, 5-6-2005]; NOX + ROG: 3 GRAM/BHP-HR DIESEL (4) [RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002]; PM: (9) [RULE 404, 2-7-1986]; PM10: 0.15 GRAM/BHP-HR DIESEL (4) [RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002]; SOX: 6.24 LBS/1000 GAL DIESEL (1) [RULE 2011, 5-6-2005]	B61.6, C1.43, C1.44, C1.45, D12.13, H23.36, I296.1, K67.13
INTERNAL COMBUSTION ENGINE, EMERGENCY FIRE WATER, ENG-77, 6 CYLINDERS, DIESEL FUEL, JOHN DEERE, MODEL 6125HF070, SERIAL NO. RG6125H042377, WITH AFTERCOOLER, TURBOCHARGER, 500 BHP A/N: 481818	D1645		NOX: PROCESS UNIT**; SOX: PROCESS UNIT**	CO: 2.6 GRAM/BHP-HR DIESEL (4) [RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002]; NOX: 469 LBS/1000 GAL DIESEL (1) [RULE 2012, 5-6-2005]; NOX + ROG: 4.9 GRAM/BHP-HR DIESEL (4) [RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002]; PM: (9) [RULE 404, 2-7-1986]; PM10: 0.15 GRAM/BHP-HR DIESEL (4) [RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002]; SOX: 6.24 LBS/1000 GAL DIESEL (1) [RULE 2011, 5-6-2005]	B61.6, C1.43, C1.44, C1.45, D12.13, H23.36, I296.1, K67.13

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

## 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:

Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions * And Requirements	Conditions
<b>Process 17: ELECTRIC GENERATION</b>					
INTERNAL COMBUSTION ENGINE, C-18, EMERGENCY FIRE WATER, 6 CYLINDERS, DIESEL FUEL, CATERPILLAR, MODEL C18, SERIAL NO. WJH05543, WITH AFTERCOOLER, TURBOCHARGER, 700 BHP A/N: 481817	D1646		NOX: PROCESS UNIT**; SOX: PROCESS UNIT**	CO: 2.6 GRAM/BHP-HR DIESEL (4) [RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002]; NOX: 469 LBS/1000 GAL DIESEL (1) [RULE 2012, 5-6-2005]; NOX + ROG: 3 GRAM/BHP-HR DIESEL (4) [RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002]; PM: (9) [RULE 404, 2-7-1986]; PM10: 0.15 GRAM/BHP-HR DIESEL (4) [RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002]; SOX: 6.24 LBS/1000 GAL DIESEL (1) [RULE 2011, 5-6-2005]	B61.6, C1.43, C1.44, C1.45, D12.13, H23.36, I296.1, K67.13
INTERNAL COMBUSTION ENGINE, EMERGENCY FIRE WATER, 6 CYLINDERS, DIESEL FUEL, JOHN DEERE, MODEL 6125HF070, SERIAL NO. RG6125H08, WITH AFTERCOOLER, TURBOCHARGER, 375 BHP A/N: 484509	D1659		NOX: PROCESS UNIT**; SOX: PROCESS UNIT**	CO: 2.6 GRAM/BHP-HR DIESEL (4) [RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002]; NOX: 469 LBS/1000 GAL DIESEL (1) [RULE 2012, 5-6-2005]; NOX + ROG: 4.9 GRAM/BHP-HR DIESEL (4) [RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002]; PM: (9) [RULE 404, 2-7-1986]; PM10: 0.15 GRAM/BHP-HR DIESEL (4) [RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002]; SOX: 6.24 LBS/1000 GAL DIESEL (1) [RULE 2011, 5-6-2005]	B61.6, C1.43, C1.44, C1.45, D12.13, H23.36, K67.13

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| <ul style="list-style-type: none"> <li>* (1) (1A) (1B) Denotes RECLAIM emission factor</li> <li>(3) Denotes RECLAIM concentration limit</li> <li>(5) (5A) (5B) Denotes command and control emission limit</li> <li>(7) Denotes NSR applicability limit</li> <li>(9) See App B for Emission Limits</li> </ul> | <ul style="list-style-type: none"> <li>(2) (2A) (2B) Denotes RECLAIM emission rate</li> <li>(4) Denotes BACT emission limit</li> <li>(6) Denotes air toxic control rule limit</li> <li>(8) (8A) (8B) Denotes 40 CFR limit (e.g. NSPS, NESHAPS, etc.)</li> <li>(10) See section J for NESHAP/MACT requirements</li> </ul> |
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\*\* Refer to section F and G of this permit to determine the monitoring, recordkeeping and reporting requirements for this device.

## 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:

Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions * And Requirements	Conditions
<b>Process 17: ELECTRIC GENERATION</b>					
<b>System 2: COGENERATION UNIT A</b>					
TURBINE, A, NATURAL GAS, REFINERY GAS, UNITED TECHNOLOGIES, MODEL FT4, WITH WATER INJECTION, 392 MMBTU/HR WITH A/N: 470302  GENERATOR, ELECTRIC, 30 MW  BOILER, WASTE HEAT RECOVERY, UNFIRED  INJECTOR, WATER INJECTION  MIST ELIMINATOR, DOLLINGER, OE-158-300	D810	C811	NOX: MAJOR SOURCE**; SOX: MAJOR SOURCE**	CO: 2000 PPMV (5) [RULE 407, 4-2-1982]; NOX: 96 PPMV (8) [40CFR 60 Subpart GG, 2-24-2006]; PM: 0.01 GRAINS/SCF (5) [RULE 475, 10-8-1976; RULE 475, 8-7-1978]; PM: 11 LBS/HR (5A) [RULE 475, 10-8-1976; RULE 475, 8-7-1978]	A63.3, A63.4, A327.1, B61.5, B61.9, D12.3, D29.2, D90.7, D90.10, D328.1, E51.2, E71.4, H23.18
CO OXIDATION CATALYST, JOHNSON MATTHEY A/N: 470302	C811	D810 C1536			D82.1
FILTER, V-1584, KING FILTER A A/N: 470302	D1648	D752 D753			
COMPRESSOR, C-127-129, FUEL GAS, 3 TOTAL, COMMON TO BOTH COGENERATION SYSTEM A AND B A/N: 470302	D973				

\* (1) (1A) (1B) Denotes RECLAIM emission factor  
 (2) (2A) (2B) 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 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:

Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions * And Requirements	Conditions
<b>Process 17: ELECTRIC GENERATION</b>					
SELECTIVE CATALYTIC REDUCTION, FIXED BED REACTOR, VANADIUM-TITANIUM-TUNGSTEN CATALYST, HALDOR TOPSOE OR EQUIVALENT, WAFER TYPE, 1226.83 CU.FT.; WIDTH: 12 FT 5 IN; HEIGHT: 31 FT ; LENGTH: 3 FT 6 IN WITH  A/N: 470303  INJECTOR, ANHYDROUS AMMONIA	C1536	C811		NH3: 5 PPMV (4) [RULE 1303(a) (1)-BACT, 5-10-1996]	A195.1, D12.6, D12.7, D12.8, D29.5, E73.1, E179.1, E179.2
FUGITIVE EMISSIONS, MISCELLANEOUS  A/N: 470302	D1415				H23.5
<b>System 3: COGENERATION UNIT B</b>					
TURBINE, B, NATURAL GAS, REFINERY GAS, UNITED TECHNOLOGIES, MODEL FT4, WITH WATER INJECTION, 392 MMBTU/HR WITH  A/N: 470304  GENERATOR, ELECTRIC, 30 MW  BOILER, WASTE HEAT RECOVERY, UNFIRED  INJECTOR, WATER INJECTION  MIST ELIMINATOR, DOLLINGER, OE-158-300	D812	C813	NOX: MAJOR SOURCE**, SOX: MAJOR SOURCE**	CO: 2000 PPMV (5) [RULE 407, 4-2-1982]; NOX: 96 PPMV (8) [40CFR 60 Subpart GG, 2-24-2006]; PM: 0.01 GRAINS/SCF (5) [RULE 475, 10-8-1976; RULE 475, 8-7-1978]; PM: 11 LBS/HR (5A) [RULE 475, 10-8-1976; RULE 475, 8-7-1978]	A63.3, A63.4, A327.1, B61.5, B61.9, D12.3, D29.2, D90.7, D90.10, D328.1, E51.4, E71.4, H23.18

\* (1) (1A) (1B) Denotes RECLAIM emission factor (2) (2A) (2B) 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 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:

Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions * And Requirements	Conditions
<b>Process 17: ELECTRIC GENERATION</b>					
CO OXIDATION CATALYST, JOHNSON MATHEY A/N: 470304	C813	D812 C1538			D82.1
FILTER, V-1585, KING FILTER B A/N: 470304	D1651	D752 D753			
COMPRESSOR, C-127-129, FUEL GAS, 3 TOTAL, COMMON TO BOTH COGENERATION SYSTEM A AND B A/N: 470302	D973				
SELECTIVE CATALYTIC REDUCTION, FIXED BED REACTOR, VANADIUM-TITANIUM-TUNGSTE N CATALYST, HALDOR TOPSOE OR EQUIVALENT, WAFER TYPE, 1226.83 CU.FT.; WIDTH: 12 FT 5 IN; HEIGHT: 31 FT ; LENGTH: 3 FT 6 IN WITH INJECTOR, ANHYDROUS AMMONIA	C1538	C813		NH3: 5 PPMV (4) [RULE 1303(a) (1)-BACT, 5-10-1996]	A195.1, D12.6, D12.7, D12.8, D29.5, E73.1, E179.1, E179.2
FUGITIVE EMISSIONS, MISCELLANEOUS A/N: 470304	D1425				H23.5
<b>Process 18: STEAM GENERATION</b>					
BOILER, BO-7, PROCESS GAS, REFINERY GAS, BABCOCK AND WILCOX, MODEL SPL-F25AB NO. 12, OR 110000 LB/HR OF 225 PSIG STEAM (PROCESS GAS FROM FUME SCRUBBER OF P21/S2), 183.54 MMBTU/HR A/N: 470234	D722	D449 D450 S874	NOX: MAJOR SOURCE**; SOX: MAJOR SOURCE**	CO: 2000 PPMV (5) [RULE 407, 4-2-1982]; PM: 0.1 GRAINS/SCF (5) [RULE 409, 8-7-1981]	A63.4, B61.1, C1.1, C8.2, D90.7, D90.17, D328.1, H23.3

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

## 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:

Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions * And Requirements	Conditions
<b>Process 18: STEAM GENERATION</b>					
BOILER, BO-8, PROCESS GAS, REFINERY GAS, BABCOCK AND WILCOX, MODEL SPL-F25AB NO. 12, OR 110000 LB/HR OF 225 PSIG STEAM (PROCESS GAS FROM FUME SCRUBBER OF P21/S2), 183.54 MMBTU/HR A/N: 470235	D723	D449 D450 S874	NOX: MAJOR SOURCE**; SOX: MAJOR SOURCE**	CO: 2000 PPMV (5) [RULE 407, 4-2-1982]; PM: 0.1 GRAINS/SCF (5) [RULE 409, 8-7-1981]	A63.4, B61.1, C1.1, C8.2, D90.7, D90.17, D328.1, H23.3
STACK A/N: 470235	S874	D722 D723			
BOILER, BO-9, PROCESS GAS, REFINERY GAS, BABCOCK AND WILCOX, MODEL SPL-F25AB NO. 12, OR 110000 LB/HR OF 225 PSIG STEAM (PROCESS GAS FROM FUME SCRUBBER OF P21/S2), 183.54 MMBTU/HR A/N: 470240	D724	D449 D450 S1028	NOX: MAJOR SOURCE**; SOX: MAJOR SOURCE**	CO: 2000 PPMV (5) [RULE 407, 4-2-1982]; PM: 0.1 GRAINS/SCF (5) [RULE 409, 8-7-1981]	A63.4, B61.1, C1.1, C8.2, D90.7, D90.17, D328.1, H23.3
BOILER, BO-10, PROCESS GAS, REFINERY GAS, BABCOCK AND WILCOX, MODEL SPL-F25AB NO. 12, OR 110000 LB/HR OF 225 PSIG OF STEAM (PROCESS GAS FROM FUME SCRUBBER OF P21/S2), 183.54 MMBTU/HR A/N: 470241	D725	D449 D450 S1028	NOX: MAJOR SOURCE**; SOX: MAJOR SOURCE**	CO: 2000 PPMV (5) [RULE 407, 4-2-1982]; PM: 0.1 GRAINS/SCF (5) [RULE 409, 8-7-1981]	A63.4, B61.1, C1.1, C8.2, D90.7, D90.17, D328.1, H23.3
STACK A/N: 470241	S1028	D724 D725			
FUGITIVE EMISSIONS, MISCELLANEOUS A/N: 470241	D1416				H23.5
<b>Process 19: MISCELLANEOUS</b>					
<b>System 1: FUEL STORAGE &amp; DISPENSING</b>					S13.8

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| <ul style="list-style-type: none"> <li>* (1) (1A) (1B) Denotes RECLAIM emission factor</li> <li>(3) Denotes RECLAIM concentration limit</li> <li>(5) (5A) (5B) Denotes command and control emission limit</li> <li>(7) Denotes NSR applicability limit</li> <li>(9) See App B for Emission Limits</li> </ul> | <ul style="list-style-type: none"> <li>(2) (2A) (2B) Denotes RECLAIM emission rate</li> <li>(4) Denotes BACT emission limit</li> <li>(6) Denotes air toxic control rule limit</li> <li>(8) (8A) (8B) Denotes 40 CFR limit (e.g. NSPS, NESHAPS, etc.)</li> <li>(10) See section J for NESHAP/MACT requirements</li> </ul> |
|--|--|

\*\* Refer to section F and G of this permit to determine the monitoring, recordkeeping and reporting requirements for this device.

## 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:

Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions * And Requirements	Conditions
<b>Process 19: MISCELLANEOUS</b>					
FUEL DISPENSING NOZZLE, BALANCE TYPE PHASE II CONTROL, GASOLINE A/N: 470243	D734				D330.1, J110.1
STORAGE TANK, FIXED ROOF, NO. 15W, CONVAULT TYPE (G-70-116-F), GASOLINE, WITH SUBMERGED FILLING, 1000 GALS; WIDTH: 5 FT 8 IN; HEIGHT: 4 FT ; LENGTH: 11 FT A/N: 470243	D728				C1.12, J109.1, J119.1
FUGITIVE EMISSIONS, MISCELLANEOUS A/N: 470244	D1473				H23.5
<b>System 2: FUEL STORAGE &amp; DISPENSING</b>					S13.8
FUEL DISPENSING NOZZLE, BALANCE TYPE PHASE II CONTROL, GASOLINE A/N: 469254	D1320				D330.1, J110.1
STORAGE TANK, FIXED ROOF, NO. 16E, CONVAULT TYPE (G-70-116-F), GASOLINE, 1000 GALS; WIDTH: 5 FT 8 IN; HEIGHT: 4 FT ; LENGTH: 11 FT A/N: 469254	D1321				C1.12, J109.1, J119.1
<b>System 3: FUEL GAS MIX SYSTEM</b>					S13.4, S15.2
DRUM, V-536, SOUTH FUEL GAS MIX, LENGTH: 40 FT ; DIAMETER: 10 FT A/N: 470245	D888				
DRUM, V-1222, NORTH FUEL GAS MIX, LENGTH: 33 FT ; DIAMETER: 12 FT A/N: 470245	D889				

- \* (1) (1A) (1B) Denotes RECLAIM emission factor (2) (2A) (2B) 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 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:

Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions * And Requirements	Conditions
<b>Process 19: MISCELLANEOUS</b>					
FUGITIVE EMISSIONS, MISCELLANEOUS A/N: 470245	D1556				H23.5
<b>System 4: SUMPS</b>					
SUMP, FIXED ROOF, WASTE OIL RECOVERY, 10000 GALS; WIDTH: 10 FT ; HEIGHT: 10 FT ; LENGTH: 10 FT A/N: 470244	D526				E336.2, H23.40
SUMP, FIXED ROOF, NO. 29, LAB WASTEWATER, 1400 GALS; DIAMETER: 6 FT ; LENGTH: 7 FT A/N: 470147	D1095	C1096		<b>BENZENE:</b> (10) [40CFR 61 Subpart FF, #1, 12-4-2003]; <b>VOC:</b> 500 PPMV (8) [40CFR 61 Subpart FF, 12-4-2003]; <b>VOC:</b> 500 PPMV (5) [RULE 1176, 9-13-1996]	E71.10, H23.40, K67.2
ADSORBER, TWO IN SERIES AND ONE STANDBY, 3 TOTAL, EACH CONTAINING 2000 POUNDS OF ACTIVATED CARBON A/N: 470147	C1096	D1095		<b>BENZENE:</b> (10) [40CFR 61 Subpart FF, #1, 12-4-2003]; <b>VOC:</b> 50 PPMV (8A) [CONSENT DECREE, 3-21-2001]; <b>VOC:</b> 500 PPMV (8) [40CFR 61 Subpart FF, 12-4-2003]	D90.4, E153.1, H23.40
FUGITIVE EMISSIONS, MISCELLANEOUS A/N: 470147	D1572				
<b>System 5: AMMONIA STORAGE</b>					
STORAGE TANK, PRESSURIZED, V-1058, AMMONIA, 250 PSIG TOTAL, LENGTH: 36 FT 9 IN; DIAMETER: 9 FT A/N: 470247	D311				B59.3, E71.12, K67.10
<b>Process 21: AIR POLLUTION CONTROL</b>					
<b>System 1: REFINERY FLARE</b>					
					S13.4, S18.2

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

Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions * And Requirements	Conditions
<b>Process 21: AIR POLLUTION CONTROL</b>					
FLARE, ELEVATED WITH STEAM INJECTION, NO.2, Q-910, JOHN ZINK, MODEL STF-S-30, HEIGHT: 250 FT ; DIAMETER: 2 FT 6 IN A/N:	C747				D12.4, D323.2, E193.1, H23.38, 11.1
FLARE, ELEVATED WITH STEAM INJECTION, NO.1, Q-913, JOHN ZINK, MODEL STF-S-30, HEIGHT: 250 FT ; DIAMETER: 2 FT 6 IN A/N:	C748				D12.4, D323.2, E193.1, H23.38, 11.1
KNOCK OUT POT, V-847, FLARE NO. 2, LENGTH: 24 FT ; DIAMETER: 12 FT A/N:	D752	D1648 D1651			
KNOCK OUT POT, V-848, FLARE NO. 1, LENGTH: 24 FT ; DIAMETER: 12 FT A/N:	D753	D1648 D1651			
KNOCK OUT POT, V-616, CRU-HTU NO. 1, LENGTH: 16 FT ; DIAMETER: 8 FT A/N:	D750				
KNOCK OUT POT, V-630, CRU-HTU NO. 2, LENGTH: 19 FT ; DIAMETER: 6 FT A/N:	D751				
KNOCK OUT POT, V-873, CRU NO. 3, LENGTH: 18 FT ; DIAMETER: 9 FT A/N:	D754				
KNOCK OUT POT, V-934, DCU, LENGTH: 25 FT ; DIAMETER: 12 FT A/N:	D755				
KNOCK OUT POT, V-951, HGU NO. 1, LENGTH: 40 FT ; DIAMETER: 10 FT A/N:	D756				

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| <ul style="list-style-type: none"> <li>* (1) (1A) (1B) Denotes RECLAIM emission factor</li> <li>(3) Denotes RECLAIM concentration limit</li> <li>(5) (5A) (5B) Denotes command and control emission limit</li> <li>(7) Denotes NSR applicability limit</li> <li>(9) See App B for Emission Limits</li> </ul> | <ul style="list-style-type: none"> <li>(2) (2A) (2B) Denotes RECLAIM emission rate</li> <li>(4) Denotes BACT emission limit</li> <li>(6) Denotes air toxic control rule limit</li> <li>(8) (8A) (8B) Denotes 40 CFR limit (e.g. NSPS, NESHAPS, etc.)</li> <li>(10) See section J for NESHAP/MACT requirements</li> </ul> |
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\*\* Refer to section F and G of this permit to determine the monitoring, recordkeeping and reporting requirements for this device.

## 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:

Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions * And Requirements	Conditions
<b>Process 21: AIR POLLUTION CONTROL</b>					
KNOCK OUT POT, V-1018, HCU, LENGTH: 29 FT ; DIAMETER: 14 FT 6 IN A/N:	D757				
KNOCK OUT POT, V-1431,ALKYLATION UNIT, LENGTH: 35 FT ; DIAMETER: 11 FT A/N:	D758				
KNOCK OUT POT, V-1472, HTU NO. 3, LENGTH: 23 FT 8 IN; DIAMETER: 9 FT 3 IN A/N:	D759				
KNOCK OUT POT, V-1764, HTU-4, HEIGHT: 36 FT ; DIAMETER: 13 FT A/N:	D172				
FUGITIVE EMISSIONS, MISCELLANEOUS A/N:	D1419				H23.5
<b>System 2: FUME SCRUBBERS</b>					S13.4, S18.3
SCRUBBER, V-146/V-154, HEIGHT: 25 FT 3 IN; DIAMETER: 6 FT A/N: 470257	C761				C8.3, D90.6
SCRUBBER, V-673, CAUSTIC, HEIGHT: 25 FT 6 IN; DIAMETER: 6 FT A/N: 470257	C762				C8.3, D90.6
KNOCK OUT POT, V-671, NORTH, HEIGHT: 25 FT 3 IN; DIAMETER: 6 FT A/N: 470257	D763				

\* (1) (1A) (1B) Denotes RECLAIM emission factor  
 (2) (2A) (2B) 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 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:

Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions * And Requirements	Conditions
<b>Process 21: AIR POLLUTION CONTROL</b>					
KNOCK OUT POT, V-672, SOUTH, HEIGHT: 25 FT 3 IN; DIAMETER: 6 FT A/N: 470257	D1087				
DRUM, ACID WASH WATER, V-1214, HEIGHT: 8 FT ; DIAMETER: 2 FT 6 IN A/N: 470257	C1638				
DRUM, ACID WASH WATER, V-250, HEIGHT: 8 FT ; DIAMETER: 2 FT 6 IN A/N: 470257	C1639				
<b>System 3: REFINERY VAPOR RECOVERY COMPRESSORS SYSTEM</b>					S11.3, S13.4, S15.11, S18.1
COMPRESSOR, C-68, INGERSOLL-RAND, TWO-STAGE, 350 H.P. A/N:	D641				
COMPRESSOR, C-69, INGERSOLL-RAND, TWO-STAGE, 350 H.P. A/N:	D642				H23.4
COMPRESSOR, C-104, WORTHINGTON, TWO-STAGE, 900 H.P. A/N:	D643				
COMPRESSOR, C-105, WORTHINGTON, TWO-STAGE, 900 H.P, SPARE FOR C-104 A/N:	D644				

\* (1) (1A) (1B) Denotes RECLAIM emission factor  
 (2) (2A) (2B) 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 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:

Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions * And Requirements	Conditions
<b>Process 21: AIR POLLUTION CONTROL</b>					
DRUM, CONDENSATE ACCUMULATOR, V-305, LENGTH: 12 FT ; DIAMETER: 3 FT A/N:	D1303				
POT, V-556, CONDENSATE POT #4, HEIGHT: 6 FT ; DIAMETER: 3 FT A/N:	D886				
DRUM, SUCTION, V-1135, LENGTH: 22 FT 6 IN; DIAMETER: 9 FT A/N:	D887				
DRUM, SOUR WATER FLASH DRUM AND BACK UP DEA SKIM, V-1490, LENGTH: 30 FT ; DIAMETER: 12 FT A/N:	D1615				
DRUM, DEA SKIM, V-1139, SPARE, LENGTH: 26 FT ; DIAMETER: 8 FT A/N:	D1316				
POT, V-1865, CONDENSATE POT #1, HEIGHT: 8 FT ; DIAMETER: 4 FT A/N:	D890				
POT, V-1866, CONDENSATE POT #2, HEIGHT: 8 FT ; DIAMETER: 4 FT A/N:	D891				
POT, V-1867, CONDENSATE POT #3, HEIGHT: 8 FT ; DIAMETER: 4 FT A/N:	D892				
POT, V-1868, CONDENSATE POT #5, HEIGHT: 8 FT ; DIAMETER: 4 FT A/N:	D893				
POT, V-1871, CONDENSATE POT #6, HEIGHT: 8 FT ; DIAMETER: 4 FT A/N:	D894				

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

## 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:

Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions * And Requirements	Conditions
<b>Process 21: AIR POLLUTION CONTROL</b>					
POT, V-1872, CONDENSATE POT #7, HEIGHT: 8 FT ; DIAMETER: 4 FT A/N:	D895				
POT, V-1873, CONDENSATE POT #8, HEIGHT: 8 FT ; DIAMETER: 4 FT A/N:	D896				
FUGITIVE EMISSIONS, MISCELLANEOUS A/N:	D1477				H23.5
<b>Process 22: R-219 EXEMPT EQUIPMENT SUBJECT TO SOURCE-SPECIFIC RULES</b>					
RULE 219 EXEMPT EQUIPMENT, AIR CONDITIONING UNITS	E1487				H23.12
RULE 219 EXEMPT EQUIPMENT, REFRIGERATION UNITS	E1488				H23.12
RULE 219 EXEMPT EQUIPMENT, COOLING TOWERS	E1489				H23.13
RULE 219 EXEMPT EQUIPMENT, LAMINATING EQUIPMENT, LOW USE OR EMISSIONS	E1491			<b>VOC: (9) [RULE 1168, 10-3-2003; RULE 1168, 1-7-2005; RULE 1171, 11-7-2003; RULE 1171, 2-1-2008]</b>	H23.27
RULE 219 EXEMPT EQUIPMENT, CLEANING EQUIPMENT, SMALL, UNHEATED, NON-CONVEYORIZED	E1492			<b>VOC: (9) [RULE 1171, 11-7-2003; RULE 1171, 2-1-2008]</b>	H23.14
RULE 219 EXEMPT EQUIPMENT, COATING EQUIPMENT, PORTABLE, ARCHITECTURAL COATINGS	E1493			<b>VOC: (9) [RULE 1113, 11-8-1996; RULE 1113, 7-13-2007; RULE 1171, 11-7-2003; RULE 1171, 2-1-2008]</b>	K67.4
RULE 219 EXEMPT EQUIPMENT, FIRE EXTINGUISHING EQUIPMENT USING HALONS	E1494				H23.15

\* (1) (1A) (1B) Denotes RECLAIM emission factor  
 (2) (2A) (2B) 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 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:

Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions * And Requirements	Conditions
<b>Process 22: R-219 EXEMPT EQUIPMENT SUBJECT TO SOURCE-SPECIFIC RULES</b>					
RULE 219 EXEMPT EQUIPMENT, COATING EQUIPMENT, SMALL, UNHEATED, NON-CONVEYORIZED	E1499			VOC: (9) [RULE 1107, 1-6-2006; RULE 1171, 11-7-2003; RULE 1171, 2-1-2008]	H23.27
<b>Process 23: ISOMERIZATION</b>					
<b>System 1: BUTANE ISOMERIZATION</b>					S13.2, S15.5, S31.1
VESSEL, BUTANE FEED COALESCER, V-2252, LENGTH: 8 FT ; DIAMETER: 4 FT A/N: 470311	D1514				
DRYER, V-2253/2254, BUTANE, 2 TOTAL, LENGTH: 22 FT ; DIAMETER: 4 FT A/N: 470311	D1515				
DRYER, V-55/56, MAKE UP GAS, 2 TOTAL, LENGTH: 14 FT ; DIAMETER: 4 FT A/N: 470311	D1516				
KNOCK OUT POT, V-2257, MAKE UP GAS, LENGTH: 7 FT 6 IN; DIAMETER: 2 FT A/N: 470311	D1517				
VESSEL, REGENERANT COALESCER, V-2258, LENGTH: 6 FT ; DIAMETER: 2 FT A/N: 470311	D1518				
TANK, SURGE, V-2259, FEED, LENGTH: 15 FT ; DIAMETER: 5 FT A/N: 470311	D1519				
SCRUBBER, V-2262, NET GAS, LENGTH: 37 FT ; DIAMETER: 78 FT A/N: 470311	D1520				

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

Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions * And Requirements	Conditions
<b>Process 23: ISOMERIZATION</b>					
TANK, DEGASSING, V-2263, CAUSTIC, LENGTH: 10 FT ; DIAMETER: 2 FT 6 IN A/N: 470311	D1521				
VESSEL, STABILIZER, V-2260, LENGTH: 6 FT 8 IN; DIAMETER: 66 FT A/N: 470311	D1522				
VESSEL, STABILIZER RECEIVER, V-2261, LENGTH: 12 FT 6 IN; DIAMETER: 5 FT 6 IN A/N: 470311	D1523				
VESSEL, DIB OVERHEAD ACCUMULATOR, V-0012, LENGTH: 19 FT ; DIAMETER: 7 FT 6 IN A/N: 470311	D1524				
REACTOR, V-604, HEIGHT: 59 FT 6 IN; DIAMETER: 3 FT A/N: 470311	D1067				
REACTOR, V-605, HEIGHT: 12 FT ; DIAMETER: 5 FT A/N: 470311	D978				
COLUMN, DIB, V-1041, HEIGHT: 185 FT ; DIAMETER: 7 FT 6 IN A/N: 470311	D275				
FUGITIVE EMISSIONS, MISCELLANEOUS A/N: 470311	D1562				H23.16

\* (1) (1A) (1B) Denotes RECLAIM emission factor  
 (2) (2A) (2B) 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  
TESORO REFINING AND MARKETING CO**

**SECTION D: DEVICE ID INDEX**

**The following sub-section provides an index  
to the devices that make up the facility  
description sorted by device ID.**

**FACILITY PERMIT TO OPERATE  
 TESORO REFINING AND MARKETING CO  
 SECTION D: DEVICE ID INDEX**

<b>Device Index For Section D</b>			
<b>Device ID</b>	<b>Section D Page No.</b>	<b>Process</b>	<b>System</b>
D1	1	1	1
D3	33	4	7
D4	1	1	1
D5	2	1	2
D6	2	1	2
D7	2	1	2
D8	2	1	2
D9	3	1	3
D10	3	2	1
D11	4	2	1
D12	15	2	10
D13	15	2	10
D14	16	2	10
D15	4	2	1
D16	5	2	1
D17	5	2	1
D18	5	2	1
D19	8	2	1
D20	5	2	1
D24	6	2	1
D25	6	2	1
D26	6	2	1
D27	6	2	1
D28	7	2	1
D29	7	2	1
D30	7	2	1
D31	7	2	1
D32	8	2	2
D33	8	2	2
D41	12	2	8
D45	12	2	8
D46	13	2	8
D47	13	2	8
D49	12	2	8
S50	24	3	3

**FACILITY PERMIT TO OPERATE  
 TESORO REFINING AND MARKETING CO  
 SECTION D: DEVICE ID INDEX**

<b>Device Index For Section D</b>			
<b>Device ID</b>	<b>Section D Page No.</b>	<b>Process</b>	<b>System</b>
S51	24	3	3
D52	9	2	3
D53	10	2	6
D54	9	2	3
D56	9	2	3
D58	9	2	3
D60	10	2	3
D62	10	2	3
D63	10	2	6
D65	10	2	6
D66	75	12	8
D67	75	12	8
D68	11	2	6
D76	11	2	7
D77	11	2	7
D78	16	3	1
D79	17	3	1
D80	17	3	1
D81	17	3	1
D82	17	3	1
D83	17	3	1
D84	17	3	1
D85	17	3	1
D86	18	3	1
D87	19	3	1
D89	23	3	3
D90	24	3	3
D91	24	3	3
D92	23	3	3
D93	19	3	2
D94	20	3	2
D95	20	3	2
D96	21	3	2
D97	21	3	2
D99	25	3	4

**FACILITY PERMIT TO OPERATE  
 TESORO REFINING AND MARKETING CO  
 SECTION D: DEVICE ID INDEX**

<b>Device Index For Section D</b>			
<b>Device ID</b>	<b>Section D Page No.</b>	<b>Process</b>	<b>System</b>
D100	25	3	4
D102	55	8	1
D103	26	3	5
D104	25	3	4
D105	25	3	4
D106	34	4	7
D107	26	3	5
D112	24	3	3
D114	27	4	1
D115	27	4	1
D117	28	4	1
D120	28	4	2
D121	29	4	3
D122	29	4	3
D123	29	4	3
D129	29	4	3
D130	29	4	3
D131	29	4	3
D132	30	4	3
D134	29	4	3
D140	30	4	3
D146	30	4	4
D147	30	4	5
D148	31	4	5
D149	31	4	5
D153	31	4	5
D155	32	4	5
D156	32	4	5
D157	32	4	6
D158	32	4	6
D159	31	4	5
D160	33	4	7
D161	33	4	7
D162	33	4	7
D163	33	4	7

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<b>Device Index For Section D</b>			
<b>Device ID</b>	<b>Section D Page No.</b>	<b>Process</b>	<b>System</b>
D165	33	4	7
D167	34	4	7
D168	33	4	7
D169	34	4	7
D170	34	4	7
D172	124	21	1
D173	34	4	7
D174	34	4	7
D176	35	4	7
D188	35	4	7
D192	36	4	9
D194	37	5	2
D196	38	5	2
D197	38	5	3
D198	38	5	3
D199	39	5	3
D200	39	5	3
D201	39	5	3
D203	39	5	3
D209	40	5	3
D210	40	5	3
D214	41	5	4
D215	42	5	4
D216	41	5	4
D217	41	5	4
D218	40	5	4
D219	42	5	5
D220	43	5	5
D221	43	5	5
D222	43	5	5
D223	43	5	5
D224	43	5	5
D225	43	5	5
D226	43	5	5
D227	44	5	5

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<b>Device Index For Section D</b>			
<b>Device ID</b>	<b>Section D Page No.</b>	<b>Process</b>	<b>System</b>
D229	44	5	5
C232	75	14	1
D244	33	4	7
D245	55	8	1
D247	44	5	6
D248	45	5	6
D249	45	5	6
D250	46	5	6
D251	46	5	6
D275	129	23	1
D276	47	6	1
D305	47	6	1
D307	47	6	1
D311	122	19	5
D317	47	6	3
D319	47	6	3
D320	47	6	3
D321	48	6	3
D323	48	6	3
D333	48	6	3
D335	48	6	3
D340	50	8	1
D341	51	8	1
D342	51	8	1
D344	51	8	1
D345	51	8	1
D346	51	8	1
D347	52	8	1
D348	52	8	1
D349	52	8	1
D350	52	8	1
D351	52	8	1
D352	52	8	1
D355	53	8	1
D356	53	8	1

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<b>Device Index For Section D</b>			
<b>Device ID</b>	<b>Section D Page No.</b>	<b>Process</b>	<b>System</b>
D357	53	8	1
D358	53	8	1
D359	53	8	1
D364	53	8	1
D371	50	8	1
D372	50	8	1
D373	50	8	1
D374	51	8	1
D375	52	8	1
D376	52	8	1
D377	54	8	1
D384	55	8	2
D385	56	8	2
D386	56	8	2
D387	57	8	2
D388	57	8	2
D390	58	9	1
D391	58	9	1
D392	58	9	1
D393	58	9	1
D394	59	9	1
D395	59	9	1
D396	59	9	1
D397	59	9	1
D399	59	9	1
D400	59	9	1
D401	59	9	1
D402	59	9	1
D403	60	9	1
D404	60	9	1
D405	60	9	1
D406	60	9	1
D407	60	9	1
D408	60	9	1
D409	60	9	1

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<b>Device Index For Section D</b>			
<b>Device ID</b>	<b>Section D Page No.</b>	<b>Process</b>	<b>System</b>
D410	60	9	1
D411	61	9	1
D413	61	9	1
D414	61	9	1
D415	61	9	1
D416	61	9	1
D417	61	9	1
D418	62	9	1
D419	62	9	1
D420	62	9	1
D421	62	9	1
D422	62	9	1
D423	62	9	1
D424	62	9	1
D425	62	9	1
D431	63	9	1
D432	63	9	1
D434	64	9	2
D435	64	9	2
D436	65	9	2
D437	65	9	2
D439	66	9	3
D440	65	9	3
D442	65	9	3
D445	65	9	2
D449	65	9	3
D450	65	9	3
D453	66	11	1
D454	66	11	1
D457	66	11	1
D458	67	12	1
D459	67	12	1
D460	67	12	1
D461	67	12	1
D462	68	12	1

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<b>Device Index For Section D</b>			
<b>Device ID</b>	<b>Section D Page No.</b>	<b>Process</b>	<b>System</b>
D463	68	12	1
D464	68	12	1
D465	68	12	1
D466	67	12	1
D467	68	12	1
D469	70	12	1
D471	69	12	1
C472	69	12	1
C473	69	12	1
D498	73	12	2
D502	35	4	7
D505	75	14	1
D507	76	14	2
D513	76	14	3
D515	78	14	9
D520	78	15	1
D521	78	15	1
D523	78	15	1
D524	78	15	1
D526	122	19	4
D527	97	15	4
D528	98	15	4
D531	79	15	1
D533	79	15	1
D534	79	15	1
D543	79	15	1
D544	79	15	1
D546	79	15	1
D547	79	15	1
D548	80	15	1
D549	80	15	1
D550	80	15	1
D551	80	15	1
D552	80	15	1
D553	80	15	1

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<b>Device Index For Section D</b>			
<b>Device ID</b>	<b>Section D Page No.</b>	<b>Process</b>	<b>System</b>
D554	80	15	1
D555	81	15	1
D556	81	15	1
D557	81	15	1
D558	81	15	1
D559	81	15	1
D560	81	15	1
D561	81	15	1
D562	81	15	1
D563	82	15	1
D564	82	15	1
D565	82	15	1
D566	82	15	1
D567	82	15	1
D568	92	15	1
D569	82	15	1
D571	82	15	1
D572	82	15	1
D573	83	15	1
D574	83	15	1
D575	83	15	1
D576	83	15	1
D577	83	15	1
D578	83	15	1
D579	83	15	1
D581	83	15	1
D582	84	15	1
D583	84	15	1
D584	84	15	1
D585	84	15	1
D586	92	15	1
D587	84	15	1
D588	84	15	1
D589	84	15	1
D591	85	15	1

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<b>Device Index For Section D</b>			
<b>Device ID</b>	<b>Section D Page No.</b>	<b>Process</b>	<b>System</b>
D592	85	15	1
D593	85	15	1
D594	85	15	1
D595	85	15	1
D596	85	15	1
D597	86	15	1
D598	91	15	1
D599	86	15	1
D600	86	15	1
D602	86	15	1
D603	86	15	1
D604	86	15	1
D605	87	15	1
D606	87	15	1
D607	87	15	1
D608	87	15	1
D609	87	15	1
D610	110	15	7
D611	88	15	1
D612	88	15	1
D613	112	15	7
D614	88	15	1
D615	88	15	1
D616	88	15	1
D617	88	15	1
D618	110	15	7
D619	88	15	1
D620	89	15	1
D621	111	15	7
D622	89	15	1
D623	89	15	1
D624	89	15	1
D625	89	15	1
D626	89	15	1
D627	90	15	1

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<b>Device Index For Section D</b>			
<b>Device ID</b>	<b>Section D Page No.</b>	<b>Process</b>	<b>System</b>
D628	90	15	1
D629	90	15	1
D630	111	15	7
D631	90	15	1
D632	92	15	1
D633	90	15	1
D634	90	15	1
D635	92	15	1
D636	91	15	1
D637	91	15	1
D639	91	15	1
D640	78	15	1
D641	125	21	3
D642	125	21	3
D643	125	21	3
D644	125	21	3
D647	93	15	2
D648	98	15	5
D649	104	15	5
D650	99	15	5
D651	108	15	5
D652	100	15	5
D653	101	15	5
D654	106	15	5
D655	107	15	5
D656	102	15	5
D657	71	12	2
D658	109	15	5
D659	103	15	5
D660	105	15	5
D662	93	15	3
D663	93	15	3
D664	94	15	3
D665	94	15	3
D666	94	15	3

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<b>Device Index For Section D</b>			
<b>Device ID</b>	<b>Section D Page No.</b>	<b>Process</b>	<b>System</b>
D667	94	15	3
D669	94	15	3
D670	94	15	3
D671	95	15	3
D672	95	15	3
D673	95	15	3
D674	95	15	3
D675	95	15	3
D676	95	15	3
D677	96	15	3
D678	96	15	3
D679	96	15	3
D680	96	15	3
D681	96	15	3
D682	96	15	3
D683	97	15	3
D684	97	15	3
D685	97	15	3
D686	97	15	3
D688	72	12	2
D689	73	12	2
S692	57	8	2
D693	73	12	2
D696	72	12	2
D697	74	12	3
D698	74	12	3
C699	74	12	3
D700	74	12	4
D701	74	12	4
C702	74	12	4
D703	70	12	1
D709	70	12	1
D713	112	17	1
D714	113	17	1
D722	119	18	0

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<b>Device Index For Section D</b>			
<b>Device ID</b>	<b>Section D Page No.</b>	<b>Process</b>	<b>System</b>
D723	120	18	0
D724	120	18	0
D725	120	18	0
D728	121	19	1
D734	121	19	1
C747	123	21	1
C748	123	21	1
D749	21	3	2
D750	123	21	1
D751	123	21	1
D752	123	21	1
D753	123	21	1
D754	123	21	1
D755	123	21	1
D756	123	21	1
D757	124	21	1
D758	124	21	1
D759	124	21	1
C761	124	21	2
C762	124	21	2
D763	124	21	2
C764	3	1	3
C768	9	2	2
D770	35	4	8
C771	36	4	8
C773	42	5	4
C775	45	5	6
D777	49	6	4
C778	49	6	4
D780	47	6	1
D781	47	6	1
C784	56	8	2
C786	57	8	2
C788	58	8	2
D790	77	14	4

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<b>Device Index For Section D</b>			
<b>Device ID</b>	<b>Section D Page No.</b>	<b>Process</b>	<b>System</b>
D798	77	14	5
D807	70	12	1
D808	70	12	1
D809	70	12	1
D810	117	17	2
C811	117	17	2
D812	118	17	3
C813	119	17	3
S874	120	18	0
D886	126	21	3
D887	126	21	3
D888	121	19	3
D889	121	19	3
D890	126	21	3
D891	126	21	3
D892	126	21	3
D893	126	21	3
D894	126	21	3
D895	127	21	3
D896	127	21	3
D898	1	1	1
D900	6	2	1
D901	7	2	1
D904	7	2	1
D906	6	2	1
D907	9	2	3
D908	17	3	1
D909	19	3	1
D910	18	3	1
D912	18	3	1
D913	19	3	1
D915	17	3	1
D916	22	3	2
D917	22	3	2
D918	19	3	1

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<b>Device Index For Section D</b>			
<b>Device ID</b>	<b>Section D Page No.</b>	<b>Process</b>	<b>System</b>
D919	21	3	2
D922	47	6	1
D923	47	6	1
D928	53	8	1
D930	54	8	1
D932	54	8	1
D933	54	8	1
D934	54	8	1
D949	61	9	1
D950	61	9	1
D953	63	9	1
D954	63	9	1
D959	64	9	1
D960	63	9	1
D961	63	9	1
D969	7	2	1
D973	117	17	2
D973	119	17	3
D976	36	5	1
D977	36	5	1
D978	129	23	1
D979	37	5	1
D980	37	5	1
D982	91	15	1
S987	9	2	2
S989	36	4	8
S990	42	5	4
S992	45	5	6
S993	50	6	4
S994	56	8	2
S995	58	8	2
D998	72	12	2
D1001	72	12	2
D1002	72	12	2
D1022	73	12	2

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<b>Device Index For Section D</b>			
<b>Device ID</b>	<b>Section D Page No.</b>	<b>Process</b>	<b>System</b>
D1023	73	12	2
S1028	120	18	0
D1040	77	14	5
D1061	36	5	1
D1067	129	23	1
D1071	37	5	1
D1078	104	15	5
D1080	63	9	1
D1081	63	9	1
D1082	63	9	1
D1087	125	21	2
D1088	7	2	1
D1093	14	2	9
D1094	14	2	9
D1095	122	19	4
C1096	122	19	4
D1100	113	17	1
D1101	113	17	1
D1102	113	17	1
D1103	113	17	1
D1104	114	17	1
D1112	35	4	7
D1120	39	5	3
D1121	44	5	5
D1122	50	6	4
D1123	114	17	1
D1125	1	1	1
D1126	1	1	1
D1127	1	1	1
D1128	1	1	1
D1129	1	1	1
D1131	2	1	1
D1132	3	2	1
D1133	4	2	1
D1134	4	2	1

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<b>Device Index For Section D</b>			
<b>Device ID</b>	<b>Section D Page No.</b>	<b>Process</b>	<b>System</b>
D1135	4	2	1
D1136	4	2	1
D1137	4	2	1
D1141	4	2	1
D1143	5	2	1
D1145	5	2	1
D1147	5	2	1
D1149	6	2	1
D1151	7	2	1
D1152	10	2	6
D1154	10	2	3
D1155	11	2	8
D1156	12	2	8
D1157	12	2	8
D1158	12	2	8
D1159	12	2	8
D1160	11	2	8
D1161	13	2	8
D1162	13	2	8
D1164	13	2	8
D1165	13	2	8
D1170	14	2	9
D1173	14	2	9
D1174	15	2	9
D1175	15	2	9
D1176	15	2	9
D1177	15	2	9
D1178	15	2	9
D1180	27	4	1
D1182	27	4	1
D1183	27	4	1
D1184	28	4	1
D1187	30	4	3
D1188	30	4	3
D1189	31	4	5

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<b>Device Index For Section D</b>			
<b>Device ID</b>	<b>Section D Page No.</b>	<b>Process</b>	<b>System</b>
D1191	31	4	5
D1194	32	4	5
D1195	32	4	7
D1197	38	5	3
D1198	38	5	3
D1199	38	5	3
D1200	38	5	3
D1203	39	5	3
D1204	39	5	3
D1205	40	5	3
D1206	40	5	3
D1207	40	5	3
D1208	42	5	5
D1209	43	5	5
D1210	43	5	5
D1212	44	5	5
D1213	44	5	5
D1217	46	6	1
D1255	48	6	3
D1256	48	6	3
D1257	48	6	3
D1258	48	6	3
D1259	51	8	1
D1260	51	8	1
D1265	53	8	1
D1266	54	8	1
D1267	16	3	1
D1268	16	3	1
D1269	16	3	1
D1271	18	3	1
D1272	18	3	1
D1273	18	3	1
D1275	18	3	1
D1280	18	3	1
D1283	20	3	2

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<b>Device Index For Section D</b>			
<b>Device ID</b>	<b>Section D Page No.</b>	<b>Process</b>	<b>System</b>
D1284	20	3	2
D1285	21	3	2
D1287	22	3	2
D1288	22	3	2
D1289	22	3	2
D1292	25	3	4
D1293	25	3	5
D1294	25	3	5
D1295	26	3	5
D1296	26	3	5
D1297	26	3	5
D1298	65	9	2
D1301	66	11	1
D1303	126	21	3
D1304	69	12	1
D1305	71	12	1
D1306	71	12	1
D1307	71	12	1
D1308	71	12	1
D1316	126	21	3
D1320	121	19	2
D1321	121	19	2
D1326	33	4	7
D1332	28	4	1
D1333	30	4	3
D1334	34	4	7
D1335	34	4	7
D1336	34	4	7
D1337	37	5	1
D1338	37	5	1
D1339	48	6	3
D1340	54	8	1
D1341	54	8	1
D1342	54	8	1
D1343	28	4	1

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<b>Device Index For Section D</b>			
<b>Device ID</b>	<b>Section D Page No.</b>	<b>Process</b>	<b>System</b>
D1350	11	2	6
D1351	27	4	1
D1354	2	1	1
D1355	2	1	2
S1356	3	1	3
D1357	8	2	1
D1359	10	2	3
D1361	11	2	6
D1362	109	15	5
D1363	112	15	7
D1365	19	3	1
D1366	22	3	2
D1367	11	2	7
D1380	36	4	9
D1381	37	5	1
D1384	44	5	5
D1392	64	9	1
D1399	74	12	3
D1415	118	17	2
D1416	120	18	0
D1419	124	21	1
D1425	119	17	3
D1438	11	2	8
D1443	25	3	4
D1444	26	3	5
D1446	28	4	1
D1447	30	4	3
D1448	32	4	5
D1449	35	4	7
D1451	40	5	3
D1453	48	6	3
D1454	55	8	1
D1455	65	9	2
D1456	66	9	3
D1458	66	11	1

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<b>Device Index For Section D</b>			
<b>Device ID</b>	<b>Section D Page No.</b>	<b>Process</b>	<b>System</b>
D1459	71	12	1
D1460	73	12	2
D1461	74	12	4
D1465	76	14	2
D1466	76	14	3
D1467	77	14	4
D1469	78	14	9
D1470	93	15	1
D1471	93	15	2
D1472	97	15	3
D1473	121	19	1
D1477	127	21	3
E1487	127	22	0
E1488	127	22	0
E1489	127	22	0
E1491	127	22	0
E1492	127	22	0
E1493	127	22	0
E1494	127	22	0
D1495	71	12	1
D1496	73	12	2
E1499	128	22	0
D1500	91	15	1
D1501	39	5	3
D1502	97	15	3
D1504	64	9	1
D1505	64	9	1
D1506	64	9	1
D1507	64	9	1
D1508	27	4	1
D1509	64	9	1
D1510	27	4	1
D1514	128	23	1
D1515	128	23	1
D1516	128	23	1

**FACILITY PERMIT TO OPERATE  
 TESORO REFINING AND MARKETING CO  
 SECTION D: DEVICE ID INDEX**

<b>Device Index For Section D</b>			
<b>Device ID</b>	<b>Section D Page No.</b>	<b>Process</b>	<b>System</b>
D1517	128	23	1
D1518	128	23	1
D1519	128	23	1
D1520	128	23	1
D1521	129	23	1
D1522	129	23	1
D1523	129	23	1
D1524	129	23	1
D1530	55	8	1
D1531	55	8	1
D1532	20	3	2
D1533	109	15	6
C1536	118	17	2
C1538	119	17	3
D1553	77	14	5
D1555	92	15	1
D1556	122	19	3
D1557	16	2	10
D1558	16	2	10
D1559	16	2	10
D1560	16	2	10
D1561	75	12	8
D1562	129	23	1
D1566	35	4	7
D1567	8	2	1
D1572	122	19	4
D1573	26	3	8
C1574	26	3	8
D1597	19	3	1
D1598	19	3	1
D1615	126	21	3
D1616	8	2	1
D1617	114	17	1
D1618	115	17	1
C1638	125	21	2

**FACILITY PERMIT TO OPERATE  
 TESORO REFINING AND MARKETING CO  
 SECTION D: DEVICE ID INDEX**

<b>Device Index For Section D</b>			
<b>Device ID</b>	<b>Section D Page No.</b>	<b>Process</b>	<b>System</b>
C1639	125	21	2
D1645	115	17	1
D1646	116	17	1
D1648	117	17	2
D1651	119	17	3
D1659	116	17	1
D1664	24	3	3
D1668	31	4	5
D1669	31	4	5

## **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:**

#### **FACILITY CONDITIONS**

F9.1 Except for open abrasive blasting operations, the operator shall not discharge into the atmosphere from any single source of emissions whatsoever any air contaminant for a period or periods aggregating more than three minutes in any one hour which is:

(a) As dark or darker in shade as that designated No.1 on the Ringelmann Chart, as published by the United States Bureau of Mines; or

(b) Of such opacity as to obscure an observer's view to a degree equal to or greater than does smoke described in subparagraph (a) of this condition.

[RULE 401, 3-2-1984; RULE 401, 11-9-2001]

F14.1 The operator shall not purchase diesel fuel containing sulfur compounds in excess of 15 ppm by weight as supplied by the supplier.

This condition shall become effective on or after June 1, 2004.

[RULE 431.2, 5-4-1990; RULE 431.2, 9-15-2000]

F24.1 Accidental release prevention requirements of Section 112(r)(7):

a). The operator shall comply with the accidental release prevention requirements pursuant to 40 CFR Part 68 and shall submit to the Executive Officer, as a part of an annual compliance certification, a statement that certifies compliance with all of the requirements of 40 CFR Part 68, including the registration and submission of a risk management plan (RMP).

b). The operator shall submit any additional relevant information requested by the Executive Officer or designated agency.

## **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:**

**[40CFR 68 - Accidental Release Prevention, 5-24-1996]**

## **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:**

F25.1 The permit holder of this facility shall not install, alter, or operate a refinery process unit or other non-Rule 219 exempt equipment without a valid RECLAIM/Title V permit issued by the AQMD pursuant to Rule 201 - Permit to Construct, Rule 203 - Permit to Operate, Rule 2004 - Requirements, and Rule 3002 - Requirements, as applicable.

Notwithstanding the above, the provisions of Rules 201, 203, 2004, and 3002 shall not apply to installations or alterations that involve only the equipment listed in Table 1 below, nor shall they apply to the operation of equipment listed in Table 1, when directly associated with permitted process units or other permitted equipment.

Notwithstanding the above, all new equipment listed in Table 1, including associated fugitive components installed with such equipment, shall have Best Available Control Technology installed in conformance with the Best Available Control Technology Guidelines in effect at the time of the installation.

TABLE 1

- (a) Heat Exchanger (including air-cooler, reboiler, cooler, condenser, and shell and tube exchanger)
- (b) In-line Mixer
- (c) Pump
- (d) Knockout Pot - Compressor inlet (immediate inlet) and interstage
- (e) Knockout Pot - Fuel Gas System (downstream of fuel gas mix drums)

This condition applies only to the facility that processes petroleum as defined in the Standard Industrial Classification Manual as Industry No. 2911 - Petroleum Refining, as well as its directly associated sulfur recovery plant which may be located outside of the facility.

## **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:**

**[RULE 2004, 5-11-2001; RULE 2004, 4-6-2007]**

F34.1 The operator shall not sell refinery gas containing sulfur compounds in excess of 40 ppmv, calculated as hydrogen sulfide, averaged over 4-hour period.

**[RULE 431.1, 6-12-1998]**

F52.1 This facility is subject to the applicable requirements of the following rules or regulation(s):

40CFR79

40CFR80

**[40CFR 79, 7-1-1999; 40CFR 80, 7-1-1999]**

F52.2 This facility is subject to the applicable requirements of the following rules or regulation(s):

40CFR61, Subpart FF

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

F52.3 This facility is subject to the applicable requirements of the following rules or regulation(s):

40CFR60 Subpart A

40CFR61 Subpart A

40CFR63 Subpart A

## 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:**

**[40CFR 60 Subpart A, 6-13-2007; 40CFR 61 Subpart A, 5-16-2007; 40CFR 63 Subpart A, 5-16-2007]**

F52.4 This facility is subject to the applicable requirements of the following rules or regulation(s):

Consent Decree Civil No. H-01-0978, 3-21-2001

**[ CONSENT DECREE, 3-21-2001 ]**

F60.1 The emission limits identified in Section D and H of the permit shall be defined as emissions discharged to the atmosphere from the originating equipment.

### PROCESS CONDITIONS

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]**

[Processes subject to this condition : 1, 2, 3, 4, 5, 6, 8, 9, 11, 12, 15]

### SYSTEM CONDITIONS

S1.1 The operator shall limit the loading rate to no more than 1262500 barrel(s) in any one 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:**

For the purpose of this condition, loading rate shall be defined as the combined loading rate of D790 in Process 14, System 4 and D1040 in Process 14, System 5, and shall be recorded by shipping records.

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

[Systems subject to this condition : Process 14, System 4 , 5]

S2.1 The operator shall limit emissions from this system as follows

CONTAMINANT	EMISSIONS LIMIT
VOC	Less than 2.5 lbs/mmscf of hydrogen produced

**[RULE 1189, 1-21-2000]**

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

S7.1 The following conditions shall apply to all coke handling and related devices from this system:

The operator shall drive all outgoing petroleum coke trucks, whether filled or empty, through the truck wash system in order to thoroughly wash any residual coke off the exterior of the trucks.

The operator shall clean or wet down the ground area below the conveyors to prevent airborne dust.

The operator shall wash exterior conveyors and return belts, overhead structures and ground area down to the coke laden water return system to avoid accumulation of coke dust.

## **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:**

[**RULE 1158, 6-11-1999**; RULE 1158, 7-11-2008]

[Systems subject to this condition : Process 2, System 8]

S7.2 The following conditions shall apply to all coke handling and related devices from this system:

The operator shall drive all outgoing petroleum coke trucks, whether filled or empty, through the truck wash system in order to thoroughly wash any residual coke off the exterior of the trucks.

The operator shall clean or wet down the ground area below the conveyors to prevent airborne dust.

The operator shall wash exterior conveyors and return belts, overhead structures and ground area down to the coke laden water return system to avoid accumulation of coke dust.

The operator shall drain raw coke from the coker pit before loading to the conveyor hopper to minimize spillage of coke from elevated inclined conveyors.

[**RULE 1158, 6-11-1999**; RULE 1158, 7-11-2008]

[Systems subject to this condition : Process 2, System 9]

S11.1 The operator shall comply with all applicable mitigation measures stipulated in the "Statement of Findings, Statement of Overriding Considerations, and Mitigation Monitoring Plan" document which is part of the AQMD Certified Final Environmental Impact Report dated 21-mar-1994 for this facility.

This condition shall only apply to equipment listed in Section H of this facility permit.

[CA PRC CEQA, 11-23-1970]

## 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:**

[Systems subject to this condition : Process 6, System 1]

S11.2 The operator shall comply with all applicable mitigation measures stipulated in the "Statement of Findings, Statement of Overriding Considerations, and Mitigation Monitoring Plan" document which is part of the AQMD Certified Final Environmental Impact Report dated 15-oct-2001 for this facility.

This condition shall only apply to equipment listed in Section H of this facility permit.

[CA PRC CEQA, 11-23-1970]

[Systems subject to this condition : Process 4, System 3 , 7]

S11.3 The operator shall comply with all applicable mitigation measures stipulated in the "Statement of Findings, Statement of Overriding Considerations, and Mitigation Monitoring Plan" document which is part of the AQMD Certified Final Environmental Impact Report dated 04-10-2009 for this facility.

This condition shall only apply to equipment listed in Section H of this facility permit.

[CA PRC CEQA, 11-23-1970]

[Systems subject to this condition : Process 2, System 1; Process 8, System 1; Process 21, System 3]

S13.2 All devices under this system are subject to the applicable requirements of the following rules or regulations:

Contaminant	Rule	Rule/Subpart
VOC	40CFR60, SUBPART	QQQ

## 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:**

**[40CFR 60 Subpart QQQ, 10-17-2000]**

[Systems subject to this condition : Process 4, System 7; Process 6, System 3; Process 12, System 1 , 2; Process 23, System 1]

S13.3 All devices under this system are subject to the applicable requirements of the following rules or regulations:

Contaminant	Rule	Rule/Subpart
PM	District Rule	1158

**[RULE 1158, 6-11-1999; RULE 1158, 7-11-2008]**

[Systems subject to this condition : Process 2, System 8 , 9]

S13.4 All devices under this system are subject to the applicable requirements of the following rules or regulations:

Contaminant	Rule	Rule/Subpart
VOC	District Rule	1123

**[RULE 1123, 12-7-1990]**

[Systems subject to this condition : Process 1, System 1 , 2; Process 2, System 1 , 3 , 6 , 7 , 10; Process 3, System 1 , 2 , 4 , 5; Process 4, System 1 , 3 , 5 , 7 , 9; Process 5, System 1 , 3 , 5; Process 6, System 1 , 3; Process 8, System 1; Process 9, System 1 , 2 , 3; Process 12, System 8; Process 19, System 3; Process 21, System 1 , 2 , 3 , 4]

S13.5 All devices under this system are subject to the applicable requirements of the following rules or regulations:

Contaminant	Rule	Rule/Subpart
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## 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:**

VOC | District Rule | 1176

**[RULE 1176, 9-13-1996]**

[Systems subject to this condition : Process 12, System 1, 2, 3, 4, 7; Process 19, System 4]

S13.6 All devices under this system are subject to the applicable requirements of the following rules or regulations:

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

**[RULE 1149, 7-14-1995; RULE 1149, 5-2-2008; RULE 463, 5-6-2005]**

[Systems subject to this condition : Process 15, System 3]

S13.7 All devices under this system are subject to the applicable requirements of the following rules or regulations:

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

**[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 15, System 1, 2, 7]

## 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:**

S13.8 All devices under this system are subject to the applicable requirements of the following rules or regulations:

Contaminant	Rule	Rule/Subpart
VOC	District Rule	461

**[RULE 461, 6-3-2005; RULE 461, 3-7-2008]**

[Systems subject to this condition : Process 19, System 1 , 2]

S13.9 All devices under this system are subject to the applicable requirements of the following rules or regulations:

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

For Rule 463 applicability, only subdivision (d) in the March 11,1994 amendment, or equivalent requirements in the future amendments, shall apply to domed external floating roof tanks. This does not preclude any requirements specified in 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 15, System 5]

S15.1 The vent gases from all affected devices of this process/system shall be vented as follows:

## **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:**

All emergency vent gases shall be directed to a blowdown flare system.

This process/system shall not be operated unless the refinery flare system is in full use and has a valid permit to receive vent gases from this system.

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

[Systems subject to this condition : Process 15, System 3]

S15.2 The vent gases from all affected devices of this process/system shall be vented as follows:

All emergency vent gases shall be directed to the refinery flares (process 21, system 1) or flare gas recovery system (process 21, system 4) which may also include DCU Blowdown Compressor C-137 (device D68) except Devices IDs D898, D20, D910, D1268, D1269, D1280, D93, D94, D96, D1283, D1284, D1288, D1292, D219, D226, D1212, D275, D1256, D375, D928, D1267 & D916 that vent to the atmosphere.

This process/system shall not be operated unless the blowdown flare system is in full use and has a valid permit to receive vent gases from this system.

**[RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(b)(2)-Offset, 5-10-1996]**

[Systems subject to this condition : Process 1, System 1, 2; Process 2, System 1, 3, 6, 10; Process 3, System 1, 2, 5; Process 4, System 1, 3, 5, 7, 9; Process 5, System 1, 3, 5; Process 6, System 1, 3; Process 8, System 1; Process 9, System 1, 2, 3; Process 12, System 8; Process 19, System 3; Process 21, System 4]

S15.3 The vent gases from all affected devices of this process/system shall be vented as follows:

## **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:**

All vent gases under normal operating conditions shall be directed to a vapor recovery system (process 21, system 3) consisting of compressors, D641, D642, D643, and/or D644, which can be operated independently to maintain a system vacuum that efficiently collects all vented gases or the flare gas recovery system (process 21, system 4).

This process/system shall not be operated unless the vapor recovery system (process 21, system 3) or flare gas recovery system (process 21, system 4) is in full use and has a valid permit to receive vent gases from this system.

**[RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(b)(2)-Offset, 5-10-1996]**

[Systems subject to this condition : Process 1, System 2; Process 2, System 3, 6; Process 3, System 2, 4; Process 4, System 1, 3, 5, 7; Process 5, System 1, 3, 5; Process 6, System 1; Process 8, System 1; Process 9, System 2; Process 21, System 4]

S15.5 The vent gases from all affected devices of this process/system shall be vented as follows:

All vent gases under normal operating conditions shall be directed to a vapor recovery system consisting of compressors, D641, 642, 643, and/or 644, which can be operated independently to maintain a system vacuum that efficiently collects all vented gases, except devices D305, 432, 1504-1507, 1514-1524 that vent to the flare system.

This process/system shall not be operated unless the vapor recovery system is in full use and has a valid permit to receive vent gases from this system.

**[RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(b)(2)-Offset, 5-10-1996]**

[Systems subject to this condition : Process 9, System 1; Process 23, System 1]

S15.6 The vent gases from all affected devices of this process/system shall be vented as follows:

## **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:**

All vent gases under normal operating conditions shall be directed to a vapor recovery system consisting of compressors, D641, D642, D643, and/or D644, which can be operated independently to maintain a system vacuum that efficiently collects all vented gases.

This process/system shall not be operated unless the blowdown vapor recovery system is in full use and has a valid permit to receive vent gases from this system.

**[RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(b)(2)-Offset, 5-10-1996]**

[Systems subject to this condition : Process 12, System 7; Process 14, System 4 , 5]

S15.7 The vent gases from all affected devices of this process/system shall be vented as follows:

All vent gases under normal operating conditions shall be directed to to the fume scrubber system (P21, S2), and then to the boiler system (P18) with at least one of four boilers (D722-5) in operation.

This process/system shall not be operated unless the above air pollution control system is in full use and has a valid permit to receive vent gases from this system.

**[RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(b)(2)-Offset, 5-10-1996]**

[Systems subject to this condition : Process 14, System 1; Process 15, System 4]

S15.8 The vent gases from all affected devices of this process/system shall be vented as follows:

All vent gases under normal operating conditions shall be directed to the flare system.

This process/system shall not be operated unless the flare(s) is in full use and has a valid permit to receive vent gases from this system.

## **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:**

**[RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(b)(2)-Offset, 5-10-1996]**

[Systems subject to this condition : Process 14, System 2 , 3]

S15.9 The vent gases from all affected devices of this process/system shall be vented as follows:

All vent gases under normal operating conditions shall be directed to a vapor recovery system (process 21 system 3) consisting of compressors, D641, D642, D643, and/or D644, which can be operated independently to maintain a system vacuum that efficiently collects all vented gases, or the flare gas recovery system ( process 21, system 4) except Device D1151 that vents to the atmosphere.

This process/system shall not be operated unless the vapor recovery system(process 21, system3) or flare gas recovery system ( process 21, system 4) is in full use and has a valid permit to receive vent gases from this system.

**[RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(b)(2)-Offset, 5-10-1996]**

[Systems subject to this condition : Process 2, System 1]

S15.10 The vent gases from all affected devices of this process/system shall be vented as follows:

All sour gases under normal operating conditions shall be directed to the amine absorber(s) located in this system.

This process/system shall not be operated unless the absorber(s) is in full use and has a valid permit to receive vent gases from this system.

**[RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(b)(2)-Offset, 5-10-1996]**

## **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:**

[Systems subject to this condition : Process 2, System 1; Process 4, System 7; Process 8, System 1]

S15.11 The vent gases from all affected devices of this process/system shall be vented as follows:

All sour gases under normal operating conditions shall be directed to the fuel gas treating system(s) (Process 12, System 8 or Process 4, System 9).

This process/system shall not be operated unless the fuel gas treating system(s) is in full use and has a valid permit to receive vent gases from this system.

**[RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(b)(2)-Offset, 5-10-1996]**

[Systems subject to this condition : Process 2, System 6; Process 21, System 3 , 4]

S15.12 The vent gases from all affected devices of this process/system shall be vented as follows:

All sour gases under normal operating conditions shall be directed to the FCCU gas treating system.

This process/system shall not be operated unless the FCCU gas treating system is in full use and has a valid permit to receive vent gases from this system.

**[RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(b)(2)-Offset, 5-10-1996]**

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

S15.13 The vent gases from all affected devices of this process/system shall be vented as follows:

## **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:**

All sour gases under normal operating conditions shall be directed to the fuel gas treating system (Process 4, System 9) or to the scrubber located in Process 8, System 1.

This process/system shall not be operated unless the fuel gas treating system or the scrubber is in full use and has a valid permit to receive vent gases from this system.

**[RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(b)(2)-Offset, 5-10-1996]**

[Systems subject to this condition : Process 4, System 1 , 3 , 5]

- S18.1 All affected devices listed under this process/system shall be used only to receive, recover and/or dispose of vent gases routed from the system(s) or process(es) listed below, in addition to specific devices identified in the "connected to" column:

## **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:**

Crude Distillation Unit (Process: 1, System: 1 & 2)

Delayed Coking Unit (DCU) (Process: 2, System: 1, 3, 6 & 10)

Fluid Catalytic Cracking Unit (FCCU) (Process: 3, System: 1, 2, 4 & 5)

Hydrotreating Units (Process: 4, System: 1, 3, 5, 7 & 9)

Catalytic Reforming Units (Process: 5, System: 1, 3 & 5)

Hydrogen Generation Units (Process: 6, System: 1 & 3)

Hydrocracking Unit (Process: 8, System: 1)

Alkylation Unit (Process: 9, System: 1, 2 & 3)

Treating/Stripping Units (Process: 12, System: 1 & 7)

Loading/Unloading (Process: 14, System: 4 & 5)

Isomerization Unit (Process: 23, System: 1)

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

[Systems subject to this condition : Process 21, System 3]

S18.2 All affected devices listed under this process/system shall be used only to receive, recover and/or dispose of vent gases routed from the system(s) or process(es) listed below, in addition to specific devices identified in the "connected to" column:

## **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:**

Crude Distillation Unit (Process: 1, System: 1 & 2)

Delayed Coking Unit (DCU) (Process: 2, System: 1, 3, 6 & 10)

Fluid Catalytic Cracking Unit (FCCU) (Process: 3, System: 1, 2, 4 & 5)

Hydrotreating Units (Process: 4, System: 1, 3, 5, 7 & 9)

Catalytic Reforming Units (Process: 5, System: 1, 3 & 5)

Hydrogen Generation Units (Process: 6, System: 1 & 3)

Hydrocracking Unit (Process: 8, System: 1)

Alkylation Unit (Process: 9, System: 1, 2 & 3)

Fuel Gas Treating System (Process: 12, System: 8)

Loading and Unloading (Process: 14, System: 2 & 3)

Pressurized Storage Tanks (Process: 15, System: 3)

Fuel Gas Mix System (Process: 19, System: 3)

Isomerization Unit (Process: 23, System: 1)

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

[Systems subject to this condition : Process 21, System 1]

S18.3 All affected devices listed under this process/system shall be used only to receive, recover and/or dispose of vent gases routed from the system(s) or process(es) listed below, in addition to specific devices identified in the "connected to" column:

## **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:**

Inorganic Chemical Loading and Unloading (Process: 14, System: 1)

Miscellaneous Storage Tanks (Process: 15, System: 4)

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

[Systems subject to this condition : Process 21, System 2]

S18.4 All affected devices listed under this process/system shall be used only to receive, recover and/or dispose of vent gases routed from the system(s) or process(es) listed below, in addition to specific devices identified in the "connected to" column:

DCU Blowdown Recovery System (Process: 2, System: 6)

Refinery Vapor Recovery System (Process: 21, System: 3)

Flare Gas Recovery System (Process: 21, System: 4)

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

[Systems subject to this condition : Process 4, System 9; Process 12, System 8]

S18.5 All affected devices listed under this process/system shall be used only to receive, recover and/or dispose of vent gases routed from the system(s) or process(es) listed below, in addition to specific devices identified in the "connected to" column:

FCCU Recovery System (Process: 3, System: 1)

FCCU Cracking Section (Process: 3, System: 2)

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

[Systems subject to this condition : Process 3, System 5]

## **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:**

S18.6 All affected devices listed under this process/system shall be used only to receive, recover and/or dispose of vent gases routed from the system(s) or process(es) listed below, in addition to specific devices identified in the "connected to" column:

Crude Distillation Unit (Process: 1, System: 1 & 2)

Delayed Coking Unit (DCU) (Process: 2, System: 1, 3, 6 & 10)

Fluid Catalytic Cracking Unit (FCCU) (Process: 3, System: 1, 2, 4 & 5)

Hydrotreating Units (Process: 4, System: 1, 3, 5, 7 & 9)

Catalytic Reforming Units (Process: 5, System: 1, 3 & 5)

Hydrogen Generation Units (Process: 6, System: 1 & 3)

Hydrocracking Unit (Process: 8, System: 1)

Alkylation Unit (Process: 9, System: 1, 2 & 3)

Treating/Stripping Units (Process: 12, System: 1 & 7)

Loading/Unloading (Process: 14, System: 4 & 5)

Isomerization Unit (Process: 23, System: 1)

**[RULE 1118, 11-4-2005; RULE 1303(a)(1)-BACT, 5-10-1996]**

[Systems subject to this condition : Process 21, System 4]

S31.1 The following BACT requirements shall apply to VOC service fugitive components associated with the devices that are covered by application number(s) 347559, 347560, 347564, 366048, 366083, 376616, 376622, 376623, 376624, 376625, 376627, 376628, 381228, 435139, 457927, 501287 & 501288:

## **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:**

All open-ended valves shall be equipped with cap, blind flange, plug, or a second valve.

All pressure relief valves shall be connected to closed vent system or equipped with rupture disc.

All sampling connections shall be closed-purge, closed-loop, or closed-vent system.

All new valves in VOC service shall be of leakless type, except those specifically exempted by Rule 1173 or approved by the District in the following applications: heavy liquid service, control valves, instrument piping/tubing, applications requiring torsional valve stem motion, applications where failures could pose safety hazards (e.g. drain valves with valve stems in horizontal position), retrofits with space limitations, and valves not commercially available.

If 98.0 percent or greater of the new valve and the new flange population inspected is found to leak gaseous or liquid volatile organic compounds at a rate less than 500 ppm for two consecutive months, then the operator may revert to a quarterly inspection program with the approval of the executive officer. This condition does not apply to leakless valves.

All components are subject to District Rule 1173 and 40CFR60 Subpart GGG.

The operator shall keep records of the monthly inspection (and quarterly where applicable), subsequent repair, and reinspection, in a manner approved by the District.

The operator shall provide to the District, no later than 90 days after initial startup, a recalculation of the fugitive emissions based on actual components installed and removed from service. The operator shall also submit a complete, as built, piping and instrumentation diagram(s) and copies of requisition data sheets for all non-leakless type valves with a listing of tag numbers and reasons why leakless valves were not used.

All process drains shall be equipped with water seal, or a closed vent system and control device complying with the requirements of 40CFR60 Subpart QQQ.

## **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:**

All new components in VOC service as defined in Rule 1173, except valves and flanges, shall be inspected quarterly using EPA reference Method 21. All new valves and flanges in VOC service except those specifically exempted by Rule 1173 shall be inspected monthly using EPA Method 21.

For the purpose of this condition, leakless valve shall be defined as any valve equipped with sealed bellow or equivalent as approved in writing by the District prior to installation.

Components shall be defined as any valve, fitting, pump, compressor, pressure relief device, diaphragm, hatch, sight-glass, and meter, which are not exempt by Rule 1173.

All new components in VOC service, a leak greater than 500 ppm but less than 1,000 ppm measured as methane above background as measured using EPA Method 21, shall be repaired within 14 days of detection.

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

[Systems subject to this condition : Process 1, System 4; Process 2, System 1; Process 3, System 1; Process 4, System 1, 3, 7; Process 5, System 1, 3, 5; Process 6, System 1; Process 8, System 1; Process 9, System 1; Process 12, System 7; Process 15, System 3; Process 23, System 1]

- S31.2 The following BACT requirements shall apply to VOC service fugitive components associated with the devices that are covered by application number(s) 501291, 494382 & 472872:

## **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:**

All new valves and major components in VOC service as defined by Rule 1173, except those specifically exempted by Rule 1173 and those in heavy liquid service as defined in Rule 1173, shall be distinctly identified from other components through their tag numbers (e.g. numbers ending in the letter "N"), and shall be noted in the records.

All open-ended valves shall be equipped with cap, blind flange, plug, or a second valve.

All pressure relief valves shall be connected to closed vent system or equipped with rupture disc.

All process drains shall be equipped with water seal, or a closed vent system and control device complying with the requirements of 40CFR60 Subpart QQQ.

All sampling connections shall be closed-purge, closed-loop, or closed-vent system.

All components are subject to District Rule 1173 and 40CFR 60 Subpart GGGa.

All new components in VOC service as defined in Rule 1173, except valves and flanges, shall be inspected quarterly using EPA reference Method 21. All new valves and flanges in VOC service except those specifically exempted by Rule 1173 shall be inspected monthly using EPA Method 21.

All new components in VOC service, a leak greater than 500 ppm but less than 1,000 ppm measured as methane above background as measured using EPA Method 21, shall be repaired within 14 days of detection.

All new valves in VOC service shall be leakless type, except those specifically exempted by Rule 1173 or approved by the District in the following applications: heavy liquid service, control valves, instrument piping/tubing, applications requiring torsional valve stem motion applications where failures could pose safety hazards (e.g. drain valves with valve stems in horizontal position), retrofits with space limitations, and valves not commercially available.

## 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:**

If 98.0 percent or greater of the new valve and the new flange population inspected is found to leak gaseous or liquid volatile organic compounds at a rate less than 500 ppm for two consecutive months, then the operator may revert to a quarterly inspection program with the approval of the executive officer. This condition does not apply to leakless valves.

The operator shall keep records of the monthly inspection( and quarterly where applicable), subsequent repair, and re-inspection, in a manner approved by the District.

The operator shall provide to the District no later than 90 days after initial startup, a recalculation of the fugitive emissions based on actual components installed and removed from service. The operator shall also submit a complete, as built, piping and instrumentation diagram(s) and copies of requisition data sheets for all non-leakless type valves with a listing of tag numbers and reasons why leakless valves were not used.

For the purpose of this condition, leakless valve shall be defined as any valve equipped with sealed bellow or equivalent as approved in writing by the District prior to installation.

Components shall be defined as any valve, fitting, pump, compressor, pressure relief device, diaphragm, hatch, sight-glass, and meter, which are not exempt by Rule 1173.

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

[Systems subject to this condition : Process 21, System 4]

S42.1 The operator shall not operate the FCCU unless the operator complies with the emission limits of the following Rule:

Contaminant	Rule	Rule/Subpart
PM10	District Rule	1105.1
NH3	District Rule	1105.1

## 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:**

If the operator fails to comply with any of the terms and conditions listed below, the operator shall be subject to the compliance deadlines as specified in Rule 1105.1(d)(1).

1. Award contract(s) to construct and install the control technology by April 28, 2006.
2. Commence construction phase of the control technology permitted by AQMD for compliance with Rule 1105.1(d)(1) by the later of May 1, 2006 or within 30 days of receiving permit. These dates may be extended in writing by the Executive Officer upon a request by Equilon if the CEQA document is not finalized by April 30, 2006. Such extension(s) shall not be for a period more than five months after the original deadline listed in this paragraph.
3. Start operation of the control technology permitted to ensure compliance with Rule 1105.1 (d)(1) by April 30, 2007.
4. Comply with Rule 1105.1 (d)(1) requirements no later than June 30, 2007.

**[RULE 1105.1, 11-7-2003]**

[Systems subject to this condition : Process 3, System 6]

### DEVICE CONDITIONS

#### A. Emission Limits

A63.2 The operator shall limit emissions from this equipment as follows:

CONTAMINANT	EMISSIONS LIMIT
CO	Less than or equal to 136 LBS PER DAY

## 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:**

PM10	Less than or equal to 26 LBS PER DAY
ROG	Less than or equal to 26 LBS PER DAY
SOX	Less than or equal to 86368 LBS IN ANY ONE YEAR

The operator shall calculate the emission limit(s) of CO based on the AQMD certified continuous monitor pursuant to Rule 218. This monitoring system shall have the capability to show the cumulative daily emissions.

The operator shall calculate the emission limit(s) of SOx by using daily emission data reported to the AQMD pursuant to Regulation XX, for any 365-day period to demonstrate exemption from PSD requirements.

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

[Devices subject to this condition : D32]

A63.3 The operator shall limit emissions from this equipment as follows:

CONTAMINANT	EMISSIONS LIMIT
CO	Less than or equal to 543 LBS PER DAY

For the purposes of this condition, the limit(s) shall be based on the total combined emissions from equipment D810 and D812.

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

[Devices subject to this condition : D810, D812]

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

CONTAMINANT	EMISSIONS LIMIT

## 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:**

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 NO<sub>x</sub> and SO<sub>x</sub> 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]**

[Devices subject to this condition : D112, D120, D146, D214, D215, D216, D217, D218, D722, D723, D724, D725, D770, D810, D812, D1122]

A63.6 The operator shall limit emissions from this equipment as follows:

CONTAMINANT	EMISSIONS LIMIT
Visible emissions	Less than or equal to 10 Percent opacity

**[RULE 1158, 6-11-1999; RULE 1158, 7-11-2008]**

[Devices subject to this condition : D41, D45, D46, D47, D49, D1093, D1094, D1155, D1156, D1157, D1158, D1159, D1160, D1161, D1162, D1164, D1165, D1170, D1173, D1174, D1175, D1176, D1177, D1178, D1438]

A63.7 The operator shall limit emissions from this equipment as follows:

## 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:**

CONTAMINANT	EMISSIONS LIMIT
Visible emissions	Less than or equal to 30 Percent opacity

Pursuant to 40CFR60.8(c), emissions in excess of the level of the applicable emission limit (40CFR60.102(a)(2)) during periods of startup, shutdown and malfunction shall not be considered a violation of the applicable emission limit (40CFR60.102(a)(2)) unless otherwise specified in the applicable standard.

The operator shall keep records to demonstrate compliance or exemption from this condition.

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

[Devices subject to this condition : D96]

A195.1 The 5 PPMV NH3 emission limit(s) is averaged over 60 minutes at 15 percent O2 dry.

The operator shall calculate and continuously record the NH3 slip concentration using the following:  $NH_3(ppmv) = [a - b * c / 1E6] * 1E6 / b$ , where a=NH3 injection rate(lb/hr)/17 (lb/lbmole), b= dry exhaust gas flow rate(lb/hr)/29(lb/lbmole), and c= change in measured NOx across the SCR(ppmvd at 15 percent O2). The operator shall install and maintain a NOx analyzer to measure the SCR inlet NOx ppm accurate to within plus or minus 5 percent calibrated at least once every 12 months.

The operator shall use the method described above or another alternative method approved by the Executive Officer.

The ammonia slip calculation procedures described above shall not be used for compliance determination for emission information determination without corroborative data using an approved reference test method for the determination of ammonia.

## **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:**

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

[Devices subject to this condition : C1536, C1538]

A229.1 The 0.1 lbs/MM Btu emission limit is calculated by an annual average CEMS data.

For the purpose of this condition, the emission limit is for NOx emission limit.

**[ CONSENT DECREE, 3-21-2001 ]**

[Devices subject to this condition : D89, D90]

A327.1 For the purpose of determining compliance with District Rule 475, combustion contaminant emissions may exceed the concentration limit or the mass emission limit listed, but not both limits at the same time.

**[RULE 475, 10-8-1976; RULE 475, 8-7-1978]**

[Devices subject to this condition : D810, D812]

#### **B. Material/Fuel Type Limits**

B22.1 The operator shall not use this equipment with materials having a(n) true vapor pressure of 0.5 psia or greater under actual operating conditions.

**[RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(b)(2)-Offset, 5-10-1996]**

[Devices subject to this condition : D543, D549, D568, D582, D583, D586, D587, D588, D591, D605, D609, D632, D635, D647, D657, D1555]

## **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:**

B22.2 The operator shall not use this equipment with materials having a(n) true vapor pressure of 1.5 psia or greater under actual operating conditions.

**[RULE 462, 5-14-1999]**

[Devices subject to this condition : D515]

B22.3 The operator shall only use this equipment with materials having a(n) true vapor pressure of 5.7 psia or less under actual operating conditions.

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

[Devices subject to this condition : D639]

B22.4 The operator shall not use this equipment with materials having a(n) true vapor pressure of 10 psia or greater under actual operating conditions.

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

[Devices subject to this condition : D547, D550, D551]

B22.8 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]**

[Devices subject to this condition : D557, D561, D564, D654, D982, D1078]

B22.9 The operator shall not use this equipment with materials having a(n) true vapor pressure of 1.7 psia or greater under actual operating conditions.

## 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:**

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

[Devices subject to this condition : D602, D608]

B22.10 The operator shall not use this equipment with materials having a(n) true vapor pressure of 9.15 psia or greater under actual operating conditions.

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

[Devices subject to this condition : D595]

B22.11 The operator shall not use this equipment with materials having a(n) true vapor pressure of 6.6 psia or greater under actual operating conditions.

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

[Devices subject to this condition : D606, D607]

B22.12 The operator shall not use this equipment with materials having a(n) true vapor pressure of 0.1 psia or greater under actual operating conditions.

**[RULE 1303(b)(2)-Offset, 5-10-1996; RULE 1303(b)(2)-Offset, 12-6-2002]**

[Devices subject to this condition : D581]

B22.13 The operator shall not use this equipment with materials having a(n) true vapor pressure of 0.1 psia or greater under actual operating conditions.

The operator shall determine the flash point of the organic material stored using ASTM Method D-93. Those materials having a flash point less than 100 degrees F as determined by this test will be considered as having a true vapor pressure of greater than 5 mmHg (0.1 psi) absolute under actual storage conditions.

## **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:**

**[RULE 1178, 4-7-2006]**

[Devices subject to this condition : D584]

- B27.1 The operator shall not use materials containing any toxic air contaminants (TACs) identified in the SCAQMD Rule 1401, as amended 03/04/2005.

**[RULE 1401, 3-7-2008]**

[Devices subject to this condition : D1573]

- B59.1 The operator shall only use the following material(s) in this device :

Fuel gas. The term "fuel gas" shall be defined as either refinery gas, or vaporized LPG, or natural gas, or any combination thereof.

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

[Devices subject to this condition : D251]

- B59.2 The operator shall only use the following material(s) in this device :

Perchloroethylene

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

[Devices subject to this condition : D1533]

- B59.3 The operator shall only use the following material(s) in this device :

## 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:**

AMMONIA

[**RULE 1303, 5-10-1996**; RULE 1303, 12-6-2002]

[Devices subject to this condition : D311]

B59.4 The operator shall only use the following material(s) in this device :

Crude Oil, Light Cycle Oil, Gas Oil, Diesel

[**RULE 1303, 5-10-1996**]

[Devices subject to this condition : D610, D613, D630]

B59.5 The operator shall only use the following material(s) in this device :

Crude Oil

[**RULE 1303, 5-10-1996**]

[Devices subject to this condition : D618, D621]

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]**

[Devices subject to this condition : D9, D32, D33, D89, D90, D91, D92, D112, D120, D146, D157, D158, D194, D196, D214, D215, D216, D217, D218, D247, D248, D249, D250, D251, D384, D385, D386, D387, D388, D722, D723, D724, D725, D770, D777, D1122]

B61.2 The operator shall only use diesel fuel containing the following specified compounds:

Compound	weight percent
Sulfur compounds less than	0.05

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

[Devices subject to this condition : D713, D714, D1100, D1101, D1102, D1103, D1104, D1123]

B61.4 The operator shall not use fresh feed containing the following specified compounds:

Compound	weight percent
Total sulfur greater than	0.3

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

[Devices subject to this condition : D96]

## 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:**

B61.5 The operator shall not use any fuel containing the following specified compounds:

Compound	weight percent
Total sulfur greater than	0.8

The sulfur concentration limit shall be based on a daily average

**[40CFR 60 Subpart GG, 2-24-2006]**

[Devices subject to this condition : D810, D812]

B61.6 The operator shall not use diesel fuel containing the following specified compounds:

Compound	ppm by weight
Sulfur less than or equal to	15

[RULE 1470, 6-1-2007; **RULE 431.2, 5-4-1990**; RULE 431.2, 9-15-2000]

[Devices subject to this condition : D1617, D1618, D1645, D1646, D1659]

B61.9 The operator shall not use fuel gas containing the following specified compounds:

Compound	ppm by volume
H2S greater than	160

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

## **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:**

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

[Devices subject to this condition : D810, D812]

#### **C. Throughput or Operating Parameter Limits**

C1.1 The operator shall limit the material processed to no more than 276000 lb(s)/hr.

For the purpose of this condition, material processed shall be defined as steam produced on an average daily basis from equipment ID: D722, D723, D724 & D725 when two turbines, D810 & D812, and the CO boiler, D112, are in operation.

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

[Devices subject to this condition : D722, D723, D724, D725]

C1.2 The operator shall limit the throughput to no more than 1000 gallon(s) per year.

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

[Devices subject to this condition : D1120, D1121]

C1.3 The operator shall limit the loading rate to no more than 20000 gallon(s) per day.

For the purpose of this condition, loading rate shall be defined as the throughput recorded by the shipping records.

**[RULE 462, 5-14-1999]**

## **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:**

[Devices subject to this condition : D515]

- C1.4 The operator shall limit the throughput to no more than 425000 barrel(s) in any one calendar month.

The operator shall measure and record the liquid volume of the tank using an automatic tank level gauging system(ATLGS). The ATLGS shall measure the tank liquid level and calculate the liquid volume using the tank strapping tables. The volume measurements shall be recorded electronically once every 15 minutes.

The operator shall calculate the throughput in barrels using the total one-way (increasing) volume movement on a monthly basis. The calculation will be based on the sum of the increasing volume readings.

The ATLGS installed shall be verified once per quarter by comparing against a manual tank level measurement. If the ATLGS differs from the manual tank level measurement by more than 1.0 inch or 0.8%, whichever is greater, the ATLGS shall be repaired and back to service within 10 days.

In the event of a failure or routine maintenance of the ATLGS, the ATLGS shall be repaired and put back into service within 10 days of the time that the ATLGS failed or was removed from service for maintenance. While the ATLGS is being repaired or maintained, the throughput shall be determined by the hourly tank level data averaged from the previous 30 days prior to time that the ATLGS went out of service.

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

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

[Devices subject to this condition : D602, D608]

- C1.5 The operator shall limit the throughput to no more than 600,000 barrel(s) in any one calendar month.

## **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 operator shall measure and record the liquid volume of the tank using an automatic tank level gauging system(ATLGS). The ATLGS shall measure the tank liquid level and calculate the liquid volume using the tank strapping tables. The volume measurements shall be recorded electronically once every 15 minutes.

The operator shall calculate the throughput in barrels using the total one-way(increasing) volume movement on a monthly basis. The calculation will be based on the sum of the increasing volume readings..

The ATLGS installed shall be verified once per quarter by comparing against a manual tank level measurement. If the ATLGS differs from the manual tank level measurement by more than 1.0 inch or 0.8%, whichever is greater, the ATLGS shall be repaired and back to service within 10 days.

In the event of a failure or routine maintenance of the ATLGS, the ATLGS shall be repaired and put back into service within 10 days of the time that the ATLGS failed or was removed from service for maintenance. While the ATLGS is being repaired or maintained, the throughput shall be determined by the hourly tank level data averaged from the previous 30 days prior to time that the ATLGS went out of service.

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

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

[Devices subject to this condition : D595]

C1.7 The operator shall limit the throughput to no more than 168885 barrel(s) in any one year.

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

[Devices subject to this condition : D550]

## **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:**

- C1.8 The operator shall limit the throughput to no more than 152083 barrel(s) in any one month.

The operator shall measure and record the liquid volume of the tank using an automatic tank level gauging system(ATLGS). The ATLGS shall measure the tank liquid level and calculate the liquid volume using the tank strapping tables. The volume measurements shall be recorded electronically once every 15 minutes.

The operator shall calculate the throughput in barrels using the total one-way(increasing)volume movement on a monthly basis. The calculation will be based on the sum of the increasing volume readings.

In the event of a failure of a component of the ATLGS, the throughput shall be determined by utilizing the one-hour average from the previous 30 days during the period that data was not available.

During routine maintenance or manual gauging, the throughput shall be determined by utilizing the one-hour average from the previous 30 days during the period that data was not available.

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

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

[Devices subject to this condition : D561, D564]

- C1.12 The operator shall limit the unloading rate to no more than 30000 gallon(s) per month.

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

[Devices subject to this condition : D728, D1321]

## **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:**

C1.15 The operator shall limit the heat input to no more than 90000 MM Btu in any one year.

The purpose(s) of this condition is to ensure that this equipment qualifies as a RECLAIM large source.

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

[Devices subject to this condition : D91, D194, D196, D251]

C1.17 The operator shall limit the operating time to no more than 199 hour(s) in any one year.

[RULE 1110.2, 2-1-2008; **RULE 1304(c)-Offset Exemption, 6-14-1996**; RULE 1470, 6-1-2007]

[Devices subject to this condition : D713, D714, D1100, D1101, D1102, D1103, D1104, D1123]

C1.18 The operator shall limit the throughput to no more than 375000 barrel(s) in any one calendar month.

## **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 operator shall measure and record the liquid volume of the tank using an automatic tank level gauging system(ATLGS). The ATLGS shall measure the tank liquid level and calculate the liquid volume using the tank strapping tables. The volume measurements shall be recorded electronically once every 15 minutes.

The operator shall calculate the throughput in barrels using the total one-way (increasing) volume movement on a monthly basis. The calculation will be based on the sum of the increasing volume readings.

The ATLGS installed shall be verified once per quarter by comparing against a manual tank level measurement. If the ATLGS differs from the manual tank level measurement by more than 1.0 inch or 0.8%, whichever is greater, the ATLGS shall be repaired and back to service within 10 days.

In the event of a failure or routine maintenance of the ATLGS, the ATLGS shall be repaired and put back into service within 10 days of the time that the ATLGS failed or was removed from service for maintenance. While the ATLGS is being repaired or maintained, the throughput shall be determined by the hourly tank level data averaged from the previous 30 days prior to time that the ATLGS went out of service.

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

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

[Devices subject to this condition : D654]

C1.19 The operator shall limit the number of turnovers to no more than 130 in any one year.

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

[Devices subject to this condition : D639]

## **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:**

C1.21 The operator shall limit the number of turnovers to no more than 12.5 in any one year.

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

[Devices subject to this condition : D523]

C1.22 The operator shall limit the number of turnovers to no more than 26 in any one year.

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

[Devices subject to this condition : D524]

C1.24 The operator shall limit the throughput to no more than 5.475e+06 barrel(s) in any one year.

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

[Devices subject to this condition : D688]

C1.25 The operator shall limit the throughput to no more than 3e+06 barrel(s) in any one year.

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

[Devices subject to this condition : D657]

C1.26 The operator shall limit the throughput to no more than 72083 barrel(s) in any one month.

## **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 operator shall shall measure and record the liquid volume of the tank using an automatic tank level gauging system(ATLGS). The ATLGS shall measure the tank liquid level and calculate the liquid volume using the tank strapping tables. The volume measurements shall be recorded electronically once every 15 minutes.

The operator shall calculate the throughput in barrels using the total one-way(increasing) volume movement on a monthly basis. The calculation will be based on the sum of the increasing volume readings.

In the event of a failure of a component of the ATLGS, the throughput shall be determined by utilizing the one-hour average from the previous 30 days during the period that data was not available.

During routine maintenance or manual gauging, the throughput shall be determined by utilizing the one-hour average from the previous 30 days during the period that data was not available.

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

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

[Devices subject to this condition : D557]

C1.27 The operator shall limit the throughput to no more than 274651 barrel(s) in any one year.

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

[Devices subject to this condition : D546]

C1.28 The operator shall limit the throughput to no more than 2.4e+06 barrel(s) in any one 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:**

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

[Devices subject to this condition : D1500]

C1.29 The operator shall limit the throughput to no more than 200000 barrel(s) in any one calendar month.

The operator shall measure and record the liquid volume of the tank using an automatic tank level gauging system (ATLGS). The ATLGS shall measure the tank liquid level and calculate the liquid volume using the tank strapping tables. The volume measurements shall be recorded electronically once every 15 minutes.

The operator shall calculate the throughput in barrels using the total one-way(increasing) volume movement on a monthly basis. The calculation will be based on the sum of the increasing volume readings.

The ATLGS installed shall be verified once per quarter by comparing against a manual tank level measurement. If the ATLGS differs from the manual tank level measurement by more than 1.0 inch or 0.8 %, whichever is greater, the ATLGS shall be repaired and back to service within 10 days.

In the event of a failure or routine maintenance of the ATLGS, the ATLGS shall be repaired and put back into service within 10 days of the time that the ATLGS failed or was removed from service for maintenance. While the ATLGS is being repaired or maintained, the throughput shall be determined by the hourly tank level data averaged from the previous 30 days prior to time that the ATLGS went out of service.

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

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

[Devices subject to this condition : D589, D600]

## **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:**

C1.30 The operator shall limit the throughput to no more than 500000 barrel(s) in any one calendar month.

The operator shall measure and record the liquid volume of the tank using an automatic tank level gauging system(ATLGS). The ATLGS shall measure the tank liquid level and calculate the liquid volume using the tank strapping tables. The volume measurements shall be recorded electronically once every 15 minutes.

The operator shall calculate the throughput in barrels using the total one-way (increasing) volume movement on a monthly basis. The calculation will be based on the sum of the increasing volume readings.

The ATLGS installed shall be verified once per quarter by comparing against a manual tank level measurement. If the ATLGS differs from the manual tank level measurement by more than 1.0 inch or 0.8%, whichever is greater, the ATLGS shall be repaired and back to service within 10 days.

In the event of a failure or routine maintenance of the ATLGS, the ATLGS shall be repaired and put back into service within 10 days of the time that the ATLGS failed or was removed from service for maintenance. While the ATLGS is being repaired or maintained, the throughput shall be determined by the hourly tank level data averaged from the previous 30 days prior to time that the ATLGS went out of service.

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

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

[Devices subject to this condition : D624]

C1.31 The operator shall limit the throughput to no more than 450000 barrel(s) in any one calendar month.

## **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 operator shall measure and record the liquid volume of the tank using an automatic tank level gauging system(ATLGS). The ATLGS shall measure the tank liquid level and calculate the liquid volume using the tank strapping tables. The volume measurements shall be recorded electronically once every 15 minutes.

The operator shall calculate the throughput in barrels using the total one-way (increasing) volume movement on a monthly basis. The calculation will be based on the sum of the increasing volume readings.

The ATLGS installed shall be verified once per quarter by comparing against a manual tank level measurement. If the ATLGS differs from the manual tank level measurement by more than 1.0 inch or 0.8% , whichever is greater, the ATLGS shall be repaired and back to service within 10 days.

In the event of a failure or routine maintenance of the ATLGS, the ATLGS shall be repaired and put back into service within 10 days of the time that the ATLGS failed or was removed from service for maintenance. While the ATLGS is being repaired or maintained, the throughput shall be determined by the hourly tank level data averaged from the previous 30 days prior to time that the ATLGS went out of service.

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

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

[Devices subject to this condition : D652]

- C1.32 The operator shall limit the throughput to no more than 350000 barrel(s) in any one calendar month.

## **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 operator shall measure and record the liquid volume of the tank using an automatic tank level gauging system(ATLGS). The ATLGS shall measure the tank liquid level and calculate the liquid volume using the tank strapping tables. The volume measurements shall be recorded electronically once every 15 minutes.

The operator shall calculate the throughput in barrels using the total one-way (increasing) volume movement on a monthly basis. The calculation will be based on the sum of the increasing volume readings.

The ATLGS installed shall be verified once per quarter by comparing against a manual tank level measurement. If the ATLGS differs from the manual tank level measurement by more than 1.0 inch or 0.8%, whichever is greater, the ATLGS shall be repaired and back to service within 10 days.

In the event of a failure or routine maintenance of the ATLGS, the ATLGS shall be repaired and put back into service within 10 days of the time that the ATLGS failed or was removed from service for maintenance. While the ATLGS is being repaired or maintained, the throughput shall be determined by the hourly tank level data averaged from the previous 30 days prior to time that the ATLGS went out of service.

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

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

[Devices subject to this condition : D655, D1078]

- C1.33 The operator shall limit the throughput to no more than 650000 barrel(s) in any one calendar month.

## **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 operator shall measure and record the liquid volume of the tank using an automatic tank level gauging system(ATLGS). The ATLGS shall measure the tank liquid level and calculate the liquid volume using the tank strapping tables. The volume measurements shall be recorded electronically once every 15 minutes.

The operator shall calculate the throughput in barrels using the total one-way (increasing) volume movement on a monthly basis. The calculation will be based on the sum of the increasing volume readings.

The ATLGS installed shall be verified once per quarter by comparing against a manual tank level measurement. If the ATLGS differs from the manual tank level measurement by more than 1.0 inch or 0.8%, whichever is greater, the ATLGS shall be repaired and back to service within 10 days.

In the event of a failure or routine maintenance of the ATLGS, the ATLGS shall be repaired and put back into service within 10 days of the time that the ATLGS failed or was removed from service for maintenance. While the ATLGS is being repaired or maintained, the throughput shall be determined by the hourly tank level data averaged from the previous 30 days prior to time that the ATLGS went out of service.

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

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

[Devices subject to this condition : D648, D658]

C1.34 The operator shall limit the throughput to no more than 12000 gallon(s) per year.

The operator shall use the purchase invoices to determine the throughput of stored liquid.

**[RULE 1401, 3-7-2008]**

## **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:**

[Devices subject to this condition : D1533]

- C1.35 The operator shall limit the throughput to no more than 300,000 barrel(s) in any one calendar month.

The operator shall utilize an automatic tank level gauging device to determine throughput. The automatic level gauge (tank liquid level) will be manually recorded every 4 hours during the time that product movement occurs and at the start and the end of each product movement. The liquid volume shall be calculated using the tank liquid level records and the tank strapping tables. The throughput in barrels shall be calculated the sum of total one-way (increasing) volume movements on a monthly basis.

The operator shall keep monthly records on the throughput and the vapor pressure for each type of stored product.

**[RULE 1303(b)(2)-Offset, 5-10-1996; RULE 1303(b)(2)-Offset, 12-6-2002]**

[Devices subject to this condition : D653]

- C1.36 The operator shall limit the throughput to no more than 350,000 barrel(s) in any one calendar month.

## **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 operator shall measure and record the liquid volume of the tank using an automatic tank level gauging system(ATLGS). The ATLGS shall measure the tank liquid level and calculate the liquid volume using the tank strapping tables. The volume measurements shall be recorded electronically once every 15 minutes.

The operator shall calculate the throughput in barrels using the total one-way (increasing) volume movement on a monthly basis. The calculation will be based on the sum of the increasing volume readings.

The ATLGS installed shall be verified once per quarter by comparing against a manual tank level measurement. If the ATLGS differs from the manual tank level measurement by more than 1.0 inch or 0.8%, whichever is greater, the ATLGS shall be repaired and back to service within 10 days.

In the event of a failure or routine maintenance of the ATLGS, the ATLGS shall be repaired and put back into service within 10 days of the time that the ATLGS failed or was removed from service for maintenance. While the ATLGS is being repaired or maintained, the throughput shall be determined by the hourly tank level data averaged from the previous 30 days prior to time that the ATLGS went out of service.

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

**[RULE 1303(b)(2)-Offset, 5-10-1996; RULE 1303(b)(2)-Offset, 12-6-2002]**

[Devices subject to this condition : D659]

- C1.37 The operator shall limit the throughput to no more than 900,000 barrel(s) in any one calendar month.

## **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 operator shall measure and record the liquid volume of the tank using an automatic tank level gauging system(ATLGS). The ATLGS shall measure the tank liquid level and calculate the liquid volume using the tank strapping tables. The volume measurements shall be recorded electronically once every 15 minutes.

The operator shall calculate the throughput in barrels using the total one-way(increasing) volume movement on a monthly basis. The calculation will be based on the sum of the increasing volume readings..

The ATLGS installed shall be verified once per quarter by comparing against a manual tank level measurement. If the ATLGS differs from the manual tank level measurement. If the ATLGS differs from the manual tank level measurement by more than 1.0 inch or 0.8%, whichever is greater, the ATLGS shall be repaired and back to service within 10 days.

In the event of a failure or routine maintenance of the ATLGS, the ATLGS shall be repaired and put back into service within 10 days of the time that the ATLGS failed or was removed from service for maintenance. While the ATLGS is being repaired or maintained, the throughput shall be determined by the hourly tank level data averaged from the previous 30 days prior to time that the ATLGS went out of service.

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

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

[Devices subject to this condition : D606, D607]

C1.40 The operator shall limit the throughput to no more than 600,000 barrel(s) in any one month.

## **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 operator shall measure and record the liquid volume of the tank using an automatic tank level gauging system(ATLGS). The ATLGS shall measure the tank liquid level and calculate the liquid volume using the tank strapping tables. The volume measurements shall be recorded electronically once every 15 minutes.

The operator shall calculate the throughput in barrels using the total one-way(increasing)volume movement on a monthly basis. The calculation will be based on the sum of the increasing volume readings.

In the event of a failure of a component of the ATLGS, the throughput shall be determined by utilizing the one-hour average from the previous 30 days during the period that data was not available.

During routine maintenance or manual gauging, the throughput shall be determined by utilizing the one-hour average from the previous 30 days during the period that data was not available.

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

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

[Devices subject to this condition : D982]

C1.41 The operator shall limit the throughput to no more than 400,000 barrel(s) in any one calendar month.

## **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 operator shall measure and record the liquid volume of the tank using an automatic tank level gauging system(ATLGS). The ATLGS shall measure the tank liquid level and calculate the liquid volume using the tank strapping tables. The volume measurements shall be recorded electronically once every 15 minutes.

The operator shall calculate the throughput in barrels using the total one-way (increasing) volume movement on a monthly basis. The calculation will be based on the sum of the increasing volume readings.

The ATLGS installed shall be verified once per quarter by comparing against a manual tank level measurement. If the ATLGS differs from the manual tank level measurement by more than 1.0 inch or 0.8%, whichever is greater, the ATLGS shall be repaired and back to service within 10 days.

In the event of a failure or routine maintenance of the ATLGS, the ATLGS shall be repaired and put back into service within 10 days of the time that the ATLGS failed or was removed from service for maintenance. While the ATLGS is being repaired or maintained, the throughput shall be determined by the hourly tank level data averaged from the previous 30 days prior to time that the ATLGS went out of service.

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

**[RULE 1303(b)(2)-Offset, 5-10-1996; RULE 1303(b)(2)-Offset, 12-6-2002]**

[Devices subject to this condition : D649]

- C1.42 The operator shall limit the throughput to no more than 300,000 barrel(s) in any one calendar month.

## **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 operator shall measure and record the liquid volume of the tank using an automatic tank level gauging system(ATLGS). The ATLGS shall measure the tank liquid level and calculate the liquid volume using the tank strapping tables. The volume measurements shall be recorded electronically once every 15 minutes.

The operator shall calculate the throughput in barrels using the total one-way (increasing) volume movement on a monthly basis. The calculation will be based on the sum of the increasing volume readings.

The ATLGS installed shall be verified once per quarter by comparing against a manual tank level measurement. If the ATLGS differs from the manual tank level measurement by more than 1.0 inch or 0.8%, whichever is greater, the ATLGS shall be repaired and back to service within 10 days.

In the event of a failure or routine maintenance of the ATLGS, the ATLGS shall be repaired and put back into service within 10 days of the time that the ATLGS failed or was removed from service for maintenance. While the ATLGS is being repaired or maintained, the throughput shall be determined by the hourly tank level data averaged from the previous 30 days prior to time that the ATLGS went out of service.

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

**[RULE 1303(b)(2)-Offset, 5-10-1996; RULE 1303(b)(2)-Offset, 12-6-2002]**

[Devices subject to this condition : D610, D630]

C1.43 The operator shall limit the maintenance and testing to no more than 50 hour(s) in any one year.

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

## **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:**

[**RULE 1303(a)-BACT, 5-10-1996**; RULE 1303(a)(1)-BACT, 12-6-2002; **RULE 1303(b)(2)-Offset, 5-10-1996**; RULE 1303(b)(2)-Offset, 12-6-2002; RULE 1470, 6-1-2007]

[Devices subject to this condition : D1617, D1618, D1645, D1646, D1659]

C1.44 The operator shall limit the maintenance and testing to no more than 5 hour(s) in any one month.

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

[**RULE 1303(b)(2)-Offset, 5-10-1996**; RULE 1303(b)(2)-Offset, 12-6-2002]

[Devices subject to this condition : D1123, D1617, D1618, D1645, D1646, D1659]

C1.45 The operator shall limit the operating time to no more than 199 hour(s) in any one year.

[RULE 1110.2, 2-1-2008; **RULE 1303(b)(2)-Offset, 5-10-1996**; RULE 1303(b)(2)-Offset, 12-6-2002; RULE 1470, 6-1-2007]

[Devices subject to this condition : D1617, D1618, D1645, D1646, D1659]

C1.46 The operator shall limit the loading rate to no more than 912500 barrel(s) of Pentane in any one year.

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

[Devices subject to this condition : D1040]

C1.47 The operator shall limit the throughput to no more than 350,000 barrel(s) in any one calendar month.

## **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 operator shall measure and record the liquid volume of the tank using an automatic tank level gauging system(ATLGS). The ATLGS shall measure the tank liquid level and calculate the liquid volume using the tank strapping tables. The volume measurements shall be recorded electronically once every 15 minutes.

The operator shall calculate the throughput in barrels using the total one-way (increasing) volume movement on a monthly basis. The calculation will be based on the sum of the increasing volume readings.

The ATLGS installed shall be verified once per quarter by comparing against a manual tank level measurement. If the ATLGS differs from the manual tank level measurement by more than 1.0 inch or 0.8%, whichever is greater, the ATLGS shall be repaired and back to service within 10 days.

In the event of a failure or routine maintenance of the ATLGS, the ATLGS shall be repaired and put back into service within 10 days of the time that the ATLGS failed or was removed from service for maintenance. While the ATLGS is being repaired or maintained, the throughput shall be determined by the hourly tank level data averaged from the previous 30 days prior to time that the ATLGS went out of service.

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

**[RULE 1303(b)(2)-Offset, 5-10-1996; RULE 1303(b)(2)-Offset, 12-6-2002]**

[Devices subject to this condition : D613, D618, D621]

C1.48 The operator shall limit the maintenance and testing to no more than 34 hour(s) in any one year.

The purpose of this condition is to ensure compliance with requirements of National Fire Protection Association (NFPA) 25 standards.

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

## **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:**

[RULE 1470, 6-1-2007]

[Devices subject to this condition : D1123]

- C1.49 The operator shall limit the throughput to no more than 152,167 barrel(s) in any one calendar month.

This condition shall only apply when this tank is storing product having a vapor pressure of 0.1 psia or lower.

The operator shall measure and record the liquid volume of the tank using an automatic tank level gauging system(ATLGS). The ATLGS shall measure the tank liquid level and calculate the liquid volume using the tank strapping tables. The volume measurements shall be recorded electronically once every 15 minutes.

The operator shall calculate the throughput in barrels using the total one-way (increasing) volume movement on a monthly basis. The calculation will be based on the sum of the increasing volume readings.

The ATLGS installed shall be verified once per quarter by comparing against a manual tank level measurement. If the ATLGS differs from the manual tank level measurement by more than 1.0 inch or 0.8%, whichever is greater, the ATLGS shall be repaired and back to service within 10 days.

In the event of a failure or routine maintenance of the ATLGS, the ATLGS shall be repaired and put back into service within 10 days of the time that the ATLGS failed or was removed from service for maintenance. While the ATLGS is being repaired or maintained, the throughput shall be determined by the hourly tank level data averaged from the previous 30 days prior to time that the ATLGS went out of service.

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

## **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:**

[RULE 1303(b)(2)-Offset, 5-10-1996; RULE 1303(b)(2)-Offset, 12-6-2002]

[Devices subject to this condition : D547, D551]

C1.51 The operator shall limit the throughput to no more than 14,074 barrel(s) in any one calendar month.

This condition shall only apply when this tank is storing product of vapor pressure of 0.1 psia or greater. If this tank is storing product of vapor pressure of 0.1 psia or lower, refer to condition C1.49 for throughput limit.

The operator shall measure and record the liquid volume of the tank using an automatic tank level gauging system(ATLGS). The ATLGS shall measure the tank liquid level and calculate the liquid volume using the tank strapping tables. The volume measurements shall be recorded electronically once every 15 minutes.

The operator shall calculate the throughput in barrels using the total one-way (increasing) volume movement on a monthly basis. The calculation will be based on the sum of the increasing volume readings.

The ATLGS installed shall be verified once per quarter by comparing against a manual tank level measurement. If the ATLGS differs from the manual tank level measurement by more than 1.0 inch or 0.8%, whichever is greater, the ATLGS shall be repaired and back to service within 10 days.

In the event of a failure or routine maintenance of the ATLGS, the ATLGS shall be repaired and put back into service within 10 days of the time that the ATLGS failed or was removed from service for maintenance. While the ATLGS is being repaired or maintained, the throughput shall be determined by the hourly tank level data averaged from the previous 30 days prior to time that the ATLGS went out of service.

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

## **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:**

[**RULE 1303(b)(2)-Offset, 5-10-1996; RULE 1303(b)(2)-Offset, 12-6-2002**]

[Devices subject to this condition : D547, D551]

C1.53 The operator shall limit the throughput to no more than 2,450,000 barrel(s) in any one calendar month.

The operator shall measure and record the liquid volume of the tank using an automatic tank level gauging system(ATLGS). The ATLGS shall measure the tank liquid level and calculate the liquid volume using the tank strapping tables. The volume measurements shall be recorded electronically once every 15 minutes.

The operator shall calculate the throughput in barrels using the total one-way (increasing) volume movement on a monthly basis. The calculation will be based on the sum of the increasing volume readings.

The ATLGS installed shall be verified once per quarter by comparing against a manual tank level measurement. If the ATLGS differs from the manual tank level measurement by more than 1.0 inch or 0.8%, whichever is greater, the ATLGS shall be repaired and back to service within 10 days.

In the event of a failure or routine maintenance of the ATLGS, the ATLGS shall be repaired and put back into service within 10 days of the time that the ATLGS failed or was removed from service for maintenance. While the ATLGS is being repaired or maintained, the throughput shall be determined by the hourly tank level data averaged from the previous 30 days prior to time that the ATLGS went out of service.

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

[**RULE 1303(b)(2)-Offset, 5-10-1996; RULE 1303(b)(2)-Offset, 12-6-2002**]

[Devices subject to this condition : D584]

## **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:**

- C6.2 The operator shall use this equipment in such a manner that the hydrocarbon concentration being monitored, as indicated below, does not exceed 30 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 device twice a year to a 4 to 8 month interval.

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

[Devices subject to this condition : D659, D660]

- C6.3 The operator shall use this equipment in such a manner that the differential pressure being monitored, as indicated below, does not exceed 4 inches HG.

To comply with this condition, the operator shall install and maintain a(n) differential pressure gauge to accurately indicate the differential pressure across the filters.

**[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 : C1574]

- C6.4 The operator shall use this equipment in such a manner that the hydrocarbon concentration being monitored, as indicated below, does not exceed 30 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 device on a semi-annual basis.

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

[Devices subject to this condition : D610, D613, D618, D621, D630]

## **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:**

- C8.2 The operator shall use this equipment in such a manner that the temperature being monitored, as indicated below, is not less than 1200 Deg F.

This condition shall only apply when waste gases are being incinerated.

To comply with this condition, the operator shall install and maintain a(n) temperature gauge to accurately indicate the temperature in the firebox or in the ductwork immediately downstream from the firebox.

The measuring device or gauge shall be accurate to within plus or minus 10 percent. It shall be calibrated once every 12 months.

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

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

[Devices subject to this condition : D722, D723, D724, D725]

- C8.3 The operator shall use this equipment in such a manner that the flow rate being monitored, as indicated below, is not less than 20 gpm.

To comply with this condition, the operator shall install and maintain a(n) flow meter to accurately indicate the flow rate of the caustic scrubbing solution.

The operator shall determine and record the parameter being monitored daily.

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

[Devices subject to this condition : C761, C762]

- C177.1 The operator shall set and maintain the fuel injection timing of the engine at 4 degrees retarded relative to standard timing.

## **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:**

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

[Devices subject to this condition : D713]

#### **D. Monitoring/Testing Requirements**

D12.1 The operator shall install and maintain a(n) temperature gauge to accurately indicate the temperature across the SCR bed.

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

[Devices subject to this condition : C764, C768, C771, C773, C775, C778, C784,  
C786, C788]

D12.2 The operator shall install and maintain a(n) non-resettable elapsed time meter to accurately indicate the elapsed operating time of the engine.

**[RULE 1304(c)-Offset Exemption, 6-14-1996; RULE 2012, 5-6-2005]**

[Devices subject to this condition : D713, D714, D1100, D1101, D1102, D1103,  
D1104, D1123]

D12.3 The operator shall install and maintain a(n) continuous monitoring system to accurately indicate the water-to-fuel ratio of the cogeneration system.

**[RULE 1303(a)(1)-BACT, 5-10-1996; RULE 3004(a)(4)-Periodic Monitoring,  
12-12-1997; RULE 475, 10-8-1976; RULE 475, 8-7-1978; 40CFR 60 Subpart GG,  
2-24-2006]**

## **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:**

[Devices subject to this condition : D810, D812]

- D12.4 The operator shall install and maintain a(n) thermocouple or any other equivalent device to accurately indicate the presence of a flame at the pilot light.

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

The continuous monitoring system shall include EXACT CHAR alarms.  
CONDITION PARAMETER NOT SET UP

**[RULE 1118, 11-4-2005; RULE 3004(a)(4)-Periodic Monitoring, 12-12-1997; 40CFR 60  
Subpart A, 6-13-2007]**

[Devices subject to this condition : C747, C748]

- D12.6 The operator shall install and maintain a(n) flow meter to accurately indicate the flow rate of the the total hourly throughput recorded of injected ammonia.

The measuring device or gauge shall be accurate to within plus or minus 5 percent. It shall be calibrated once every 12 months.

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

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

[Devices subject to this condition : C1536, C1538]

- D12.7 The operator shall install and maintain a(n) temperature gauge to accurately indicate the temperature of the exhaust at the inlet to the SCR reactor.

## **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 measuring device or gauge shall be accurate to within plus or minus 5 percent. It shall be calibrated once every 12 months.

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

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

[Devices subject to this condition : C1536, C1538]

D12.8 The operator shall install and maintain a(n) pressure gauge to accurately indicate the differential pressure across the SCR catalyst bed in inches of water column.

The measuring device or gauge shall be accurate to within plus or minus 5 percent. It shall be calibrated once every 12 months.

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

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

[Devices subject to this condition : C1536, C1538]

D12.13 The operator shall install and maintain a(n) non-resettable elapsed time meter to accurately indicate the elapsed operating time of the engine.

**[RULE 1110.2, 2-1-2008; RULE 1470, 6-1-2007; RULE 2012, 5-6-2005]**

[Devices subject to this condition : D1617, D1618, D1645, D1646, D1659]

D28.3 The operator shall conduct source test(s) in accordance with the following specifications:

## **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 test shall be conducted to confirm the emission limits of this equipment as specified in Condition A63.2 for device D32 and Condition A63.10 for device D9.

The test shall be conducted to determine and report the mass emission rate in pound per hour for ROG, PM10 and CO.

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 confirm the CO emission concentration limit of 35 ppm, corrected to 3 percent oxygen, dry basis.

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

The District shall be notified of the date and time of the test at least 10 days prior to the test.

The test shall be conducted at least once every three years for ROG, PM10 and CO emissions.

**[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]**

[Devices subject to this condition : D32]

D28.4 The operator shall conduct source test(s) in accordance with the following specifications:

The test shall be conducted at least annually.

The test shall be conducted when the SCR is in use to determine the NH<sub>3</sub> emissions at the outlet.

## 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:**

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

[Devices subject to this condition : C764, C768, C771, C773, C775, C778, C784, C786, C788]

D29.1 The operator shall conduct source test(s) for the pollutant(s) identified below.

Pollutant(s) to be tested	Required Test Method(s)	Averaging Time	Test Location
PM emissions	Approved District method	1 hour	Outlet

The test(s) shall be conducted at least annually.

The test shall be conducted when the equipment is operating under normal conditions.

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

Source test results shall include the following parameters: FCCU feed rate; catalyst recirculation rate; coke burn rate; oxygen content of exhaust gases; exhaust flow rate; exhaust gas moisture content; the flue gas temperature at the outlet of the ESP; and the average current, voltage, and spark rate at each of the ESP fields

**[RULE 3004(a)(4)-Periodic Monitoring, 12-12-1997; RULE 404, 2-7-1986; RULE 405, 2-7-1986; CONSENT DECREE, 3-21-2001]**

[Devices subject to this condition : D96]

D29.2 The operator shall conduct source test(s) for the pollutant(s) identified below.

## 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:**

Pollutant(s) to be tested	Required Test Method(s)	Averaging Time	Test Location
PM emissions	Approved District method	1 hour	Outlet

The test(s) shall be conducted at least once every three years.

The test shall be conducted when the equipment is operating under normal conditions.

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

[Devices subject to this condition : D810, D812]

D29.3 The operator shall conduct source test(s) for the pollutant(s) identified below.

Pollutant(s) to be tested	Required Test Method(s)	Averaging Time	Test Location
PM emissions	Approved District method	1 hour	Outlet

The test(s) shall be conducted at least once every three years.

The test shall be conducted when the equipment being vented by the SCR are operating under normal conditions.

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

[Devices subject to this condition : C786]

D29.5 The operator shall conduct source test(s) for the pollutant(s) identified below.

## 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:**

Pollutant(s) to be tested	Required Test Method(s)	Averaging Time	Test Location
NH3 emissions	District method 207.1 or EPA method 17	1 hour	Outlet of the SCR serving this equipment

The test(s) shall be conducted at least once each calendar quarter during the first 12 months of operation and at least annually thereafter. The NOx concentration, as determined by the CEMS, shall be simultaneously recorded during the ammonia slip test. If the CEMS is inoperable, a test shall be conducted to determine the NOx emissions using District Method 100.1 measured over a 60 minute averaging time period.

The test shall be conducted to demonstrate compliance with Rule 1303 concentration limit.

The test shall be conducted when the equipment is operating at 80 percent load or greater.

The test shall be conducted and the results submitted to the AQMD permitting engineer within 45 days after the test date.

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

[Devices subject to this condition : C1536, C1538]

D29.6 The operator shall conduct source test(s) for the pollutant(s) identified below.

Pollutant(s) to be tested	Required Test Method(s)	Averaging Time	Test Location
PM emissions	Approved District method	1 hour	Outlet of the filter
PM10 emissions	Approved District method	1 hour	Outlet of the filter

## 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 test shall be conducted initially and annually if the equipment is utilized for more than 30 days in a calendar year.

The test(s) shall be conducted within 120 days after achieving maximum production rate, but no later than 180 days after initial start-up.

The test shall be conducted when this equipment is operating at least 80 percent of the maximum capacity. Report of the test and operating condition of the equipment shall be submitted to the District within 60 days after the test..

The District shall be notified of the date and time of the test at least 10 days prior to the test

The operator shall submit a test protocol to the District at least 60 days prior to the initial testing. The initial and annual tests shall be conducted according to the approved test protocol or any subsequently approved revisions

**[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 : C1574]

D29.7 The operator shall conduct source test(s) for the pollutant(s) identified below.

Pollutant(s) to be tested	Required Test Method(s)	Averaging Time	Test Location
NOX emissions	District method 100.1	1 hour	Outlet of the SCR
PM emissions	Approved District method	District-approved averaging time	Outlet of the SCR
NH3 emissions	District method 207.1 and 5.3 or EPA method	1 hour	Outlet of the SCR

## **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 test shall be conducted after AQMD approval of the source test protocol, but no later than 180 days after the issuance of the permit. The AQMD shall be notified of the date and time of the test at least 10 days prior to the test.

The test shall be conducted to determine the oxygen levels in the exhaust. In addition, the test shall record the fuel flow rate(CFH), the flue gas flowrate.

The test shall be conducted in accordance with AQMD approved source test protocol. The protocol shall be submitted to the AQMD no later than 45 days before the proposed test date and shall be approved by the AQMD before test commences. The test protocol shall include the proposed operating conditions of the SCR during the test, the identity of the testing lab, a statement from the testing lab certifying that it meets the criteria of Rule 304, and a description of all sampling and analytical procedures.

The test shall be conducted when the heater(s) , which this SCR is serving, is (are) operating at loads of 80 percent or greater of the permitted maximum rated capacity.

**[RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(b)(2)-Offset, 5-10-1996]**

[Devices subject to this condition : C771, C773, C775, C778]

D82.1 The operator shall install and maintain a CEMS to measure the following parameters:

CO concentration in ppmv

Concentrations shall be corrected to 15 percent oxygen on a dry basis.

**[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; RULE 407, 4-2-1982]**

[Devices subject to this condition : C811, C813]

## **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:**

D82.2 The operator shall install and maintain a CEMS to measure the following parameters:

CO concentration in ppmv

Oxygen concentration in percent volume

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

[Devices subject to this condition : D96]

D90.2 The operator shall periodically monitor the pH of the caustic solution according to the following specifications:

The operator shall monitor once every week.

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

[Devices subject to this condition : D798]

D90.3 The operator shall periodically monitor the pH of the caustic solution whenever the scrubber is in operation according to the following specifications:

The operator shall monitor once every day.

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

[Devices subject to this condition : C232]

D90.4 The operator shall periodically monitor the VOC concentration at the outlet of the last carbon according to the following specifications:

## **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 operator shall use a District approved Organic Vapor Analyzer (OVA) to monitor the parameter.

The operator shall monitor once every day.

**[RULE 1303(a)(1)-BACT, 5-10-1996; RULE 3004(a)(4)-Periodic Monitoring, 12-12-1997; 40CFR 61 Subpart FF, 12-4-2003; 40CFR 63 Subpart CC, 6-23-2003]**

[Devices subject to this condition : C472, C473, C1096]

D90.5 The operator shall continuously monitor the VOC concentration at the outlet of the last carbon adsorber according to the following specifications:

The operator shall use a continuous emission monitoring system (CEMS) to monitor the parameter.

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

The operator shall monitor the VOC concentration utilizing a District approved Organic Analyzer once per day during the CEMS breakdown or maintenance periods.

**[RULE 1303(a)(1)-BACT, 5-10-1996; RULE 3004(a)(4)-Periodic Monitoring, 12-12-1997; 40CFR 63 Subpart CC, 6-23-2003]**

[Devices subject to this condition : C699, C702]

D90.6 The operator shall periodically sample the caustic scrubbing solution at the inlet of the scrubber for caustic concentration analysis according to the following specifications:

The operator shall sample, analyze, and record once per day the strength of the caustic (NaOH) solution which shall not be less than 3 percent.

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

## **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:**

[Devices subject to this condition : C761, C762]

D90.7 The operator shall continuously monitor the H<sub>2</sub>S 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 H<sub>2</sub>S concentration at a single location for fuel combustion devices, if monitoring at this location accurately represents the concentration of H<sub>2</sub>S in the fuel gas being burned in this device.

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

[Devices subject to this condition : D9, D32, D33, D89, D90, D91, D92, D112, D120, D146, D157, D158, D194, D196, D214, D215, D216, D217, D218, D247, D248, D249, D250, D251, D384, D385, D386, D387, D388, D722, D723, D724, D725, D770, D777, D810, D812, D1122]

D90.8 The operator shall continuously monitor the opacity at the stack according to the following specifications:

The operator shall use an opacity meter to monitor the parameter.

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

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

[Devices subject to this condition : D96]

## **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:**

D90.10 The operator shall continuously monitor the sulfur concentration in the fuel gases being burned in this device according to the following specifications:

The operator shall monitor the sulfur concentration in the fuel by utilizing the SO<sub>x</sub> emission data from the certified RECLAIM SO<sub>x</sub> CEMS to calculate the sulfur concentration in the fuel as specified in the alternative monitoring plan which received EPA approval on June 23, 1998.

**[40CFR 60 Subpart GG, 2-24-2006]**

[Devices subject to this condition : D810, D812]

D90.16 The operator shall periodically monitor the H<sub>2</sub>S concentration in the fuel gases before being burned in this device according to the following specifications:

The Alternative Monitoring Plan (AMP) approved by the United States Environmental Protection Agency (USEPA) on December 4, 2002 for the periodic monitoring and reporting of H<sub>2</sub>S concentration for the PSA Purge Gas stream to the reformer heater H-42/43.

The operator shall conduct annual source testing of the PSA purge gas and daily detector tube sampling at the outlet of the first Zinc Oxide bed to confirm that the concentration of H<sub>2</sub>S does not exceed 0-1 ppmv.

In addition, the operator shall also comply with all other requirements of the AMP issued by the USEPA on December 4, 2002 for reformer heater H-42/43.

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

**[40CFR 60 Subpart A, 6-13-2007; 40CFR 60 Subpart J, 6-24-2008]**

[Devices subject to this condition : D777, D1122]

## **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:**

D90.17 The operator shall periodically monitor the H<sub>2</sub>S concentration in the fuel gases before being burned in this device according to the following specifications:

The Alternative Monitoring Plan (AMP) approved by the United States Environmental Protection Agency (USEPA) on June 23, 2004 for the periodic monitoring and reporting of H<sub>2</sub>S concentration for the Merichem Off-Gas Fuel stream to the boiler.

The operator shall conduct daily drager tube sampling of the Merichem Off-Gas Fuel stream to confirm that the concentration of H<sub>2</sub>S does not exceed 0-1 ppmv.

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

**[40CFR 60 Subpart A, 6-13-2007; 40CFR 60 Subpart J, 6-24-2008]**

[Devices subject to this condition : D722, D723, D724, D725]

D90.18 The operator shall periodically monitor the vapor pressure of the material stored in this storage tank according to the following specifications:

The operator shall determine the true vapor pressure by one of the following methods: 1) sample and test the materials stored, 2) derive the vapor pressure using engineering calculations, or 3) maintain on file a copy of the Material Safety Data Sheet (MSDS) of the material stored.

Records of material stored, and their MSDS if applicable, shall be retained for a period of five years and made available to the Executive Officer upon request.

**[RULE 1303(b)(2)-Offset, 5-10-1996; RULE 1303(b)(2)-Offset, 12-6-2002; RULE 3004(a)(4)-Periodic Monitoring, 12-12-1997]**

[Devices subject to this condition : D543, D547, D549, D550, D551, D557, D561, D564, D568, D582, D583, D586, D587, D588, D595, D602, D605, D606, D607, D608, D609, D632, D635, D639, D647, D654, D657, D982, D1078, D1555]

## **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:**

D90.19 The operator shall monitor the throughput of this storage tank according to the following specifications:

The operator shall install and maintain an automatic tank level gauge (ATLG) and recorder to continuously measure and record the liquid surface level movement. The throughput, in barrels, shall be calculated using the following equation:  $0.14 \times D \times D \times L$ , where D is the diameter of the tank in feet based on the tank strapping chart and L is the total vertical one-way liquid surface level travel in feet per month. For the purpose of this condition, continuous recording is defined as once per hour.

Alternatively, for tanks which do not have an ATLG device, the throughput shall be derived by using engineering calculations using parameters obtained from process records, shipping invoices, manual tank level gauging, etc.

Records of throughput shall be retained for a period of five years and made available to the Executive Officer upon request.

**[RULE 1303(b)(2)-Offset, 5-10-1996; RULE 1303(b)(2)-Offset, 12-6-2002; RULE 3004(a)(4)-Periodic Monitoring, 12-12-1997]**

[Devices subject to this condition : D546, D550, D648, D649, D657, D688, D1120, D1121, D1500]

D135.1 The operator shall inspect, adjust, and certify the ignition or fuel injection timing of this engine a minimum of once every 3 years of operation. Inspections, adjustments, and certifications shall be performed by a qualified mechanic and performed in accordance with the engine manufacturer's specifications and procedures.

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

[Devices subject to this condition : D713, D714]

D322.2 The operator shall perform annual inspection of the equipment and filter media for leaks, broken or torn filter media, and improperly installed filter media.

## **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:**

To comply with this condition, the operator shall maintain records in a manner approved by the District, to demonstrate compliance with this condition.

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

[Devices subject to this condition : C1574]

## **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:**

D323.1 The operator shall conduct an inspection for visible emissions from all stacks and other emission points of this equipment whenever there is a public complaint of visible emissions, whenever visible emissions are observed, and on a semi-annual basis, at least, unless the equipment did not operate during the entire semi-annual period. The routine semi-annual inspection shall be conducted while the equipment is in operation and during daylight hours.

If any visible emissions (not including condensed water vapor) are detected that last more than three minutes in any one hour, the operator shall verify and certify within 24 hours that the equipment causing the emission and any associated air pollution control equipment are operating normally according to their design and standard procedures and under the same conditions under which compliance was achieved in the past, and either:

- 1). Take corrective action(s) that eliminates the visible emissions within 24 hours and report the visible emissions as a potential deviation in accordance with the reporting requirements in Section K of this permit; or
- 2). Have a CARB-certified smoke reader determine compliance with the opacity standard, using EPA Method 9 or the procedures in the CARB manual "Visible Emission Evaluation", within three business days and report any deviations to AQMD.

The operator shall keep the records in accordance with the recordkeeping requirements in Section K of this permit and the following records:

- 1). Stack or emission point identification;
- 2). Description of any corrective actions taken to abate visible emissions;
- 3). Date and time visible emission was abated; and
- 4). All visible emission observation records by operator or a certified smoke reader.

## **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:**

**[RULE 3004(a)(4)-Periodic Monitoring, 12-12-1997; RULE 401, 3-2-1984; RULE 401, 11-9-2001]**

[Devices subject to this condition : D41, D45, D46, D47, D49, D1093, D1094, D1155, D1156, D1157, D1158, D1159, D1160, D1161, D1162, D1164, D1165, D1170, D1173, D1174, D1175, D1176, D1177, D1178, D1283, D1284, D1287, D1288, D1438, D1532, C1574]

## **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:**

D323.2 The operator shall conduct an inspection for visible emissions from all stacks and other emission points of this equipment whenever there is a public complaint of visible emissions, whenever visible emissions are observed, and on a bi-weekly basis, at least, unless the equipment did not operate during the entire bi-weekly period. The routine bi-weekly inspection shall be conducted while the equipment is in operation and during daylight hours.

If any visible emissions (not including condensed water vapor) are detected that last more than three minutes in any one hour, the operator shall verify and certify within 24 hours that the equipment causing the emission and any associated air pollution control equipment are operating normally according to their design and standard procedures and under the same conditions under which compliance was achieved in the past, and either:

- 1). Take corrective action(s) that eliminates the visible emissions within 24 hours and report the visible emissions as a potential deviation in accordance with the reporting requirements in Section K of this permit; or
- 2). Have a CARB-certified smoke reader determine compliance with the opacity standard, using EPA Method 9 or the procedures in the CARB manual "Visible Emission Evaluation", within three business days and report any deviations to AQMD.

The operator shall keep the records in accordance with the recordkeeping requirements in Section K of this permit and the following records:

- 1). Stack or emission point identification;
- 2). Description of any corrective actions taken to abate visible emissions;
- 3). Date and time visible emission was abated; and
- 4). All visible emission observation records by operator or a certified smoke reader.

## **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:**

**[RULE 3004(a)(4)-Periodic Monitoring, 12-12-1997; RULE 401, 3-2-1984; RULE 401, 11-9-2001]**

[Devices subject to this condition : C747, C748]

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 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]**

[Devices subject to this condition : D9, D32, D33, D89, D90, D91, D112, D120, D146, D157, D158, D194, D196, D214, D218, D247, D248, D251, D384, D386, D387, D388, D722, D723, D724, D725, D770, D777, D810, D812, D1122]

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]**

[Devices subject to this condition : D92, D215, D216, D217, D249, D250, D385]

## **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:**

D330.1 The operator shall have a person that has been trained in accordance with Rule 461 conduct a semi-annual inspection of the gasoline transfer and dispensing equipment. The first inspection shall be in accordance with Rule 461, Attachment B, the second inspection shall be in accordance with Rule 461, Attachment C, and the subsequent inspections shall alternate protocols. The operator shall keep records of the inspection and the repairs in accordance to Rule 461 and Section K of this Permit.

**[RULE 3004(a)(4)-Periodic Monitoring, 12-12-1997; RULE 461, 6-3-2005; RULE 461, 3-7-2008]**

[Devices subject to this condition : D734, D1320]

#### **E. Equipment Operation/Construction Requirements**

E51.2 The following condition number(s) shall not apply if any of the requirements stated below are met:

Condition Number E 71- 4

Requirement number 1: The gas turbine is in the start-up mode.

Requirement number 2: Device ID C1536 (Selective Catalytic Reduction) is in full operation

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

[Devices subject to this condition : D810]

E51.4 The following condition number(s) shall not apply if any of the requirements stated below are met:

## **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:**

Condition Number E 71- 4

Requirement number 1: The gas turbine is in the start-up mode.

Requirement number 2: Device ID C1538 (Selective Catalytic Reduction) is in full operation

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

[Devices subject to this condition : D812]

E54.1 The operator is not required to vent this equipment to the following equipment if any of the requirements listed below are met:

Device ID: C764 [SELECTIVE CATALYTIC REDUCTION]

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]**

[Devices subject to this condition : D9]

E54.3 The operator is not required to vent this equipment to the following equipment if any of the requirements listed below are met:

Device ID: C788 [SELECTIVE CATALYTIC REDUCTION]

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]**

## **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:**

[Devices subject to this condition : D388]

E54.4 The operator is not required to vent this equipment to the following equipment if any of the requirements listed below are met:

Device ID: C786 [SELECTIVE CATALYTIC REDUCTION]

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]**

[Devices subject to this condition : D386, D387]

E54.5 The operator is not required to vent this equipment to the following equipment if any of the requirements listed below are met:

Device ID: C784 [SELECTIVE CATALYTIC REDUCTION]

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]**

[Devices subject to this condition : D384, D385]

E54.6 The operator is not required to vent this equipment to the following equipment if any of the requirements listed below are met:

## **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:**

Device ID: C775 [SELECTIVE CATALYTIC REDUCTION]

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]**

[Devices subject to this condition : D247, D248, D249]

E54.7 The operator is not required to vent this equipment to the following equipment if any of the requirements listed below are met:

Device ID: C771 [SELECTIVE CATALYTIC REDUCTION]

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]**

[Devices subject to this condition : D770]

E54.8 The operator is not required to vent this equipment to the following equipment if any of the requirements listed below are met:

Device ID: C778 [SELECTIVE CATALYTIC REDUCTION]

Requirement number 1: The furnace 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]**

## **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:**

[Devices subject to this condition : D777]

E54.9 The operator is not required to vent this equipment to the following equipment if any of the requirements listed below are met:

Device ID: C768 [SELECTIVE CATALYTIC REDUCTION]

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]**

[Devices subject to this condition : D33]

E54.10 The operator is not required to vent this equipment to the following equipment if any of the requirements listed below are met:

Device ID: C778 [SELECTIVE CATALYTIC REDUCTION]

Requirement number 1: The boiler 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]**

[Devices subject to this condition : D1122]

E54.11 The operator is not required to vent this equipment to the following equipment if all of the requirements listed below are met:

## **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:**

Device ID: C764 [SELECTIVE CATALYTIC REDUCTION]

Requirement number 1: The District shall be notified at least 72 hours before the planned bypass.

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.

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 maintenance (scheduled or unscheduled) work performed for each bypass.

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

[Devices subject to this condition : D9]

E54.13 The operator is not required to vent this equipment to the following equipment if all of the requirements listed below are met:

Device ID: C788 [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

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

## **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:**

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

[Devices subject to this condition : D388]

E54.14 The operator is not required to vent this equipment to the following equipment if all of the requirements listed below are met:

Device ID: C786 [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

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]**

[Devices subject to this condition : D386, D387]

E54.15 The operator is not required to vent this equipment to the following equipment if all of the requirements listed below are met:

## **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:**

Device ID: C784 [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

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]**

[Devices subject to this condition : D384, D385]

E54.16 The operator is not required to vent this equipment to the following equipment if all of the requirements listed below are met:

Device ID: C775 [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

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

## **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:**

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

[Devices subject to this condition : D247, D248, D249]

E54.17 The operator is not required to vent this equipment to the following equipment if all of the requirements listed below are met:

Device ID: C768 [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

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]**

[Devices subject to this condition : D33]

E57.1 The operator shall vent this equipment to scrubber C232 whenever scrubbers C761 and C762 are shutdown for breakdown or maintenance.

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

[Devices subject to this condition : D505]

## **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:**

E71.1 The operator shall only use this equipment for holding excess storm water, or holding separator effluent water in the event of mechanical problems or upset conditions in the final effluent treating units. It may also be used for surge storage of fresh water during plant water well outage. This equipment shall be completely emptied as soon as possible after receipt of effluent water.

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

[Devices subject to this condition : D688]

E71.3 The operator shall only use this equipment to process the sludge from Equipment ID D469 (TK-6002/6003).

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

[Devices subject to this condition : D703]

E71.4 The operator shall only operate this equipment if the water injection is in full operation.

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

[Devices subject to this condition : D810, D812]

E71.5 The operator shall only use this equipment if the pH of the caustic solution in this equipment is maintained at equal or greater than 10.

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

[Devices subject to this condition : C232]

## **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:**

E71.6 The operator shall only use this equipment for loading spent caustic solution having pH equal or greater than 10.

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

[Devices subject to this condition : D798]

E71.7 The operator shall only inject anhydrous ammonia into this equipment if the flue gas inlet temperature to this equipment is 550 degrees F or higher.

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

[Devices subject to this condition : C764, C768, C771, C773, C775, C778, C784, C786, C788]

E71.8 The operator shall only use this equipment for processing storm and rain water run-off.

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

[Devices subject to this condition : D697, D700]

E71.10 The operator shall only use this equipment for storing waste water discharged from laboratory operations.

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

[Devices subject to this condition : D1095]

E71.11 The operator shall only operate this equipment if the caustic solution is maintained at a minimum height of 1 FT.

## **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:**

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

[Devices subject to this condition : C232]

- E71.12 The operator shall only limit the product deliveries to this equipment to no more than 61 trucks per year. The operator shall use the purchases invoices and other records to demonstrate compliance with the number of truck deliveries of Ammonia.

**[RULE 1303, 5-10-1996; RULE 1303, 12-6-2002]**

[Devices subject to this condition : D311]

- E71.13 The operator shall not operate this equipment if V-822 (D1287) Catalyst Loading Pot is in operation.

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

[Devices subject to this condition : D1573]

- E73.1 Notwithstanding the requirements of Section E conditions, the operator may, at his discretion, choose not to use ammonia injection if any of the following requirement(s) are met:

The inlet exhaust temperature to the SCR reactor is 450 degrees F or less

condition E71.4 is met

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

[Devices subject to this condition : C1536, C1538]

## **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:**

E102.1 The operator shall discharge dust collected in this equipment only into closed containers.

**[RULE 3004(a)(4)-Periodic Monitoring, 12-12-1997; RULE 401, 3-2-1984; RULE 401, 11-9-2001]**

[Devices subject to this condition : C1574]

E131.1 The operator shall maintain a vapor-tight seal between the adaptor and compartment hatch when loading fresh or spent acid.

**[RULE 1303(a)(1)-BACT, 5-10-1996; RULE 402, 5-7-1976]**

[Devices subject to this condition : D505]

E153.1 The operator shall change over the carbon in the adsorber whenever breakthrough occurs.

For the purpose of this condition, breakthrough occurs when the hydrocarbon monitor reading indicates a concentration of 500 ppmv at the outlet of the last carbon adsorber. The 500 ppmv refers to VOC concentration.

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

[Devices subject to this condition : C472, C473, C699, C702, C1096]

E179.1 For the purpose of the following condition number(s), continuously record shall be defined as once every hour and shall be calculated upon average of the continuous monitoring for that hour.

Condition Number D 12- 6

Condition Number D 12- 7

## **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:**

**[RULE 1303(a)(1)-BACT, 5-10-1996; RULE 2012, 5-6-2005]**

[Devices subject to this condition : C1536, C1538]

E179.2 For the purpose of the following condition number(s), continuously record shall be defined as once every month and shall be calculated upon average of the continuous monitoring for that month.

Condition Number D 12- 8

**[RULE 1303(a)(1)-BACT, 5-10-1996; RULE 2012, 5-6-2005]**

[Devices subject to this condition : C1536, C1538]

E193.1 The operator shall operate and maintain this equipment according to the following specifications:

The operator shall comply with all applicable requirements specified in Subpart A of the 40CFR60

**[40CFR 60 Subpart A, 6-13-2007]**

[Devices subject to this condition : C747, C748]

E193.5 The operator shall operate and maintain this equipment according to the following requirements:

To maintain the PM10 average daily value to 26 lbs or below from this equipment H-101 (D32), the DCU Propane Vaporizer E-1465 (D1616-P2S1) will only operate when the DCU Sponge Oil Absorber V-910 (D1143-P2S1) is in operation

**[RULE 1303(b)(2)-Offset, 5-10-1996; RULE 1303(b)(2)-Offset, 12-6-2002]**

## **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:**

[Devices subject to this condition : D32]

E313.1 This device is classified as a non-operated major SO<sub>x</sub> and NO<sub>x</sub> source as defined under Rules 2011 and 2012 and shall not be operated unless the Facility Permit holder provides written notification to the Executive Officer 30 days prior to starting operation. In order to maintain the non-operational classification, the Facility Permit holder shall:

(a) Remove a section of the fuel feed line(s) to the device and place a blind flange on both ends of the fuel feed line(s); and

(b) Remove all burners.

Removal of parts or components solely to qualify the device for non-operated classification pursuant to this condition, or replacement of the same removed parts or components resulting in the device no longer being classified as non-operated shall not be deemed to affect the potential to emit within the meanings of Rule 2005, Regulation XIII and Regulation XXX.

**[RULE 2011, 5-6-2005; RULE 2012, 5-6-2005]**

[Devices subject to this condition : D91, D194, D196]

E315.1 Once this device is operated, it shall no longer be classified as non-operational. This device shall also meet the monitoring requirements of Rules 2011 and 2012, subparagraph (c)(2)(A) or (c)(2)(B) no later than 30 calendar days after the start of operation except as provided in Rule 2011, paragraph (c)(11) and Rule 2012, paragraph (c)(10).

**[RULE 2011, 5-6-2005; RULE 2012, 5-6-2005]**

[Devices subject to this condition : D91, D194, D196]

## **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:**

E336.1 The operator shall vent the vent gases from this equipment as follows:

All vent gases from the vacuum trucks used in transferring bottom sludges of this equipment shall be directed to the vapor recovery system or carbon adsorber.

This equipment shall not be operated unless the vapor recovery system/carbon adsorber is in full use and has a valid permit to receive vent gases from this equipment.

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

[Devices subject to this condition : D469]

E336.2 The operator shall vent the vent gases from this equipment as follows:

All vent gases under normal operating conditions shall be directed to a vapor recovery system consisting of compressors, D641, D642, D643, and/or D644, which can be operated independently to maintain a system vacuum that efficiently collects all vented gases.

This equipment shall not be operated unless the vapor recovery system is in full use and has a valid permit to receive vent gases from this equipment.

**[RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(b)(2)-Offset, 5-10-1996]**

## **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:**

[Devices subject to this condition : D458, D459, D460, D461, D462, D466, D467, D520, D521, D526, D531, D533, D534, D544, D546, D547, D548, D550, D551, D552, D553, D554, D555, D556, D557, D558, D559, D560, D561, D562, D563, D564, D565, D566, D567, D569, D571, D572, D573, D574, D575, D576, D577, D578, D579, D585, D589, D592, D593, D594, D595, D596, D597, D598, D599, D600, D602, D603, D604, D606, D607, D608, D611, D614, D615, D616, D617, D619, D620, D622, D623, D624, D625, D626, D627, D628, D631, D633, D634, D636, D637, D639, D640, D807, D808, D809, D982, D998, D1001, D1002, D1500]

E336.3 The operator shall vent the vent gases from this equipment as follows:

All vent gases under normal operating conditions shall be directed to the DCU Blowdown Recovery system.

This equipment shall not be operated unless the above vapor recovery system is in full use and has a valid permit to receive vent gases from this equipment.

**[RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(b)(2)-Offset, 5-10-1996]**

[Devices subject to this condition : D20]

## **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:**

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

The requirement of condition E336.2 does not apply when the commodity being stored in this equipment is only Metropolitan Water or water supplied by the Los Angeles Department of Water and Power for the sole purpose of supplying water for the refinery firewater system and the operator demonstrate that the tank has been degassed pursuant to Rule 1149 and the hydrocarbon vapor pressure at storage condition does not exceed 0.1 psia as determined by SCAQMD Method 25.3

The following equation will use the results of SCAQMD Method 25.3 to convert from ppm to psia:  $P(\text{voc}) = (\text{ppm}/1000000) \times P_t$ ; where  $P_t = \text{atmospheric pressure} = 14.7 \text{ psia}$

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

[Devices subject to this condition : D552, D553]

E440.2 The operator shall operate and maintain this equipment according to the following specifications:

The operator shall notify the primary SCAQMD inspector for the refinery in writing and by e-mail (Refinery\_Compliance@aqmd.gov) whenever (1) the commodity is switched from water to organic liquid, (2) the commodity is switched from organic liquid to water and (3) water or organic liquid is introduced into an empty tank. The notification shall be made within 5 days of any changes in commodity as described above and shall include the vapor pressure of liquid at storage condition expressed in the unit of psia

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

## 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:**

[Devices subject to this condition : D552, D553]

E448.1 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 damper limit switches or 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]

#### **H. Applicable Rules**

H23.1 This equipment is subject to the applicable requirements of the following rules or regulations:

Contaminant	Rule	Rule/Subpart

## 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:

VOC	40CFR60, SUBPART	Kb
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**[40CFR 60 Subpart Kb, 10-15-2003]**

[Devices subject to this condition : D469, D524, D598, D610, D613, D630, D648, D982, D1001, D1002, D1078]

H23.2 This equipment is subject to the applicable requirements of the following rules or regulations:

Contaminant	Rule	Rule/Subpart
VOC	40CFR60, SUBPART	Ka

**[40CFR 60 Subpart Ka, 12-14-2000]**

[Devices subject to this condition : D581]

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]**

[Devices subject to this condition : D9, D32, D33, D89, D90, D91, D92, D112, D120, D146, D157, D158, D194, D196, D214, D215, D216, D217, D218, D247, D248, D249, D250, D251, D384, D385, D386, D387, D388, D722, D723, D724, D725, D770, D777]

## 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:**

H23.4 This equipment is subject to the applicable requirements of the following rules or regulations:

Contaminant	Rule	Rule/Subpart
VOC	40CFR60, SUBPART	GGG

**[40CFR 60 Subpart GGG, 6-2-2008]**

[Devices subject to this condition : D68, D140, D156, D176, D333, D377, D642, D901, D918, D1082, D1194, D1338]

H23.5 This equipment is subject to the applicable requirements of the following rules or regulations:

Contaminant	Rule	Rule/Subpart
VOC	District Rule	1173

**[RULE 1173, 5-13-1994; RULE 1173, 2-6-2009]**

[Devices subject to this condition : D1354, D1355, D1357, D1359, D1361, D1362, D1363, D1366, D1367, D1384, D1399, D1415, D1416, D1419, D1425, D1443, D1444, D1451, D1454, D1459, D1460, D1461, D1465, D1466, D1467, D1469, D1470, D1471, D1472, D1473, D1477, D1553, D1556, D1557, D1561]

H23.9 This equipment is subject to the applicable requirements of the following rules or regulations:

Contaminant	Rule	Rule/Subpart
VOC	40CFR60, SUBPART	K

## 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:**

**[40CFR 60 Subpart K, 10-17-2000]**

[Devices subject to this condition : D634]

H23.10 This equipment is subject to the applicable requirements of the following rules or regulations:

Contaminant	Rule	Rule/Subpart
VOC	40CFR60, SUBPART	K
Benzene	40CFR61, SUBPART	FF

**[40CFR 60 Subpart K, 10-17-2000; 40CFR 61 Subpart FF, 12-4-2003]**

[Devices subject to this condition : D633]

H23.12 This equipment is subject to the applicable requirements of the following rules or regulations:

Contaminant	Rule	Rule/Subpart
Refrigerants	District Rule	1415

[RULE 1415, 10-14-1994]

[Devices subject to this condition : E1487, E1488]

H23.13 This equipment is subject to the applicable requirements of the following rules or regulations:

Contaminant	Rule	Rule/Subpart
Chromium, Hexavalent	District Rule	1404

## 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:**

[RULE 1404, 4-6-1990]

[Devices subject to this condition : E1489]

H23.14 This equipment is subject to the applicable requirements of the following rules or regulations:

Contaminant	Rule	Rule/Subpart
VOC	District Rule	1122

[RULE 1122, 10-1-2004]

[Devices subject to this condition : E1492]

H23.15 This equipment is subject to the applicable requirements of the following rules or regulations:

Contaminant	Rule	Rule/Subpart
Halon	District Rule	1418

[RULE 1418, 9-10-1999]

[Devices subject to this condition : E1494]

H23.16 This equipment is subject to the applicable requirements of the following rules or regulations:

Contaminant	Rule	Rule/Subpart
VOC	District Rule	1173
VOC	40CFR60, SUBPART	GGG

## 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:**

**[RULE 1173, 5-13-1994; RULE 1173, 2-6-2009; 40CFR 60 Subpart GGG, 6-2-2008]**

[Devices subject to this condition : D922, D923, D1365, D1380, D1381, D1392, D1446, D1447, D1448, D1449, D1453, D1455, D1456, D1458, D1562]

H23.17 This equipment is subject to the applicable requirements of the following rules or regulations:

Contaminant	Rule	Rule/Subpart
VOC	40CFR60, SUBPART	QQQ

**[40CFR 60 Subpart QQQ, 10-17-2000]**

[Devices subject to this condition : D1495, D1496]

H23.18 This equipment is subject to the applicable requirements of the following rules or regulations:

Contaminant	Rule	Rule/Subpart
NOX	40CFR60, SUBPART	GG
H2S	40CFR60, SUBPART	J
SOX	40CFR60, SUBPART	GG
CO	District Rule	1134

**[RULE 1134, 8-8-1997; 40CFR 60 Subpart GG, 2-24-2006; 40CFR 60 Subpart J, 6-24-2008]**

[Devices subject to this condition : D810, D812]

## 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:**

H23.25 This equipment is subject to the applicable requirements of the following rules or 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]**

[Devices subject to this condition : D657, D688, D1001, D1002]

H23.27 This equipment is subject to the applicable requirements of the following rules or regulations:

Contaminant	Rule	Rule/Subpart
VOC	District Rule	109

**[RULE 109, 5-2-2003]**

[Devices subject to this condition : E1491, E1499]

H23.29 This equipment is subject to the applicable requirements of the following rules or regulations:

Contaminant	Rule	Rule/Subpart
NOX	40CFR60, SUBPART	Db
H2S	40CFR60, SUBPART	J

## 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:**

**[40CFR 60 Subpart Db, 1-28-2009; 40CFR 60 Subpart J, 6-24-2008]**

[Devices subject to this condition : D1122]

H23.30 This equipment is subject to the applicable requirements of the following rules or regulations:

Contaminant	Rule	Rule/Subpart
VOC	District Rule	465

**[RULE 465, 8-13-1999]**

[Devices subject to this condition : D1558, D1559, D1560]

H23.31 This equipment is subject to the applicable requirements of the following rules or regulations:

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

For Rule 463 applicability, only subdivision (d) in the March 11,1994 amendment, or equivalent requirements in the future amendments, shall apply to domed external floating roof tanks. This does not preclude any requirements specified in Rule 1178

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

[Devices subject to this condition : D648]

H23.32 This equipment is subject to the applicable requirements of the following rules or regulations:

## 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:**

Contaminant	Rule	Rule/Subpart
CO	40CFR60, SUBPART	J
PM	40CFR60, SUBPART	J
Visible Emissions	40CFR60, SUBPART	J
SOX	40CFR60, SUBPART	J

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

[Devices subject to this condition : D96]

H23.33 This equipment is subject to the applicable requirements of the following rules or regulations:

Contaminant	Rule	Rule/Subpart
VOC	District Rule	463
VOC	District Rule	1149
VOC	District Rule	1178
VOC	40CFR60, SUBPART	Kb

For Rule 463 applicability, only subdivision (d) in the March 11, 1994 amendment, or equivalent requirements in the future amendments, shall apply to domed external floating roof tanks. This does not preclude any requirements specified in Rule 1178.

**[RULE 1149, 7-14-1995; RULE 1149, 5-2-2008; RULE 1178, 4-7-2006; RULE 463, 5-6-2005; 40CFR 60 Subpart Kb, 10-15-2003]**

[Devices subject to this condition : D561, D564, D639, D659]

## 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:**

H23.36 This equipment is subject to the applicable requirements of the following rules or regulations:

Contaminant	Rule	Rule/Subpart
PM	District Rule	1470

[RULE 1470, 6-1-2007]

[Devices subject to this condition : D1617, D1618, D1645, D1646, D1659]

H23.38 This equipment is subject to the applicable requirements of the following rules or regulations:

Contaminant	Rule	Rule/Subpart
SOX	District Rule	1118

[RULE 1118, 11-4-2005]

[Devices subject to this condition : C747, C748]

H23.40 This equipment is 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]

## **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:**

[Devices subject to this condition : D458, D459, D460, D461, D462, D463, D464, D465, D466, D467, D469, D471, C472, C473, D526, D544, D546, D562, D563, D565, D567, D572, D573, D575, D576, D577, D578, D579, D608, D611, D623, D625, D626, D627, D628, D633, D639, D703, D709, D1095, C1096, D1304]

#### **I. Administrative**

- I1.1 The operator shall comply with all the requirements of the conditions and compliance schedule as specified in the Variance, Case No. 4982-77, issued on April 24, 2007, in accordance with the Findings and Decisions of the Hearing Board or as subsequently modified by the Hearing Board. The operator shall submit progress reports at least semi-annually, or more frequently if specified in the Findings and Decisions. The progress reports shall contain dates for achieving activities, milestones or compliance required in the schedule of compliance and dates when such activities, milestones or compliance were achieved; and an explanation of why any dates in the schedule of compliance were not, or will not be met, and any preventative or corrective measures adopted.

The variance (or Order for Abatement) referenced in this condition does not affect federal or citizen enforceability of the underlying SIP approved rules for which the applicant is receiving the variance (or Order for Abatement).

**[RULE 3004(a)(10)(C), 12-12-1997]**

[Devices subject to this condition : C747, C748]

- I296.1 This equipment shall not be operated unless the operator demonstrates to the Executive Officer that the facility holds sufficient RTCs to offset the prorated annual emissions increase for the first compliance year of operation. In addition, this equipment shall not be operated unless the operator demonstrates to the Executive Officer that, at the commencement of each compliance year after the first compliance year of operation, the facility holds sufficient RTCs in an amount equal to the annual emissions increase.

## **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:**

**[RULE 2005, 5-6-2005]**

[Devices subject to this condition : D1617, D1618, D1645, D1646]

#### **J. Rule 461**

J109.1 The operator shall use, except for diesel transfer, the phase I vapor recovery system in full operation whenever this equipment is in use. This system shall be installed, operated and maintained to meet all CARB certification requirements.

**[RULE 461, 6-3-2005; RULE 461, 3-7-2008]**

[Devices subject to this condition : D728, D1321]

J110.1 The operator shall use, except for diesel transfer, the phase II vapor recovery system in full operation whenever gasoline from this equipment is dispensed to motor vehicles as defined in Rule 461. This system shall be installed, operated and maintained to meet all CARB certification requirements.

**[RULE 461, 6-3-2005; RULE 461, 3-7-2008]**

[Devices subject to this condition : D734, D1320]

J119.1 A CARB certified pressure/vacuum relief valve shall be installed on the tank vent stack and shall be set as specified in G-70-116

**[RULE 461, 6-3-2005; RULE 461, 3-7-2008]**

[Devices subject to this condition : D728, D1321]

## 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:**

#### **K. Record Keeping/Reporting**

K67.1 The operator shall keep records, in a manner approved by the District, for the following parameter(s) or item(s):

The date of operation, the elapsed time in hours, and the reason for operation.

**[RULE 1304(a)-Modeling and Offset Exemption, 6-14-1996; RULE 2012, 5-6-2005]**

[Devices subject to this condition : D713, D714, D1100, D1101, D1102, D1103, D1104, D1123]

K67.2 The operator shall keep records, in a manner approved by the District, for the following parameter(s) or item(s):

Throughput and vapor pressure of stored liquid.

**[RULE 3004(a)(4)-Periodic Monitoring, 12-12-1997; RULE 463, 5-6-2005]**

[Devices subject to this condition : D520, D521, D531, D533, D534, D543, D544, D546, D548, D549, D554, D555, D556, D558, D559, D560, D562, D563, D565, D566, D567, D568, D569, D571, D572, D573, D575, D576, D577, D578, D579, D581, D582, D583, D584, D585, D586, D587, D588, D591, D592, D593, D594, D596, D597, D598, D599, D603, D604, D605, D609, D611, D612, D614, D615, D616, D617, D619, D620, D622, D623, D625, D626, D627, D628, D629, D631, D632, D633, D634, D635, D636, D637, D640, D647, D648, D649, D650, D651, D652, D653, D654, D655, D656, D658, D1001, D1002, D1095, D1500, D1555]

K67.4 The operator shall keep records, in a manner approved by the District, for the following parameter(s) or item(s):

## **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:**

For architectural applications where no thinners, reducers, or other VOC containing materials are added, maintain semi-annual records for all coating consisting of (a) coating type, (b) VOC content as supplied in grams per liter (g/l) of materials for low-solids coatings, (c) VOC content as supplied in g/l of coating, less water and exempt solvent, for other coatings.

For architectural applications where thinners, reducers, or other VOC containing materials are added, maintain daily records for each coating consisting of (a) coating type, (b) VOC content as applied in grams per liter (g/l) of materials used for low-solids coatings, (c) VOC content as applied in g/l of coating, less water and exempt solvent, for other coatings.

**[RULE 1113, 11-8-1996; RULE 1113, 7-13-2007; RULE 3004(a)(4)-Periodic Monitoring, 12-12-1997]**

[Devices subject to this condition : E1493]

K67.8 The operator shall keep records, in a manner approved by the District, for the following parameter(s) or item(s):

Throughput in barrels per calendar month

Vapor pressure of stored liquid in psia

Other records that may be required to comply with the applicable requirements of District Rules 463 and 1178

**[RULE 3004(a)(4)-Periodic Monitoring, 12-12-1997; RULE 463, 5-6-2005]**

[Devices subject to this condition : D557, D561, D564, D595, D606, D607, D982]

K67.9 The operator shall keep records, in a manner approved by the District, for the following parameter(s) or item(s):

## 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:**

Hydrocarbon concentration measurements done in the vapor space above the floating roof of the tank

Throughput in barrels per calendar month

Vapor pressure of stored liquid in psia

Other records that may be required to comply with the applicable requirements of District Rules 463 and 1178

**[RULE 3004(a)(4)-Periodic Monitoring, 12-12-1997; RULE 463, 5-6-2005]**

[Devices subject to this condition : D659, D660]

K67.10 The operator shall keep records, in a manner approved by the District, for the following parameter(s) or item(s):

Material Stored (Ammonia)

The purchase invoices to determine the truck deliveries of ammonia.

**[RULE 3004(a)(1), 12-12-1997]**

[Devices subject to this condition : D311]

K67.11 The operator shall keep records, in a manner approved by the District, for the following parameter(s) or item(s):

Throughput and vapor pressure of stored liquid in psia, when the tank is not storing firewater.

**[RULE 3004(a)(4)-Periodic Monitoring, 12-12-1997; RULE 463, 5-6-2005]**

## **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:**

[Devices subject to this condition : D552, D553]

K67.12 The operator shall keep records, in a manner approved by the District, for the following parameter(s) or item(s):

Throughput in barrels per calendar month

Commodity/product stored and time period of its storage

Actual vapor pressure of stored liquid in psia, of each commodity/product stored

Hydrocarbon concentration measurements done in the vapor space above the floating roof of the tank

Other records that may be required to comply with the applicable requirements of District Rules 463, 1149 and 1178, 40CFR60, Subpart Kb, and 40CFR63, Subpart CC

**[RULE 3004(a)(4)-Periodic Monitoring, 12-12-1997; RULE 463, 5-6-2005]**

[Devices subject to this condition : D610, D630]

K67.13 The operator shall keep records, in a manner approved by the District, for the following parameter(s) or item(s):

## 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:**

An engine operating log shall be maintained which on a monthly basis shall include manual and automatic operation and shall list all engine operations in each of the following areas:

- A. Emergency use hours of operation
- B. Maintenance and testing hours
- C. Other operating hours(describe the reason for operation)

In addition, each time the engine is started manually, the log shall include the date of operation and the timer reading in hours at the beginning and end of operation. The log shall be kept for a minimum of three calendar years prior to the current year and made available to the District personnel upon request. The total hours of operation for the previous calendar year shall be recorded sometime during the first 15 days of January of each year

[RULE 1110.2, 2-1-2008; **RULE 1303(b)(2)-Offset, 5-10-1996**; RULE 1303(b)(2)-Offset, 12-6-2002; RULE 1470, 6-1-2007]

[Devices subject to this condition : D1617, D1618, D1645, D1646, D1659]

K67.15 The operator shall keep records, in a manner approved by the District, for the following parameter(s) or item(s):

Throughput and vapor pressure of stored liquid

Hydrocarbon concentration measurements done in the vapor space above the floating roof of the tank

Other records that may be required to comply with the applicable requirements of District Rules 463, 1149 and 1178

## **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:**

**[RULE 1178, 4-7-2006; RULE 3004(a)(4)-Periodic Monitoring, 12-12-1997; RULE 463, 5-6-2005]**

[Devices subject to this condition : D613, D618, D621]

K67.16 The operator shall keep records, in a manner approved by the District, for the following parameter(s) or item(s):

Throughput in barrels per calendar month or per year as required in the throughput condition

Commodity/product stored and time period of its storage

Actual vapor pressure of stored liquid in psia, of each commodity/product stored

Other records that may be required to comply with the applicable requirements of District Rules 463 ,1149 and 1178

**[RULE 3004(a)(4)-Periodic Monitoring, 12-12-1997; RULE 463, 5-6-2005]**

[Devices subject to this condition : D547, D551]

K67.17 The operator shall keep records, in a manner approved by the District, for the following parameter(s) or item(s):

Throughput of stored liquid.

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

[Devices subject to this condition : D1533]

K171.2 The operator shall provide to the District the following items:

## **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:**

Final drawings and/or specifications of the geodesic dome cover to be installed/constructed shall be submitted to the District within 30 days after its construction

**[RULE 1178, 4-7-2006]**

[Devices subject to this condition : D651, D658]

K171.3 The operator shall provide to the District the following items:

Final drawings and/or specifications of the internal floating roof to be installed/constructed shall be submitted to the District within 30 days after its construction

**[RULE 1178, 4-7-2006]**

[Devices subject to this condition : D613, D618, D621]

## FACILITY PERMIT TO OPERATE TESORO REFINING AND MARKETING CO

### 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
<b>Process 1: CRUDE DISTILLATION</b>					P13.1
<b>System 3: CRUDE DISTILLATION HEATER</b>					
HEATER, CRUDE, H-1, PROCESS GAS, REFINERY GAS, WITH LOW NOX BURNER, AIR PREHEATING, 198.98 MMBTU/HR WITH A/N: 470259 † Permit to Construct Issued: 05/13/99  BURNER, REFINERY GAS, JOHN ZINK, MODEL PSMR-17, WITH LOW NOX BURNER, 12 TOTAL; 198.98 MMBTU/HR	D9	D76 D77 C764	NOX: MAJOR SOURCE**; SOX: MAJOR SOURCE**	CO: 35 PPMV (5) [RULE 1303(a)(1)-BACT, 5-10-1996]; CO: 2000 PPMV (5A) [RULE 407, 4-2-1982]; PM: (9) [RULE 404, 2-7-1986]; PM: 0.1 GRAINS/SCF (5) [RULE 409, 8-7-1981]	A63.10, A305.1, B61.1, D28.3, D90.7, D328.1, H23.3, I296.1
<b>System 4: CRUDE DESALTER</b>					S31.1
VESSEL, DESALTER, V-2183, FIRST STAGE, HEIGHT: 20 FT ; DIAMETER: 16 FT A/N: 470262 † Permit to Construct Issued: 08/04/00	D1478				
VESSEL, DESALTER, V-2184, SECOND STAGE, HEIGHT: 20 FT ; DIAMETER: 16 FT A/N: 470262 † Permit to Construct Issued: 08/04/00	D1479				
<b>Process 2: COKING AND RESIDUAL CONDITIONING</b>					P13.1
<b>System 1: DELAYED COKING UNIT (DCU)</b>					S11.3, S13.4, S15.2, S15.9, S15.10, S31.1

- \* (1) (1A) (1B) Denotes RECLAIM emission factor
- (3) Denotes RECLAIM concentration limit
- (5) (5A) (5B) Denotes command and control emission limit
- (7) Denotes NSR applicability limit
- (9) See App B for Emission Limits
- (2) (2A) (2B) Denotes RECLAIM emission rate
- (4) Denotes BACT emission limit
- (6) Denotes air toxic control rule limit
- (8) (8A) (8B) Denotes 40 CFR limit (e.g. NSPS, NESHAPS, etc.)
- (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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## FACILITY PERMIT TO OPERATE TESORO REFINING AND MARKETING CO

### 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
<b>Process 2: COKING AND RESIDUAL CONDITIONING</b>					P13.1
FRACTIONATOR, FC-105 (V-900), HEIGHT: 147 FT 9 IN; DIAMETER: 16 FT A/N: 501288 Permit to Construct Issued: 10/16/09	D10				I30.1
COLUMN, STRIPPER, FC-106 (V-902), LIGHT GAS-OIL, HEIGHT: 25 FT ; DIAMETER: 4 FT 6 IN A/N: 501288 Permit to Construct Issued: 10/16/09	D1132				I30.1
COLUMN, STRIPPER, FC-107 (V-903), INTERMEDIATE GAS-OIL, HEIGHT: 25 FT ; DIAMETER: 4 FT 6 IN A/N: 501288 Permit to Construct Issued: 10/16/09	D1133				I30.1
COLUMN, STRIPPER, FC-108 (V-904), HEAVY GAS-OIL, HEIGHT: 25 FT ; DIAMETER: 4 FT 6 IN A/N: 501288 Permit to Construct Issued: 10/16/09	D1134				I30.1
DRUM, FLASH, FC-131 (V-927), FRESH FEED, LENGTH: 33 FT ; DIAMETER: 15 FT A/N: 501288 Permit to Construct Issued: 10/16/09	D11				I30.1
DRUM, SURGE, FC-135 (V-931), LGO, HEIGHT: 16 FT ; DIAMETER: 3 FT 6 IN A/N: 501288 Permit to Construct Issued: 10/16/09	D1135				I30.1
VESSEL, DESALTER, FC-137 (V-933), LENGTH: 90 FT ; DIAMETER: 12 FT A/N: 501288 Permit to Construct Issued: 10/16/09	D1136				I30.1

- \* (1) (1A) (1B) Denotes RECLAIM emission factor (2) (2A) (2B) 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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## FACILITY PERMIT TO OPERATE TESORO REFINING AND MARKETING CO

### 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
<b>Process 2: COKING AND RESIDUAL CONDITIONING</b>					P13.1
DRUM, COKER HEATER SURGE, FC-146 (V-901), HEIGHT: 18 FT 6 IN; DIAMETER: 16 FT A/N: 501288 Permit to Construct Issued: 10/16/09	D1137				I30.1
SUMP, GLAND OIL, WIDTH: 5 FT ; DEPTH: 7 FT ; LENGTH: 5 FT A/N: 501288 Permit to Construct Issued: 10/16/09	D1141				I30.1
ACCUMULATOR, FRACTIONATOR OVERHEAD, FC-109 (V-905), LENGTH: 36 FT ; DIAMETER: 10 FT A/N: 501288 Permit to Construct Issued: 10/16/09	D15				I30.1
SCRUBBER, COMPRESSOR SUCTION, FC-110 (V-906), HEIGHT: 8 FT ; DIAMETER: 7 FT 6 IN A/N: 501288 Permit to Construct Issued: 10/16/09	D16				I30.1
ACCUMULATOR, FIRST STAGE DISCHARGE, FC-111 (V-907), LENGTH: 10 FT ; DIAMETER: 5 FT 6 IN A/N: 501288 Permit to Construct Issued: 10/16/09	D17				I30.1
ACCUMULATOR, SECOND STAGE DISCHARGE, FC-112 (V-908), LENGTH: 10 FT ; DIAMETER: 4 FT 6 IN A/N: 501288 Permit to Construct Issued: 10/16/09	D18				I30.1

- \* (1) (1A) (1B) Denotes RECLAIM emission factor
- (3) Denotes RECLAIM concentration limit
- (5) (5A) (5B) Denotes command and control emission limit
- (7) Denotes NSR applicability limit
- (9) See App B for Emission Limits
- (2) (2A) (2B) Denotes RECLAIM emission rate
- (4) Denotes BACT emission limit
- (6) Denotes air toxic control rule limit
- (8) (8A) (8B) Denotes 40 CFR limit (e.g. NSPS, NESHAPS, etc.)
- (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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## FACILITY PERMIT TO OPERATE TESORO REFINING AND MARKETING CO

### 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
<b>Process 2: COKING AND RESIDUAL CONDITIONING</b>					P13.1
ABSORBER, SPONGE OIL, FC-114 (V-910), HEIGHT: 57 FT 6 IN; DIAMETER: 3 FT 6 IN A/N: 501288 Permit to Construct Issued: 10/16/09	D1143				I30.1
VESSEL, WATER COALESCER, V-2379, LENGTH: 12 FT 2 IN; DIAMETER: 4 FT A/N: 501288 Permit to Construct Issued: 10/16/09	D1661				I30.1
DRUM, COKE, FC-100-103 (V-895-898), 4 TOTAL, HEIGHT: 68 FT ; DIAMETER: 26 FT A/N: 501288 Permit to Construct Issued: 10/16/09	D20			PM: (9) [RULE 405, 2-7-1986]	E336.3, I30.1
ACCUMULATOR, FC-126 (V-922), COKE DRUM CONDENSATE, LENGTH: 15 FT ; DIAMETER: 5 FT A/N: 501288 Permit to Construct Issued: 10/16/09	D1147				I30.1
COLUMN, DEBUTANIZER, FC-115 (V-911), HEIGHT: 85 FT 6 IN; DIAMETER: 5 FT 6 IN A/N: 501288 Permit to Construct Issued: 10/16/09	D906				I30.1
ACCUMULATOR, DEBUTANIZER OVERHEAD, FC-116 (V-912), LENGTH: 19 FT ; DIAMETER: 6 FT A/N: 501288 Permit to Construct Issued: 10/16/09	D24				I30.1

- \* (1) (1A) (1B) Denotes RECLAIM emission factor
- (3) Denotes RECLAIM concentration limit
- (5) (5A) (5B) Denotes command and control emission limit
- (7) Denotes NSR applicability limit
- (9) See App B for Emission Limits
- (2) (2A) (2B) Denotes RECLAIM emission rate
- (4) Denotes BACT emission limit
- (6) Denotes air toxic control rule limit
- (8) (8A) (8B) Denotes 40 CFR limit (e.g. NSPS, NESHAPS, etc.)
- (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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## FACILITY PERMIT TO OPERATE TESORO REFINING AND MARKETING CO

### 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
<b>Process 2: COKING AND RESIDUAL CONDITIONING</b>					P13.1
COLUMN, DEPROPANIZER, FC-117 (V-913), HEIGHT: 93 FT 1 IN; DIAMETER: 5 FT A/N: 501288 Permit to Construct Issued: 10/16/09	D25				I30.1
ACCUMULATOR, DEPROPANIZER OVERHEAD, FC-118 (V-914), LENGTH: 11 FT ; DIAMETER: 4 FT 4 IN A/N: 501288 Permit to Construct Issued: 10/16/09	D900				I30.1
COLUMN, SPLITTER, FC-119 (V-915), NAPHTHA, HEIGHT: 84 FT 1 IN; DIAMETER: 7 FT A/N: 501288 Permit to Construct Issued: 10/16/09	D26				I30.1
ACCUMULATOR, NAPHTHA SPLITTER OVERHEAD, FC-120 (V-916), HEIGHT: 14 FT ; DIAMETER: 5 FT 6 IN A/N: 501288 Permit to Construct Issued: 10/16/09	D27				I30.1
SCRUBBER, V-917, SPONGE OIL ABSORBER GAS, HEIGHT: 8 FT ; DIAMETER: 3 FT 6 IN A/N: 501288 Permit to Construct Issued: 10/16/09	D1149				I30.1
ABSORBER, AMINE, FC-122 (V-918), RESIDUE GAS, HEIGHT: 40 FT ; DIAMETER: 3 FT A/N: 501288 Permit to Construct Issued: 10/16/09	D28				I30.1

- \* (1) (1A) (1B) Denotes RECLAIM emission factor
- (3) Denotes RECLAIM concentration limit
- (5) (5A) (5B) Denotes command and control emission limit
- (7) Denotes NSR applicability limit
- (9) See App B for Emission Limits
- (2) (2A) (2B) Denotes RECLAIM emission rate
- (4) Denotes BACT emission limit
- (6) Denotes air toxic control rule limit
- (8) (8A) (8B) Denotes 40 CFR limit (e.g. NSPS, NESHAPS, etc.)
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## FACILITY PERMIT TO OPERATE TESORO REFINING AND MARKETING CO

### 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
<b>Process 2: COKING AND RESIDUAL CONDITIONING</b>					P13.1
SCRUBBER, RESIDUE GAS, FC-123 (V-919), HEIGHT: 8 FT ; DIAMETER: 3 FT A/N: 501288 Permit to Construct Issued: 10/16/09	D1088				I30.1
ABSORBER, AMINE, FC-124 (V-920), PROPANE/PROPYLENE, HEIGHT: 30 FT ; DIAMETER: 5 FT A/N: 501288 Permit to Construct Issued: 10/16/09	D29				I30.1
VESSEL, SEPARATOR, FC-130 (V-926), AMINE, LENGTH: 10 FT ; DIAMETER: 3 FT 6 IN A/N: 501288 Permit to Construct Issued: 10/16/09	D30				I30.1
DRUM, FLASH, FC-147 (V-942), RICH AMINE, LENGTH: 15 FT ; DIAMETER: 8 FT 6 IN A/N: 501288 Permit to Construct Issued: 10/16/09	D31				I30.1
PIT, COKE, WITH FOUR COKE DRUM CHUTES, WIDTH: 36 FT ; HEIGHT: 21 FT ; LENGTH: 585 FT A/N: 501288 Permit to Construct Issued: 10/16/09	D1151			PM: (9) [RULE 405, 2-7-1986]	I30.1
COMPRESSOR, OVERHEAD, C-145 A/N: 501288 Permit to Construct Issued: 10/16/09	D901				H23.4, I30.1
VESSEL, H-100/101, FUEL GAS, 2 TOTAL A/N: 501288 Permit to Construct Issued: 10/16/09	D904				I30.1

- \* (1) (1A) (1B) Denotes RECLAIM emission factor (2) (2A) (2B) 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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## FACILITY PERMIT TO OPERATE TESORO REFINING AND MARKETING CO

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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
<b>Process 2: COKING AND RESIDUAL CONDITIONING</b>					P13.1
COMPRESSOR, C-87 A/N: 501288 Permit to Construct Issued: 10/16/09	D969				I30.1
DRUM, RICH OIL FLASH DRUM, V-2332, LENGTH: 10 FT ; DIAMETER: 3 FT 6 IN A/N: 501288 Permit to Construct Issued: 10/16/09	D1567				E336.2, I30.1
HEAT EXCHANGER, PROPANE VAPORIZER E-1465 A/N: 501288 Permit to Construct Issued: 10/16/09	D1616				I30.1
COLUMN, DEETHANIZER, FC-113 (V-909), HEIGHT: 104 FT 2 IN; DIAMETER: 8 FT 6 IN A/N: 501288 Permit to Construct Issued: 10/16/09	D19				I30.1
FUGITIVE EMISSIONS, MISCELLANEOUS A/N: 501288 Permit to Construct Issued: 10/16/09	D1357			<b>HAP: (10) [40CFR 63 Subpart CC, #5A, 6-23-2003]</b>	H23.5, I30.1
<b>System 6: DCU BLOWDOWN RECOVERY SYSTEM</b>					S13.4, S15.2, S15.3, S15.11
ACCUMULATOR, BLOWDOWN, FC-127 (V-923), LENGTH: 20 FT ; DIAMETER: 10 FT A/N: 472871 Permit to Construct Issued: 11/29/07	D53				
VESSEL, BLOWDOWN CONTACTOR, FC-128 (V-924), HEIGHT: 40 FT ; DIAMETER: 16 FT A/N: 472871 Permit to Construct Issued: 11/29/07	D1152				

- \* (1) (1A) (1B) Denotes RECLAIM emission factor (2) (2A) (2B) 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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Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions* And Requirements	Conditions
<b>Process 2: COKING AND RESIDUAL CONDITIONING</b>					P13.1
KNOCK OUT POT, DISCHARGE, V-1400, HEIGHT: 7 FT 8 IN; DIAMETER: 3 FT A/N: 472871 Permit to Construct Issued: 11/29/07	D63				
DRUM, FLARE SEAL, V-1613, LENGTH: 19 FT 6 IN; DIAMETER: 6 FT A/N: 472871 Permit to Construct Issued: 11/29/07	D65				
COMPRESSOR, C-137, BLOWDOWN, ALSO SERVES AS FLARE GAS RECOVERY COMPRESSOR AS NEEDED A/N: 472871 Permit to Construct Issued: 11/29/07	D68				H23.4
DRUM, V-1613, DCU FLARE SEAL, HEIGHT: 25 FT ; DIAMETER: 5 FT A/N: 472871 Permit to Construct Issued: 11/29/07	D1350				
FUGITIVE EMISSIONS, MISCELLANEOUS A/N: 472871 Permit to Construct Issued: 11/29/07	D1361			<b>HAP: (10) [40CFR 63 Subpart CC, #5A, 6-23-2003]</b>	H23.5
<b>System 8: COKE HANDLING, SCREENING AND LOADING</b>					S7.1, S13.3
HOPPER, RECEIVING, QQ-942, PETROLEUM COKE, PORTABLE A/N: 475398 Permit to Construct Issued: 01/29/08	D1155			<b>PM: (9) [RULE 405, 2-7-1986]</b>	A63.6, D323.1
STORAGE BUILDING, PETROLEUM COKE BARN A/N: 475398 Permit to Construct Issued: 01/29/08	D1438			<b>PM: (9) [RULE 405, 2-7-1986]</b>	A63.6, D323.1

- \* (1) (1A) (1B) Denotes RECLAIM emission factor (2) (2A) (2B) 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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Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions* And Requirements	Conditions
<b>Process 2: COKING AND RESIDUAL CONDITIONING</b>					P13.1
FEEDER, SPREADER, QQ-943, PORTABLE, PETROLEUM COKE A/N: 475398 Permit to Construct Issued: 01/29/08	D1160			PM: (9) [RULE 405, 2-7-1986]	A63.6, D323.1
CONVEYOR, BELT, QQ-944, PETROLEUM COKE, PORTABLE A/N: 475398 Permit to Construct Issued: 01/29/08	D1156			PM: (9) [RULE 405, 2-7-1986]	A63.6, D323.1
CONVEYOR, BELT, QQ-950, PETROLEUM COKE, WITH AN ENCLOSED TRANSFER POINT, 733 FEET LONG A/N: 475398 Permit to Construct Issued: 01/29/08	D1157			PM: (9) [RULE 405, 2-7-1986]	A63.6, D323.1
CONVEYOR, BELT, QQ-951, PETROLEUM COKE, COVERED, 33 FEET LONG, WITH AN ENCLOSED TRANSFER POINT A/N: 475398 Permit to Construct Issued: 01/29/08	D1158			PM: (9) [RULE 405, 2-7-1986]	A63.6, D323.1
CONVEYOR, BELT, QQ-952, PETROLEUM COKE, TUBE ENCLOSED WITH FIXED DISCHARGE, 90 FEET LONG A/N: 475398 Permit to Construct Issued: 01/29/08	D1159			PM: (9) [RULE 405, 2-7-1986]	A63.6, D323.1
HOPPER, SCREEN FEED, QQ-972-75, 4 TOTAL, PETROLEUM COKE, EACH 60 TONS A/N: 475398 Permit to Construct Issued: 01/29/08	D34			PM: (9) [RULE 405, 2-7-1986]	A63.6, D323.1

- \* (1) (1A) (1B) Denotes RECLAIM emission factor
- (3) Denotes RECLAIM concentration limit
- (5) (5A) (5B) Denotes command and control emission limit
- (7) Denotes NSR applicability limit
- (9) See App B for Emission Limits
- (2) (2A) (2B) Denotes RECLAIM emission rate
- (4) Denotes BACT emission limit
- (6) Denotes air toxic control rule limit
- (8) (8A) (8B) Denotes 40 CFR limit (e.g. NSPS, NESHAPS, etc.)
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Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions* And Requirements	Conditions
<b>Process 2: COKING AND RESIDUAL CONDITIONING</b>					P13.1
CONVEYOR, BELT, QQ-968-971, 4 TOTAL, PETROLEUM COKE, COVERED, EACH 14 FEET LONG A/N: 475398 Permit to Construct Issued: 01/29/08	D41			PM: (9) [RULE 405, 2-7-1986]	A63.6, D323.1
SCREEN, CLASSIFYING, QQ-964/965, PETROLEUM COKE, 2 TOTAL, DOUBLE-DECK VIBRATING TYPE, WIDTH: 8 FT ; LENGTH: 20 FT A/N: 475398 Permit to Construct Issued: 01/29/08	D45			PM: (9) [RULE 405, 2-7-1986]	A63.6, D323.1
CONVEYOR, BELT, QQ-954/955, 2 TOTAL, PETROLEUM COKE, COVERED, REVERSIBLE TYPE, EA. W/ AN ENCLOSED TRANSFER POINT AND 61 FT LONG A/N: 475398 Permit to Construct Issued: 01/29/08	D49			PM: (9) [RULE 405, 2-7-1986]	A63.6, D323.1
CONVEYOR, BELT, QQ-959, PETROLEUM COKE, COVERED, WITH AN ENCLOSED TRANSFER POINT, 185 FEET LONG A/N: 475398 Permit to Construct Issued: 01/29/08	D46			PM: (9) [RULE 405, 2-7-1986]	A63.6, D323.1
CONVEYOR, QQ-960, PETROLEUM COKE, COVERED, SHUTTLE BELT TYPE, WITH AN ENCLOSED TRANSFER POINT, 80 FEET LONG A/N: 475398 Permit to Construct Issued: 01/29/08	D47			PM: (9) [RULE 405, 2-7-1986]	A63.6, D323.1

- \* (1) (1A) (1B) Denotes RECLAIM emission factor
- (3) Denotes RECLAIM concentration limit
- (5) (5A) (5B) Denotes command and control emission limit
- (7) Denotes NSR applicability limit
- (9) See App B for Emission Limits
- (2) (2A) (2B) Denotes RECLAIM emission rate
- (4) Denotes BACT emission limit
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- (8) (8A) (8B) Denotes 40 CFR limit (e.g. NSPS, NESHAPS, etc.)
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Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions* And Requirements	Conditions
<b>Process 2: COKING AND RESIDUAL CONDITIONING</b>					P13.1
HOPPER, RAIL CAR /TRUCK LOADING, QQ-945, PETROLEUM COKE, THREE 45 TON CAPACITY SECTIONS WITH A/N: 475398 Permit to Construct Issued: 01/29/08  LOADING ARM, RAIL CAR, TANK TRUCK, LOADING CHUTE, 3 TOTAL, PETROLEUM COKE, EACH WITH AN ELEVATION HOIST AND AN EXTENSION DRIVE	D1162			PM: (9) [RULE 405, 2-7-1986]	A63.6, D323.1
CONVEYOR, BELT, QQ-956, PETROLEUM COKE, COVERED, WITH AN ENCLOSED TRANSFER TOWER, 255 FEET LONG A/N: 475398 Permit to Construct Issued: 01/29/08	D1161			PM: (9) [RULE 405, 2-7-1986]	A63.6, D323.1
CONVEYOR, BELT, QQ-957, PETROLEUM COKE, COVERED, WITH AN ENCLOSED TRANSFER POINT, 152 FEET LONG A/N: 475398 Permit to Construct Issued: 01/29/08	D1164			PM: (9) [RULE 405, 2-7-1986]	A63.6, D323.1
CONVEYOR, QQ-958, PETROLEUM COKE, SHUTTLE BELT TYPE, 52 FEET LONG, WITH A FEEDER A/N: 475398 Permit to Construct Issued: 01/29/08	D1165			PM: (9) [RULE 405, 2-7-1986]	A63.6, D323.1
<b>Process 3: FLUID CATALYTIC CRACKING (FCCU)</b>					P13.1
<b>System 1: FCCU RECOVERY SECTION</b>					S13.4, S15.2, S15.12, S31.1

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

† This permit to construct was issued to the previous operator at a prior date. The equipment was constructed and the permit was subsequently transferred to this operator.

## FACILITY PERMIT TO OPERATE TESORO REFINING AND MARKETING CO

### 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
<b>Process 3: FLUID CATALYTIC CRACKING (FCCU)</b>					P13.1
ABSORBER, V-406, HEIGHT: 64 FT 4 IN; DIAMETER: 4 FT 6 IN A/N: 472873 Permit to Construct Issued: 11/29/07	D78				
TOWER, SPLITTER, HEAVY NAPHTHA, V-407, HEIGHT: 47 FT ; DIAMETER: 5 FT 6 IN A/N: 472873 Permit to Construct Issued: 11/29/07	D1267				
TOWER, RERUN, V-408, HEIGHT: 82 FT ; DIAMETER: 7 FT A/N: 472873 Permit to Construct Issued: 11/29/07	D1268				
TOWER, SPLITTER, LIGHT NAPHTHA, V-409, HEIGHT: 60 FT ; DIAMETER: 8 FT 6 IN A/N: 472873 Permit to Construct Issued: 11/29/07	D1269				
COLUMN, DEPROPANIZER, V-410, HEIGHT: 80 FT ; DIAMETER: 6 FT A/N: 472873 Permit to Construct Issued: 11/29/07	D908				
ACCUMULATOR, V-413, HEIGHT: 10 FT ; DIAMETER: 5 FT A/N: 472873 Permit to Construct Issued: 11/29/07	D79				
DRUM, V-414, RERUN REFLUX A/N: 472873 Permit to Construct Issued: 11/29/07	D915				
ACCUMULATOR, V-415, SPLITTER TOWER REFLUX, HEIGHT: 19 FT ; DIAMETER: 5 FT 7 IN A/N: 472873 Permit to Construct Issued: 11/29/07	D80				

- \* (1) (1A) (1B) Denotes RECLAIM emission factor (2) (2A) (2B) 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.

† This permit to construct was issued to the previous operator at a prior date. The equipment was constructed and the permit was subsequently transferred to this operator.

## FACILITY PERMIT TO OPERATE TESORO REFINING AND MARKETING CO

### 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
<b>Process 3: FLUID CATALYTIC CRACKING (FCCU)</b>					P13.1
ACCUMULATOR, V-416, DEPROPANIZER TOWER REFLUX, LENGTH: 19 FT ; DIAMETER: 6 FT 6 IN A/N: 472873 Permit to Construct Issued: 11/29/07	D81				
DRUM, DRYING, LOW PRESSURE, V-419, HEIGHT: 20 FT ; DIAMETER: 10 FT A/N: 472873 Permit to Construct Issued: 11/29/07	D82				
VESSEL, SURGE, V-423, AVGAS CHARGE, HEIGHT: 19 FT ; DIAMETER: 7 FT 7 IN A/N: 472873 Permit to Construct Issued: 11/29/07	D84				
DRUM, DRYING, V-424, RERUN TOWER GAS, HEIGHT: 10 FT ; DIAMETER: 3 FT 6 IN A/N: 472873 Permit to Construct Issued: 11/29/07	D85				
KNOCK OUT POT, FLARE, V-431, LENGTH: 13 FT ; DIAMETER: 6 FT A/N: 472873 Permit to Construct Issued: 11/29/07	D1271				
DRUM, PRESSURE RELIEVING SEAL, V-432, HEIGHT: 43 FT ; DIAMETER: 4 FT 4 IN A/N: 472873 Permit to Construct Issued: 11/29/07	D86			<b>HAP: (10) [40CFR 63 Subpart CC, #2, 6-23-2003]</b>	

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

† This permit to construct was issued to the previous operator at a prior date. The equipment was constructed and the permit was subsequently transferred to this operator.

## FACILITY PERMIT TO OPERATE TESORO REFINING AND MARKETING CO

### 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
<b>Process 3: FLUID CATALYTIC CRACKING (FCCU)</b>					P13.1
POT, DEETHANIZER WATER DRAIN, V-547, HEIGHT: 6 FT ; DIAMETER: 1 FT 6 IN A/N: 472873 Permit to Construct Issued: 11/29/07	D1273				
DRUM, WATER DRAW-OFF, V-675, LENGTH: 4 FT 8 IN; DIAMETER: 4 FT A/N: 472873 Permit to Construct Issued: 11/29/07	D1275				
KNOCK OUT POT, VAPOR RECOVERY, V-676, LENGTH: 4 FT 4 IN; DIAMETER: 2 FT A/N: 472873 Permit to Construct Issued: 11/29/07	D1272				
KNOCK OUT POT, V-1100, NAPHTHA, LENGTH: 12 FT 6 IN; DIAMETER: 3 FT A/N: 472873 Permit to Construct Issued: 11/29/07	D912				
TOWER, DEBUTANIZER, V-1547, HEIGHT: 100 FT 6 IN; DIAMETER: 7 FT A/N: 472873 Permit to Construct Issued: 11/29/07	D1280				
COLUMN, DEETHANIZER, V-1548, HEIGHT: 12 FT 6 IN; DIAMETER: 6 FT A/N: 472873 Permit to Construct Issued: 11/29/07	D910				

- \* (1) (1A) (1B) Denotes RECLAIM emission factor
- (3) Denotes RECLAIM concentration limit
- (5) (5A) (5B) Denotes command and control emission limit
- (7) Denotes NSR applicability limit
- (9) See App B for Emission Limits
- (2) (2A) (2B) Denotes RECLAIM emission rate
- (4) Denotes BACT emission limit
- (6) Denotes air toxic control rule limit
- (8) (8A) (8B) Denotes 40 CFR limit (e.g. NSPS, NESHAPS, etc.)
- (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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## FACILITY PERMIT TO OPERATE TESORO REFINING AND MARKETING CO

### 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
<b>Process 3: FLUID CATALYTIC CRACKING (FCCU)</b>					P13.1
ACCUMULATOR, V-1549, DEBUTANIZER REFLUX, HEIGHT: 20 FT ; DIAMETER: 7 FT A/N: 472873 Permit to Construct Issued: 11/29/07	D913				
KNOCK OUT POT, V-1789, PROPANE/PROPYLENE, HEIGHT: 8 FT 6 IN; DIAMETER: 24 FT A/N: 472873 Permit to Construct Issued: 11/29/07	D909				
COMPRESSOR, RERUN TOWER GAS, C-43/44, 2 TOTAL, 4 CYLINDERS A/N: 472873 Permit to Construct Issued: 11/29/07	D87				
COMPRESSOR, C-142, WET GAS A/N: 472873 Permit to Construct Issued: 11/29/07	D918				H23.4
VESSEL, SEPARATOR, HIGH PRESSURE, V-2343, LENGTH: 22 FT ; DIAMETER: 8 FT A/N: 472873 Permit to Construct Issued: 11/29/07	D1597				
VESSEL, SEPARATOR, SOUR WATER FLASH , V-2344, LENGTH: 25 FT ; DIAMETER: 8 FT 6 IN A/N: 472873 Permit to Construct Issued: 11/29/07	D1598				
FUGITIVE EMISSIONS, MISCELLANEOUS A/N: 472873 Permit to Construct Issued: 11/29/07	D1365			<b>HAP: (10) [40CFR 63 Subpart CC, #5A, 6-23-2003]</b>	H23.16
<b>System 2: FCCU CRACKING SECTION</b>					S13.4, S15.2, S15.3, S15.12

- \* (1) (1A) (1B) Denotes RECLAIM emission factor (2) (2A) (2B) 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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## FACILITY PERMIT TO OPERATE TESORO REFINING AND MARKETING CO

### 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
<b>Process 3: FLUID CATALYTIC CRACKING (FCCU)</b>					P13.1
BOILER, BO-1, CO WASTE HEAT, REFINERY GAS, 300 MMBTU/HR WITH A/N: 470272  BURNER, REFINERY GAS, BABCOCK WILCOX, WITH STEAM/CONDENSATE INJECTION, WITH LOW NOX BURNER, 6 TOTAL; 300 MMBTU/HR	D112	S51 C1575 C1576 C1577	NOX: MAJOR SOURCE**; SOX: MAJOR SOURCE**	CO: 2000 PPMV (5) [RULE 407, 4-2-1982]; PM: 0.1 GRAINS/SCF (5) [RULE 409, 8-7-1981]	A63.4, B61.1, D28.10, D90.7, D328.1, H23.3, K171.1
STACK, CO BOILER A/N: 470272	S51	D112 C1575 C1576 C1577			
<b>System 6: FCCU AIR POLLUTION CONTROL</b>					S42.1
ELECTROSTATIC PRECIPITATOR, #3, SINGLE STAGE, ONE(1) CHAMBER, WITH 8 TRANSFORMER/RECTIFIER SETS, HAMON RESEARCH-COTTREL, 54 KVA WITH A/N: 470273 † Permit to Construct Issued: 04/27/06  HOPPER, CATALYST FINES, 4 TOTAL  BIN, HOLDING, CATALYST FINES, 1 TOTAL  AMMONIA INJECTION, GRID	C1575	S51 D96 D112 S1105		NH3: 10 PPMV (5) [RULE 1105.1, 11-7-2003]	A195.2, C12.2, D29.8, D90.11, D90.12, D90.13, D90.14, D90.15, D323.3, E73.2, E193.2, E193.3, E193.4

- \* (1) (1A) (1B) Denotes RECLAIM emission factor (2) (2A) (2B) 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.

† This permit to construct was issued to the previous operator at a prior date. The equipment was constructed and the permit was subsequently transferred to this operator.

## FACILITY PERMIT TO OPERATE TESORO REFINING AND MARKETING CO

### 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
<b>Process 3: FLUID CATALYTIC CRACKING (FCCU)</b>					P13.1
ELECTROSTATIC PRECIPITATOR, #4, SINGLE STAGE, ONE(1) CHAMBER, WITH 8 TRANSFORMER/RECTIFIER SETS, HAMON RESEARCH-COTTREL, 54 KVA WITH A/N: 470273 † Permit to Construct Issued: 04/27/06   HOPPER, CATALYST FINES, 4 TOTAL  BIN, HOLDING, CATALYST FINES, 1 TOTAL  AMMONIA INJECTION, GRID	C1576	S51 D96 D112 S1105		NH3: 10 PPMV (5) [RULE 1105.1, 11-7-2003]	A195.2, C12.2, D29.8, D90.11, D90.12, D90.13, D90.14, D90.15, D323.3, E73.2, E193.2, E193.3, E193.4

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

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## FACILITY PERMIT TO OPERATE TESORO REFINING AND MARKETING CO

### 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
<b>Process 3: FLUID CATALYTIC CRACKING (FCCU)</b>					P13.1
ELECTROSTATIC PRECIPITATOR, #5, SINGLE STAGE, ONE(1) CHAMBER, WITH 8 TRANSFORMER/RECTIFIER SETS, MODEL HAMON RESEARCH-COTTREL, 54 KVA WITH A/N: 470273 † Permit to Construct Issued: 04/27/06  HOPPER, CATALYST FINES, 4 TOTAL  BIN, HOLDING, CATALYST FINES, 1 TOTAL  AMMONIA INJECTION, GRID	C1577	S51 D96 D112 S1105		NH3: 10 PPMV (5) [RULE 1105.1, 11-7-2003]	A195.2, C12.2, D29.8, D90.11, D90.12, D90.13, D90.14, D90.15, D323.3, E73.2, E193.2, E193.3, E193.4
HEAT EXCHANGER, CATALYST FINES A/N: 470273 † Permit to Construct Issued: 04/27/06	D1580				
STACK, BY-PASS A/N: 470273 † Permit to Construct Issued: 04/27/06	S1105	C1575 C1576 C1577			
<b>Process 4: HYDROTREATING</b>					P13.1
<b>System 3: HYDROTREATING UNIT NO. 2</b>					S11.2, S13.4, S15.2, S15.3, S15.13, S31.1

- \* (1) (1A) (1B) Denotes RECLAIM emission factor
- (3) Denotes RECLAIM concentration limit
- (5) (5A) (5B) Denotes command and control emission limit
- (7) Denotes NSR applicability limit
- (9) See App B for Emission Limits
- (2) (2A) (2B) Denotes RECLAIM emission rate
- (4) Denotes BACT emission limit
- (6) Denotes air toxic control rule limit
- (8) (8A) (8B) Denotes 40 CFR limit (e.g. NSPS, NESHAPS, etc.)
- (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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## FACILITY PERMIT TO OPERATE TESORO REFINING AND MARKETING CO

### 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
<b>Process 4: HYDROTREATING</b>					P13.1
REACTOR, 1ST STAGE MAIN, V-2237, LENGTH: 20 FT 3 IN; DIAMETER: 9 FT 6 IN A/N: 470276 † Permit to Construct Issued: 01/18/02	D1511				
VESSEL, PRETREAT REACTOR, V-2143, LENGTH: 28 FT 6 IN; DIAMETER: 8 FT A/N: 470276 † Permit to Construct Issued: 01/18/02	D1512				
TOWER, STRIPPER, V-2238, HEIGHT: 20 FT 9 IN; DIAMETER: 6 FT 6 IN A/N: 470276 † Permit to Construct Issued: 01/18/02	D1513				
REACTOR, 2ND STAGE MAIN, V-740, HEIGHT: 21 FT 9 IN; DIAMETER: 7 FT 6 IN A/N: 470276 † Permit to Construct Issued: 01/18/02	D123				
VESSEL, HIGH PRESSURE SEPARATOR, V-725, HEIGHT: 20 FT 9 IN; DIAMETER: 6 FT 6 IN A/N: 470276 † Permit to Construct Issued: 01/18/02	D129				
<b>System 7: FCCU FEED HYDRODESULFURIZATION UNIT NO. 4</b>					S11.2, S13.2, S13.4, S15.2, S15.3, S15.10, S31.1
COLUMN, H2S STRIPPER, V-1755, HEIGHT: 59 FT 6 IN; DIAMETER: 10 FT 6 IN A/N: 470277 † Permit to Construct Issued: 10/15/01	D160				

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|--|--|
| <ul style="list-style-type: none"> <li>* (1) (1A) (1B) Denotes RECLAIM emission factor</li> <li>(3) Denotes RECLAIM concentration limit</li> <li>(5) (5A) (5B) Denotes command and control emission limit</li> <li>(7) Denotes NSR applicability limit</li> <li>(9) See App B for Emission Limits</li> </ul> | <ul style="list-style-type: none"> <li>(2) (2A) (2B) Denotes RECLAIM emission rate</li> <li>(4) Denotes BACT emission limit</li> <li>(6) Denotes air toxic control rule limit</li> <li>(8) (8A) (8B) Denotes 40 CFR limit (e.g. NSPS, NESHAPS, etc.)</li> <li>(10) See section J for NESHAP/MACT requirements</li> </ul> |
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\*\* Refer to section F and G of this permit to determine the monitoring, recordkeeping and reporting requirements for this device.

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## FACILITY PERMIT TO OPERATE TESORO REFINING AND MARKETING CO

### 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
<b>Process 4: HYDROTREATING</b>					P13.1
FRACTIONATOR, V-1757, HEIGHT: 70 FT 6 IN; DIAMETER: 8 FT 6 IN A/N: 470277 † Permit to Construct Issued: 10/15/01	D168				
COLUMN, STRIPPER, V-867, DIESEL, HEIGHT: 22 FT 8 IN; DIAMETER: 3 FT 6 IN A/N: 470277 † Permit to Construct Issued: 10/15/01	D244				
VESSEL, DRIER, V-1374, DIESEL PRODUCT, HEIGHT: 36 FT 6 IN; DIAMETER: 9 FT A/N: 470277 † Permit to Construct Issued: 10/15/01	D3				
ABSORBER, AMINE/COLD HIGH PRESSURE SEPARATOR, V-2231, HEIGHT: 42 FT ; DIAMETER: 4 FT 7 IN A/N: 470277 † Permit to Construct Issued: 10/15/01	D164				
DRUM, FLASH, RICH AMINE, V-2234, HEIGHT: 15 FT 6 IN; DIAMETER: 5 FT 6 IN A/N: 470277 † Permit to Construct Issued: 10/15/01	D1503				
<b>System 9: FUEL GAS TREATING SYSTEM</b>					S13.4, S15.2, S18.4
TOWER, V-598, RECOVERED FLARE GAS WASH, HEIGHT: 69 FT ; DIAMETER: 5 FT A/N: 472874 Permit to Construct Issued: 11/29/07	D192				

- \* (1) (1A) (1B) Denotes RECLAIM emission factor
- (3) Denotes RECLAIM concentration limit
- (5) (5A) (5B) Denotes command and control emission limit
- (7) Denotes NSR applicability limit
- (9) See App B for Emission Limits
- (2) (2A) (2B) Denotes RECLAIM emission rate
- (4) Denotes BACT emission limit
- (6) Denotes air toxic control rule limit
- (8) (8A) (8B) Denotes 40 CFR limit (e.g. NSPS, NESHAPS, etc.)
- (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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## FACILITY PERMIT TO OPERATE TESORO REFINING AND MARKETING CO

### 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
<b>Process 4: HYDROTREATING</b>					P13.1
FUGITIVE EMISSIONS, MISCELLANEOUS A/N: 472874 Permit to Construct Issued: 11/29/07	D1380				H23.16
<b>Process 5: CATALYTIC REFORMING</b>					P13.1
<b>System 3: CATALYTIC REFORMING UNIT NO. 2</b>					S13.4, S15.2, S15.3, S31.1
ABSORBER, CARBON, V-2277, HYDROGEN CHLORIDE, DIAMETER: 5 FT 6 IN; HEIGHT: 18 FT A/N: 470284 † Permit to Construct Issued: 07/10/02	D1525			HAP: (10) [40CFR 63 Subpart UUU, #1, 4-20-2006]	
KNOCK OUT POT, RECYCLE GAS CONDENSATE, V-2276; DIAMETER: 3 FT 6 IN; HEIGHT: 8 FT 6 IN A/N: 470284 † Permit to Construct Issued: 07/10/02	D1526				
HEAT EXCHANGER, NET GAS RECYCLE COOLING, E-1858, 2.2 MMBTU/HR DUTY A/N: 470284 † Permit to Construct Issued: 07/10/02	D1527				
<b>Process 8: HYDROCRACKING</b>					P13.1
<b>System 1: HYDROCRACKING UNIT</b>					S11.3, S13.4, S15.2, S15.3, S15.10, S31.1
REACTOR, V-993, HEIGHT: 58 FT 3 IN; DIAMETER: 10 FT A/N: 493279 Permit to Construct Issued: 04/10/09	D371				

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

† This permit to construct was issued to the previous operator at a prior date. The equipment was constructed and the permit was subsequently transferred to this operator.

## FACILITY PERMIT TO OPERATE TESORO REFINING AND MARKETING CO

### 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
<b>Process 8: HYDROCRACKING</b>					P13.1
REACTOR, V-994, HEIGHT: 68 FT 10 IN; DIAMETER: 10 FT A/N: 493279 Permit to Construct Issued: 04/10/09	D372				
REACTOR, V-995, HEIGHT: 74 FT 10 IN; DIAMETER: 8 FT 6 IN A/N: 493279 Permit to Construct Issued: 04/10/09	D373				
DRUM, SURGE, V-996, HEIGHT: 28 FT ; DIAMETER: 11 FT 6 IN A/N: 493279 Permit to Construct Issued: 04/10/09	D340				
VESSEL, SEPARATOR, HIGH PRESSURE, V-997, HEIGHT: 34 FT ; DIAMETER: 10 FT A/N: 493279 Permit to Construct Issued: 04/10/09	D341				
VESSEL, SEPARATOR, LOW PRESSURE, V-998, HEIGHT: 26 FT ; DIAMETER: 7 FT 6 IN A/N: 493279 Permit to Construct Issued: 04/10/09	D342				
FRACTIONATOR, V-1001, HEIGHT: 144 FT ; DIAMETER: 15 FT A/N: 493279 Permit to Construct Issued: 04/10/09	D344				
VESSEL, STRIPPER, V-1002, HEAVY NAPHTHA, HEIGHT: 33 FT 6 IN; DIAMETER: 6 FT A/N: 493279 Permit to Construct Issued: 04/10/09	D345				

- \* (1) (1A) (1B) Denotes RECLAIM emission factor
- (3) Denotes RECLAIM concentration limit
- (5) (5A) (5B) Denotes command and control emission limit
- (7) Denotes NSR applicability limit
- (9) See App B for Emission Limits
- (2) (2A) (2B) Denotes RECLAIM emission rate
- (4) Denotes BACT emission limit
- (6) Denotes air toxic control rule limit
- (8) (8A) (8B) Denotes 40 CFR limit (e.g. NSPS, NESHAPS, etc.)
- (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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## FACILITY PERMIT TO OPERATE TESORO REFINING AND MARKETING CO

### 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
<b>Process 8: HYDROCRACKING</b>					P13.1
VESSEL, STRIPPER, V-1003, MEDIUM NAPHTHA, HEIGHT: 31 FT 6 IN; DIAMETER: 6 FT A/N: 493279 Permit to Construct Issued: 04/10/09	D1259				
ACCUMULATOR, V-1004, FRACTIONATOR REFLUX, LENGTH: 22 FT 6 IN; DIAMETER: 9 FT A/N: 493279 Permit to Construct Issued: 04/10/09	D1260				
ACCUMULATOR, V-1005, FRACTIONATOR OVERHEAD, LENGTH: 18 FT ; DIAMETER: 7 FT A/N: 493279 Permit to Construct Issued: 04/10/09	D346			<b>HAP: (10) [40CFR 63 Subpart CC, #2, 6-23-2003]</b>	
ABSORBER, V-1006, LEAN OIL, HEIGHT: 50 FT ; DIAMETER: 3 FT A/N: 493279 Permit to Construct Issued: 04/10/09	D374				
COLUMN, DEPROPANIZER, V-1007, HEIGHT: 106 FT ; DIAMETER: 7 FT 6 IN A/N: 493279 Permit to Construct Issued: 04/10/09	D347				
DRUM, V-1008, DEPROPANIZER REFLUX, LENGTH: 13 FT 6 IN; DIAMETER: 4 FT 6 IN A/N: 493279 Permit to Construct Issued: 04/10/09	D348				
COLUMN, DEBUTANIZER, V-1009, HEIGHT: 93 FT 6 IN; DIAMETER: 5 FT 6 IN A/N: 493279 Permit to Construct Issued: 04/10/09	D349				

- \* (1) (1A) (1B) Denotes RECLAIM emission factor (2) (2A) (2B) 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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## FACILITY PERMIT TO OPERATE TESORO REFINING AND MARKETING CO

### 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
<b>Process 8: HYDROCRACKING</b>					P13.1
DRUM, V-1010, DEBUTANIZER REFLUX, HEIGHT: 14 FT ; DIAMETER: 5 FT A/N: 493279 Permit to Construct Issued: 04/10/09	D350				
DRUM, AMINE SCRUBBER FEED,V-2381, HEIGHT: 11 FT ; DIAMETER: 4 FT 6 IN A/N: 493279 Permit to Construct Issued: 04/10/09	D1652				
SCRUBBER, V-1011, AMINE, HEIGHT: 51 FT ; DIAMETER: 5 FT 6 IN A/N: 493279 Permit to Construct Issued: 04/10/09	D351				
DRUM, FLASH, V-1012, CONDENSATE, LENGTH: 10 FT ; DIAMETER: 3 FT 6 IN A/N: 493279 Permit to Construct Issued: 04/10/09	D375				
DRUM, FRACTIONATOR COMPRESSOR SUCTION, V-1695, HEIGHT: 8 FT ; DIAMETER: 5 FT A/N: 493279 Permit to Construct Issued: 04/10/09	D352				
POT, V-1025, DEPROPANIZER REBOILER CONDENSATE, LENGTH: 12 FT ; DIAMETER: 1 FT 5 IN A/N: 493279 Permit to Construct Issued: 04/10/09	D376				

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

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## FACILITY PERMIT TO OPERATE TESORO REFINING AND MARKETING CO

### 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
<b>Process 8: HYDROCRACKING</b>					P13.1
POT, V-1026, DEBUTANIZER REBOILER CONDENSATE, LENGTH: 12 FT ; DIAMETER: 1 FT 5 IN A/N: 493279 Permit to Construct Issued: 04/10/09	D928				
VESSEL, SEPARATOR, V-2036, COKER GAS OIL, HEIGHT: 5 FT 2 IN; DIAMETER: 1 FT A/N: 493279 Permit to Construct Issued: 04/10/09	D355				
VESSEL, SEPARATOR, V-1087, FCC GAS OIL SOLIDS, HEIGHT: 5 FT 2 IN; DIAMETER: 1 FT A/N: 493279 Permit to Construct Issued: 04/10/09	D356				
VESSEL, COALESCER, V-1088, FCC GAS OIL, LENGTH: 10 FT ; DIAMETER: 3 FT A/N: 493279 Permit to Construct Issued: 04/10/09	D357				
VESSEL, COALESCER, V-1089, COKER GAS OIL, LENGTH: 10 FT ; DIAMETER: 3 FT A/N: 493279 Permit to Construct Issued: 04/10/09	D358				
VESSEL, EFFLUENT COALESCER, V-1090, LENGTH: 15 FT ; DIAMETER: 5 FT A/N: 493279 Permit to Construct Issued: 04/10/09	D1265				

- \* (1) (1A) (1B) Denotes RECLAIM emission factor
- (3) Denotes RECLAIM concentration limit
- (5) (5A) (5B) Denotes command and control emission limit
- (7) Denotes NSR applicability limit
- (9) See App B for Emission Limits
- (2) (2A) (2B) Denotes RECLAIM emission rate
- (4) Denotes BACT emission limit
- (6) Denotes air toxic control rule limit
- (8) (8A) (8B) Denotes 40 CFR limit (e.g. NSPS, NESHAPS, etc.)
- (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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## FACILITY PERMIT TO OPERATE TESORO REFINING AND MARKETING CO

### 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
<b>Process 8: HYDROCRACKING</b>					P13.1
DRUM, INJECTION, V-1122, DIMETHYL DISULFIDE, LENGTH: 10 FT ; DIAMETER: 3 FT A/N: 493279 Permit to Construct Issued: 04/10/09	D359				
COMPRESSOR, C-93, RECYCLE GAS A/N: 493279 Permit to Construct Issued: 04/10/09	D364				
COMPRESSOR, FRACTIONATOR NO.1 & 2, C-94/95, 2 TOTAL, RECIPROCATING TYPE A/N: 493279 Permit to Construct Issued: 04/10/09	D930				
TOWER, DEA, V-1621, HEIGHT: 37 FT 6 IN; DIAMETER: 3 FT A/N: 493279 Permit to Construct Issued: 04/10/09	D932				
KNOCK OUT POT, V-1622, LIQUID, HEIGHT: 7 FT 3 IN; DIAMETER: 1 FT 2 IN A/N: 493279 Permit to Construct Issued: 04/10/09	D1266				
MIST ELIMINATOR, V-1623, HEIGHT: 9 FT ; DIAMETER: 2 FT 6 IN A/N: 493279 Permit to Construct Issued: 04/10/09	D933				
VESSEL, SEPARATOR, MEMBRANE, V-1624-38, 15 TOTAL, HEIGHT: 12 FT 5 IN; DIAMETER: 8 FT A/N: 493279 Permit to Construct Issued: 04/10/09	D934				

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

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## FACILITY PERMIT TO OPERATE TESORO REFINING AND MARKETING CO

### 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
<b>Process 8: HYDROCRACKING</b>					P13.1
COMPRESSOR, C-141, RECIPROCATING TYPE A/N: 493279 Permit to Construct Issued: 04/10/09	D377				H23.4
DRUM, SECOND STAGE CHARGE, V-1965, LENGTH: 10 FT ; DIAMETER: 3 FT A/N: 493279 Permit to Construct Issued: 04/10/09	D1340				
KNOCK OUT POT, LIQUID, V-1995, LENGTH: 10 FT ; DIAMETER: 3 FT A/N: 493279 Permit to Construct Issued: 04/10/09	D1341				
FILTER, V-1967, STRIPPED WATER, LENGTH: 10 FT ; DIAMETER: 3 FT A/N: 493279 Permit to Construct Issued: 04/10/09	D1342				
DRUM, SURGE, V-1966, WASH WATER, HEIGHT: 13 FT 6 IN; DIAMETER: 5 FT 6 IN A/N: 493279 Permit to Construct Issued: 04/10/09	D1530				
DRUM, V-1972, FLASH, FOUL WATER, LENGTH: 10 FT ; DIAMETER: 6 FT A/N: 493279 Permit to Construct Issued: 04/10/09	D1531				
COMPRESSOR, HYDROGEN, C-91/92, 2 TOTAL, RECIPROCATING TYPE A/N: 493279 Permit to Construct Issued: 04/10/09	D245				
COMPRESSOR, C-98 A/N: 493279 Permit to Construct Issued: 04/10/09	D102				

- \* (1) (1A) (1B) Denotes RECLAIM emission factor (2) (2A) (2B) 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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## FACILITY PERMIT TO OPERATE TESORO REFINING AND MARKETING CO

### 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
<b>Process 8: HYDROCRACKING</b>					P13.1
FUGITIVE EMISSIONS, MISCELLANEOUS A/N: 493279 Permit to Construct Issued: 04/10/09	D1454			HAP: (10) [40CFR 63 Subpart CC, #5A, 6-23-2003]	H23.5
<b>Process 12: TREATING /STRIPPING</b>					P13.1
<b>System 7: BRINE WATER TREATMENT</b>					S13.5, S15.6, S31.1
DRUM, HEAT TREATING, V-2201, VENT TO ATMOSPHERE, HEIGHT: 20 FT ; DIAMETER: 16 FT A/N: 470291 † Permit to Construct Issued: 08/04/00	D1480			BENZENE: (10) [40CFR 61 Subpart FF, #1, 12-4-2003]; VOC: 500 PPMV (8) [40CFR 61 Subpart FF, 12-4-2003]	H23.40
DRUM, HEAT TREATING, V-2202, VENT TO ATMOSPHERE, HEIGHT: 40 FT ; DIAMETER: 12 FT A/N: 470291 † Permit to Construct Issued: 08/04/00	D1481			BENZENE: (10) [40CFR 61 Subpart FF, #1, 12-4-2003]; VOC: 500 PPMV (8) [40CFR 61 Subpart FF, 12-4-2003]	H23.40
DRUM, CLARIFIED OIL, V-2204, HEIGHT: 6 FT ; DIAMETER: 3 FT A/N: 470291 † Permit to Construct Issued: 08/04/00	D1482			BENZENE: (10) [40CFR 61 Subpart FF, #1, 12-4-2003]; VOC: 500 PPMV (8) [40CFR 61 Subpart FF, 12-4-2003]	H23.40
VESSEL, CLARIFIER THICKENER, V-2007, HEIGHT: 16 FT ; DIAMETER: 30 FT A/N: 470291 † Permit to Construct Issued: 08/04/00	D1483			BENZENE: (10) [40CFR 61 Subpart FF, #1, 12-4-2003]; VOC: 500 PPMV (8) [40CFR 61 Subpart FF, 12-4-2003]	H23.40
TANK, CLARIFIER EFFLUENT, TK-43, HEIGHT: 9 FT ; DIAMETER: 6 FT A/N: 470291 † Permit to Construct Issued: 08/04/00	D1484			BENZENE: (10) [40CFR 61 Subpart FF, #1, 12-4-2003]; VOC: 500 PPMV (8) [40CFR 61 Subpart FF, 12-4-2003]	H23.40

- \* (1) (1A) (1B) Denotes RECLAIM emission factor  
 (2) (2A) (2B) 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.

† This permit to construct was issued to the previous operator at a prior date. The equipment was constructed and the permit was subsequently transferred to this operator.

## FACILITY PERMIT TO OPERATE TESORO REFINING AND MARKETING CO

### 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
<b>Process 12: TREATING /STRIPPING</b>					P13.1
DRUM, RECOVERY OIL, V-2203, HEIGHT: 8 FT ; DIAMETER: 4 FT A/N: 470291 † Permit to Construct Issued: 08/04/00	D1485			<b>BENZENE: (10) [40CFR 61 Subpart FF, #1, 12-4-2003]; VOC: 500 PPMV (8) [40CFR 61 Subpart FF, 12-4-2003]</b>	H23.40
<b>Process 15: STORAGE TANKS</b>					P13.1
<b>System 1: FIXED ROOF STORAGE TANKS</b>					S13.7
STORAGE TANK, FIXED ROOF, NO. 13510, BRINE WATER, EQUIPPED WITH AN OIL SKIMMER, 13500 BBL; DIAMETER: 52 FT 9 IN; HEIGHT: 35 FT 6 IN A/N: 470292 † Permit to Construct Issued: 08/04/00	D562			<b>BENZENE: (10) [40CFR 61 Subpart FF, #1, 12-4-2003]; VOC: 500 PPMV (8) [40CFR 61 Subpart FF, 12-4-2003]</b>	C1.23, E336.2, H23.40
STORAGE TANK, FIXED ROOF, NO. 13511, BRINE WATER, EQUIPPED WITH AN OIL SKIMMER, 13500 BBL; DIAMETER: 52 FT 9 IN; HEIGHT: 35 FT 6 IN A/N: 470293 † Permit to Construct Issued: 08/04/00	D563			<b>BENZENE: (10) [40CFR 61 Subpart FF, #1, 12-4-2003]; VOC: 500 PPMV (8) [40CFR 61 Subpart FF, 12-4-2003]</b>	C1.23, E336.2, H23.40
<b>System 6: STORAGE TANKS, OTHERS</b>					
STORAGE TANK, PRESSURIZED, AQUEOUS AMMONIA, 19.9 % SOLUTION OR LESS, 12000 GALS, WITH A VAPOR BALANCE SYSTEM A/N: 484367 Permit to Construct Issued: 02/12/10	D1628				C157.1, E144.1
<b>Process 18: STEAM GENERATION</b>					

- \* (1) (1A) (1B) Denotes RECLAIM emission factor
- (3) Denotes RECLAIM concentration limit
- (5) (5A) (5B) Denotes command and control emission limit
- (7) Denotes NSR applicability limit
- (9) See App B for Emission Limits
- (2) (2A) (2B) Denotes RECLAIM emission rate
- (4) Denotes BACT emission limit
- (6) Denotes air toxic control rule limit
- (8) (8A) (8B) Denotes 40 CFR limit (e.g. NSPS, NESHAPS, etc.)
- (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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## FACILITY PERMIT TO OPERATE TESORO REFINING AND MARKETING CO

### 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
<b>Process 18: STEAM GENERATION</b>					
BOILER, BO-11, NATURAL GAS, REFINERY GAS, RENTECH WITH FGR, 352 MMBTU/HR WITH A/N: 484366 Permit to Construct Issued: 02/12/10	D1629	C1631	NOX: MAJOR SOURCE**; SOX: MAJOR SOURCE**	CO: 50 PPMV (4) [RULE 1703(a)(2) - PSD-BACT, 10-7-1988]; CO: 2000 PPMV (5) [RULE 407, 4-2-1982]; NOX: 0.035 LBS/MMSCF (1) [RULE 2012, 5-6-2005]; NOX: 0.2 LBS/MMBTU (8) [40CFR 60 Subpart Db, 1-28-2009]; NOX: 5 PPMV NATURAL GAS (4) [RULE 2005, 5-6-2005]; NOX: 7 PPMV(Monthly) REFINERY GAS (4) [RULE 2005, 4-20-2001; RULE 2005, 5-6-2005]; NOX: 9 PPMV REFINERY GAS (4) [RULE 2005, 4-20-2001; RULE 2005, 5-6-2005]; NOX: 74.2 LBS/MMSCF (1A) [RULE 2012, 5-6-2005]; PM: (9) [RULE 404, 2-7-1986]; PM: 0.01 GRAINS/SCF (5B) [RULE 476, 10-8-1976]; PM: 0.051 LBS/MMBTU (8) [40CFR 60 Subpart Db, 1-28-2009]; PM: 11 LBS/HR (5A) [RULE 476, 10-8-1976]; PM10: 0.1 GRAINS/SCF (5) [RULE 409, 8-7-1981]; SOX: 6.65 LBS/MMSCF (1A) [RULE 2011, 5-6-2005]; SOX: 34 LBS/MMSCF (1) [RULE 2011, 12-7-1995]	A63.9, A99.11, A99.12, A99.13, A99.14, A99.15, A99.16, A195.12, A195.13, A195.14, A195.15, A195.16, A327.2, B59.7, B61.8, B61.10, C1.52, D29.12, D29.13, D82.5, D82.6, D90.20, D90.21, I296.3, K40.3, K67.14, L341.1

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

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## FACILITY PERMIT TO OPERATE TESORO REFINING AND MARKETING CO

### 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
<b>Process 18: STEAM GENERATION</b>					
BURNER, NATURAL GAS, REFINERY GAS, COEN-TODD, VARIFLAME, WITH LOW NOX BURNER, 352 MMBTU/HR					
SELECTIVE CATALYTIC REDUCTION, SERVING BOILER BO-11, WITH 608 CUBIC FEET CATALYST VOLUME, CORMETECH OR EQUIVALENT WITH A/N: 484364 Permit to Construct Issued: 02/12/10  AMMONIA INJECTION	C1631	D1629		NH3: 5 PPMV (4) [RULE <b>1303(a)(1)-BACT, 5-10-1996;</b> <i>RULE 1303(a)(1)-BACT,</i> <i>12-6-2002]</i>	D12.10, D12.11, D12.12, D29.10, E73.5, E179.3, E179.4

\* (1) (1A) (1B) Denotes RECLAIM emission factor  
 (2) (2A) (2B) 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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Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions* And Requirements	Conditions
<b>Process 18: STEAM GENERATION</b>					
BOILER, BO-12, NATURAL GAS, REFINERY GAS, RENTECH WITH FGR, 352 MMBTU/HR WITH A/N: 484362 Permit to Construct Issued: 02/12/10	D1634	C1636	NOX: MAJOR SOURCE**; SOX: MAJOR SOURCE**	CO: 50 PPMV (4) [RULE 1703(a)(2) - PSD-BACT, 10-7-1988]; CO: 2000 PPMV (5) [RULE 407, 4-2-1982]; NOX: 0.035 LBS/MMSCF (1) [RULE 2012, 5-6-2005]; NOX: 5 PPMV NATURAL GAS (4) [RULE 2005, 5-6-2005]; NOX: 7 PPMV(Monthly) REFINERY GAS (4) [RULE 2005, 5-6-2005]; NOX: 9 PPMV REFINERY GAS (4) [RULE 2005, 5-6-2005]; NOX: 74.2 LBS/MMSCF (1A) [RULE 2012, 5-6-2005]; PM: (9) [RULE 404, 2-7-1986]; PM: 0.01 GRAINS/SCF (5B) [RULE 476, 10-8-1976]; PM: 0.051 LBS/MMBTU (8) [40CFR 60 Subpart Db, 1-28-2009]; PM: 11 LBS/HR (5A) [RULE 476, 10-8-1976]; PM10: 0.1 GRAINS/SCF (5) [RULE 409, 8-7-1981]; SOX: 6.65 LBS/MMSCF (1A) [RULE 2011, 5-6-2005]; SOX: 34 LBS/MMSCF (1) [RULE 2011, 5-6-2005]	A63.9, A99.11, A99.12, A99.13, A99.14, A99.15, A99.16, A195.12, A195.13, A195.14, A195.15, A195.16, A327.2, B59.7, B61.8, B61.10, C1.52, D29.12, D29.13, D82.5, D82.6, D90.20, D90.21, I296.3, K40.3, K67.14, L341.2
BURNER, NATURAL GAS, REFINERY GAS, COEN-TODD, VARIFLAME, WITH LOW NOX BURNER, 352 MMBTU/HR					

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

† This permit to construct was issued to the previous operator at a prior date. The equipment was constructed and the permit was subsequently transferred to this operator.

## FACILITY PERMIT TO OPERATE TESORO REFINING AND MARKETING CO

### 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
<b>Process 18: STEAM GENERATION</b>					
SELECTIVE CATALYTIC REDUCTION, SERVING BOILER BO-12, WITH 608 CUBIC FEET CATALYST VOLUME, CORMETECH OR EQUIVALENT WITH A/N: 484365 Permit to Construct Issued: 02/12/10  AMMONIA INJECTION	C1636	D1634		NH3: 5 PPMV (4) [RULE 1303(a)-BACT, 5-10-1996; RULE 1303(a), 12-6-2002]	D12.10, D12.11, D12.12, D29.10, E73.5, E179.3, E179.4
<b>Process 21: AIR POLLUTION CONTROL</b>					
<b>System 1: REFINERY FLARE</b>					S13.4, S18.2
FLARE, ELEVATED WITH STEAM INJECTION, NO.2, Q-910, JOHN ZINK, MODEL STF-S-30, HEIGHT: 250 FT ; DIAMETER: 2 FT 6 IN A/N: 472870 Permit to Construct Issued: 11/29/07	C747				D12.4, D323.2, E193.1, H23.38, I1.1
FLARE, ELEVATED WITH STEAM INJECTION, NO.1, Q-913, JOHN ZINK, MODEL STF-S-30, HEIGHT: 250 FT ; DIAMETER: 2 FT 6 IN A/N: 472870 Permit to Construct Issued: 11/29/07	C748				D12.4, D323.2, E193.1, H23.38, I1.1
KNOCK OUT POT, V-847, FLARE NO. 2, WITH INTERNAL LIQUID SEAL, LENGTH: 24 FT ; DIAMETER: 12 FT A/N: 472870 Permit to Construct Issued: 11/29/07	D752				
KNOCK OUT POT, V-848, FLARE NO. 1, WITH INTERNAL LIQUID SEAL, LENGTH: 24 FT ; DIAMETER: 12 FT A/N: 472870 Permit to Construct Issued: 11/29/07	D753				

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

† This permit to construct was issued to the previous operator at a prior date. The equipment was constructed and the permit was subsequently transferred to this operator.

## FACILITY PERMIT TO OPERATE TESORO REFINING AND MARKETING CO

### 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
<b>Process 21: AIR POLLUTION CONTROL</b>					
KNOCK OUT POT, V-616, CRU-HTU NO. 1, LENGTH: 16 FT ; DIAMETER: 8 FT A/N: 472870 Permit to Construct Issued: 11/29/07	D750				
KNOCK OUT POT, V-630, CRU-HTU NO. 2, LENGTH: 19 FT ; DIAMETER: 6 FT A/N: 472870 Permit to Construct Issued: 11/29/07	D751				
KNOCK OUT POT, V-873, CRU NO. 3, LENGTH: 18 FT ; DIAMETER: 9 FT A/N: 472870 Permit to Construct Issued: 11/29/07	D754				
KNOCK OUT POT, V-934, DCU, LENGTH: 25 FT ; DIAMETER: 12 FT A/N: 472870 Permit to Construct Issued: 11/29/07	D755				
KNOCK OUT POT, V-951, HGU NO. 1, LENGTH: 40 FT ; DIAMETER: 10 FT A/N: 472870 Permit to Construct Issued: 11/29/07	D756				
KNOCK OUT POT, V-1018, HCU, LENGTH: 29 FT ; DIAMETER: 14 FT 6 IN A/N: 472870 Permit to Construct Issued: 11/29/07	D757				
KNOCK OUT POT, V-1431, ALKYLATION UNIT, LENGTH: 35 FT ; DIAMETER: 11 FT A/N: 472870 Permit to Construct Issued: 11/29/07	D758				

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

† This permit to construct was issued to the previous operator at a prior date. The equipment was constructed and the permit was subsequently transferred to this operator.

## FACILITY PERMIT TO OPERATE TESORO REFINING AND MARKETING CO

### 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
<b>Process 21: AIR POLLUTION CONTROL</b>					
KNOCK OUT POT, V-1472, HTU NO. 3, LENGTH: 23 FT 8 IN; DIAMETER: 9 FT 3 IN A/N: 472870 Permit to Construct Issued: 11/29/07	D759				
KNOCK OUT POT, V-1764, HTU-4, HEIGHT: 36 FT ; DIAMETER: 13 FT A/N: 472870 Permit to Construct Issued: 11/29/07	D172				
FUGITIVE EMISSIONS, MISCELLANEOUS A/N: 472870 Permit to Construct Issued: 11/29/07	D1419				H23.5
<b>System 3: REFINERY VAPOR RECOVERY COMPRESSORS SYSTEM</b>					S11.3, S13.4, S15.11, S18.1
COMPRESSOR, C-68, INGERSOLL-RAND, TWO-STAGE, 350 H.P. A/N: 501287 Permit to Construct Issued: 10/16/09	D641				I30.1
COMPRESSOR, C-69, INGERSOLL-RAND, TWO-STAGE, 350 H.P. A/N: 501287 Permit to Construct Issued: 10/16/09	D642				I30.1
COMPRESSOR, C-104, WORTHINGTON, TWO-STAGE, 900 H.P. A/N: 501287 Permit to Construct Issued: 10/16/09	D643				I30.1

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

† This permit to construct was issued to the previous operator at a prior date. The equipment was constructed and the permit was subsequently transferred to this operator.

## FACILITY PERMIT TO OPERATE TESORO REFINING AND MARKETING CO

### 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
<b>Process 21: AIR POLLUTION CONTROL</b>					
COMPRESSOR, C-105, WORTHINGTON, TWO-STAGE, 900 H.P., SPARE FOR C-104 AND C-137 A/N: 501287 Permit to Construct Issued: 10/16/09	D644				I30.1
DRUM, VAPOR RECOVERY GAS K.O, V-2380, LENGTH: 11 FT ; DIAMETER: 54 FT A/N: 501287 Permit to Construct Issued: 10/16/09	D1662				I30.1
POT, V-556, CONDENSATE POT #4, HEIGHT: 6 FT ; DIAMETER: 3 FT A/N: 501287 Permit to Construct Issued: 10/16/09	D886				I30.1
DRUM, SUCTION, V-1135, LENGTH: 22 FT 6 IN; DIAMETER: 9 FT A/N: 501287 Permit to Construct Issued: 10/16/09	D887				I30.1
DRUM, SOUR WATER FLASH DRUM AND BACK UP DEA SKIM, V-1490, LENGTH: 30 FT ; DIAMETER: 12 FT A/N: 501287 Permit to Construct Issued: 10/16/09	D1615				I30.1
DRUM, DEA FLASH, V-1491, LENGTH: 40 FT ; DIAMETER: 4 FT A/N: 501287 Permit to Construct Issued: 10/16/09	D1663				I30.1
DRUM, DEA SKIM, V-1139, SPARE, LENGTH: 26 FT ; DIAMETER: 8 FT A/N: 501287 Permit to Construct Issued: 10/16/09	D1316				I30.1

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

† This permit to construct was issued to the previous operator at a prior date. The equipment was constructed and the permit was subsequently transferred to this operator.

## FACILITY PERMIT TO OPERATE TESORO REFINING AND MARKETING CO

### 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
<b>Process 21: AIR POLLUTION CONTROL</b>					
POT, V-1865, CONDENSATE POT #1, HEIGHT: 8 FT ; DIAMETER: 4 FT A/N: 501287 Permit to Construct Issued: 10/16/09	D890				I30.1
POT, V-1866, CONDENSATE POT #2, HEIGHT: 8 FT ; DIAMETER: 4 FT A/N: 501287 Permit to Construct Issued: 10/16/09	D891				I30.1
POT, V-1867, CONDENSATE POT #3, HEIGHT: 8 FT ; DIAMETER: 4 FT A/N: 501287 Permit to Construct Issued: 10/16/09	D892				I30.1
POT, V-1868, CONDENSATE POT #5, HEIGHT: 8 FT ; DIAMETER: 4 FT A/N: 501287 Permit to Construct Issued: 10/16/09	D893				I30.1
POT, V-1871, CONDENSATE POT #6, HEIGHT: 8 FT ; DIAMETER: 4 FT A/N: 501287 Permit to Construct Issued: 10/16/09	D894				I30.1
POT, V-1872, CONDENSATE POT #7, HEIGHT: 8 FT ; DIAMETER: 4 FT A/N: 501287 Permit to Construct Issued: 10/16/09	D895				I30.1
POT, V-1873, CONSENSATE POT #8, HEIGHT: 8 FT ; DIAMETER: 4 FT A/N: 501287 Permit to Construct Issued: 10/16/09	D896				I30.1
FUGITIVE EMISSIONS, MISCELLANEOUS A/N: 501287 Permit to Construct Issued: 10/16/09	D1477				H23.5, I30.1

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

† This permit to construct was issued to the previous operator at a prior date. The equipment was constructed and the permit was subsequently transferred to this operator.

## FACILITY PERMIT TO OPERATE TESORO REFINING AND MARKETING CO

### 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
<b>Process 21: AIR POLLUTION CONTROL</b>					
<b>System 4: FLARE GAS RECOVERY SYSTEM</b>					S13.4, S15.2, S15.3, S15.11, S18.6, S31.2
COMPRESSOR, C-167, LIQUID RING TYPE, DUAL SEALS WITH BARRIER FLUID SYSTEM, 60 MSCFH CAPACITY A/N: 501291 Permit to Construct Issued: 10/16/09	D1600				E73.3, H23.39, I30.1
COMPRESSOR, C-168, LIQUID RING TYPE, DUAL SEALS WITH BARRIER FLUID SYSTEM, 60 MSCFH CAPACITY A/N: 501291 Permit to Construct Issued: 10/16/09	D1601				E73.3, H23.39, I30.1
COMPRESSOR, C-169, LIQUID RING TYPE, DUAL SEALS WITH BARRIER FLUID SYSTEM, 60 MSCFH CAPACITY A/N: 501291 Permit to Construct Issued: 10/16/09	D1602				E73.3, H23.39, I30.1
COMPRESSOR, C-170, LIQUID RING TYPE, DUAL SEALS WITH BARRIER FLUID SYSTEM, 60 MSCFH CAPACITY A/N: 501291 Permit to Construct Issued: 10/16/09	D1603				E73.3, H23.39, I30.1
COMPRESSOR, C-171, LIQUID RING TYPE, DUAL SEALS WITH BARRIER FLUID SYSTEM, 60 MSCFH CAPACITY A/N: 501291 Permit to Construct Issued: 10/16/09	D1604				E73.3, H23.39, I30.1

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

† This permit to construct was issued to the previous operator at a prior date. The equipment was constructed and the permit was subsequently transferred to this operator.

## FACILITY PERMIT TO OPERATE TESORO REFINING AND MARKETING CO

### 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
<b>Process 21: AIR POLLUTION CONTROL</b>					
VESSEL, COMPRESSOR LIQUID SEPARATOR, V-2358, HEIGHT: 20 FT ; DIAMETER: 6 FT A/N: 501291 Permit to Construct Issued: 10/16/09	D1605				I30.1
VESSEL, COMPRESSOR LIQUID SEPARATOR, V-2359, HEIGHT: 20 FT ; DIAMETER: 6 FT A/N: 501291 Permit to Construct Issued: 10/16/09	D1606				I30.1
KNOCK OUT POT, V-2360, HEIGHT: 4 FT ; DIAMETER: 1 FT 6 IN A/N: 501291 Permit to Construct Issued: 10/16/09	D1607				I30.1
FUGITIVE EMISSIONS, MISCELLANEOUS A/N: 501291 Permit to Construct Issued: 10/16/09	D1608			<b>HAP: (10) [40CFR 63 Subpart CC, #5A, 6-23-2003]</b>	H23.39, I30.1

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

† This permit to construct was issued to the previous operator at a prior date. The equipment was constructed and the permit was subsequently transferred to this operator.

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

## **SECTION H: DEVICE ID INDEX**

**The following sub-section provides an index  
to the devices that make up the facility  
description sorted by device ID.**

## FACILITY PERMIT TO OPERATE TESORO REFINING AND MARKETING CO

### SECTION H: DEVICE ID INDEX

<b>Device Index For Section H</b>			
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D10	2	2	1
D11	2	2	1
D15	3	2	1
D16	3	2	1
D17	3	2	1
D18	3	2	1
D19	7	2	1
D20	4	2	1
D24	4	2	1
D25	5	2	1
D26	5	2	1
D27	5	2	1
D28	5	2	1
D29	6	2	1
D30	6	2	1
D31	6	2	1
D34	9	2	8
D41	10	2	8
D45	10	2	8
D46	10	2	8
D47	10	2	8
D49	10	2	8
S51	17	3	3
D53	7	2	6
D63	8	2	6
D65	8	2	6
D68	8	2	6
D78	12	3	1
D79	12	3	1
D80	12	3	1
D81	13	3	1
D82	13	3	1

## FACILITY PERMIT TO OPERATE TESORO REFINING AND MARKETING CO

### SECTION H: DEVICE ID INDEX

<b>Device Index For Section H</b>			
<b>Device ID</b>	<b>Section H Page No.</b>	<b>Process</b>	<b>System</b>
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D85	13	3	1
D86	13	3	1
D87	15	3	1
D96	16	3	2
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D112	17	3	3
D123	20	4	3
D129	20	4	3
D160	20	4	7
D164	21	4	7
D168	21	4	7
D172	36	21	1
D192	21	4	9
D244	21	4	7
D245	28	8	1
D340	23	8	1
D341	23	8	1
D342	23	8	1
D344	23	8	1
D345	23	8	1
D346	24	8	1
D347	24	8	1
D348	24	8	1
D349	24	8	1
D350	25	8	1
D351	25	8	1
D352	25	8	1
D355	26	8	1
D356	26	8	1
D357	26	8	1
D358	26	8	1
D359	27	8	1

## FACILITY PERMIT TO OPERATE TESORO REFINING AND MARKETING CO

### SECTION H: DEVICE ID INDEX

<b>Device Index For Section H</b>			
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D372	23	8	1
D373	23	8	1
D374	24	8	1
D375	25	8	1
D376	25	8	1
D377	28	8	1
D562	30	15	1
D563	30	15	1
D641	36	21	3
D642	36	21	3
D643	36	21	3
D644	37	21	3
C747	34	21	1
C748	34	21	1
D750	35	21	1
D751	35	21	1
D752	34	21	1
D753	34	21	1
D754	35	21	1
D755	35	21	1
D756	35	21	1
D757	35	21	1
D758	35	21	1
D759	36	21	1
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D887	37	21	3
D890	38	21	3
D891	38	21	3
D892	38	21	3
D893	38	21	3
D894	38	21	3
D895	38	21	3

## FACILITY PERMIT TO OPERATE TESORO REFINING AND MARKETING CO

### SECTION H: DEVICE ID INDEX

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D901	6	2	1
D904	6	2	1
D906	4	2	1
D908	12	3	1
D909	15	3	1
D910	14	3	1
D912	14	3	1
D913	15	3	1
D915	12	3	1
D918	15	3	1
D928	26	8	1
D930	27	8	1
D932	27	8	1
D933	27	8	1
D934	27	8	1
D969	7	2	1
D1088	6	2	1
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D1133	2	2	1
D1134	2	2	1
D1135	2	2	1
D1136	2	2	1
D1137	3	2	1
D1141	3	2	1
D1143	4	2	1
D1147	4	2	1
D1149	5	2	1
D1151	6	2	1
D1152	7	2	6
D1155	8	2	8
D1156	9	2	8

## FACILITY PERMIT TO OPERATE TESORO REFINING AND MARKETING CO

### SECTION H: DEVICE ID INDEX

<b>Device Index For Section H</b>			
<b>Device ID</b>	<b>Section H Page No.</b>	<b>Process</b>	<b>System</b>
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D1158	9	2	8
D1159	9	2	8
D1160	9	2	8
D1161	11	2	8
D1162	11	2	8
D1164	11	2	8
D1165	11	2	8
D1259	24	8	1
D1260	24	8	1
D1265	26	8	1
D1266	27	8	1
D1267	12	3	1
D1268	12	3	1
D1269	12	3	1
D1271	13	3	1
D1272	14	3	1
D1273	14	3	1
D1275	14	3	1
D1280	14	3	1
D1288	16	3	2
D1316	37	21	3
D1340	28	8	1
D1341	28	8	1
D1342	28	8	1
D1350	8	2	6
D1357	7	2	1
D1361	8	2	6
D1365	15	3	1
D1380	22	4	9
D1419	36	21	1
D1438	8	2	8
D1454	29	8	1
D1477	38	21	3

## FACILITY PERMIT TO OPERATE TESORO REFINING AND MARKETING CO

### SECTION H: DEVICE ID INDEX

<b>Device Index For Section H</b>			
<b>Device ID</b>	<b>Section H Page No.</b>	<b>Process</b>	<b>System</b>
D1478	1	1	4
D1479	1	1	4
D1480	29	12	7
D1481	29	12	7
D1482	29	12	7
D1483	29	12	7
D1484	29	12	7
D1485	30	12	7
D1503	21	4	7
D1511	20	4	3
D1512	20	4	3
D1513	20	4	3
D1525	22	5	3
D1526	22	5	3
D1527	22	5	3
D1530	28	8	1
D1531	28	8	1
D1567	7	2	1
C1575	17	3	6
C1576	18	3	6
C1577	19	3	6
D1580	19	3	6
D1597	15	3	1
D1598	15	3	1
D1600	39	21	4
D1601	39	21	4
D1602	39	21	4
D1603	39	21	4
D1604	39	21	4
D1605	40	21	4
D1606	40	21	4
D1607	40	21	4
D1608	40	21	4
D1615	37	21	3

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

**SECTION H: DEVICE ID INDEX**

<b>Device Index For Section H</b>			
<b>Device ID</b>	<b>Section H Page No.</b>	<b>Process</b>	<b>System</b>
D1616	7	2	1
D1628	30	15	6
D1629	32	18	0
C1631	32	18	0
D1634	33	18	0
C1636	34	18	0
D1652	25	8	1
D1661	4	2	1
D1662	37	21	3
D1663	37	21	3

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

### SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

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

#### **FACILITY CONDITIONS**

F9.1 Except for open abrasive blasting operations, the operator shall not discharge into the atmosphere from any single source of emissions whatsoever any air contaminant for a period or periods aggregating more than three minutes in any one hour which is:

(a) As dark or darker in shade as that designated No.1 on the Ringelmann Chart, as published by the United States Bureau of Mines; or

(b) Of such opacity as to obscure an observer's view to a degree equal to or greater than does smoke described in subparagraph (a) of this condition.

**[RULE 401, 3-2-1984; RULE 401, 11-9-2001]**

F14.1 The operator shall not purchase diesel fuel containing sulfur compounds in excess of 15 ppm by weight as supplied by the supplier.

This condition shall become effective on or after June 1, 2004.

**[RULE 431.2, 5-4-1990; RULE 431.2, 9-15-2000]**

F24.1 Accidental release prevention requirements of Section 112(r)(7):

a). The operator shall comply with the accidental release prevention requirements pursuant to 40 CFR Part 68 and shall submit to the Executive Officer, as a part of an annual compliance certification, a statement that certifies compliance with all of the requirements of 40 CFR Part 68, including the registration and submission of a risk management plan (RMP).

b). The operator shall submit any additional relevant information requested by the Executive Officer or designated agency.

**[40CFR 68 - Accidental Release Prevention, 5-24-1996]**

## FACILITY PERMIT TO OPERATE TESORO REFINING AND MARKETING CO

### SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

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

F25.1 The permit holder of this facility shall not install, alter, or operate a refinery process unit or other non-Rule 219 exempt equipment without a valid RECLAIM/Title V permit issued by the AQMD pursuant to Rule 201 - Permit to Construct, Rule 203 - Permit to Operate, Rule 204 - Requirements, and Rule 3002 - Requirements, as applicable.

Notwithstanding the above, the provisions of Rules 201, 203, 204, and 3002 shall not apply to installations or alterations that involve only the equipment listed in Table 1 below, nor shall they apply to the operation of equipment listed in Table 1, when directly associated with permitted process units or other permitted equipment.

Notwithstanding the above, all new equipment listed in Table 1, including associated fugitive components installed with such equipment, shall have Best Available Control Technology installed in conformance with the Best Available Control Technology Guidelines in effect at the time of the installation.

TABLE 1

- (a) Heat Exchanger (including air-cooler, reboiler, cooler, condenser, and shell and tube exchanger)
- (b) In-line Mixer
- (c) Pump
- (d) Knockout Pot - Compressor inlet (immediate inlet) and interstage
- (e) Knockout Pot - Fuel Gas System (downstream of fuel gas mix drums)

This condition applies only to the facility that processes petroleum as defined in the Standard Industrial Classification Manual as Industry No. 2911 - Petroleum Refining, as well as its directly associated sulfur recovery plant which may be located outside of the facility.

[RULE 2004, 5-11-2001; RULE 2004, 4-6-2007]

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

### SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

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

F34.1 The operator shall not sell refinery gas containing sulfur compounds in excess of 40 ppmv, calculated as hydrogen sulfide, averaged over 4-hour period.

**[RULE 431.1, 6-12-1998]**

F52.1 This facility is subject to the applicable requirements of the following rules or regulation(s):

40CFR79

40CFR80

**[40CFR 79, 7-1-1999; 40CFR 80, 7-1-1999]**

F52.2 This facility is subject to the applicable requirements of the following rules or regulation(s):

40CFR61, Subpart FF

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

F52.3 This facility is subject to the applicable requirements of the following rules or regulation(s):

40CFR60 Subpart A

40CFR61 Subpart A

40CFR63 Subpart A

**[40CFR 60 Subpart A, 6-13-2007; 40CFR 61 Subpart A, 5-16-2007; 40CFR 63 Subpart A, 5-16-2007]**

F52.4 This facility is subject to the applicable requirements of the following rules or regulation(s):

Consent Decree Civil No. H-01-0978, 3-21-2001

**[ CONSENT DECREE, 3-21-2001 ]**

## FACILITY PERMIT TO OPERATE TESORO REFINING AND MARKETING CO

### SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

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

F60.1 The emission limits identified in Section D and H of the permit shall be defined as emissions discharged to the atmosphere from the originating equipment.

#### PROCESS CONDITIONS

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]**

[Processes subject to this condition : 1, 2, 3, 4, 5, 6, 8, 9, 11, 12, 15]

#### SYSTEM CONDITIONS

S1.1 The operator shall limit the loading rate to no more than 1262500 barrel(s) in any one year.

For the purpose of this condition, loading rate shall be defined as the combined loading rate of D790 in Process 14, System 4 and D1040 in Process 14, System 5, and shall be recorded by shipping records.

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

[Systems subject to this condition : Process 14, System 4 , 5]

S2.1 The operator shall limit emissions from this system as follows

CONTAMINANT	EMISSIONS LIMIT
VOC	Less than 2.5 lbs/mmscf of hydrogen produced

**[RULE 1189, 1-21-2000]**

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

### SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

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

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

S7.1 The following conditions shall apply to all coke handling and related devices from this system:

The operator shall drive all outgoing petroleum coke trucks, whether filled or empty, through the truck wash system in order to thoroughly wash any residual coke off the exterior of the trucks.

The operator shall clean or wet down the ground area below the conveyors to prevent airborne dust.

The operator shall wash exterior conveyors and return belts, overhead structures and ground area down to the coke laden water return system to avoid accumulation of coke dust.

[**RULE 1158, 6-11-1999**; RULE 1158, 7-11-2008]

[Systems subject to this condition : Process 2, System 8]

S7.2 The following conditions shall apply to all coke handling and related devices from this system:

The operator shall drive all outgoing petroleum coke trucks, whether filled or empty, through the truck wash system in order to thoroughly wash any residual coke off the exterior of the trucks.

The operator shall clean or wet down the ground area below the conveyors to prevent airborne dust.

The operator shall wash exterior conveyors and return belts, overhead structures and ground area down to the coke laden water return system to avoid accumulation of coke dust.

The operator shall drain raw coke from the coker pit before loading to the conveyor hopper to minimize spillage of coke from elevated inclined conveyors.

## FACILITY PERMIT TO OPERATE TESORO REFINING AND MARKETING CO

### SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

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

[**RULE 1158, 6-11-1999**; RULE 1158, 7-11-2008]

[Systems subject to this condition : Process 2, System 9]

- S11.1 The operator shall comply with all applicable mitigation measures stipulated in the "Statement of Findings, Statement of Overriding Considerations, and Mitigation Monitoring Plan" document which is part of the AQMD Certified Final Environmental Impact Report dated 21-mar-1994 for this facility.

This condition shall only apply to equipment listed in Section H of this facility permit.

[CA PRC CEQA, 11-23-1970]

[Systems subject to this condition : Process 6, System 1]

- S11.2 The operator shall comply with all applicable mitigation measures stipulated in the "Statement of Findings, Statement of Overriding Considerations, and Mitigation Monitoring Plan" document which is part of the AQMD Certified Final Environmental Impact Report dated 15-oct-2001 for this facility.

This condition shall only apply to equipment listed in Section H of this facility permit.

[CA PRC CEQA, 11-23-1970]

[Systems subject to this condition : Process 4, System 3 , 7]

- S11.3 The operator shall comply with all applicable mitigation measures stipulated in the "Statement of Findings, Statement of Overriding Considerations, and Mitigation Monitoring Plan" document which is part of the AQMD Certified Final Environmental Impact Report dated 04-10-2009 for this facility.

This condition shall only apply to equipment listed in Section H of this facility permit.

[CA PRC CEQA, 11-23-1970]

## FACILITY PERMIT TO OPERATE TESORO REFINING AND MARKETING CO

### SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

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

[Systems subject to this condition : Process 2, System 1; Process 8, System 1; Process 21, System 3]

S13.2 All devices under this system are subject to the applicable requirements of the following rules or regulations:

Contaminant	Rule	Rule/Subpart
VOC	40CFR60, SUBPART	QQQ

**[40CFR 60 Subpart QQQ, 10-17-2000]**

[Systems subject to this condition : Process 4, System 7; Process 6, System 3; Process 12, System 1 , 2; Process 23, System 1]

S13.3 All devices under this system are subject to the applicable requirements of the following rules or regulations:

Contaminant	Rule	Rule/Subpart
PM	District Rule	1158

**[RULE 1158, 6-11-1999; RULE 1158, 7-11-2008]**

[Systems subject to this condition : Process 2, System 8 , 9]

S13.4 All devices under this system are subject to the applicable requirements of the following rules or regulations:

Contaminant	Rule	Rule/Subpart
VOC	District Rule	1123

**[RULE 1123, 12-7-1990]**

[Systems subject to this condition : Process 1, System 1 , 2; Process 2, System 1 , 3 , 6 , 7 , 10; Process 3, System 1 , 2 , 4 , 5; Process 4, System 1 , 3 , 5 , 7 , 9; Process 5, System 1 , 3 , 5; Process 6, System 1 , 3; Process 8, System 1; Process 9, System 1 , 2 , 3; Process 12, System 8; Process 19, System 3; Process 21, System 1 , 2 , 3 , 4]

## FACILITY PERMIT TO OPERATE TESORO REFINING AND MARKETING CO

### SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

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

S13.5 All devices under this system are subject to the applicable requirements of the following rules or regulations:

Contaminant	Rule	Rule/Subpart
VOC	District Rule	1176

**[RULE 1176, 9-13-1996]**

[Systems subject to this condition : Process 12, System 1, 2, 3, 4, 7; Process 19, System 4]

S13.6 All devices under this system are subject to the applicable requirements of the following rules or regulations:

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

**[RULE 1149, 7-14-1995; RULE 1149, 5-2-2008; RULE 463, 5-6-2005]**

[Systems subject to this condition : Process 15, System 3]

S13.7 All devices under this system are subject to the applicable requirements of the following rules or regulations:

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

**[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 15, System 1, 2, 7]

## FACILITY PERMIT TO OPERATE TESORO REFINING AND MARKETING CO

### SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

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

S13.8 All devices under this system are subject to the applicable requirements of the following rules or regulations:

Contaminant	Rule	Rule/Subpart
VOC	District Rule	461

**[RULE 461, 6-3-2005; RULE 461, 3-7-2008]**

[Systems subject to this condition : Process 19, System 1 , 2]

S13.9 All devices under this system are subject to the applicable requirements of the following rules or regulations:

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

For Rule 463 applicability, only subdivision (d) in the March 11,1994 amendment, or equivalent requirements in the future amendments, shall apply to domed external floating roof tanks. This does not preclude any requirements specified in 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 15, System 5]

S15.1 The vent gases from all affected devices of this process/system shall be vented as follows:

All emergency vent gases shall be directed to a blowdown flare system.

This process/system shall not be operated unless the refinery flare system is in full use and has a valid permit to receive vent gases from this system.

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

### **SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE**

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

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

[Systems subject to this condition : Process 15, System 3]

S15.2 The vent gases from all affected devices of this process/system shall be vented as follows:

All emergency vent gases shall be directed to the refinery flares (process 21, system 1) or flare gas recovery system (process 21, system 4) which may also include DCU Blowdown Compressor C-137 (device D68) except Devices IDs D898, D20, D910, D1268, D1269, D1280, D93, D94, D96, D1283, D1284, D1288, D1292, D219, D226, D1212, D275, D1256, D375, D928, D1267 & D916 that vent to the atmosphere.

This process/system shall not be operated unless the blowdown flare system is in full use and has a valid permit to receive vent gases from this system.

**[RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(b)(2)-Offset, 5-10-1996]**

[Systems subject to this condition : Process 1, System 1, 2; Process 2, System 1, 3, 6, 10; Process 3, System 1, 2, 5; Process 4, System 1, 3, 5, 7, 9; Process 5, System 1, 3, 5; Process 6, System 1, 3; Process 8, System 1; Process 9, System 1, 2, 3; Process 12, System 8; Process 19, System 3; Process 21, System 4]

S15.3 The vent gases from all affected devices of this process/system shall be vented as follows:

All vent gases under normal operating conditions shall be directed to a vapor recovery system (process 21, system 3) consisting of compressors, D641, D642, D643, and/or D644, which can be operated independently to maintain a system vacuum that efficiently collects all vented gases or the flare gas recovery system (process 21, system 4).

This process/system shall not be operated unless the vapor recovery system (process 21, system 3) or flare gas recovery system (process 21, system 4) is in full use and has a valid permit to receive vent gases from this system.

**[RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(b)(2)-Offset, 5-10-1996]**

## FACILITY PERMIT TO OPERATE TESORO REFINING AND MARKETING CO

### SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

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

[Systems subject to this condition : Process 1, System 2; Process 2, System 3, 6; Process 3, System 2, 4; Process 4, System 1, 3, 5, 7; Process 5, System 1, 3, 5; Process 6, System 1; Process 8, System 1; Process 9, System 2; Process 21, System 4]

- S15.5 The vent gases from all affected devices of this process/system shall be vented as follows:

All vent gases under normal operating conditions shall be directed to a vapor recovery system consisting of compressors, D641, 642, 643, and/or 644, which can be operated independently to maintain a system vacuum that efficiently collects all vented gases, except devices D305, 432, 1504-1507, 1514-1524 that vent to the flare system.

This process/system shall not be operated unless the vapor recovery system is in full use and has a valid permit to receive vent gases from this system.

**[RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(b)(2)-Offset, 5-10-1996]**

[Systems subject to this condition : Process 9, System 1; Process 23, System 1]

- S15.6 The vent gases from all affected devices of this process/system shall be vented as follows:

All vent gases under normal operating conditions shall be directed to a vapor recovery system consisting of compressors, D641, D642, D643, and/or D644, which can be operated independently to maintain a system vacuum that efficiently collects all vented gases.

This process/system shall not be operated unless the blowdown vapor recovery system is in full use and has a valid permit to receive vent gases from this system.

**[RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(b)(2)-Offset, 5-10-1996]**

[Systems subject to this condition : Process 12, System 7; Process 14, System 4, 5]

- S15.7 The vent gases from all affected devices of this process/system shall be vented as follows:

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

### SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

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

All vent gases under normal operating conditions shall be directed to to the fume scrubber system (P21, S2), and then to the boiler system (P18) with at least one of four boilers (D722-5) in operation.

This process/system shall not be operated unless the above air pollution control system is in full use and has a valid permit to receive vent gases from this system.

**[RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(b)(2)-Offset, 5-10-1996]**

[Systems subject to this condition : Process 14, System 1; Process 15, System 4]

S15.8 The vent gases from all affected devices of this process/system shall be vented as follows:

All vent gases under normal operating conditions shall be directed to the flare system.

This process/system shall not be operated unless the flare(s) is in full use and has a valid permit to receive vent gases from this system.

**[RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(b)(2)-Offset, 5-10-1996]**

[Systems subject to this condition : Process 14, System 2 , 3]

S15.9 The vent gases from all affected devices of this process/system shall be vented as follows:

All vent gases under normal operating conditions shall be directed to a vapor recovery system (process 21 system 3) consisting of compressors, D641, D642, D643, and/or D644, which can be operated independently to maintain a system vacuum that efficiently collects all vented gases, or the flare gas recovery system ( process 21, system 4) except Device D1151 that vents to the atmosphere.

This process/system shall not be operated unless the vapor recovery system(process 21, system3) or flare gas recovery system ( process 21, system 4) is in full use and has a valid permit to receive vent gases from this system.

**[RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(b)(2)-Offset, 5-10-1996]**

## FACILITY PERMIT TO OPERATE TESORO REFINING AND MARKETING CO

### SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

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

[Systems subject to this condition : Process 2, System 1]

S15.10 The vent gases from all affected devices of this process/system shall be vented as follows:

All sour gases under normal operating conditions shall be directed to the amine absorber(s) located in this system.

This process/system shall not be operated unless the absorber(s) is in full use and has a valid permit to receive vent gases from this system.

**[RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(b)(2)-Offset, 5-10-1996]**

[Systems subject to this condition : Process 2, System 1; Process 4, System 7; Process 8, System 1]

S15.11 The vent gases from all affected devices of this process/system shall be vented as follows:

All sour gases under normal operating conditions shall be directed to the fuel gas treating system(s) (Process 12, System 8 or Process 4, System 9).

This process/system shall not be operated unless the fuel gas treating system(s) is in full use and has a valid permit to receive vent gases from this system.

**[RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(b)(2)-Offset, 5-10-1996]**

[Systems subject to this condition : Process 2, System 6; Process 21, System 3 , 4]

S15.12 The vent gases from all affected devices of this process/system shall be vented as follows:

All sour gases under normal operating conditions shall be directed to the FCCU gas treating system.

This process/system shall not be operated unless the FCCU gas treating system is in full use and has a valid permit to receive vent gases from this system.

**[RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(b)(2)-Offset, 5-10-1996]**

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

### SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

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

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

S15.13 The vent gases from all affected devices of this process/system shall be vented as follows:

All sour gases under normal operating conditions shall be directed to the fuel gas treating system (Process 4, System 9) or to the scrubber located in Process 8, System 1.

This process/system shall not be operated unless the fuel gas treating system or the scrubber is in full use and has a valid permit to receive vent gases from this system.

**[RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(b)(2)-Offset, 5-10-1996]**

[Systems subject to this condition : Process 4, System 1 , 3 , 5]

S18.1 All affected devices listed under this process/system shall be used only to receive, recover and/or dispose of vent gases routed from the system(s) or process(es) listed below, in addition to specific devices identified in the "connected to" column:

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

### SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

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

Crude Distillation Unit (Process: 1, System: 1 & 2)

Delayed Coking Unit (DCU) (Process: 2, System: 1, 3, 6 & 10)

Fluid Catalytic Cracking Unit (FCCU) (Process: 3, System: 1, 2, 4 & 5)

Hydrotreating Units (Process: 4, System: 1, 3, 5, 7 & 9)

Catalytic Reforming Units (Process: 5, System: 1, 3 & 5)

Hydrogen Generation Units (Process: 6, System: 1 & 3)

Hydrocracking Unit (Process: 8, System: 1)

Alkylation Unit (Process: 9, System: 1, 2 & 3)

Treating/Stripping Units (Process: 12, System: 1 & 7)

Loading/Unloading (Process: 14, System: 4 & 5)

Isomerization Unit (Process: 23, System: 1)

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

[Systems subject to this condition : Process 21, System 3]

S18.2 All affected devices listed under this process/system shall be used only to receive, recover and/or dispose of vent gases routed from the system(s) or process(es) listed below, in addition to specific devices identified in the "connected to" column:

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

### SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

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

Crude Distillation Unit (Process: 1, System: 1 & 2)

Delayed Coking Unit (DCU) (Process: 2, System: 1, 3, 6 & 10)

Fluid Catalytic Cracking Unit (FCCU) (Process: 3, System: 1, 2, 4 & 5)

Hydrotreating Units (Process: 4, System: 1, 3, 5, 7 & 9)

Catalytic Reforming Units (Process: 5, System: 1, 3 & 5)

Hydrogen Generation Units (Process: 6, System: 1 & 3)

Hydrocracking Unit (Process: 8, System: 1)

Alkylation Unit (Process: 9, System: 1, 2 & 3)

Fuel Gas Treating System (Process: 12, System: 8)

Loading and Unloading (Process: 14, System: 2 & 3)

Pressurized Storage Tanks (Process: 15, System: 3)

Fuel Gas Mix System (Process: 19, System: 3)

Isomerization Unit (Process: 23, System: 1)

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

[Systems subject to this condition : Process 21, System 1]

S18.3 All affected devices listed under this process/system shall be used only to receive, recover and/or dispose of vent gases routed from the system(s) or process(es) listed below, in addition to specific devices identified in the "connected to" column:

Inorganic Chemical Loading and Unloading (Process: 14, System: 1)

Miscellaneous Storage Tanks (Process: 15, System: 4)

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

### SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

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

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

[Systems subject to this condition : Process 21, System 2]

S18.4 All affected devices listed under this process/system shall be used only to receive, recover and/or dispose of vent gases routed from the system(s) or process(es) listed below, in addition to specific devices identified in the "connected to" column:

DCU Blowdown Recovery System (Process: 2, System: 6)

Refinery Vapor Recovery System (Process: 21, System: 3)

Flare Gas Recovery System (Process: 21, System: 4)

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

[Systems subject to this condition : Process 4, System 9; Process 12, System 8]

S18.5 All affected devices listed under this process/system shall be used only to receive, recover and/or dispose of vent gases routed from the system(s) or process(es) listed below, in addition to specific devices identified in the "connected to" column:

FCCU Recovery System (Process: 3, System: 1)

FCCU Cracking Section (Process: 3, System: 2)

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

[Systems subject to this condition : Process 3, System 5]

S18.6 All affected devices listed under this process/system shall be used only to receive, recover and/or dispose of vent gases routed from the system(s) or process(es) listed below, in addition to specific devices identified in the "connected to" column:

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

### SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

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

Crude Distillation Unit (Process: 1, System: 1 & 2)

Delayed Coking Unit (DCU) (Process: 2, System: 1, 3, 6 & 10)

Fluid Catalytic Cracking Unit (FCCU) (Process: 3, System: 1, 2, 4 & 5)

Hydrotreating Units (Process: 4, System: 1, 3, 5, 7 & 9)

Catalytic Reforming Units (Process: 5, System: 1, 3 & 5)

Hydrogen Generation Units (Process: 6, System: 1 & 3)

Hydrocracking Unit (Process: 8, System: 1)

Alkylation Unit (Process: 9, System: 1, 2 & 3)

Treating/Stripping Units (Process: 12, System: 1 & 7)

Loading/Unloading (Process: 14, System: 4 & 5)

Isomerization Unit (Process: 23, System: 1)

**[RULE 1118, 11-4-2005; RULE 1303(a)(1)-BACT, 5-10-1996]**

[Systems subject to this condition : Process 21, System 4]

S31.1 The following BACT requirements shall apply to VOC service fugitive components associated with the devices that are covered by application number(s) 347559, 347560, 347564, 366048, 366083, 376616, 376622, 376623, 376624, 376625, 376627, 376628, 381228, 435139, 457927, 501287 & 501288:

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

### **SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE**

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

All open-ended valves shall be equipped with cap, blind flange, plug, or a second valve.

All pressure relief valves shall be connected to closed vent system or equipped with rupture disc.

All sampling connections shall be closed-purge, closed-loop, or closed-vent system.

All new valves in VOC service shall be of leakless type, except those specifically exempted by Rule 1173 or approved by the District in the following applications: heavy liquid service, control valves, instrument piping/tubing, applications requiring torsional valve stem motion, applications where failures could pose safety hazards (e.g. drain valves with valve stems in horizontal position), retrofits with space limitations, and valves not commercially available.

If 98.0 percent or greater of the new valve and the new flange population inspected is found to leak gaseous or liquid volatile organic compounds at a rate less than 500 ppm for two consecutive months, then the operator may revert to a quarterly inspection program with the approval of the executive officer. This condition does not apply to leakless valves.

All components are subject to District Rule 1173 and 40CFR60 Subpart GGG.

The operator shall keep records of the monthly inspection (and quarterly where applicable), subsequent repair, and reinspection, in a manner approved by the District.

The operator shall provide to the District, no later than 90 days after initial startup, a recalculation of the fugitive emissions based on actual components installed and removed from service. The operator shall also submit a complete, as built, piping and instrumentation diagram(s) and copies of requisition data sheets for all non-leakless type valves with a listing of tag numbers and reasons why leakless valves were not used.

All process drains shall be equipped with water seal, or a closed vent system and

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

### SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

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

control device complying with the requirements of 40CFR60 Subpart QQQ.

All new components in VOC service as defined in Rule 1173, except valves and flanges, shall be inspected quarterly using EPA reference Method 21. All new valves and flanges in VOC service except those specifically exempted by Rule 1173 shall be inspected monthly using EPA Method 21.

For the purpose of this condition, leakless valve shall be defined as any valve equipped with sealed bellow or equivalent as approved in writing by the District prior to installation.

Components shall be defined as any valve, fitting, pump, compressor, pressure relief device, diaphragm, hatch, sight-glass, and meter, which are not exempt by Rule 1173.

All new components in VOC service, a leak greater than 500 ppm but less than 1,000 ppm measured as methane above background as measured using EPA Method 21, shall be repaired within 14 days of detection.

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

[Systems subject to this condition : Process 1, System 4; Process 2, System 1; Process 3, System 1; Process 4, System 1, 3, 7; Process 5, System 1, 3, 5; Process 6, System 1; Process 8, System 1; Process 9, System 1; Process 12, System 7; Process 15, System 3; Process 23, System 1]

- S31.2 The following BACT requirements shall apply to VOC service fugitive components associated with the devices that are covered by application number(s) 501291, 494382 & 472872:

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

All new valves and major components in VOC service as defined by Rule 1173, except those specifically exempted by Rule 1173 and those in heavy liquid service as defined in Rule 1173, shall be distinctly identified from other components through their tag numbers (e.g. numbers ending in the letter "N"), and shall be noted in the records.

All open-ended valves shall be equipped with cap, blind flange, plug, or a second valve.

All pressure relief valves shall be connected to closed vent system or equipped with rupture disc.

All process drains shall be equipped with water seal, or a closed vent system and control device complying with the requirements of 40CFR60 Subpart QQQ.

All sampling connections shall be closed-purge, closed-loop, or closed-vent system.

All components are subject to District Rule 1173 and 40CFR 60 Subpart GGGa.

All new components in VOC service as defined in Rule 1173, except valves and flanges, shall be inspected quarterly using EPA reference Method 21. All new valves and flanges in VOC service except those specifically exempted by Rule 1173 shall be inspected monthly using EPA Method 21.

All new components in VOC service, a leak greater than 500 ppm but less than 1,000 ppm measured as methane above background as measured using EPA Method 21, shall be repaired within 14 days of detection.

All new valves in VOC service shall be leakless type, except those specifically exempted by Rule 1173 or approved by the District in the following applications: heavy liquid service, control valves, instrument piping/tubing, applications requiring torsional valve stem motion applications where failures could pose safety hazards (e.g. drain valves with valve stems in horizontal position), retrofits with space limitations, and valves not commercially available.

## FACILITY PERMIT TO OPERATE TESORO REFINING AND MARKETING CO

### SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

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

If 98.0 percent or greater of the new valve and the new flange population inspected is found to leak gaseous or liquid volatile organic compounds at a rate less than 500 ppm for two consecutive months, then the operator may revert to a quarterly inspection program with the approval of the executive officer. This condition does not apply to leakless valves.

The operator shall keep records of the monthly inspection( and quarterly where applicable), subsequent repair, and re-inspection, in a manner approved by the District.

The operator shall provide to the District no later than 90 days after initial startup, a recalculation of the fugitive emissions based on actual components installed and removed from service. The operator shall also submit a complete, as built, piping and instrumentation diagram(s) and copies of requisition data sheets for all non-leakless type valves with a listing of tag numbers and reasons why leakless valves were not used.

For the purpose of this condition, leakless valve shall be defined as any valve equipped with sealed bellow or equivalent as approved in writing by the District prior to installation.

Components shall be defined as any valve, fitting, pump, compressor, pressure relief device, diaphragm, hatch, sight-glass, and meter, which are not exempt by Rule 1173.

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

[Systems subject to this condition : Process 21, System 4]

S42.1 The operator shall not operate the FCCU unless the operator complies with the emission limits of the following Rule:

Contaminant	Rule	Rule/Subpart
PM10	District Rule	1105.1
NH3	District Rule	1105.1

## FACILITY PERMIT TO OPERATE TESORO REFINING AND MARKETING CO

### SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

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

If the operator fails to comply with any of the terms and conditions listed below, the operator shall be subject to the compliance deadlines as specified in Rule 1105.1(d)(1).

1. Award contract(s) to construct and install the control technology by April 28, 2006.
2. Commence construction phase of the control technology permitted by AQMD for compliance with Rule 1105.1(d)(1) by the later of May 1, 2006 or within 30 days of receiving permit. These dates may be extended in writing by the Executive Officer upon a request by Equilon if the CEQA document is not finalized by April 30, 2006. Such extension(s) shall not be for a period more than five months after the original deadline listed in this paragraph.
3. Start operation of the control technology permitted to ensure compliance with Rule 1105.1 (d)(1) by April 30, 2007.
4. Comply with Rule 1105.1 (d)(1) requirements no later than June 30, 2007.

**[RULE 1105.1, 11-7-2003]**

[Systems subject to this condition : Process 3, System 6]

### DEVICE CONDITIONS

#### A. Emission Limits

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

## FACILITY PERMIT TO OPERATE TESORO REFINING AND MARKETING CO

### SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

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

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]**

[Devices subject to this condition : D112]

A63.6 The operator shall limit emissions from this equipment as follows:

CONTAMINANT	EMISSIONS LIMIT
Visible emissions	Less than or equal to 10 Percent opacity

**[RULE 1158, 6-11-1999; RULE 1158, 7-11-2008]**

[Devices subject to this condition : D34, D41, D45, D46, D47, D49, D1155, D1156, D1157, D1158, D1159, D1160, D1161, D1162, D1164, D1165, D1438]

A63.7 The operator shall limit emissions from this equipment as follows:

CONTAMINANT	EMISSIONS LIMIT
Visible emissions	Less than or equal to 30 Percent opacity

## FACILITY PERMIT TO OPERATE TESORO REFINING AND MARKETING CO

### SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

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

Pursuant to 40CFR60.8(c), emissions in excess of the level of the applicable emission limit (40CFR60.102(a)(2)) during periods of startup, shutdown and malfunction shall not be considered a violation of the applicable emission limit (40CFR60.102(a)(2)) unless otherwise specified in the applicable standard.

The operator shall keep records to demonstrate compliance or exemption from this condition.

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

[Devices subject to this condition : D96]

A63.9 The operator shall limit emissions from this equipment as follows:

CONTAMINANT	EMISSIONS LIMIT
PM10	Less than or equal to 2768 LBS IN ANY ONE MONTH
VOC	Less than or equal to 1049 LBS IN ANY ONE MONTH

The operator shall calculate the monthly emissions for PM10 and VOC using either the equation below and the following emission factor: VOC= 0.0040 lb/MMBTU and PM10 = 0.01056 lb/MMBTU or the results of the most recent test whichever is higher

Monthly Emissions, lb/month = X\*(EF); Where X= monthly heat input , MMBTU/month ; and EF = emission factor indicated above

**[RULE 1303, 5-10-1996; RULE 1303, 12-6-2002]**

[Devices subject to this condition : D1629, D1634]

A63.10 The operator shall limit emissions from this equipment as follows:

CONTAMINANT	EMISSIONS LIMIT
CO	Less than or equal to 123 LBS PER DAY

## FACILITY PERMIT TO OPERATE TESORO REFINING AND MARKETING CO

### SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

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

PM	Less than or equal to 78 LBS PER DAY
ROG	Less than or equal to 67 LBS PER DAY
SOX	Less than or equal to 88493 LBS IN ANY ONE YEAR

The operator shall calculate the emission limit(s) of CO based on the AQMD certified continuous monitor pursuant to Rule 218. This monitoring system shall have the capability to show the cumulative daily emissions.

The operator shall calculate the emission limit(s) of SO<sub>x</sub> by using daily emission data reported to the AQMD pursuant to Regulation XX, for any 365-day period to demonstrate exemption from PSD requirements.

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

[Devices subject to this condition : D9]

- A99.4 The 3.6 Lbs/hr PM<sub>10</sub> emission limit(s) shall only apply when the fresh feed to the FCCU is 30.9 thousand barrels per day or less.

For the purposes of this condition, PM<sub>10</sub> emissions shall be defined as filterable PM<sub>10</sub> collected on the cyclone exit, probe and filters of the applicable test methods referenced in the Rule.

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

**[RULE 1105.1, 11-7-2003]**

[Devices subject to this condition : D96]

- A99.5 The 2.8 lb/1000 bbl fresh feed PM<sub>10</sub> emission limit(s) shall only apply when the fresh feed to the FCCU is 30.9 thousand barrels per day or more.

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

### SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

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

For the purposes of this condition, PM10 Emissions shall be defined as filterable PM10 collected on the cyclone exit, probe and filters of the applicable test methods referenced in the Rule..

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

**[RULE 1105.1, 11-7-2003]**

[Devices subject to this condition : D96]

- A99.11 The 6.65 LBS/MMSCF SOX emission limit(s) shall only apply during initial boiler commissioning to report RECLAIM emissions. The commissioning reporting period shall not exceed 498 hours for the duration of no more than 100 days from start of operation of this device.

**[RULE 2011, 5-6-2005]**

[Devices subject to this condition : D1629, D1634]

- A99.12 The 34 LBS/MMSCF SOX emission limit(s) shall only apply during the interim reporting period after initial boiler commissioning to report RECLAIM emissions. The interim reporting shall not exceed 12 months from start of operation of this equipment.

**[RULE 2011, 5-6-2005]**

[Devices subject to this condition : D1629, D1634]

- A99.13 The 9, 7 and 5 PPM NOX emission limit(s) shall not apply during boiler commissioning, startup, and shutdown periods. The commissioning period shall not exceed 498 operating hours for the duration of no more than 100 days. Cold start shall be restricted to the followings: maximum of 5 hrs per event, maximum of 48 events per year, no more than 14.5 lbs NOx per event. Shutdown periods shall not exceed 30 minutes per event, 24 hours per year.

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

### SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

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

For the purposes of this condition, start-up and shutdown shall be defined as the period when the exhaust temperature at the entrance to the SCR catalyst bed is below 546 degree F.

Written records of commissioning, start-ups and shutdowns shall be maintained and made available upon request from the Executive Officer of his designee

**[RULE 2005, 5-6-2005]**

[Devices subject to this condition : D1629, D1634]

- A99.14 The 50 PPM CO emission limit(s) shall not apply during boiler commissioning, startup, and shutdown periods. The commissioning period shall not exceed 498 operating hours for the duration of no more than 100 days. Cold start shall be restricted to the followings: maximum of 5 hrs per event, maximum of 48 events per year. Shutdown periods shall not exceed 30 minutes per event, 24 hours per year.

For the purposes of this condition, start-up and shutdown shall be defined as the period when the exhaust temperature at the entrance to the SCR catalyst bed is below 546 degree F.

Written records of commissioning, start-ups and shutdowns shall be maintained and made available upon request from the Executive Officer of his designee

**[RULE 1703(a)(2) - PSD-BACT, 10-7-1988]**

[Devices subject to this condition : D1629, D1634]

- A99.15 The 74.2 LBS/MMSCF NOX emission limit(s) shall only apply during initial boiler commissioning to report RECLAIM emissions. The commissioning period shall not exceed a total of 498 hours or a duration of 100 days from start of operation of this equipment. The NOx emission limit shall be defined as NOx emission factor.

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

[Devices subject to this condition : D1629, D1634]

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

### SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

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

A99.16 The 0.035 LBS/MMSCF NOX emission limit(s) shall only apply during the interim reporting period after initial boiler commissioning to report RECLAIM emissions. The interim reporting shall not exceed 12 months from start of operation of this equipment. The NOx emission limit shall be defined as NOx emission factor.

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

[Devices subject to this condition : D1629, D1634]

A195.2 The 10 PPMV NH3 emission limit(s) is averaged over consecutive 60 minutes at 3 percent O2 dry.

**[RULE 1105.1, 11-7-2003]**

[Devices subject to this condition : C1575, C1576, C1577]

A195.3 The 51.9 PPMV NOX emission limit(s) is averaged over 365-day rolling and at 0% O2.

For the purposes of this condition, this limit is a long term limit which applies at all times including during start-up, shutdown, malfunction and hydrotreater outages as well as operation of the FCCU with or without the CO Boiler operating .

**[ CONSENT DECREE, 3-21-2001]**

[Devices subject to this condition : D96]

A195.4 The 36.2 PPMV SOX emission limit(s) is averaged over 365-day rolling at 0% O2.

For the purposes of this condition, this limit is a long term limit which applies at all times including during start-up, shutdown, malfunction and hydrotreater outages as well as operation of the FCCU with or without the CO Boiler operating.

**[ CONSENT DECREE, 3-21-2001]**

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

### SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

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

[Devices subject to this condition : D96]

A195.5 The 63.2 PPMV NOX emission limit(s) is averaged over 24-hour rolling at 0% O2.

For the purposes of this condition, this limit shall apply when the FCCU and CO boiler are operating and does not apply during periods of start-up, shutdown, malfunction and hydrotreater outages.

[ **CONSENT DECREE, 3-21-2001** ]

[Devices subject to this condition : D96]

A195.6 The 88.6 PPMV NOX emission limit(s) is averaged over 24-hour rolling at 0% O2.

For the purposes of this condition, this limit shall apply when only the FCCU is operating and does not apply during periods of start-up, shutdown, malfunction and hydrotreater outages.

[ **CONSENT DECREE, 3-21-2001** ]

[Devices subject to this condition : D96]

A195.8 The 69.1 PPMV SOX emission limit(s) is averaged over 7-day rolling at 0% O2.

For the purposes of this condition, this limit shall apply when only the FCCU is operating and does not apply during periods of start-up, shutdown, malfunction and hydrotreater outages.

[ **CONSENT DECREE, 3-21-2001** ]

[Devices subject to this condition : D96]

A195.12 The 9 PPMV NOX emission limit(s) is averaged over 1 hour at 3 percent O2 dry.

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

### SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

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

The 9 ppm (1- hour) NO<sub>x</sub> shall apply when the boiler fires refinery fuel gas or a mixture of refinery fuel gas and natural gas with greater or equal 50% of heat input from refinery fuel gas.

This NO<sub>x</sub> hourly emission limit shall be calculated based on the measured NO<sub>x</sub> emissions using a certified RECLAIM CEMS and the heat input during all boiler operating hours except during:

Any District required source test performed without ammonia.

Periods when the exhaust temperature at the entrance to the SCR catalyst bed is less than 546 degree F, which is the minimum ammonia injection temperature.

RATA testing; RECLAIM Missing Data Period; Calibration and maintenance periods; Equipment breakdown periods as defined in Rule 2004; and periods of zero fuel flow.

**[RULE 1303(a)(1)-BACT, 5-10-1996; RULE 2005, 5-6-2005]**

[Devices subject to this condition : D1629, D1634]

A195.13 The 7 PPMV NO<sub>x</sub> emission limit(s) is averaged over a calendar month and is at dry conditions, corrected to 3 percent oxygen.

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

### SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

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

The 7 ppm( monthly) NO<sub>x</sub> shall apply when the boiler fires refinery fuel gas or a mixture of refinery fuel gas and natural gas with greater or equal 50% of heat input from refinery fuel gas.

This NO<sub>x</sub> calendar monthly emission limit shall be calculated based on the measured NO<sub>x</sub> emissions using a certified RECLAIM CEMS and the heat input during all boiler operating hours for the calendar month except during:.

Any District required source test performed without ammonia.

Periods of the exhaust temperature entering the SCR catalyst is less than 546 degree F, which is the minimum ammonia injection temperature:.

RATA testing; RECLAIM Missing Data Period; Calibration and maintenance periods; Equipment breakdown periods as defined in Rule 2004; and periods of zero fuel flow.

A data acquisition system(DAS) shall be installed and maintained to record the parameters necessary to determine the calendar monthly NO<sub>x</sub> concentration. In addition, the DAS shall calculate and display on demand the average monthly NO<sub>x</sub> PPM.

Any DAS concentration data and calculation shall be completed within 72 hours after the end of the calendar month. The recorded parameters and the calculated average monthly NO<sub>x</sub> PPM shall be kept for a period as stated in the section E of this facility permit and shall be readily available to the District personnel upon request.

**[RULE 1303(a)(1)-BACT, 5-10-1996; RULE 2005, 5-6-2005]**

[Devices subject to this condition : D1629, D1634]

A195.14 The 50 PPMV CO emission limit(s) is averaged over 1 hour at 3 percent O<sub>2</sub> dry.

[RULE 1703(a)(2) - PSD-BACT, 10-7-1988]

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

### SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

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

[Devices subject to this condition : D1629, D1634]

A195.15 The 5 PPMV NH<sub>3</sub> emission limit(s) is averaged over 1 hour at 3 percent O<sub>2</sub> dry.

The operator shall calculate and continuously record the NH<sub>3</sub> slip concentration using the following:  $NH_3(\text{ppmv}) = [a - b * c / 1E6] * 1E6 / b$ , where a = NH<sub>3</sub> injection rate (lb/hr) / 17 (lb/lbmole), b = dry exhaust gas flow rate (scf/hr) / 385.3 scf/lbmole, and c = change in measured NO<sub>x</sub> across the SCR (ppmv at 3 percent O<sub>2</sub>). The operator shall install and maintain a NO<sub>x</sub> analyzer to measure the SCR inlet NO<sub>x</sub> ppm accurate to within plus or minus 5 percent, calibrated at least once every 12 months.

The NH<sub>3</sub> analyzer shall be installed and operated within 90 days of initial start up.

The operator shall use the method described above or another alternative method approved by the Executive Officer.

The ammonia slip calculation procedures described above shall not be used for compliance determination for emission information determination without corroborative data using an approved reference test method for the determination of ammonia.

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

[Devices subject to this condition : D1629, D1634]

A195.16 The 5 PPMV NO<sub>x</sub> emission limit(s) is averaged over 1 hour at 3 percent O<sub>2</sub> dry.

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

### SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

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

The 5 ppm (1- hour) NO<sub>x</sub> limit shall apply when the boiler fires natural gas or a mixture of refinery fuel gas and natural gas with less 50% of heat input from refinery fuel gas.

This NO<sub>x</sub> hourly emission limit shall be calculated based on the measured NO<sub>x</sub> emissions using a certified RECLAIM CEMS and the heat input during all boiler operating hours except during:

Any District required source test performed without ammonia

Periods of the exhaust temperature at the entrance of the SCR catalyst bed is less than 546 degree F, which is the minimum ammonia injection temperature

RATA testing; RECLAIM Missing Data Period; calibration and maintenance periods; equipment breakdown periods as defined in Rule 2004; and periods of zero fuel flow

**[RULE 1303(a)(1)-BACT, 5-10-1996; RULE 2005, 5-6-2005]**

[Devices subject to this condition : D1629, D1634]

- A305.1 Whenever this equipment is in operation, the SCR serving this equipment, C764, is not required to be in operation, but may be operated at any control efficiency provided that the emission concentrations being monitored by the certified CEMS serving this equipment is below the valid upper range specified in the approved CEMS plan.

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

[Devices subject to this condition : D9]

- A327.2 For the purpose of determining compliance with District Rule 476, combustion contaminant emissions may exceed the concentration limit or the mass emission limit listed, but not both limits at the same time.

**[RULE 476, 10-8-1976]**

[Devices subject to this condition : D1629, D1634]

## FACILITY PERMIT TO OPERATE TESORO REFINING AND MARKETING CO

### SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

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

#### B. Material/Fuel Type Limits

B59.7 The operator shall only use the following material(s) in this device :

Refinery fuel gas meeting sulfur limit specified by condition B61.8, natural gas, or mixture of refinery fuel gas and natural gas

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

[Devices subject to this condition : D1629, D1634]

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

Compound	ppm by volume
H2S greater than	160

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]

[Devices subject to this condition : D9, D112]

B61.4 The operator shall not use fresh feed containing the following specified compounds:

Compound	weight percent
Total sulfur greater than	0.3

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

[Devices subject to this condition : D96]

B61.8 The operator shall not use refinery fuel gas containing the following specified compounds:

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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:**

Compound	ppm by volume
total sulfur compounds calculated as H <sub>2</sub> S greater than	40

The total reduced sulfur concentration limit shall apply to refinery fuel gas and be based on one-hour averaging period and measured before blending with natural gas

**[RULE 1303(b)(2)-Offset, 5-10-1996; RULE 1303(b)(2)-Offset, 12-6-2002]**

[Devices subject to this condition : D1629, D1634]

B61.10 The operator shall not use fuel gas containing the following specified compounds:

Compound	ppm by volume
H <sub>2</sub> S greater than	162
H <sub>2</sub> S greater than	60

The 162 ppm limit shall be based on a rolling 3-hour averaging period

The 60 ppm limit shall be based on a rolling 365 successive calendar day rolling average

**[40CFR 60 Subpart Ja, 6-24-2008]**

[Devices subject to this condition : D1629, D1634]

#### **C. Throughput or Operating Parameter Limits**

C1.23 The operator shall limit the number of turnovers to no more than 183 in any one year.

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

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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:**

[Devices subject to this condition : D562, D563]

C1.52 The operator shall limit the heat input to no more than 352 MM Btu per hour.

[RULE 1303(b)(2)-Offset, 12-6-2002; **RULE 2005, 5-6-2005**]

[Devices subject to this condition : D1629, D1634]

C12.2 The operator shall use this equipment in such a manner that the ESP daily average voltage and secondary current (or total power input) being monitored as indicated below are greater than or equal to the average value in the most recent source test which demonstrated compliance with the emission limits.

The operator shall install and maintain a continuous monitoring and recording system to accurately measure and record the:

1. Total flue gas inlet temperature to ESPs
2. Total flue gas flow rate
3. Current across each ESP
4. Voltage across each ESP

at each ESP. In addition, the operator shall keep records, in a manner approved by the District, for each of these parameters.

If the daily average ESP total power input falls below the level measured in the most recent source test which demonstrated compliance with the emission limit, a source test shall be performed within 90 days at the new minimum daily average ESP total power level. The source test shall be performed according to the requirements specified in Permit Condition D29.8

[**RULE 1105.1, 11-7-2003**]

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

### SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

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

[Devices subject to this condition : C1575, C1576, C1577]

C157.1 The operator shall install and maintain a pressure relief valve set at 50 psig.

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

[Devices subject to this condition : D1628]

#### **D. Monitoring/Testing Requirements**

D12.4 The operator shall install and maintain a(n) thermocouple or any other equivalent device to accurately indicate the presence of a flame at the pilot light.

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

The continuous monitoring system shall include EXACT CHAR alarms.  
CONDITION PARAMETER NOT SET UP

[**RULE 1118, 11-4-2005; RULE 3004(a)(4)-Periodic Monitoring, 12-12-1997; 40CFR 60 Subpart A, 6-13-2007**]

[Devices subject to this condition : C747, C748]

D12.10 The operator shall install and maintain a(n) flow meter to accurately indicate the flow rate of the total hourly throughput of injected ammonia.

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

The measuring device or gauge shall be accurate to within plus or minus 5 percent. It shall be calibrated once every 12 months.

[**RULE 1303(a)(1)-BACT, 5-10-1996; RULE 2011, 5-6-2005**]

[Devices subject to this condition : C1631, C1636]

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

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

D12.11 The operator shall install and maintain a(n) temperature reading device to accurately indicate the temperature of the boiler exhaust at the inlet to the SCR reactor.

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

The measuring device or gauge shall be accurate to within plus or minus 5 percent. It shall be calibrated once every 12 months.

**[RULE 1303(a)(1)-BACT, 5-10-1996; RULE 2012, 5-6-2005]**

[Devices subject to this condition : C1631, C1636]

D12.12 The operator shall install and maintain a(n) pressure gauge to accurately indicate the differential pressure across the the SCR catalyst bed in inches water column.

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

The measuring device or gauge shall be accurate to within plus or minus 5 percent. It shall be calibrated once every 12 months.

**[RULE 1303(a)(1)-BACT, 5-10-1996; RULE 2012, 5-6-2005]**

[Devices subject to this condition : C1631, C1636]

D28.3 The operator shall conduct source test(s) in accordance with the following specifications:

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

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

The test shall be conducted to confirm the emission limits of this equipment as specified in Condition A63.2 for device D32 and Condition A63.10 for device D9.

The test shall be conducted to determine and report the mass emission rate in pound per hour for ROG, PM10 and CO.

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 confirm the CO emission concentration limit of 35 ppm, corrected to 3 percent oxygen, dry basis.

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

The District shall be notified of the date and time of the test at least 10 days prior to the test.

The test shall be conducted at least once every three years for ROG, PM10 and CO emissions.

**[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]**

[Devices subject to this condition : D9]

D28.8 The operator shall conduct source test(s) in accordance with the following specifications:

## FACILITY PERMIT TO OPERATE TESORO REFINING AND MARKETING CO

### SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

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

The test shall be conducted to determine emission rate of NO<sub>x</sub>, SO<sub>x</sub>, ROG, CO, PM and PM<sub>10</sub>. The operator shall submit a test protocol to the District at least 60 days prior to the initial testing. The initial and annual test shall be conducted according to the approved test protocol or any subsequently approved revisions. The report of the test and operating condition of the equipment shall be submitted to the District within 60 days after the test.

The District shall be notified of the date and time of the test at least 10 days prior to the test.

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

[Devices subject to this condition : D96]

D28.10 The operator shall conduct source test(s) in accordance with the following specifications:

The test shall be conducted before and after the boiler burner modification have been completed. The post-modification source test shall be conducted within 210 days of initial startup.

The test shall be conducted to determine emission rate of NO<sub>x</sub>, SO<sub>x</sub>, 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(b)(2)-Offset, 5-10-1996; RULE 3004(a)(4)-Periodic Monitoring, 12-12-1997]**

[Devices subject to this condition : D112]

D29.1 The operator shall conduct source test(s) for the pollutant(s) identified below.

Pollutant(s) to be tested	Required Test Method(s)	Averaging Time	Test Location

## FACILITY PERMIT TO OPERATE TESORO REFINING AND MARKETING CO

### SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

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

PM emissions	Approved District method	1 hour	Outlet
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The test(s) shall be conducted at least annually.

The test shall be conducted when the equipment is operating under normal conditions.

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

Source test results shall include the following parameters: FCCU feed rate; catalyst recirculation rate; coke burn rate; oxygen content of exhaust gases; exhaust flow rate; exhaust gas moisture content; the flue gas temperature at the outlet of the ESP; and the average current, voltage, and spark rate at each of the ESP fields

**[RULE 3004(a)(4)-Periodic Monitoring, 12-12-1997; RULE 404, 2-7-1986; RULE 405, 2-7-1986; CONSENT DECREE, 3-21-2001]**

[Devices subject to this condition : D96]

D29.8 The operator shall conduct source test(s) for the pollutant(s) identified below.

Pollutant(s) to be tested	Required Test Method(s)	Averaging Time	Test Location
PM10 emissions	District Method 5.2 Modified with EPA Method 201A Cyclone (filterables compliance, condensables information)	District-approved averaging time	Combined Stack Outlet of the ESP's

## FACILITY PERMIT TO OPERATE TESORO REFINING AND MARKETING CO

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

PM10 emissions	District Method 5.2 (filterables compliance, condensables information)	District-approved averaging time	Combined Stack Outlet of the ESP's
PM10 emissions	District Method 5.2 with Previously Determined PM10 to PM Ratio Applied (filterables compliance, condensables information)	District-approved averaging time	Combined Stack Outlet of the ESP's
PM10 emissions	EPA Method 5 (filterables compliance) and District Method 5.2 (condensables information)	District-approved averaging time	Combined Stack Outlet of the ESP's
NH3 emissions	District method 207.1	1 hour	Combined Stack Outlet of the ESP's
NOX emissions	District method 100.1	1 hour	Combined Stack Outlet of the ESP's
CO emissions	District Method 100.1 or 10.1	1 hour	Combined Stack Outlet of the ESP's
VOC	District Method 25.1 or 25.3	1 hour	Combined Stack Outlet of the ESP's

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

### **SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE**

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

The operator shall choose any of the PM10 test methods as indicated above to comply with Rule 1105.1 requirements and the test results of any of the selected test methods shall be used to determine compliance with Rules 404 and 405.

For the purpose of this condition filterable PM10 is the PM10 collected on the cyclone exit, probe, and filter(s) of the applicable test methods referenced above. Condensable PM10 is the PM10 collected in the impingers of the applicable test methods referenced above

The test shall be conducted after AQMD approval of the source test protocol, but no later than 180 days after initial start-up of the new ESP's. The AQMD engineer shall be notified in writing of the date and time of the test at least 10 days prior to the test.

The test shall be conducted in accordance with AQMD approves source test protocol. The protocol shall be submitted to the AQMD no later than 45 days before the proposed test date and shall be approved by the AQMD before test commences. The test protocol shall include the proposed operating conditions of the FCCU during the test, the identity of the test lab, a statement from the testing lab certifying that it meets the criteria of R-304, and a description of all sampling and analytical procedures.

The test shall be conducted at two different throughput ranges. The 1st throughput range when the FCCU is operating at 30.9 thousand barrels a day or less. The 2nd throughput range when the FCCU is operating at 30.9 thousand barrels per day or more.

The test(s) shall be conducted at least every year with the two different ranges after initial source test(s).

Source test results shall include the following parameters: FCCU feed rate in BPD; catalyst recirculation rate in BPD; catalyst inventory in the equipment; fresh catalyst feed; coke burn rate; oxygen content of exhaust gases; exhaust flow rate; exhaust gas moisture content; the flue gas temperature at the outlet of the ESP; ammonia injection rate prior to the ESPs( if applicable) and the average current in amps , voltage in volts and spark rate at each ESP field in use

## FACILITY PERMIT TO OPERATE TESORO REFINING AND MARKETING CO

### SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

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

A source test report shall be submitted to the District no later than 60 days after the source test was completed

**[RULE 1105.1, 11-7-2003; RULE 3004(a)(4)-Periodic Monitoring, 12-12-1997; RULE 404, 2-7-1986; RULE 405, 2-7-1986]**

[Devices subject to this condition : C1575, C1576, C1577]

D29.10 The operator shall conduct source test(s) for the pollutant(s) identified below.

Pollutant(s) to be tested	Required Test Method(s)	Averaging Time	Test Location
NH3 emissions	Approved District method	1 hour	Outlet of the SCR

The test shall be conducted at least quarterly during the first twelve months of operation and at least annually thereafter. The NOx concentration, as determined by the CEMS, shall be simultaneously recorded during the ammonia slip test. If the CEMS is inoperable or not yet certified, the test shall be conducted to determine the NOx emissions using District Method 100.1 measured over 60 minutes averaging time period.

The test shall be conducted no later than 180 days after initial start up

The test results shall be submitted to the District within 60 days after the test date. The AQMD shall be notified of the date and time of the test at least 7 days prior to the test

The test shall be conducted to demonstrate compliance with Rule 1303 concentration limit. If the equipment is not operated in any given quarter, the operator may elect to defer the required testing to a quarter in which the equipment is operated.

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

[Devices subject to this condition : C1631, C1636]

## FACILITY PERMIT TO OPERATE TESORO REFINING AND MARKETING CO

### SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

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

D29.12 The operator shall conduct source test(s) for the pollutant(s) identified below.

Pollutant(s) to be tested	Required Test Method(s)	Averaging Time	Test Location
NOX emissions	District method 100.1	1 hour	Outlet of the SCR
CO emissions	District method 100.1	1 hour	Outlet of the SCR
SOX emissions	AQMD Laboratory Method 307-91	District-approved averaging time	fuel sample
VOC emissions	District Method 25.3	1 hour	Outlet of the SCR
PM10 emissions	District Method 5	District-approved averaging time	Outlet of the SCR

The test shall be conducted after AQMD approval of the source test protocol, but no later than 180 days after initial start-up. The AQMD shall be notified of the date and time of the test at least 10 days prior to the test.

The test shall be conducted to determine the oxygen levels in the exhaust. In addition, the test shall record the fuel flow rate(CFH), the flue gas flowrate.

The test shall be conducted in accordance with AQMD approved source test protocol. The protocol shall be submitted to the AQMD(attention:Sawsan Andrawis) no later than 45 days before the proposed test date and shall be approved by the AQMD before test commences. The test protocol shall include the proposed operating conditions of the boiler during the test, the identity of the testing lab, a statement from the testing lab certifying that it meets the criteria of Rule 304, and a description of all sampling and analytical procedures.

The test shall be conducted when this equipment is operating at maximum, average, and minimum load.

**[RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002; RULE 1303(b)(2)-Offset, 5-10-1996; RULE 1303(b)(2)-Offset, 12-6-2002; RULE 1703(a)(2) - PSD-BACT, 10-7-1988; RULE 2005, 4-20-2001; RULE 2005, 5-6-2005]**

## FACILITY PERMIT TO OPERATE TESORO REFINING AND MARKETING CO

### SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

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

[Devices subject to this condition : D1629, D1634]

D29.13 The operator shall conduct source test(s) for the pollutant(s) identified below.

Pollutant(s) to be tested	Required Test Method(s)	Averaging Time	Test Location
VOC emissions	District Method 25.3	1 hour	Outlet of the SCR
PM10 emissions	District Method 5	District-approved averaging time	Outlet of the SCR

The test shall be conducted at least once every three years.

The test shall be conducted and the results submitted to the AQMD within 60 days after the test date. The AQMD shall be notified of the date and time of the test at least 7 days prior to the test.

The test shall be conducted when this equipment is operating at least at 80 percent of maximum load.

The test shall be conducted to demonstrate compliance with all applicable emission limits.

**[RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002; RULE 1303(b)(2)-Offset, 5-10-1996; RULE 1303(b)(2)-Offset, 12-6-2002]**

[Devices subject to this condition : D1629, D1634]

D82.2 The operator shall install and maintain a CEMS to measure the following parameters:

CO concentration in ppmv

Oxygen concentration in percent volume

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

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

### SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

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

[Devices subject to this condition : D96]

D82.5 The operator shall install and maintain a CEMS to measure the following parameters:

CO concentration in ppmv at the outlet of the SCR serving the equipment

Concentrations shall be corrected to 3 percent oxygen on a dry basis.

The CEMS shall be installed and operated no later than 90 days after initial start up of the boiler and in accordance with an approved AQMD Rule 218 CEMS plan application. The operator shall not install the CEMS prior to receiving initial approval. Within two weeks of the boiler start-up, the operator shall provide written notification to the AQMD of the exact date of start-up

[RULE 1703(a)(2) - PSD-BACT, 10-7-1988]

[Devices subject to this condition : D1629, D1634]

D82.6 The operator shall install and maintain a CEMS to measure the following parameters:

NOX concentration in ppmv at the outlet of the SCR serving the equipment

Concentrations shall be corrected to 3 percent oxygen on a dry basis.

The CEMS shall be installed and operating no later than 90 days after initial start up of the boiler and shall comply with the requirements of Rule 2012. During the interim period between the initial start-up and the provisional certification date of the CEMS, the operator shall comply with the monitoring requirements of Rule 2012(h)(2) and 2012(h)(3). Within two weeks of boiler start-up date, the operator shall provide written notification to the District of the exact date of start-up

[**RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(b)(2)-Offset, 5-10-1996**]

[Devices subject to this condition : D1629, D1634]

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

### SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

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

D90.7 The operator shall continuously monitor the H<sub>2</sub>S 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 H<sub>2</sub>S concentration at a single location for fuel combustion devices, if monitoring at this location accurately represents the concentration of H<sub>2</sub>S in the fuel gas being burned in this device.

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

[Devices subject to this condition : D9, D112]

D90.8 The operator shall continuously monitor the opacity at the stack according to the following specifications:

The operator shall use an opacity meter to monitor the parameter.

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

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

[Devices subject to this condition : D96]

D90.11 The operator shall continuously monitor the temperature in degree F of the flue gas at the inlet to the ESP according to the following specifications:

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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:**

The operator shall monitor once every 15 minutes.

The operator shall automatically record electronically the above parameter at least one measurement every hour. These records shall be maintained for at least five years and made available to AQMD personnel upon request

The continuous monitor shall be installed and operated whenever the ESP is operating

Monitoring and recording of this parameter shall not be required during periods of routine maintenance or malfunction of the monitoring and recording devices

The temperature monitor shall have a minimum range from 500 to 710 degrees F and be accurate to within plus or minus 5 percent and shall be calibrated at least once every 12 months

**[RULE 1105.1, 11-7-2003]**

[Devices subject to this condition : C1575, C1576, C1577]

D90.12 The operator shall continuously monitor the the flow rate in scfm of the flue gas at the inlet to the ESP according to the following specifications:

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

### SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

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

The operator shall monitor once every 15 minutes.

The operator shall automatically record electronically the above parameter at least one measurement every hour. These records shall be maintained for at least five years and made available to AQMD personnel upon request

The continuous monitor shall be installed and operated whenever the ESP is operating

Monitoring and recording of this parameter shall not be required during periods of routine maintenance or malfunction of the monitoring and recording devices

The flow rate monitor shall have a minimum range of 55,000 to 75,000 scfm and be accurate to within plus or minus 5 percent and shall be calibrated at least once every 12 months

**[RULE 1105.1, 11-7-2003]**

[Devices subject to this condition : C1575, C1576, C1577]

D90.13 The operator shall continuously monitor the voltage in volts across the ESP's T/R sets according to the following specifications:

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

### SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

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

The operator shall monitor once every 15 minutes.

The operator shall automatically record electronically the above parameter at least one measurement every hour. These records shall be maintained for at least five years and made available to AQMD personnel upon request

The continuous monitor shall be installed and operated whenever the ESP is operating

Monitoring and recording of this parameter shall not be required during periods of routine maintenance or malfunction of the monitoring and recording devices

The voltage monitor shall have a minimum range of 15 to 54 KV and be accurate to within plus or minus 5 percent and shall be calibrated at least once every 12 months

**[RULE 1105.1, 11-7-2003]**

[Devices subject to this condition : C1575, C1576, C1577]

D90.14 The operator shall continuously monitor the current in amperes across the ESP's T/R sets according to the following specifications:

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

### SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

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

The operator shall monitor once every 15 minutes.

The operator shall automatically record electronically the above parameter at least one measurement every hour. These records shall be maintained for at least five years and made available to AQMD personnel upon request

The continuous monitor shall be installed and operated whenever the ESP is operating

Monitoring and recording of this parameter shall not be required during periods of routine maintenance or malfunction of the monitoring and recording devices

The current monitor shall have a minimum range of 400 to 1867 Amps and be accurate to within plus or minus 5 percent and shall be calibrated at least once every 12 months

**[RULE 1105.1, 11-7-2003]**

[Devices subject to this condition : C1575, C1576, C1577]

D90.15 The operator shall continuously monitor the the NH3 injection rate in scfh at the ESP inlet according to the following specifications:

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

### SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

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

The operator shall monitor once every 15 minutes.

The operator shall automatically record electronically the above parameter at least one measurement every hour. These records shall be maintained for at least five years and made available to AQMD personnel upon request

The continuous monitor shall be installed and operated whenever the ESP is operating

Monitoring and recording of this parameter shall not be required during periods of routine maintenance or malfunction of the monitoring and recording devices

The NH<sub>3</sub> injection rate monitor shall have a minimum range of 0 to 300 scfh and be accurate to within plus or minus 5 percent and shall be calibrated at least once every 12 months

**[RULE 1105.1, 11-7-2003]**

[Devices subject to this condition : C1575, C1576, C1577]

D90.20 The operator shall continuously monitor the H<sub>2</sub>S 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 Ja 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 H<sub>2</sub>S concentration at a single location for fuel combustion devices, if monitoring at this location accurately represents the concentration of H<sub>2</sub>S in the fuel gas being burned in this device.

**[40CFR 60 Subpart Ja, 6-24-2008]**

[Devices subject to this condition : D1629, D1634]

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

### SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

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

D90.21 The operator shall continuously monitor the total sulfur compounds calculated as H<sub>2</sub>S concentration in the refinery fuel gas before being burned in this device and before blending with natural gas according to the following specifications:

The CEMS shall be approved by the District before the initial start-up

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

The operator may monitor the total sulfur compounds calculated as H<sub>2</sub>S concentration at a single location for fuel combustion devices, if monitoring at this location accurately represents the concentration of the total sulfur compounds calculated as H<sub>2</sub>S in the fuel gas being burned in this device.

**[RULE 2005, 5-6-2005]**

[Devices subject to this condition : D1629, D1634]

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

### SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

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

D323.1 The operator shall conduct an inspection for visible emissions from all stacks and other emission points of this equipment whenever there is a public complaint of visible emissions, whenever visible emissions are observed, and on a semi-annual basis, at least, unless the equipment did not operate during the entire semi-annual period. The routine semi-annual inspection shall be conducted while the equipment is in operation and during daylight hours.

If any visible emissions (not including condensed water vapor) are detected that last more than three minutes in any one hour, the operator shall verify and certify within 24 hours that the equipment causing the emission and any associated air pollution control equipment are operating normally according to their design and standard procedures and under the same conditions under which compliance was achieved in the past, and either:

- 1). Take corrective action(s) that eliminates the visible emissions within 24 hours and report the visible emissions as a potential deviation in accordance with the reporting requirements in Section K of this permit; or
- 2). Have a CARB-certified smoke reader determine compliance with the opacity standard, using EPA Method 9 or the procedures in the CARB manual "Visible Emission Evaluation", within three business days and report any deviations to AQMD.

The operator shall keep the records in accordance with the recordkeeping requirements in Section K of this permit and the following records:

- 1). Stack or emission point identification;
- 2). Description of any corrective actions taken to abate visible emissions;
- 3). Date and time visible emission was abated; and
- 4). All visible emission observation records by operator or a certified smoke reader.

[**RULE 3004(a)(4)-Periodic Monitoring, 12-12-1997; RULE 401, 3-2-1984; RULE 401, 11-9-2001**]

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

### **SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE**

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

[Devices subject to this condition : D34, D41, D45, D46, D47, D49, D1155, D1156, D1157, D1158, D1159, D1160, D1161, D1162, D1164, D1165, D1288, D1438]

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

### SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

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

D323.2 The operator shall conduct an inspection for visible emissions from all stacks and other emission points of this equipment whenever there is a public complaint of visible emissions, whenever visible emissions are observed, and on a bi-weekly basis, at least, unless the equipment did not operate during the entire bi-weekly period. The routine bi-weekly inspection shall be conducted while the equipment is in operation and during daylight hours.

If any visible emissions (not including condensed water vapor) are detected that last more than three minutes in any one hour, the operator shall verify and certify within 24 hours that the equipment causing the emission and any associated air pollution control equipment are operating normally according to their design and standard procedures and under the same conditions under which compliance was achieved in the past, and either:

- 1). Take corrective action(s) that eliminates the visible emissions within 24 hours and report the visible emissions as a potential deviation in accordance with the reporting requirements in Section K of this permit; or
- 2). Have a CARB-certified smoke reader determine compliance with the opacity standard, using EPA Method 9 or the procedures in the CARB manual "Visible Emission Evaluation", within three business days and report any deviations to AQMD.

The operator shall keep the records in accordance with the recordkeeping requirements in Section K of this permit and the following records:

- 1). Stack or emission point identification;
- 2). Description of any corrective actions taken to abate visible emissions;
- 3). Date and time visible emission was abated; and
- 4). All visible emission observation records by operator or a certified smoke reader.

[**RULE 3004(a)(4)-Periodic Monitoring, 12-12-1997; RULE 401, 3-2-1984; RULE 401, 11-9-2001**]

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

### SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

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

[Devices subject to this condition : C747, C748]

D323.3 The operator shall conduct an inspection for visible emissions from all stacks and other emission points of this equipment whenever there is a public complaint of visible emissions, whenever visible emissions are observed, and on a monthly basis, at least, unless the equipment did not operate during the entire monthly period. The routine monthly inspection shall be conducted while the equipment is in operation and during daylight hours.

If any visible emissions (not including condensed water vapor) are detected that last more than three minutes in any one hour, the operator shall verify and certify within 24 hours that the equipment causing the emission and any associated air pollution control equipment are operating normally according to their design and standard procedures and under the same conditions under which compliance was achieved in the past, and either:

- 1). Take corrective action(s) that eliminates the visible emissions within 24 hours and report the visible emissions as a potential deviation in accordance with the reporting requirements in Section K of this permit; or
- 2). Have a CARB-certified smoke reader determine compliance with the opacity standard, using EPA Method 9 or the procedures in the CARB manual "Visible Emission Evaluation", within three business days and report any deviations to AQMD.

The operator shall keep the records in accordance with the recordkeeping requirements in Section K of this permit and the following records:

- 1). Stack or emission point identification;
- 2). Description of any corrective actions taken to abate visible emissions;
- 3). Date and time visible emission was abated; and
- 4). All visible emission observation records by operator or a certified smoke reader.

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

### SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

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

**[RULE 3004(a)(4)-Periodic Monitoring, 12-12-1997; RULE 401, 3-2-1984; RULE 401, 11-9-2001]**

[Devices subject to this condition : C1575, C1576, C1577]

- 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 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]**

[Devices subject to this condition : D9, D112]

#### **E. Equipment Operation/Construction Requirements**

- E73.2 Notwithstanding the requirements of Section E conditions, the operator may, at his discretion, choose not to use ammonia injection if any of the following requirement(s) are met:

the filterable PM10 emissions to the atmosphere are: 3.6 lbs/hr when the feed rate to the FCCU is equal to or lower than 30.9 thousand barrels per day and 2.8 lbs per 1000 bbl fresh feed when the feed rate is greater than 30.9 thousand barrels per day

**[RULE 1105.1, 11-7-2003]**

[Devices subject to this condition : C1575, C1576, C1577]

- E73.3 Notwithstanding the requirements of Section E conditions, the operator is not required to use more than one flare gas recovery compressor if:

The load on the flare gas recovery system is not sufficient to require more than one flare gas recovery compressor to be online

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

### SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

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

**[RULE 1118, 11-4-2005]**

[Devices subject to this condition : D1600, D1601, D1602, D1603, D1604]

- E73.5 Notwithstanding the requirements of Section E conditions, the operator may, at his discretion, choose not to use ammonia injection if any of the following requirement(s) are met:

The inlet exhaust temperature to the SCR reactor is below 546 Deg F

**[RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002; RULE 2005, 5-6-2005]**

[Devices subject to this condition : C1631, C1636]

- E144.1 The operator shall vent this equipment, during filling, only to the vessel from which it is being filled.

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

[Devices subject to this condition : D1628]

- E179.3 For the purpose of the following condition number(s), continuously record shall be defined as once every hour and shall be calculated upon average of the continuous monitoring for that hour.

Condition Number D 12-10

Condition Number D 12-11

**[RULE 1303(a)(1)-BACT, 5-10-1996; RULE 2012, 12-5-2003; RULE 2012, 1-7-2005]**

[Devices subject to this condition : C1631, C1636]

- E179.4 For the purpose of the following condition number(s), continuously record shall be defined as once every month and shall be calculated upon average of the continuous monitoring for that month.

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

### SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

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

Condition Number D 12-12

**[RULE 1303(a)(1)-BACT, 5-10-1996; RULE 2012, 12-5-2003; RULE 2012, 1-7-2005]**

[Devices subject to this condition : C1631, C1636]

E193.1 The operator shall operate and maintain this equipment according to the following specifications:

The operator shall comply with all applicable requirements specified in Subpart A of the 40CFR60

**[40CFR 60 Subpart A, 6-13-2007]**

[Devices subject to this condition : C747, C748]

E193.2 The operator shall construct, operate, and maintain this equipment according to the following specifications:

The operator shall comply with all mitigations measures stipulated by the AQMD Certified Negative Declaration dated April 27, 2006

[CA PRC CEQA, 11-23-1970]

[Devices subject to this condition : C1575, C1576, C1577]

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

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

### SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

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

Whenever the ESP system (Devices C1575, C1576 and C1577) is in operation and venting the FCCU Regenerator Catalyst fine exhaust, the operator shall maintain in operation a minimum of 2 of 3 ESP units , each with a minimum of 7 of 8 active transformer/rectifier sets.

The operator shall not operate the FCCU if emissions from the FCCU to the atmosphere exceed the following limits for filterable PM10: 3.6 lbs/hr when the fresh feed to the FCCU is equal to or less than 30.9 thousand barrels per day, and 2.8 lbs per 1000 bbl fresh feed when the feed rate is greater than 30.9 thousand barrels per day.

**[RULE 1105.1, 11-7-2003]**

[Devices subject to this condition : C1575, C1576, C1577]

E193.4 The operator shall operate and maintain this equipment according to the following requirements:

The operator shall discharge dust collected in the ESP's only into leak-free hoppers or closed container bins equipped with fabric sock filters. The dust from these hoppers shall be loaded into vacuum trucks which are leak-free.

**[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 : C1575, C1576, C1577]

E336.2 The operator shall vent the vent gases from this equipment as follows:

All vent gases under normal operating conditions shall be directed to a vapor recovery system consisting of compressors, D641, D642, D643, and/or D644, which can be operated independently to maintain a system vacuum that efficiently collects all vented gases.

This equipment shall not be operated unless the vapor recovery system is in full use and has a valid permit to receive vent gases from this equipment.

## FACILITY PERMIT TO OPERATE TESORO REFINING AND MARKETING CO

### SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

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

[RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(b)(2)-Offset, 5-10-1996]

[Devices subject to this condition : D562, D563, D1567]

E336.3 The operator shall vent the vent gases from this equipment as follows:

All vent gases under normal operating conditions shall be directed to the DCU Blowdown Recovery system.

This equipment shall not be operated unless the above vapor recovery system is in full use and has a valid permit to receive vent gases from this equipment.

[RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(b)(2)-Offset, 5-10-1996]

[Devices subject to this condition : D20]

#### H. Applicable Rules

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]

[Devices subject to this condition : D9, D112]

H23.4 This equipment is subject to the applicable requirements of the following rules or regulations:

Contaminant	Rule	Rule/Subpart
VOC	40CFR60, SUBPART	GGG

[40CFR 60 Subpart GGG, 6-2-2008]

## FACILITY PERMIT TO OPERATE TESORO REFINING AND MARKETING CO

### SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

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

[Devices subject to this condition : D68, D377, D901, D918]

H23.5 This equipment is subject to the applicable requirements of the following rules or regulations:

Contaminant	Rule	Rule/Subpart
VOC	District Rule	1173

[**RULE 1173, 5-13-1994**; RULE 1173, 2-6-2009]

[Devices subject to this condition : D1357, D1361, D1419, D1454, D1477]

H23.16 This equipment is subject to the applicable requirements of the following rules or regulations:

Contaminant	Rule	Rule/Subpart
VOC	District Rule	1173
VOC	40CFR60, SUBPART	GGG

[**RULE 1173, 5-13-1994**; RULE 1173, 2-6-2009; **40CFR 60 Subpart GGG, 6-2-2008**]

[Devices subject to this condition : D1365, D1380]

H23.32 This equipment is subject to the applicable requirements of the following rules or regulations:

Contaminant	Rule	Rule/Subpart
CO	40CFR60, SUBPART	J
PM	40CFR60, SUBPART	J
Visible Emissions	40CFR60, SUBPART	J
SOX	40CFR60, SUBPART	J

## FACILITY PERMIT TO OPERATE TESORO REFINING AND MARKETING CO

### SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

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

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

[Devices subject to this condition : D96]

H23.38 This equipment is subject to the applicable requirements of the following rules or regulations:

Contaminant	Rule	Rule/Subpart
SOX	District Rule	1118

**[RULE 1118, 11-4-2005]**

[Devices subject to this condition : C747, C748]

H23.39 This equipment is subject to the applicable requirements of the following rules or regulations:

Contaminant	Rule	Rule/Subpart
VOC	District Rule	1173
VOC	40CFR60, SUBPART	GGGa

**[RULE 1173, 5-13-1994; RULE 1173, 2-6-2009; 40CFR 60 Subpart GGGa, 6-2-2008]**

[Devices subject to this condition : D1600, D1601, D1602, D1603, D1604, D1608]

H23.40 This equipment is 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]**

[Devices subject to this condition : D562, D563, D1480, D1481, D1482, D1483, D1484, D1485]

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

### SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

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

#### **I. Administrative**

- 11.1 The operator shall comply with all the requirements of the conditions and compliance schedule as specified in the Variance, Case No. 4982-77, issued on April 24, 2007, in accordance with the Findings and Decisions of the Hearing Board or as subsequently modified by the Hearing Board. The operator shall submit progress reports at least semi-annually, or more frequently if specified in the Findings and Decisions. The progress reports shall contain dates for achieving activities, milestones or compliance required in the schedule of compliance and dates when such activities, milestones or compliance were achieved; and an explanation of why any dates in the schedule of compliance were not, or will not be met, and any preventative or corrective measures adopted.

The variance (or Order for Abatement) referenced in this condition does not affect federal or citizen enforceability of the underlying SIP approved rules for which the applicant is receiving the variance (or Order for Abatement).

**[RULE 3004(a)(10)(C), 12-12-1997]**

[Devices subject to this condition : C747, C748]

- 130.1 In accordance with Rule 3002(a)(3), the permit for this equipment is being issued as a non-Title V permit.

The facility permit holder shall file an application for a Title V permit revision for this equipment within 90 days of the issuance of the facility's initial Title V permit.

**[RULE 3002, 11-14-1997]**

[Devices subject to this condition : D10, D11, D15, D16, D17, D18, D19, D20, D24, D25, D26, D27, D28, D29, D30, D31, D641, D642, D643, D644, D886, D887, D890, D891, D892, D893, D894, D895, D896, D900, D901, D904, D906, D969, D1088, D1132, D1133, D1134, D1135, D1136, D1137, D1141, D1143, D1147, D1149, D1151, D1316, D1357, D1477, D1567, D1600, D1601, D1602, D1603, D1604, D1605, D1606, D1607, D1608, D1615, D1616, D1661, D1662, D1663]

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

### SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

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

- I296.1 This equipment shall not be operated unless the operator demonstrates to the Executive Officer that the facility holds sufficient RTCs to offset the prorated annual emissions increase for the first compliance year of operation. In addition, this equipment shall not be operated unless the operator demonstrates to the Executive Officer that, at the commencement of each compliance year after the first compliance year of operation, the facility holds sufficient RTCs in an amount equal to the annual emissions increase.

**[RULE 2005, 5-6-2005]**

[Devices subject to this condition : D9]

- I296.3 This equipment shall not be operated unless the operator demonstrates to the Executive Officer that the facility holds sufficient RTCs to offset the prorated annual emissions increase for the first compliance year of operation. In addition, this equipment shall not be operated unless the operator demonstrates to the Executive Officer that, at the commencement of each compliance year after the first compliance year of operation, the facility holds sufficient RTCs in an amount equal to the annual emissions increase.

To comply with this condition, the operator shall prior to the first compliance year hold a minimum 49,568 lbs/yr of NO<sub>x</sub> RTCs and 13,393 lbs/yr of SO<sub>x</sub> RTCs. This condition shall apply to the first year of operation, commencing with the initial operation of the boiler

To comply with this condition, the operator shall, prior to the beginning of all years subsequent to the first compliance year, hold a minimum 40,594 lbs/yr of NO<sub>x</sub> RTCs and 12,789 lbs/yr of SO<sub>x</sub> RTCs for operation of the boiler. In accordance with Rule 2005(f), unused RTCs may be sold only during the reconciliation period for the fourth quarter of the applicable compliance year inclusive of the first year

For the purpose of this condition, unused RTCs is the difference between (1) the amount of NO<sub>x</sub> RTCs required to be held at the beginning of a compliance year as specified in this condition and the amount of NO<sub>x</sub> emissions during each applicable compliance year and (2) the amount of SO<sub>x</sub> RTCs required to be held at the beginning of a compliance year as specified in this condition and amount of SO<sub>x</sub> emissions during each applicable compliance year

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

### SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

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

**[RULE 2005, 5-6-2005]**

[Devices subject to this condition : D1629, D1634]

#### **K. Record Keeping/Reporting**

K40.3 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.

Emission data shall be expressed in terms of concentration (ppmv), corrected to 3 percent oxygen, dry basis.

Emission data shall be expressed in terms of mass rate (lbs/hr). In addition, solid PM emissions, if required to be tested, shall also be reported in terms of grains per DSCF.

Emission data shall be expressed in terms of lbs/MM cubic feet.

All exhaust flow rate shall be expressed in terms of dry standard cubic feet per minute (DSCFM) and dry actual cubic feet per minute (DACFM).

All moisture concentration shall be expressed in terms of percent corrected to 3 percent oxygen.

Source test results shall also include oxygen levels in the exhaust, the fuel flow rate (CFH), the fuel gas temperature under which the test conducted under which the test was conducted.

**[RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002; RULE 1303(b)(2)-Offset, 5-10-1996; RULE 1303(b)(2)-Offset, 12-6-2002]**

[Devices subject to this condition : D1629, D1634]

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

### SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

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

K67.14 The operator shall keep records, in a manner approved by the District, for the following parameter(s) or item(s):

Fuel use during the commissioning period

Fuel use after the commissioning period and prior to CEMS certification

Fuel use after CEMS certification

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

[Devices subject to this condition : D1629, D1634]

K171.1 The operator shall provide to the District the following items:

A test protocol shall be submitted to the District at least 30 days prior to the testing, and the test to be conducted according to the approved test protocol or any subsequently approved revisions.

Report of the pre-and post-modification tests and operating condition of the equipment shall be submitted to the District within 60 days after the post-modification test is completed.

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

[Devices subject to this condition : D112]

#### **L. Expiration Date**

L341.1 Within 90 days after start-up of this equipment, the following device(s) shall be removed from operation:

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

### SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

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

Boiler BO-7 identified by Device No. D722

Boiler BO-8 identified by Device No.D723

Startup as used in this condition is the initial cold startup of the boiler. Initial cold startup date shall be defined as the date of the first fuel firing of the boiler.

The operator shall surrender the boilers permits for BO-7 and BO-8 ( devices D722 &D723) 30 days after the boilers are out of service.

[RULE 1303(b)(2)-Offset, 12-6-2002; **RULE 1313(d), 12-7-1995**]

[Devices subject to this condition : D1629]

L341.2 Within 90 days after start-up of this equipment, the following device(s) shall be removed from operation:

Boiler BO-9 identified by Device No. D724

Boiler BO-10 identified by Device No.D725

Startup as used in this condition is the initial cold startup of the boiler. Initial cold startup date shall be defined as the date of the first fuel firing of the boiler.

The operator shall surrender the boiler permits for BO-9 and BO-10 (devices D724&D725) 30 days after the boilers are out of service.

[RULE 1303(b)(2)-Offset, 12-6-2002; **RULE 1313(d), 12-7-1995**]

[Devices subject to this condition : D1634]

## FACILITY PERMIT TO OPERATE TESORO REFINING AND MARKETING CO

### SECTION I: PLANS AND SCHEDULES

This section lists all plans approved by AQMD for the purposes of meeting the requirements of applicable AQMD rules specified below. The operator shall comply with all conditions specified in the approval of these plans, with the following exceptions:

- a. The operator does not have to comply with NO<sub>x</sub> or SO<sub>x</sub> emission limits from rules identified in Table 1 or Table 2 of Rule 2001(j) which become effective after December 31, 1993.
- b. The operator does not have to comply with NO<sub>x</sub> or SO<sub>x</sub> emission limits from rules identified in Table 1 or Table 2 of Rule 2001(j) after the facility has received final certification of all monitoring and reporting requirements specified in Section F and Section G.

Documents pertaining to the plan applications listed below are available for public review at AQMD Headquarters. Any changes to plan applications will require permit modification in accordance with Title V permit revision procedures.

#### List of approved plans:

Application	Rule
474117	1123
474582	2002
476506	1173

NOTE: This section does not list compliance schedules pursuant to the requirements of Regulation XXX - Title V Permits; Rule 3004(a)(10)(C). For equipment subject to a variance, order for abatement, or alternative operating condition granted pursuant to Rule 518.2, equipment specific conditions are added to the equipment in Section D or H of the permit.



# South Coast Air Quality Management District

21865 Copley Drive, Diamond Bar, CA 91765-4178  
(909) 396-2000 • www.aqmd.gov

July 20, 2010  
Facility ID No. 800436  
A/N 474117

Mr. Mike Kulakowski  
Environmental Manager  
Tesoro Refining and Marketing Company  
2101 East Pacific Coast Hwy  
Wilmington, CA 90744

Subject: Refinery Process Turnaround Plan Approval

Dear Mr. Kulakowski:

This letter is in regard to Tesoro Los Angeles Refinery's process turnaround plan submitted under Application No. 474117 to comply with SCAQMD Rule 1123—Refinery Process Turnarounds. The plan was originally submitted on September 24, 2007, but was replaced with an updated version dated December 18, 2009. The South Coast Air Quality Management District (SCAQMD) has evaluated your December 2009 plan for compliance with the applicable requirements of Rule 1123. The plan (copy attached) is approved subject to the following conditions:

1. Refinery process turnarounds shall be conducted in accordance with the attached plan received December 18, 2009, unless otherwise specified below.
2. During refinery process turnaround, the vapors released from the vessel shall not vent to the atmosphere at any time unless the vessel has been depressurized to below 5 psig, or is within 10 percent above the minimum gauge pressure at which the vapors can be collected, whichever is lower, and has met all the requirements in Condition No. 3 and 4 below.
3. To depressurize vessels pursuant to Condition No. 2, the vapors released from the vessel shall be recovered by (i) the vapor recovery system (VR system) or (ii) the flare gas recovery system (FGR system). The vapors released from the vessels may be directed to a flare provided that all flares have been operated in accordance with flaring minimization procedures pursuant to Rule 1118(c)(3) and (c)(4).
4. If inert gases are used for refinery process turnaround, the operator shall comply with all of the following requirements:

- (A) Prior to introducing inert gases into the vessel, the operator shall initially depressurize the vessel in accordance to Condition No. 2 and 3.
- (B) After introducing inert gases into the vessel, the vapors released from the vessel shall be recovered by the VR or FGR systems.
- (C) Condition No. 4B above shall not apply if the facility operator can demonstrate that recovering the vapors would result in: (i) equipment damage due to incompatibility with recovery system equipment or with refinery fuel gas systems, (ii) malfunction of pollution control equipment or safety devices, or (iii) violations of safety regulations. The vapors are permitted to be routed directly to the flare if condition (i), (ii), or (iii) is met and provided that all flares have been operated in accordance with flaring minimization procedures pursuant to Rule 1118(c)(3) and (c)(4).

5. The operator shall keep records of each refinery process unit turnaround, in a manner approved by the AQMD, for the following items:
- The date the unit was shut down.
  - The time, date, and hydrocarbon concentration measured when the vapors from the vessel were first discharged into the atmosphere.
  - The approximate amount of hydrocarbons emitted into the atmosphere.
  - Records to demonstrate that condition No. 4C is applicable

The records shall be kept for at least five years and made available for District inspection upon request.

If you have any further questions, please contact Meredith Hankins by phone at (909) 396-2493 or by email at [mhankins@aqmd.gov](mailto:mhankins@aqmd.gov).

Sincerely,



Jay Chen  
Senior Manager  
Refinery and Waste Management  
Engineering and Compliance

Attachment: Tesoro Refining and Marketing Company, Los Angeles Refinery – Process Turnaround Plan

**TESORO REFINING AND MARKETING COMPANY  
LOS ANGELES REFINERY  
PROCESS TURNAROUND PLAN  
SCAQMD RULE 1123**

**GENERAL INFORMATION**

Name of Facility: Tesoro Refining and Marketing Company,  
Los Angeles Refinery

Address: 2101 E. Pacific Coast Highway  
Wilmington, CA 90744

Facility Contact: Jo-Anne Alvarez  
Environmental Engineer

**INTRODUCTION**

This plan outlines the procedures used to depressure and purge process vessels so that organic vapor emissions are minimized during process unit turnarounds. It provides for the maximum feasible control of emissions of displaced or reduced organic gases without causing damage to equipment, malfunction of control equipment or safety devices, or violations of safety regulations. The plan will be implemented for all displacement or vacuum reduction operations associated with process turnarounds. Tesoro's process turnaround procedures are designed specifically to be compliant with Rule 1123 requirements.

**APPLICABLE PROCESS UNITS**

Tesoro's Rule 1123 Refinery Process Unit Turnaround Plan will be implemented for the following units at the refinery:

**PROCESS UNITS SUBJECT TO RULE 1123**

<b>South Area</b>	
Alkylation Unit	Fluid Catalytic Cracking Unit
Alkylation Feed Prep Unit	Mercox Treating Unit
<b>Hydrogen Processing Area</b>	
Benzene Saturation Unit	Catalytic Reforming Unit No. 2
Catalytic Reforming Unit No. 3	Hydrocracker
Hydrogen Generation Unit No. 1	Hydrogen Generation Unit No. 2
Hydrotreater No. 1	Hydrotreater No. 2

Hydrotreater No. 3	Hydrotreater No. 4
Butane Isomerization Unit	
<b>Crude/Coker Area</b>	
Delayed Coking Unit	Gas Compression Plant
Crude Unit	

## **PROCESS TURNAROUND GAS PURGING PROCEDURE**

### **Procedure for Gas Displacement**

All liquids are routed to storage tanks. Tanks that receive volatile organic compounds comply with Rule 463 and Rule 1178.

Vessels are depressured to the refinery Flare Gas Recovery System (FGRS). The Flare Gas Recovery System is used to recover vent gases during unit shutdowns unless the vent gas volume exceeds the recovery capacity of the FGRS compressors or the composition of the vent gases are incompatible with the FGRS compressors or refinery fuel gas system, per AQMD Rule 1118. The vent gases recovered by the FGRS are treated in an amine absorber to remove H<sub>2</sub>S prior to being routed to the refinery fuel gas system. Both the East and West flares can be utilized during the turnaround process, should the necessity arise.

Vessels are depressured to the FGRS until the pressure in the vessel reaches flare line pressure, which is 5 psig or less. The pressure of the equipment is usually measured with pressure gauges. At the Fluid Catalytic Cracking Unit (FCCU), some vessels do not have connections to the flare system. Here, the vapors are routed to the flare knock out drum and the FGRS through temporary piping/hoses.

Steam, nitrogen or water can be introduced into the vessel to displace any remaining process vapors. These purge gases are typically routed to the flare system while liquids are collected in tanks. The system is opened to atmosphere only after it has been confirmed that the pressure is less than 5 psig and the hydrocarbon (LEL) concentration is less than 10%.

The following units are purged through gas displacement:  
Alky, AFT, Merox, HGU1, HGU2, HTU4, DCU, Crude, GCP, FCCU, Bensat, Isomax

### **Procedure for Gas Education**

All liquids are routed to storage tanks. Tanks that receive volatile organic compounds comply with Rule 463 and Rule 1178.

Vessels are depressured to the refinery Flare Gas Recovery System (FGRS). The Flare Gas Recovery System is used to recover vent gases during unit shutdowns unless the vent gas volume exceeds the recovery capacity of the FGRS compressors or the composition of the vent gases are incompatible with the FGRS compressors or the refinery fuel gas system, per AQMD Rule 1118. The vent gases recovered by the FGRS are treated in an amine absorber to remove H<sub>2</sub>S prior to being routed to the refinery fuel gas system.

Vessels are depressured to the FGRS until the pressure in the vessel reaches flare line pressure, which is 5 psig or less. The pressure of the equipment is usually measured with pressure gauges.

Eduction is used only in reactor systems on the Hydrocracker, Hydrotreaters Nos. 1, 2, and 3, and Catalytic Reformers that contain catalyst that could be harmed by the use of a purge gas. After the vessels are depressured to flare line pressure, the eduction process is used to remove any residual organic vapors. The system is opened to atmosphere only after it has been confirmed that the pressure is less than 5 psig and the hydrocarbon (LEL) concentration is less than 10 %.

The following units are purged through eduction:  
HCU, HTU1, HTU2, HTU3, HTU4, CRU2, CRU3

### **PROCESS TURNAROUND CRITERIA WHICH DETERMINE WHEN ATMOSPHERIC VENTING BEGINS**

#### **Criteria which Determine when Atmospheric Venting Begins**

In the gas displacement procedure, the vessel is purged to the flare gas recovery system during the initial stages. Depending on the condition of the equipment at the time of shutdown, the duration of venting and purging will vary.

In both the gas displacement and eduction procedures, vessels are depressured to the Flare Gas Recovery System until the vessel pressure reaches flare line pressure. This pressure is below the 5 psig limit established for atmospheric venting in Rule 1123. The flare line pressure is known to be less than 5 psig. The flare line pressure is monitored and recorded electronically.

The fact that the vessel pressure has reached flare line pressure is determined by operator observation. Some vessels in a process unit are equipped with a pressure gauge that can be used to determine the pressure in the vessel. The flare line pressure can be determined if there is a pressure gauge on the unit flare knock out drum or a flare knock out drum that is nearby.

## FACILITY PERMIT TO OPERATE TESORO REFINING AND MARKETING CO

### SECTION J: AIR TOXICS [40CFR 61 Subpart FF, #1 12-04-2003]

#### BENZENE WASTE OPERATIONS FROM PETROLEUM REFINERIES – “6BQ” COMPLIANCE OPTION

1. The operator shall comply with all applicable requirements of 40CFR61 Subpart FF including those requirements of 40CFR61 Subpart A.
2. The operator shall comply with treatment standards specified in §61.342(e) of 40CFR61 Subpart FF for 6 Mg/yr (6.6 tons/yr) benzene quantity (6 BQ) limit as follows:
  - a. §61.342(e)(1): The operator shall manage and treat all waste streams, with a flow-weighted annual average water content of less than 10 percent, in accordance with the requirements specified in §61.342(c)(1).
  - b. §61.342(e)(2): The operator shall manage and treat all waste streams (including remediation and process turnaround waste), with a flow-weighted annual average water content of 10 percent or greater, in such a manner that the total quantity of benzene in the treated and untreated aqueous waste streams is less than 6.0 Mg/yr. The benzene in each waste stream shall be quantified in accordance with §61.355(k).
3. For each stream that is treated to comply with §61.342(e)(1) or §61.342(e)(2), the operator shall comply with the treatment process standard specified in Section 61.348.
4. For waste management units, which are used to handle or treat waste streams that are treated as specified in §61.348 and/or recycled to a process, the operator shall comply with the following standards:
  - a. Tanks standards. *{61.343}*
  - b. Surface impoundments standards. *{61.344}*
  - c. Containers standards. *{61.345}*
  - d. Individual drain system standards. *{61.346}*
  - e. Oil-water separator standards. *{61.347}*
5. For each closed vent system and control device used to comply with standards in accordance with §61.343 through §61.348, the operator shall comply with the requirements of §61.349.
6. The operator shall comply with monitoring and associated recording requirements in §61.354.

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

### **SECTION J: AIR TOXICS [40CFR 61 Subpart FF, #1 12-04-2003]**

7. The operator shall comply with applicable test methods and procedures in §61.355 for determining the total annual benzene quantity from facility waste.
8. The operator shall comply with reporting requirements in §61.357 and recordkeeping requirements in §61.356.
9. The operator shall comply with 40CFR63 Subpart CC requirements, which references to 40CFR61 Subpart FF for equipment subject to 40CFR60 Subpart QQQ or 40CFR63 Subpart CC. *{40CFR63 Subpart CC, Section 63.640(o)(1)}*

## FACILITY PERMIT TO OPERATE TESORO REFINING AND MARKETING CO

### SECTION J: AIR TOXICS [40CFR 63 Subpart CC, #1 06-23-2003]

#### HAZARDOUS AIR POLLUTANTS FROM PETROLEUM REFINERIES - GROUP 1 EMISSION POINT (GROUP 1 MISCELLANEOUS PROCESS VENT - EXISTING/NEW SOURCE)

1. The operator shall comply with all applicable requirements of 40CFR63 Subpart CC including those requirements of 40CFR63 Subpart A specified in Table 6 of 40CFR63 Subpart CC.
2. The operator shall comply with the following control, monitoring, recordkeeping and reporting requirements:
  - a. Control Requirements: The operator shall reduce the organic hazardous air pollutants by 98% or to 20 parts per million by volume on a dry basis, corrected to 3 percent oxygen, as specified in 40CFR63 Subpart CC, Section 63.643.
  - b. Monitoring Requirements:
    - The operator shall monitor the temperature in accordance with 40CFR63 Subpart CC, Section 63.644(a)(1) when an incinerator is used.
    - The operator shall monitor the presence of a pilot flame in accordance with 40CFR63 Subpart CC, Section 63.644(a)(2) when a flare is used.
  - c. Exemption from Monitoring Requirements: The operator is exempt from temperature monitoring requirements for any boiler or process heater with a design heat input capacity greater than or equal to 44 megawatt or any boiler or process heater in which all vent streams are introduced into the flame zone as per 40CFR63 Subpart CC, Section 63.644(a)(3).
  - d. Recordkeeping and Reporting Requirements: The operator shall comply with applicable reporting and recordkeeping requirements of 40CFR63 Subpart CC, Section 63.654.

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

**SECTION J: AIR TOXICS  
 [40CFR 63 Subpart CC, #2 06-23-2003]**

HAZARDOUS AIR POLLUTANTS FROM PETROLEUM REFINERIES - GROUP 2  
 EMISSION POINTS (MISCELLANEOUS PROCESS VENT, STORAGE VESSEL, AND  
 WASTEWATER STREAM)

1. The operator shall make the determination for Group 2 emission point in accordance with the following regulations:

Emissions Point	Section	Group 2 Determination Criteria
Miscellaneous process vent	63.645(h)	Total organic compounds emission rate
Storage tank	63.654(i)(1)(iv) 63.646(b)(1) and (2)	Weight percent of total organic HAP
Wastewater stream	61.342(c)(2) or (c)(3)	Total annual benzene quantity

For Group 2 Miscellaneous Process Vents, §63.145(f) and (g) must be used to show a Group 2 determination for any new process vents, and the owner or operator of an existing Group 2 process vent must make a Group 1 or Group 2 determination in accordance with §63.145(h) whenever process changes are made.

Record of any data, assumptions, and procedures used to make this determination shall be retained for five years.

2. The operator shall not reclassify a Group 2 emission point to a Group 1 emission point without first obtaining a valid permit from the AQMD.

## FACILITY PERMIT TO OPERATE TESORO REFINING AND MARKETING CO

### SECTION J: AIR TOXICS [40CFR 63 Subpart CC, #3A 06-23-2003]

#### HAZARDOUS AIR POLLUTANTS FROM PETROLEUM REFINERIES - GROUP 1 EMISSION POINT (GROUP 1 STORAGE TANK - EXISTING SOURCE)

1. The operator shall comply with all applicable requirements of 40CFR63 Subparts CC including those requirements of 40CFR63 Subpart A specified in Table 6 of 40CFR63 Subpart CC.
2. The operator shall comply with applicable requirements of 40CFR63 Subpart CC by the following applicable compliance date:
  - August 18, 1998, for fixed roof storage tank. *{63.640(h)}*
  - August 18, 2005, or at the first degassing and cleaning activity after 8/18/1998, whichever is first, for floating roof storage tank. *{63.640(h)(4)}*
3. The operator shall comply with applicable control, monitoring, inspection, and recordkeeping requirements of 40CFR63 Subpart CC, which references to 40CFR63 Subpart G as follows:

40CFR63 Subpart CC	40CFR63 Subpart G
63.646(a)	<u>Control requirements:</u> <ol style="list-style-type: none"> <li>a. Internal Floating Roof storage tanks shall be equipped with proper seals. <i>{63.119(b)(1) to (b)(4)}</i></li> <li>b. External Floating Roof storage tank shall be equipped with proper seals. <i>{63.119(c)(1), (c)(3) &amp; (c)(4)}</i></li> <li>c. External Floating Roof converted to an Internal Floating Roof shall be equipped with proper seals. <i>{63.119(d)(1)}</i></li> <li>d. Fixed roof storage tank shall be vented to a control system to reduce organic hazardous air pollutants emissions by 95%. <i>{63.119(e)(1) to (e)(5)}</i></li> </ol>

## FACILITY PERMIT TO OPERATE TESORO REFINING AND MARKETING CO

### SECTION J: AIR TOXICS [40CFR 63 Subpart CC, #3A 06-23-2003]

<b>40CFR63 Subpart CC</b>	<b>40CFR63 Subpart G</b>
63.646(e)	<p><u>Testing and inspection requirements:</u></p> <p>a. Internal Floating Roof storage tank, single seal: Roof &amp; seal shall be visually inspected yearly through manholes &amp; roof hatches and Roof &amp; seal shall be visually inspected when emptying/degassing the tank and at least every 10 years. {63.120(a)(2)(i) &amp; (ii)}</p> <p>b. Internal Floating Roof storage tank, double seals:</p> <ul style="list-style-type: none"> <li>• Roof &amp; both seals shall be visually inspected when emptying/degassing and at least every 5 years {63.120(a)(3)(i)}, or</li> <li>• Roof &amp; secondary seal shall be visually inspected yearly through manholes and roof hatches and Roof &amp; both seals shall be visually inspected when emptying/degassing and at least every 10 years. {63.120(a)(3)(ii) &amp; (iii)}</li> </ul> <p>c. External Floating Roof storage tank, single seal: Gaps between the storage vessel wall and primary seal shall be measured at least once per year (annually) until a secondary seal is installed. {63.120(b)(1)(ii)}</p> <p>d. External Floating Roof, double seals:</p> <ul style="list-style-type: none"> <li>• Gaps between vessel wall and primary seal shall be measured every 5 years during hydrostatic testing, {63.120(b)(1)(i)}</li> <li>• Gap between wall and secondary seal shall be measured yearly {63.120(b)(1)(iii)}, and</li> </ul> <p>Roof, both seals &amp; fittings shall be visually inspected when emptying/degassing (non specified frequency). {63.120(b)(10)}</p> <p>e. Fixed Roof Vent to Control System: Control system shall be tested one time for control efficiency demonstration and closed vent system shall be inspected annually. {63.120(d)(1) &amp; (6)}</p>
63.654(i)(1)(i)	The operator shall comply with recordkeeping requirements in Section 63.123.

## FACILITY PERMIT TO OPERATE TESORO REFINING AND MARKETING CO

### SECTION J: AIR TOXICS [40CFR 63 Subpart CC, #3A 06-23-2003]

4. The operator shall comply with the reporting requirements specified in 40CFR63 Subpart CC, Section 63.654(e), (f) & (g).
5. The operator shall comply with other requirements specified in 40CFR63 Subpart CC, Section 63.646(f) as follows:
  - a. Cover or lid on an opening on a floating roof,
  - b. Rim space vents to be set when the roof is not floating or the pressure beneath the rim seal exceeds the manufacturer's recommended setting, and
  - c. Close automatic bleeder vents except when the roof is being floated off or is being landed on the roof leg supports.
6. The operator is exempt from deck fitting requirements; inspection; and recordkeeping requirements for gaskets, slotted membranes, and sleeve seals for existing floating roof storage tank as specified in 40CFR63 Subpart CC, Sections 63.646(c), 63.646(e), and 63.654(i)(1)(i), respectively.
7. The operator shall comply with 40CFR63 Subpart CC requirements for existing equipment that is subject to 40CFR60 Subpart K or Ka and 40CFR63 Subpart CC. *{40CFR63 Subpart CC, Section 63.640(n)}*
8. The operator shall comply with 40CFR60 Subpart Kb requirements for existing equipment that is subject to 40CFR60 Subpart Kb and 40CFR63 Subpart CC. *{40CFR63 Subpart CC, Section 63.640(n)}*

## FACILITY PERMIT TO OPERATE TESORO REFINING AND MARKETING CO

### SECTION J: AIR TOXICS [40CFR 63 Subpart CC, #4 06-23-2003]

#### HAZARDOUS AIR POLLUTANTS FROM PETROLEUM REFINERIES - GROUP 1 EMISSION POINT (GROUP 1 WASTEWATER STREAM - EXISTING/NEW SOURCE)

1. The operator shall comply with all applicable requirements of 40CFR63 Subparts CC including those requirements of 40CFR63 Subpart A specified in Table 6 of 40CFR63 Subpart CC.
2. The operator shall comply with applicable treatment standards, equipment standards, test methods, monitoring, reporting, and recordkeeping requirements of 40CFR63 Subpart CC, which references to 40CFR61 Subpart FF as follows:

<b>40CFR63 Subpart CC</b>	<b>40CFR61 Subpart FF</b>
63.647(a)	1. <u>Treatment Standards</u> : The operator shall demonstrate compliance with any one of the methods specified in Section 61.342(c), (d) or (e) of 60CFR61 Subpart FF.
63.647(a)	2. <u>Equipment Standards</u> : The operator shall comply with the following standards set forth for the equipment used in waste handling and storage including treatment process: <ol style="list-style-type: none"> <li>a. Tanks and alternative standards for tanks. <i>{61.343 &amp; 61.351}</i></li> <li>b. Surface impoundments standards. <i>{61.344}</i></li> <li>c. Containers standards. <i>{61.345}</i></li> <li>d. Individual drain system standards. <i>{61.346}</i></li> <li>e. Oil-water separator and alternative standards for oil-water separator. <i>{61.347 &amp; 61.352}</i></li> <li>f. Treatment process standards. <i>{61.348}</i></li> <li>g. Closed-vent systems and control devices standards. <i>{61.349}</i></li> <li>h. Allowance for delay of repair of equipment. <i>{61.350}</i></li> </ol>
63.647(a)	3. <u>Test Methods and Procedures</u> : The operator shall comply with applicable test methods and procedures in Section 61.355 in determining the total annual benzene quantity from facility waste.
63.647(c)	4. <u>Monitoring Requirements</u> : The operator shall comply with monitoring and associated recording requirements in Section 61.354.
63.654	5. <u>Reporting and Recordkeeping Requirements</u> : The operator shall comply with reporting and recordkeeping requirements in Sections 61.356 and 61.357.

## FACILITY PERMIT TO OPERATE TESORO REFINING AND MARKETING CO

### SECTION J: AIR TOXICS [40CFR 63 Subpart CC, #5A 06-23-2003]

#### HAZARDOUS AIR POLLUTANTS FROM PETROLEUM REFINERIES - EQUIPMENT LEAK IN ORGANIC HAP SERVICE - EXISTING SOURCE

1. The operator shall comply with all applicable requirements of 40CFR63 Subpart CC including those requirements of 40CFR63 Subpart A specified in Table 6 of 40CFR63 Subpart CC.
2. The operator shall comply with applicable control, monitoring, inspection, and repair requirements of 40CFR63 Subpart CC, which references to 40CFR60 Subpart VV as follows:

40CFR63 Subpart CC	40CFR60 Subpart VV
63.648(a)	<ol style="list-style-type: none"> <li>1. <u>Control, Monitoring, Inspection, and Repair Requirements:</u> The operator shall comply with the following standards set forth for equipment used in volatile organic compounds service:               <ol style="list-style-type: none"> <li>a. Pumps in light liquid service. {60.482-2}</li> <li>b. Compressors. {60.482-3}</li> <li>c. Pressure relief devices in gas/vapor service. {60.482-4}</li> <li>d. Sampling connection systems. {60.482-5}</li> <li>e. Open-ended valves or lines. {60.482-6}</li> <li>f. Valves in gas/vapor and light liquid service. {60.482-7}</li> <li>g. Pumps and valves in heavy liquid service, pressure relief devices in light or heavy liquid service, and flanges and other connectors. {60.482-8}</li> <li>h. Allowance for delay of repair of equipment. {60.482-9}</li> <li>i. Closed vent systems and control devices. {60.482-10}</li> </ol> </li> <li>2. <u>Test Methods and Procedures:</u> The operator shall comply with applicable test methods and procedures in Section 60.485 in conducting performance tests and determining the presence of leaking sources.</li> </ol>

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SECTION J: AIR TOXICS  
 [40CFR 63 Subpart CC, #5A 06-23-2003]

<b>40CFR63 Subpart CC</b>	<b>40CFR60 Subpart VV</b>
63.648(b)	3. <u>Allowance for Less Frequent Monitoring</u> : The operator shall comply with applicable requirements in Section 60.483-2 when electing to skip leak detection periods for valves.
63.654(d)(1)	4. <u>Recordkeeping and Reporting Requirements</u> : The operator shall comply with recordkeeping and semiannual reporting requirements in Sections 60.486 and 60.487, respectively.

3. The operator shall comply with 40CFR63 Subpart CC requirements for existing equipment that is subject to 40CFR60 or 40CFR61 as well as 40CFR63 Subpart CC. *{40CFR63 Subpart CC, Section 63.640(p)}*

# FACILITY PERMIT TO OPERATE TESORO REFINING AND MARKETING CO

## SECTION J: AIR TOXICS [40CFR 63 Subpart UUU, #1 04-20-2006]

### HAZARDOUS AIR POLLUTANTS FROM PETROLEUM REFINERIES: CATALYTIC REFORMING UNITS

1. The operator shall comply with the applicable general requirements of Sections 63.1 through 63.15 of Subpart A and Section 63.1570 of Subpart UUU.
2. The operator shall comply with the applicable notification, reporting, and recordkeeping requirement of Sections 63.1574, 63.1575, and 63.1576, respectively.
3. The operator shall prepare an operation, maintenance, and monitoring plan for each affected source as specified in Section 63.1574(f).
4. The operator shall submit all required reports, notifications, plans, submittals and other communications required by 40CFR63 Subpart A or Subpart UUU to the AQMD and, unless notified to the contrary by AQMD or US EPA, to US EPA Region IX, where applicable (see addresses in Sections E and K of this permit).
5. The operator shall submit to AQMD all plan applications (i.e. operation, maintenance, and monitoring plans) and applications for permits to construct and operate new equipment or equipment modifications, which are required by 40CFR63 Subpart A or Subpart UUU, as a Title V permit revision for the approval by the Executive Officer.
6. The operator shall comply with the following applicable standard(s) for CRU Process Vents:

**Emission and Operating Limits for CRU Process Vents** (§ 63.1566)

HAP Type	Emission Limitation	Operating Limit
Organic HAP * (§63.1566)	Reduce uncontrolled emissions of total organic compounds (TOC) or non-methane TOC by 98% by using a control device or to a concentration of 20 ppmv (dry basis as hexane), corrected to 3 percent oxygen, whichever is less stringent. For emissions vented to a boiler or process heater to comply with the percent reduction or concentration emission limitation, the vent stream must be introduced into the flame zone, or any other location that will achieve the percent reduction or concentration standard.	<u>Use of a thermal incinerator, boiler or process heater with a design heat input capacity less than 44 MW, or use of a boiler or process heater in which all vent streams are not introduced into the flame zone.</u> Daily average concentration zone temperature must not fall below the limit established during the performance test.

*\*Exempt for depressuring and purging operation with reactor vent pressure ≤ 5 psig per § 63.1566(a)(4)*

## FACILITY PERMIT TO OPERATE TESORO REFINING AND MARKETING CO

### SECTION J: AIR TOXICS [40CFR 63 Subpart UUU, #1 04-20-2006]

#### Emission and Operating Limits for CRU Process Vents (§ 63.1567)

HAP Type	Emission Limitation**	Operating Limit**
Inorganic HAP (§63.1567)	<p><u>Existing semi-regenerative CRU:</u>            Reduce uncontrolled emissions of HCl by 92% by weight or to a concentration of 30 ppmvd corrected to 3% O<sub>2</sub>.</p> <p><u>Existing cyclic or continuous CRU:</u>            Reduce uncontrolled emissions of HCl by 97% by weight or to a concentration of 10 ppmvd corrected to 3% O<sub>2</sub>.</p>	<p><u>Wet scrubber:</u> The daily average pH or alkalinity of the water (or scrubbing liquid) exiting the scrubber must not fall below the limit established during the performance test; and the daily average liquid-to-gas ratio must not fall below the limit established during the performance test.</p> <p><u>Internal scrubbing system or no control device meeting outlet HCl concentration limit:</u> The daily average HCl concentration in the catalyst regenerator exhaust gas must not exceed the limit established during the performance test.</p> <p><u>Internal scrubbing system meeting HCl percent reduction standard:</u> The daily average pH or alkalinity of the water (or scrubbing liquid) exiting the internal scrubbing system must not fall below the limit established during the performance test; and the daily average liquid-to-gas ratio must not fall below the limit established during the performance test.</p> <p><u>Moving-bed gas-solid adsorption system (e.g., Chlorsorb™ System):</u> The daily average temperature of the gas entering or exiting the adsorption system must not exceed the limit established during the performance test; and the weekly average chloride level on the sorbent entering the adsorption system must not exceed the design or manufacturer's recommended limit (1.35 weight percent for the Chlorsorb™ System), and the weekly average chloride level on the sorbent leaving the adsorption system must not exceed the design or manufacturer's recommended limit (1.8 weight percent for the Chlorsorb™ System).</p>

*\*\*Emission and Operating Limits apply during coke burn-off and catalyst rejuvenation pursuant to §63.1567(a)(2).*

## FACILITY PERMIT TO OPERATE TESORO REFINING AND MARKETING CO

### SECTION J: AIR TOXICS [40CFR 63 Subpart UUU, #1 04-20-2006]

7. The operator shall comply with the following standard(s) for Bypass Lines:

#### Work Practice Standards for Bypass Lines (§ 63.1569)\*

Work Practice Standard
Install a car-seal or lock- and-key device placed on the mechanism by which the bypass device flow position is controlled (e.g., valve handle, damper level) when the bypass device is in the closed position such that the bypass line valve cannot be opened without breaking the seal or removing the device

*\*Each bypass line that could vent an affected vent stream away from a control device used to comply with the requirements of this subpart.*

8. The operator shall comply with the following applicable initial and continuous compliance demonstration requirements.

Source Type	HAP Type	Initial Compliance	Continuous Compliance
CRU	Organic HAP	Compliance with all applicable requirements of § 63.1566(b) including installation of a continuous monitoring system, completion of a performance test, and establishment of a site-specific operating limit.	Compliance with all applicable requirements of § 63.1566(c) including demonstration of compliance with operating limit established in the performance test.
CRU	Inorganic HAP	Compliance with all applicable requirements of § 63.1567(b) including installation of a continuous monitoring system, completion of a performance test, and establishment of a site-specific operating limit.	Compliance with all applicable requirements of § 63.1567(c) including demonstration of compliance with operating limit established in the performance test.
Bypass Lines	HAP	Compliance with all applicable requirements of § 63.1569(b) including demonstration of initial compliance with the applicable work practice standard and submission of an operation, maintenance, and monitoring plan.	Compliance with all applicable requirements of § 63.1569(c) including demonstration of continuous compliance with the applicable work practice standard and with the procedures in the operation, maintenance, and monitoring plan.

# FACILITY PERMIT TO OPERATE TESORO REFINING AND MARKETING CO

## SECTION J: AIR TOXICS [40CFR 63 Subpart UUU, #2 04-20-2006]

### HAZARDOUS AIR POLLUTANTS FROM PETROLEUM REFINERIES: CATALYTIC CRACKING UNITS

1. The operator shall comply with the applicable general requirements of Sections 63.1 through 63.15 of Subpart A and Section 63.1570 of Subpart UUU.
2. The operator shall comply with the applicable notification, reporting, and recordkeeping requirements of Sections 63.1574, 63.1575, and 63.1576, respectively.
3. The operator shall prepare an operation, maintenance, and monitoring plan for each affected source as specified in Section 63.1574(f).
4. The operator shall submit all required reports, notifications, plans, submittals and other communications required by 40CFR63 Subpart A or Subpart UUU to the AQMD and, unless notified to the contrary by AQMD or US EPA, to US EPA Region IX, where applicable (see addresses in Sections E and K of this permit).
5. The operator shall submit to AQMD all plan applications (i.e. operation, maintenance, and monitoring plans) and applications for permits to construct and operate new equipment or equipment modifications, which are required by 40CFR63 Subpart A or Subpart UUU, as a Title V permit revision for the approval by the Executive Officer.
6. The operator shall comply with the following standard(s) for FCCUs:

**Emission and Operating Limits for Existing FCCUs (§63.1564 & §63.1565)**

HAP Type	Emission Limitation	Operating Limit
Metal	1. PM emissions must not exceed 1.0 kg per 1,000 kg (1.0 lb/1,000 lb) of coke burn-off in the catalyst regenerator;  2. Opacity of emissions must not exceed 30 percent, except for one 6-minute average opacity reading in any 1-hour period.	na.
Organic	CO emissions must not exceed 500 ppmv (dry basis)	na.

## FACILITY PERMIT TO OPERATE TESORO REFINING AND MARKETING CO

### SECTION J: AIR TOXICS [40CFR 63 Subpart UUU, #2 04-20-2006]

7. The operator shall comply with the following standard(s) for Bypass Lines:

**Work Practice Standards for Bypass Lines (§ 63.1569)\***

<b>Work Practice Standard</b>
Install a car-seal or lock- and-key device placed on the mechanism by which the bypass device flow position is controlled (e.g., valve handle, damper level) when the bypass device is in the closed position such that the bypass line valve cannot be opened without breaking the seal or removing the device.

*\*Each bypass line that could vent an affected vent stream away from a control device used to comply with the requirements of this subpart.*

8. The operator shall comply with the following applicable initial and continuous compliance demonstration requirements:

<b>Source Type</b>	<b>HAP Type</b>	<b>Initial Compliance</b>	<b>Continuous Compliance</b>
FCCU	Metal HAP	Compliance with all applicable requirements of § 63.1564(b) including installation of a continuous opacity monitoring system and certification of compliance with the emission limits.	Compliance with all applicable requirements of § 63.1564(c) including demonstration of continuous compliance with the applicable Opacity and PM emission limits.
FCCU	Organic HAP	Compliance with all applicable requirements of § 63.1565(b) including installation of a continuous CO monitoring system and certification of compliance with the emission limit.	Compliance with all applicable requirements of § 63.1565(c) including demonstration of continuous compliance with the applicable CO emission limit.
Bypass Lines	HAP	Compliance with all applicable requirements of § 63.1569(b) including demonstration of initial compliance with the applicable work practice standard and submission of an operation, maintenance, and monitoring plan.	Compliance with all applicable requirements of § 63.1569(c) including demonstration of continuous compliance with the applicable work practice standard and with the procedures in the operation, maintenance, and monitoring plan.

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

### **SECTION K: TITLE V Administration**

#### **GENERAL PROVISIONS**

1. This permit may be revised, revoked, reopened and reissued, or terminated for cause, or for failure to comply with regulatory requirements, permit terms, or conditions. [3004(a)(7)(C)]
2. This permit does not convey any property rights of any sort or any exclusive privilege. [3004(a)(7)(E)]

#### **Permit Renewal and Expiration**

3. (A) Except for solid waste incineration facilities subject to standards under section 129(e) of the Clean Air Act, this permit shall expire five years from the date that this Title V permit is issued. The operator's right to operate under this permit terminates at midnight on this date, unless the facility is protected by an application shield in accordance with Rule 3002(b), due to the filing of a timely and complete application for a Title V permit renewal, consistent with Rule 3003. [3004(a)(2), 3004(f)]  
  
(B) A Title V permit for a solid waste incineration facility combusting municipal waste subject to standards under Section 129(e) of the Clean Air Act shall expire 12 years from the date of issuance unless such permit has been renewed pursuant to this regulation. These permits shall be reviewed by the Executive Officer at least every five years from the date of issuance. [3004(f)(2)]
4. To renew this permit, the operator shall submit to the Executive Officer an application for renewal at least 180 days, but not more than 545 days, prior to the expiration date of this permit. [3003(a)(6)]

#### **Duty to Provide Information**

5. The applicant for, or holder of, a Title V permit shall furnish, pursuant to Rule 3002(d) and (e), timely information and records to the Executive Officer or designee within a reasonable time as specified in writing by the Executive Officer or designee. [3004(a)(7)(F)]

#### **Payment of Fees**

6. The operator shall pay all required fees specified in Regulation III - Fees. [3004(a)(7)(G)]

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

### **SECTION K: TITLE V Administration**

#### **Reopening for Cause**

7. The Executive Officer will reopen and revise this permit if any of the following circumstances occur:
- (A) Additional regulatory requirements become applicable with a remaining permit term of three or more years. Reopening is not required if the effective date of the requirement is later than the expiration date of this permit, unless the permit or any of its terms and conditions has been extended pursuant to paragraph (f)(4) of Rule 3004.
  - (B) The Executive Officer or EPA Administrator determines that this permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of this permit.
  - (C) The Executive Officer or EPA Administrator determines that the permit must be revised or revoked to assure compliance with the applicable requirements. [3005(g)(1)]

#### **COMPLIANCE PROVISIONS**

8. The operator shall comply with all regulatory requirements, and all permit terms and conditions, except:
- (A) As provided for by the emergency provisions of condition no. 17 or condition no. 18, or
  - (B) As provided by an alternative operating condition granted pursuant to a federally approved (SIP-approved) Rule 518.2.

Any non-compliance with any federally enforceable permit condition constitutes a violation of the Federal Clean Air Act and is grounds for enforcement action; for permit termination, revocation and reissuance, or revision; or denial of a permit renewal application. Non-compliance may also be grounds for civil or criminal penalties under the California State Health and Safety Code. [3004(a)(7)(A)]

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

### SECTION K: TITLE V Administration

9. The operator shall allow the Executive Officer or authorized representative, upon presentation of appropriate credentials to:
  - (A) Enter the operator's premises where emission-related activities are conducted, or records are kept under the conditions of this permit;
  - (B) Have access to and copy, at reasonable times, any records that must be kept under the conditions of the permit;
  - (C) Inspect at reasonable times, any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit; and
  - (D) Sample or monitor at reasonable times, substances or parameters for the purpose of assuring compliance with the facility permit or regulatory requirements. [3004(a)(10)(B)]
  
10. All terms and conditions in this permit, including any provisions designed to limit a facility's potential to emit, are enforceable by the EPA Administrator and citizens under the federal Clean Air Act, unless the term or condition is designated as not federally enforceable. Each day during any portion of which a violation occurs is a separate offense. [3004(g)]
  
11. A challenge to any permit condition or requirement raised by EPA, the operator, or any other person, shall not invalidate or otherwise affect the remaining portions of this permit. [3007(b)]
  
12. The filing of any application for a permit revision, revocation, or termination, or a notification of planned changes or anticipated non-compliance does not stay any permit condition. [3004(a)(7)(D)]
  
13. It shall not be a defense for a person in an enforcement action, including those listed in Rule 3002(c)(2), that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit, except as provided for in "Emergency Provisions" of this section. [3004(a)(7)(H)]

## FACILITY PERMIT TO OPERATE TESORO REFINING AND MARKETING CO

### SECTION K: TITLE V Administration

14. The operator shall not build, erect, install, or use any equipment, the use of which, without resulting in a reduction in the total release of air contaminants to atmosphere, reduces or conceals an emission which would otherwise constitute a violation of Chapter 3 (commencing with Section 41700) of Part 4, of Division 26 of the California Health and Safety Code or of AQMD rules. This rule shall not apply to cases in which the only violation involved is of Section 41700 of the California Health and Safety Code, or Rule 402 of AQMD Rules. [408]
15. Nothing in this permit or in any permit shield can alter or affect:
- (A) Under Section 303 of the federal Clean Air Act, the provisions for emergency orders;
  - (B) The liability of the operator for any violation of applicable requirements prior to or at the time of permit issuance;
  - (C) The applicable requirements of the Acid Rain Program, Regulation XXXI;
  - (D) The ability of EPA to obtain information from the operator pursuant to Section 114 of the federal Clean Air Act;
  - (E) The applicability of state or local requirements that are not "applicable requirements", as defined in Rule 3000, at the time of permit issuance but which do apply to the facility, such as toxics requirements unique to the State; and
  - (F) The applicability of regulatory requirements with compliance dates after the permit issuance date. [3004(c)(3)]
16. For any portable equipment that requires an AQMD or state permit or registration, excluding a) portable engines, b) military tactical support equipment and c) AQMD-permitted portable equipment that are not a major source, are not located at the facility for more than 12 consecutive months after commencing operation, and whose operation does not conflict with the terms or conditions of this Title V permit: 1) the facility operator shall keep a copy of the AQMD or state permit or registration; 2) the equipment operator shall comply with the conditions on the permit or registration and all other regulatory requirements; and 3) the facility operator shall treat the permit or registration as a part of its Title V permit, subject to recordkeeping, reporting and certification requirements. [3004(a)(1)]

## FACILITY PERMIT TO OPERATE TESORO REFINING AND MARKETING CO

### SECTION K: TITLE V Administration EMERGENCY PROVISIONS

17. An emergency<sup>1</sup> constitutes an affirmative defense to an action brought for noncompliance with a technology-based emission limit only if:
- (A) Properly signed, contemporaneous operating records or other credible evidence demonstrate that:
    - (1) An emergency occurred and the operator can identify the cause(s) of the emergency;
    - (2) The facility was operated properly (i.e. operated and maintained in accordance with the manufacturer's specifications, and in compliance with all regulatory requirements or a compliance plan), before the emergency occurred;
    - (3) The operator took all reasonable steps to minimize levels of emissions that exceeded emissions standard, or other requirements in the permit; and,
    - (4) The operator submitted a written notice of the emergency to the AQMD within two working days of the time when the emissions limitations were exceeded due to the emergency. The notice shall contain a description of the emergency, any steps taken to mitigate emissions, and corrective actions taken; and
  - (B) The operator complies with the breakdown provisions of Rule 430 – Breakdown Provisions, or subdivision (i) of Rule 2004 – Requirements, whichever is applicable. [3002(g), 430, 2004(i)]
18. The operator is excused from complying with any regulatory requirement that is suspended by the Executive Officer during a state of emergency or state of war emergency, in accordance with Rule 118 - Emergencies. [118]

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<sup>1</sup> "Emergency" means any situation arising from sudden and reasonably unforeseeable events beyond the control of the operator, including acts of God, which: (A) requires immediate corrective action to restore normal operation; and (B) causes the facility to exceed a technology-based emission limitation under the permit, due to unavoidable increases in emissions attributable to the emergency; and (C) is not caused by improperly designed equipment, lack of preventative maintenance, careless or improper operation, or operator error.

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

### **SECTION K: TITLE V Administration RECORDKEEPING PROVISIONS**

19. In addition to any other recordkeeping requirements specified elsewhere in this permit, the operator shall keep records of required monitoring information, where applicable, that include:
- (A) The date, place as defined in the Title V permit, and time of sampling or measurements;
  - (B) The date(s) analyses were performed;
  - (C) The company or entity that performed the analyses;
  - (D) The analytical techniques or methods used;
  - (E) The results of such analyses; and
  - (F) The operating conditions as existing at the time of sampling or measurement. [3004(a)(4)(B)]
20. The operator shall maintain records pursuant to Rule 109 and any applicable material safety data sheet (MSDS) for any equipment claimed to be exempt from a written permit by Rule 219 based on the information in those records. [219(t)]
21. The operator shall keep all records of monitoring data required by this permit or by regulatory requirements for a period of at least five years from the date of the monitoring sample, measurement, report, or application. [3004(a)(4)(E)]

### **REPORTING PROVISIONS**

22. The operator shall comply with the following requirements for prompt reporting of deviations:
- (A) Breakdowns shall be reported as required by Rule 430 – Breakdown Provisions or subdivision (i) of Rule 2004 - Requirements, whichever is applicable.

## FACILITY PERMIT TO OPERATE TESORO REFINING AND MARKETING CO

### SECTION K: TITLE V Administration

- (B) Other deviations from permit or applicable rule emission limitations, equipment operating conditions, or work practice standards, determined by observation or by any monitoring or testing required by the permit or applicable rules that result in emissions greater than those allowed by the permit or applicable rules shall be reported within 72 hours (unless a shorter reporting period is specified in an applicable State or Federal Regulation) of discovery of the deviation by contacting AQMD enforcement personnel assigned to this facility or otherwise calling (800) CUT-SMOG.
- (C) A written report of such deviations reported pursuant to (B), and any corrective actions or preventative measures taken, shall be submitted to AQMD, in an AQMD approved format, within 14 days of discovery of the deviation.
- (D) All other deviations shall be reported with the monitoring report required by condition no. 23. [3004(a)(5)]
23. Unless more frequent reporting of monitoring results are specified in other permit conditions or in regulatory requirements, the operator shall submit reports of any required monitoring to the AQMD at least twice per year. The report shall include a) a statement whether all monitoring required by the permit was conducted; and b) identification of all instances of deviations from permit or regulatory requirements. A report for the first six calendar months of the year is due by August 31 and a report for the last six calendar months of the year is due by February 28. [3004(a)(4)(F)]
24. The operator shall submit to the Executive Officer and to the Environmental Protection Agency (EPA), an annual compliance certification. For RECLAIM facilities, the certification is due when the Annual Permit Emissions Program (APEP) report is due and shall cover the same reporting period. For other facilities, the certification is due on March 1 for the previous calendar year. The certification need not include the period preceding the date the initial Title V permit was issued. Each compliance certification shall include:
- (A) Identification of each permit term or condition that is the basis of the certification;

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

### **SECTION K: TITLE V Administration**

- (B) The compliance status during the reporting period;
- (C) Whether compliance was continuous or intermittent;
- (D) The method(s) used to determine compliance over the reporting period and currently, and
- (E) Any other facts specifically required by the Executive Officer to determine compliance.

The EPA copy of the certification shall be sent to: Director of the Air Division Attn:  
Air-3 USEPA, Region IX 75 Hawthorne St. San Francisco, CA 94105 [3004(a)(10)(E)]

25. All records, reports, and documents required to be submitted by a Title V operator to AQMD or EPA shall contain a certification of accuracy consistent with Rule 3003(c)(7) by a responsible official (as defined in Rule 3000). [3004(a)(12)]

### **PERIODIC MONITORING**

26. All periodic monitoring required by this permit pursuant to Rule 3004(a)(4)(c) is based on the requirements and justifications in the AQMD document "Periodic Monitoring Guidelines for Title V Facilities" or in case-by-case determinations documented in the TitleV application file. [3004(a)(4)]

## FACILITY PERMIT TO OPERATE TESORO REFINING AND MARKETING CO

### SECTION K: TITLE V Administration

#### *FACILITY RULES*

*This facility is subject to the following rules and regulations*

With the exception of Rule 402, 473, 477, 1118 and Rules 1401 through 1420, the following rules that are designated as non-federally enforceable are pending EPA approval as part of the state implementation plan. Upon the effective date of that approval, the approved rule(s) will become federally enforceable, and any earlier versions of those rules will no longer be federally enforceable.

<b>RULE SOURCE</b>	<b>Adopted/Amended Date</b>	<b>FEDERAL Enforceability</b>
RULE 109	5-2-2003	Federally enforceable
RULE 1105.1	11-7-2003	Federally enforceable
RULE 1107	1-6-2006	Non federally enforceable
RULE 1110.2	2-1-2008	Non federally enforceable
RULE 1113	11-8-1996	Federally enforceable
RULE 1113	7-13-2007	Non federally enforceable
RULE 1118	11-4-2005	Federally enforceable
RULE 1118	2-13-1998	Non federally enforceable
RULE 1122	10-1-2004	Federally enforceable
RULE 1123	12-7-1990	Federally enforceable
RULE 1134	8-8-1997	Federally enforceable
RULE 1146	11-17-2000	Federally enforceable
RULE 1146	9-5-2008	Non federally enforceable
RULE 1149	5-2-2008	Non federally enforceable
RULE 1149	7-14-1995	Federally enforceable
RULE 1158	6-11-1999	Federally enforceable
RULE 1158	7-11-2008	Non federally enforceable
RULE 1168	1-7-2005	Federally enforceable
RULE 1168	10-3-2003	Federally enforceable
RULE 1171	11-7-2003	Federally enforceable
RULE 1171	2-1-2008	Non federally enforceable
RULE 1173	2-6-2009	Non federally enforceable

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<b>RULE SOURCE</b>	<b>Adopted/Amended Date</b>	<b>FEDERAL Enforceability</b>
RULE 1173	5-13-1994	Federally enforceable
RULE 1176	9-13-1996	Federally enforceable
RULE 1178	4-7-2006	Federally enforceable
RULE 118	12-7-1995	Non federally enforceable
RULE 1189	1-21-2000	Federally enforceable
RULE 1303	5-10-1996	Federally enforceable
RULE 1303(a)	12-6-2002	Non federally enforceable
RULE 1303(a)(1)-BACT	12-6-2002	Non federally enforceable
RULE 1303(a)(1)-BACT	5-10-1996	Federally enforceable
RULE 1303(a)-BACT	5-10-1996	Federally enforceable
RULE 1303(b)(2)-Offset	12-6-2002	Non federally enforceable
RULE 1303(b)(2)-Offset	5-10-1996	Federally enforceable
RULE 1304(a)-Modeling and Offset Exemption	6-14-1996	Federally enforceable
RULE 1304(c)-Offset Exemption	6-14-1996	Federally enforceable
RULE 1313(d)	12-7-1995	Federally enforceable
RULE 1401	3-7-2008	Non federally enforceable
RULE 1402	3-4-2005	Non federally enforceable
RULE 1404	4-6-1990	Non federally enforceable
RULE 1415	10-14-1994	Non federally enforceable
RULE 1418	9-10-1999	Non federally enforceable
RULE 1470	6-1-2007	Non federally enforceable
RULE 1703 - PSD Analysis	10-7-1988	Federally enforceable
RULE 1703(a)(2) - PSD-BACT	10-7-1988	Non federally enforceable
RULE 2004	4-6-2007	Non federally enforceable
RULE 2004	5-11-2001	Federally enforceable
RULE 2005	4-20-2001	Federally enforceable
RULE 2005	5-6-2005	Federally enforceable
RULE 2011	5-6-2005	Federally enforceable
RULE 2012	1-7-2005	Federally enforceable
RULE 2012	12-5-2003	Federally enforceable

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<b>RULE SOURCE</b>	<b>Adopted/Amended Date</b>	<b>FEDERAL Enforceability</b>
RULE 2012	5-6-2005	Federally enforceable
RULE 204	10-8-1993	Federally enforceable
RULE 217	1-5-1990	Federally enforceable
RULE 219	7-11-2003	Non federally enforceable
RULE 219	9-4-1981	Federally enforceable
RULE 2202	2-6-2004	Non federally enforceable
RULE 3002	11-14-1997	Federally enforceable
RULE 3003	11-14-1997	Federally enforceable
RULE 3003	3-16-2001	Non federally enforceable
RULE 3004	12-12-1997	Federally enforceable
RULE 3004(a)(1)	12-12-1997	Federally enforceable
RULE 3004(a)(10)(C)	12-12-1997	Federally enforceable
RULE 3004(a)(4)-Periodic Monitoring	12-12-1997	Federally enforceable
RULE 3005	11-14-1997	Federally enforceable
RULE 3005	3-16-2001	Non federally enforceable
RULE 3007	10-8-1993	Federally enforceable
RULE 301	5-2-2008	Non federally enforceable
RULE 304	7-9-2004	Non federally enforceable
RULE 401	11-9-2001	Non federally enforceable
RULE 401	3-2-1984	Federally enforceable
RULE 402	5-7-1976	Non federally enforceable
RULE 403	12-11-1998	Federally enforceable
RULE 404	2-7-1986	Federally enforceable
RULE 405	2-7-1986	Federally enforceable
RULE 407	4-2-1982	Federally enforceable
RULE 408	5-7-1976	Federally enforceable
RULE 409	8-7-1981	Federally enforceable
RULE 430	7-12-1996	Non federally enforceable
RULE 431.1	6-12-1998	Federally enforceable
RULE 431.2	5-4-1990	Federally enforceable
RULE 431.2	9-15-2000	Non federally enforceable
RULE 461	3-7-2008	Non federally enforceable

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<b>RULE SOURCE</b>	<b>Adopted/Amended Date</b>	<b>FEDERAL Enforceability</b>
RULE 461	6-3-2005	Federally enforceable
RULE 462	5-14-1999	Federally enforceable
RULE 463	5-6-2005	Federally enforceable
RULE 465	8-13-1999	Federally enforceable
RULE 475	10-8-1976	Federally enforceable
RULE 475	8-7-1978	Non federally enforceable
RULE 476	10-8-1976	Federally enforceable
RULE 701	6-13-1997	Federally enforceable
CA PRC CEQA	11-23-1970	Non federally enforceable
40CFR 60 Subpart A	6-13-2007	Federally enforceable
40CFR 60 Subpart Db	1-28-2009	Federally enforceable
40CFR 60 Subpart GG	2-24-2006	Federally enforceable
40CFR 60 Subpart GGG	6-2-2008	Federally enforceable
40CFR 60 Subpart GGGa	6-2-2008	Federally enforceable
40CFR 60 Subpart J	6-24-2008	Federally enforceable
40CFR 60 Subpart Ja	6-24-2008	Federally enforceable
40CFR 60 Subpart K	10-17-2000	Federally enforceable
40CFR 60 Subpart Ka	12-14-2000	Federally enforceable
40CFR 60 Subpart Kb	10-15-2003	Federally enforceable
40CFR 60 Subpart QQ	10-17-2000	Federally enforceable
40CFR 61 Subpart A	5-16-2007	Federally enforceable
40CFR 61 Subpart FF	12-4-2003	Federally enforceable
40CFR 61 Subpart FF, #1	12-4-2003	Federally enforceable
40CFR 63 Subpart A	5-16-2007	Federally enforceable
40CFR 63 Subpart CC	6-23-2003	Federally enforceable
40CFR 63 Subpart CC, #1	6-23-2003	Federally enforceable
40CFR 63 Subpart CC, #2	6-23-2003	Federally enforceable
40CFR 63 Subpart CC, #3A	6-23-2003	Federally enforceable
40CFR 63 Subpart CC, #4	6-23-2003	Federally enforceable
40CFR 63 Subpart CC, #5A	6-23-2003	Federally enforceable
40CFR 63 Subpart UUU, #1	4-20-2006	Federally enforceable
40CFR 63 Subpart UUU, #2	4-20-2006	Federally enforceable

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<b>RULE SOURCE</b>	<b>Adopted/Amended Date</b>	<b>FEDERAL Enforceability</b>
40CFR 68 - Accidental Release Prevention	5-24-1996	Federally enforceable
40CFR 79	7-1-1999	Federally enforceable
40CFR 80	7-1-1999	Federally enforceable
CONSENT DECREE	3-21-2001	Federally enforceable