



**FACILITY PERMIT TO CONSTRUCT
BP WEST COAST PROD. LLC BP CARSON REF.**

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

Section D - Permit to Operate

PROCESS 6		SYSTEM 4		
CATALYTIC REFORMING		CATALYTIC REFORMING UNIT HEATERS		
[EXISTING EQUIPMENT]		System Conditions:		
Equipment	ID No.	Connected To	Emissions and Requirements	Conditions
HEATER, NO.1 REFORMER, NO. 014, REFINERY GAS, ALCORN COMBUSTION COMPANY, WITH LOW NOX BURNER, 255 MMBTU/HR WITH A/N: <u>395838 453163</u> BURNER, 75 BURNERS, REFINERY GAS, ZEECO, MODEL ZEECO, GLSF-9, WITH LOW NOX BURNER, 255 MMBTU/HR	D532	S533 S534 <u>DX2</u>	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]	B61.4, C1.19, D90.4, D328.1, H23.1, K67.1
STACK, HEIGHT: 40 FT ; DIAMETER: 7 FT A/N: <u>395838 453163</u>	S533	D532		
STACK, HEIGHT: 40 FT ; DIAMETER: 7 FT A/N: <u>395838 453163</u>	S534	D532		
HEATER, NO.2 REFORMER, # 015, REFINERY GAS, ALCORN COMBUSTION COMPANY, WITH LOW NOX BURNER, 310 MMBTU/HR WITH A/N: <u>395974 453164</u> BURNER, 72 BURNERS, REFINERY GAS, JOHN ZINK, MODEL PSMR-12R(32 BURNERS), MODEL PSMR-15R(40 BURNERS), WITH LOW NOX BURNER, 310 MMBTU/HR BURNER, 15 BURNERS, NATURAL GAS, REFINERY GAS, JOHN ZINK, MODEL HPMRA	D535	S536 S537 <u>DX7</u>	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]	B61.4, C1.20, D90.4, D328.1, H23.1, <u>K67.1</u>
STACK A/N: <u>395974 453164</u>	S536	D535		



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STACK A/N: 395974 453164	S537	D535		
HEATER, NO.3 REFORMER, NO.016, REFINERY GAS, ALCORN COMBUSTION COMPANY, WITH LOW NOX BURNER, 171 MMBTU/HR WITH A/N: 395649 453165 BURNER, 40 BURNERS, REFINERY GAS, CALLIDUS, MODEL LE-CSG-4W, WITH LOW NOX BURNER, 171 MMBTU/HR	D1439	<u>DX8</u>	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]	B61.4, D90.4, D328.1, H23.1, K67.1

Section H – Permit to Construct

PROCESS 6		SYSTEM 1		
CATALYTIC REFORMING		NO. 1 CATALYTIC REFORMER UNIT		
<i>[EXISTING EQUIPMENT]</i>		System Conditions: S13.2, S15.6, S46.1, S46.2, S56.1		
Equipment	ID No.	Connected To	Emissions and Requirements	Conditions
DRYER, WEST HYDROGEN, RW 6109, HEIGHT: 16 FT; DIAMETER: 3 FT A/N 504559 501003	D1434			
COLUMN, DESULFURIZER STRIPPER, RPV 2713, HEIGHT: 50 FT; DIAMETER: 5 FT 6 IN A/N 504559 501003	D426			
DRYER, EAST HYDROGEN, RW 6110, HEIGHT: 16 FT; DIAMETER: 3 FT A/N 504559 501003	D1435			
VESSEL, HIGH PRESSURE MDEA CONTACTOR, RPV 2716, HEIGHT: 48 FT; DIAMETER: 5 FT 6 IN A/N 504559 501003	D427			
KNOCK OUT POT, HYDROGEN DRYER, RW6111, HEIGHT: 8 FT; DIAMETER: 2 FT A/N 504559 501003	D1436			



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REACTOR, DESULFURIZER, RPV 2702, HEIGHT: 24 FT 4 IN; DIAMETER: 11 FT A/N <u>504559 501003</u>	D428			
KNOCK OUT POT, HIGH PRESSURE MDEA, RPV 2755, HEIGHT: 12 FT; DIAMETER: 4 FT A/N <u>504559 501003</u>	D429			
ACCUMULATOR, RPV 2715, DESULFURIZER STRIPPER OVERHEAD, LENGTH: 10 FT; DIAMETER: 4 FT A/N <u>504559 501003</u>	D430		BENZENE: (10) [40CFR 61 Subpart FF_02, 12-4-2003]; VOC: 500 PPMV (8) [40CFR 61 Subpart FF, 12-4-2003]	H23.12
KNOCK OUT POT, RPV 2718, FUEL GAS, HEIGHT: 8 FT; DIAMETER: 4 FT A/N <u>504559 501003</u>	D431			
FILTER, REFORMER CHARGE, RPV 2711, MORLANE COMPANY, MODEL TYPE 600-R-6, HEIGHT: 5 FT; DIAMETER: 1 FT 6 IN A/N <u>504559 501003</u>	D432			
FILTER, REFORMER CHARGE, RPV 2712, MORLANE COMPANY, MODEL TYPE 600-R-6; HEIGHT: 5 FT; DIAMETER: 1 FT 6 IN A/N <u>504559 501003</u>	D433			
COMPRESSOR, RW 0005-087.03, DESULFURIZER FEED GAS, INGERSOLL-RAND, <u>RECIPROCATING</u> A/N <u>504559 501003</u>	D434			<u>E193.X1,</u> <u>K67.X1</u>
COMPRESSOR, RW 0006-087.03, DESULFURIZER <u>RECYCLE FEED</u> GAS, <u>SPARE</u> , INGERSOLL-RAND, <u>RECIPROCATING</u> A/N <u>504559 501003</u>	D435			<u>E193.X1,</u> <u>K67.X1</u>
COLUMN, HYDROGENATION STRIPPER, RPV 2724, HEIGHT: 48 FT; DIAMETER: 4 FT 4 IN A/N <u>504559</u>	D436			



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VESSEL, LOW PRESSURE MDEA CONTACTOR, RPV 2717, HEIGHT: 53 FT 5 IN; DIAMETER: 3 FT 6 IN A/N <u>504559 501003</u>	D437			
KNOCK OUT POT, LOW PRESSURE MDEA, RPV 2719, HEIGHT: 6 FT; DIAMETER: 6 FT 6 IN A/N <u>504559 501003</u>	D438			
REACTOR, HYDROGENATION, RPV 2701, HEIGHT: 13 FT; DIAMETER: 5 FT 6 IN A/N <u>504559 501003</u>	D439			
TANK, FLASH, REFORMER, RPV 2739, HEIGHT: 15 FT; DIAMETER: 6 FT 5 IN A/N <u>504559 501003</u>	D440	<u>DX2</u>		<u>E336.X2</u>
TANK, FLASH, HYDROGENATION, RPV 2720, HEIGHT: 10 FT; DIAMETER: 4 FT 6 IN A/N <u>504559</u>	D441			
KNOCK OUT POT, HYDROGENATION WATER, RPV 2721, HEIGHT: 8 FT; DIAMETER: 3 FT A/N <u>504559</u>	D442			
DRUM, RPV 2727, HYDROGENATION STRIPPER REFLUX, HEIGHT: 8 FT; DIAMETER: 4 FT A/N <u>504559</u>	D443			
DRUM, RPV 2728, CONTAMINATED WATER, HEIGHT: 6 FT; DIAMETER: 3 FT A/N <u>504559 501003</u>	D444			
COLUMN, REFORMER STABILIZER, RPV 2743, HEIGHT: 96 FT 6 IN; DIAMETER: 5 FT 6 IN A/N <u>504559 501003</u>	D445			



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<p>REACTOR, NO. 1 REFORMER, RPV 2748, HEIGHT: 20 FT; DIAMETER: 5 FT 4 IN</p> <p>A/N <u>504559 501003</u></p>	D446		HAP: (10) [40CFR 63 Subpart UUU, #1, 4- 20-2006]	<u>E336.X1</u> , <u>E336.X2</u>
<p>REACTOR, NO. 2 REFORMER, RPV 2747, HEIGHT: 20 FT 9 IN; DIAMETER: 5 FT 4 IN</p> <p>A/N <u>504559 501003</u></p>	D447		HAP: (10) [40CFR 63 Subpart UUU, #1, 4- 20-2006]	<u>E336.X1</u> , <u>E336.X2</u>
<p>REACTOR, NO. 3 REFORMER, RPV 2750, HEIGHT: 19 FT 3 IN; DIAMETER: 7 FT 4 IN</p> <p>A/N <u>504559 501003</u></p>	D448		HAP: (10) [40CFR 63 Subpart UUU, #1, 4- 20-2006]	<u>E336.X1</u> , <u>E336.X2</u>
<p>REACTOR, NO. 4 REFORMER, RPV 2751, HEIGHT: 13 FT; DIAMETER: 11 FT 10 IN</p> <p>A/N <u>504559 501003</u></p>	D449	<u>DX2</u>	HAP: (10) [40CFR 63 Subpart UUU, #1, 4- 20-2006]	<u>E336.X1</u> , <u>E336.X2</u>
<p>COMPRESSOR, RW <u>0022-087.06</u>, DESULFURIZER RECYCLE, <u>CENTRIFUGAL</u></p> <p>A/N <u>504559 501003</u></p>	D451			<u>E193.X2</u>
<p><u>RESERVOIR, LUBE OIL, FOR</u> <u>COMPRESSOR RW 0022-087.06,</u> <u>NITROGEN PURGE, LENGTH: 8 FT;</u> <u>HEIGHT: 4 FT 6.5 IN; WIDTH: 7 FT</u></p> <p>A/N <u>501003</u></p>	<u>DX1</u>	<u>D1313</u> <u>D1314</u> <u>D2807</u>		<u>E74.2</u>
<p>EJECTOR, DESULFURIZER- HYDROGENATION EVACUATOR, RW 19 15401</p> <p>A/N <u>504559 501003</u></p>	D452			
<p>EJECTOR, REFORMER EVACUATOR, RW 20 154.02</p> <p>A/N <u>504559 501003</u></p>	D453			
<p>COMPRESSOR, RW <u>0004-087.06</u>, REFORMER RECYCLE GAS, <u>RECIPROCATING, SIX FIVE STAGES,</u> <u>CENTRIFUGAL</u></p> <p>A/N <u>504559 501003</u></p>	D454			



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RESERVOIR, LUBE OIL, FOR COMPRESSOR RW 0004-087.06, NITROGEN PURGE, LENGTH: 16 FT 10.5 IN; HEIGHT: 1 FT 8 IN; WIDTH: 6 FT 10 IN <u>A/N 504559 501003</u>	D2907	D1313 D1314 D2807		E74.2
DRUM, RPV 0235, FUEL GAS NORTH AREA, HEIGHT: 12 FT; DIAMETER: 6 FT <u>A/N 504559 501003</u>	D455			
TANK, RPV 2775, TCA INJECTION, HEIGHT: 3 FT; DIAMETER: 2 FT <u>A/N 504559 501003</u>	D456			
REACTOR, RPV 3286, R4B, HEIGHT: 12 FT 5 IN; DIAMETER: 11 FT 10 IN <u>A/N 504559 501003</u>	D457	<u>DX2</u>	HAP: (10) [40CFR 63 Subpart UUU, #1, 4- 20-2006]	<u>E336.X1</u> , <u>E336.X2</u>
<u>SCRUBBER, NO. 1 REFORMER,</u> <u>INTERNAL TO PROCESS PIPING,</u> <u>SODA ASH/WATER SOLUTION</u> <u>INJECTION INTO COOLER, WITH</u> <u>COOLER, REFORMER EFFLUENT</u> <u>COOLER TOP, RPV 3287, AND</u> <u>REFORMER EFFLUENT COOLER</u> <u>BOTTOM, RPV 3288</u> <u>A/N 501003</u>	<u>DX2</u>	<u>D449 D457</u> <u>D532</u>		
DRUM, TRAP, RPV 4016, HYDROGEN SYSTEM CHLORIDE, HEIGHT: 7 FT 10 IN; DIAMETER: 5 FT <u>A/N 504559 501003</u>	D458			
DRUM, RPV 4030, STABILIZER REFLUX, HEIGHT: 16 FT; DIAMETER: 4 FT <u>A/N 504559 501003</u>	D459			
DRUM, TRAP, RPV 5106, SULFUR, HEIGHT: 10 FT 9 IN; DIAMETER: 6 FT <u>A/N 504559 501003</u>	D460			



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<u>FILTER, FUEL GAS, RPV 5653-289.02, HEIGHT: 9 FT 4 IN; DIAMETER: 1 FT 10 IN</u>	<u>DX3</u>			
<u>A/N 501003</u>				
<u>KNOCK OUT POT, RPV 2756, REFORMER RECYCLE, HEIGHT: 8 FT; DIAMETER: 5 FT</u>	<u>D450</u>			
<u>A/N 501003</u>				
<u>FUGITIVE EMISSIONS, MISCELLANEOUS</u>	<u>D2489</u>		<u>HAP: (10) [40CFR 63 Subpart CC, #5A, 6- 23-2003]</u>	<u>H23.3</u>
<u>A/N 504559 501003</u>				
PROCESS 6		SYSTEM 2		
CATALYTIC REFORMING		NO. 2 CATALYTIC REFORMER UNIT		
[EXISTING EQUIPMENT]		System Conditions: S13.2, S15.6, S56.1		
Equipment	ID No.	Connected To	Emissions and Requirements	Conditions
<u>KNOCKOUT POT, PRV 3106, NO. 2 REFORMER RECYCLE GAS, HEIGHT: 14 FT 4 IN; DIAMETER: 10 FT</u>	<u>D466</u>			
<u>A/N 501004</u>				
<u>KNOCKOUT POT, RPV 3107, NO. 2 REFORMER DESULFURIZER COMPRESSOR, HEIGHT: 8 FT 4 IN; DIAMETER: 5 FT</u>	<u>D467</u>			
<u>A/N 501004</u>				
<u>FILTER, FUEL GAS, NO. 2 REFORMER, RPV 5756, HEIGHT: 8 FT 6 IN; DIAMETER: 1 FT 10 IN</u>	<u>DX4</u>			
<u>A/N 501004</u>				
<u>DRUM, SULFUR TRAP, NO. 2 REFORMER & DESULFURIZER, RPV 5107, HEIGHT: 12 FT 5 IN; DIAMETER: 6 FT</u>	<u>DX5</u>			
<u>A/N 501004</u>				
<u>POT, CHLORINE INJECTION, NO. 2 REFORMER, RPV 6257, HEIGHT: 3 FT; DIAMETER: 2 FT</u>	<u>DX6</u>			
<u>A/N 501004</u>				



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<p>REACTOR, REFORMER NO. 2, RPV 3100, HEIGHT: 18 FT; DIAMETER: 8 FT 6 IN</p> <p>A/N 504560 <u>501004</u></p>	D461		HAP: (10) [40CFR 63 Subpart UUU, #1, 4-20-2006]	<u>E336.X1</u> , <u>E336.X3</u>
<p>REACTOR, DESULFURIZER, RPV 3101, HEIGHT: 25 FT; DIAMETER: 12 FT 6 IN</p> <p>A/N 504560 <u>501004</u></p>	D462			
<p>REACTOR, REFORMER NO. 3-B, RPV 3103, HEIGHT: 14 FT 10 IN; DIAMETER: 15 FT</p> <p>A/N 504560 <u>501004</u></p>	D463	<u>DX7</u>	HAP: (10) [40CFR 63 Subpart UUU, #1, 4-20-2006]	<u>E336.X1</u> , <u>E336.X3</u>
<p>REACTOR, REFORMER, NO. 3-A, RPV 3104, HEIGHT: 14 FT 10 IN; DIAMETER: 15 FT</p> <p>A/N 504560 <u>501004</u></p>	D464	<u>DX7</u>	HAP: (10) [40CFR 63 Subpart UUU, #1, 4-20-2006]	<u>E336.X1</u> , <u>E336.X3</u>
<p>REACTOR, REFORMER, NO. 1, RPV 3105, HEIGHT: 16 FT 6 IN; DIAMETER: 7 FT</p> <p>A/N 504560 <u>501004</u></p>	D465		HAP: (10) [40CFR 63 Subpart UUU, #1, 4-20-2006]	<u>E336.X1</u> , <u>E336.X3</u>
<p><u>SCRUBBER, NO. 2 REFORMER, INTERNAL TO PROCESS PIPING, SODA ASH/WATER SOLUTION INJECTION INTO COOLER, WITH</u></p> <p><u>COOLER, REFORMER EFFLUENT COOLER WEST TOP/BOTTOM, RPV 3123/3122, AND REFORMER EFFLUENT COOLER EAST TOP/BOTTOM, RPV 3125/3124</u></p> <p>A/N <u>501004</u></p>	<u>DX7</u>	<u>D463 D464</u> <u>D535</u>		
<p>VESSEL, MDEA CONTACTOR, RPV 3108, HEIGHT: 56 FT 11 IN; DIAMETER: 5 FT 6 IN</p> <p>A/N 504560 <u>501004</u></p>	D468			
<p>VESSEL, SEPARATOR, RPV 3133, SOUR WATER OIL, HEIGHT: 6 FT; DIAMETER: 2 FT</p> <p>A/N 504560 <u>501004</u></p>	D469			



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ACCUMULATOR, RPV 3134, DESULFURIZER STRIPPER, OVERHEAD, HEIGHT: 13 FT; DIAMETER: 3 FT 6 IN A/N 504560 501004	D470			
COLUMN, DESULFURIZER STRIPPER, RPV 3135, HEIGHT: 53 FT 6 IN; DIAMETER: 5 FT 6 IN A/N 504560 501004	D471			
FILTER, RPV 5863, CATALYST, MOORLANE, MODEL 246, HEIGHT: 7 FT; DIAMETER: 2 FT 2 IN A/N 504560 501004	D472			
FILTER, RPV 5864, CATALYST, MOORLANE, MODEL 246, HEIGHT: 7 FT; DIAMETER: 2 FT 2 IN A/N 504560 501004	D473			
TANK, FLASH, REFORMER, RPV 3137, HEIGHT: 15 FT; DIAMETER: 10 FT A/N 504560 501004	D474	C1308 <u>DX7</u>	HAP: (10) [40CFR 63 Subpart CC, #2, 6-23- 2003]	
POT, RPV 3146, STABILIZER REBOILER CONDENSATE, HEIGHT: 2 FT 6 IN; DIAMETER: 1 FT 8 IN A/N 504560 501004	D475			
COMPRESSOR, RW 0007-087.06, REFORMER RECYCLE, CENTRIFUGAL, WITH TWO OIL SEALS A/N 504560 501004	D476			<u>E193.X2</u>
RESERVOIR, LUBE OIL, FOR COMPRESSOR RW 0007-087.06, NITROGEN PURGE, LENGTH: 7 FT; HEIGHT: 2 FT 5.5 IN; WIDTH: 6 FT A/N 504560 501004	D2908	D1313 D1314 D2807		E74.2
COMPRESSOR, RW 0009-087.03, DESULFURIZER FEED/ <u>RECYCLE</u> , <u>TURBINE</u> , RECIPROCATING A/N 504560 501004	D477			<u>E193.X1</u> , <u>K67.X1</u>



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COMPRESSOR, RW 0010-087.03, DESULFURIZER FEED/RECYCLE, RECIPROCATING, TWO CYLINDERS A/N 504560 <u>501004</u>	D478			<u>E193.X1</u> , <u>K67.X1</u>
EJECTOR, REFORMER EVACUATER JET, RW 0051 154.01 A/N 504560 <u>501004</u>	D479			
EJECTOR, SURFACE CONDENSER EVACUATER JETS, RW 0052 154.01 A/N 504560 <u>501004</u>	D480			
COLUMN, STABILIZER, RPV 3143, HEIGHT: 69 FT 6 IN; DIAMETER: 7 FT A/N 504560 <u>501004</u>	D481			
ACCUMULATOR, RPV 3142, REFORMER STABILIZER OVERHEAD, HEIGHT: 16 FT; DIAMETER; 5 FT 6 IN A/N 504560 <u>501004</u>	D482			
KNOCK OUT POT, RPV 2893, FUEL GAS, HEIGHT: 8 FT; DIAMETER: 5 FT A/N 504560 <u>501004</u>	D483			
KNOCK OUT POT, CHLORIDE TRAP, RPV 3293, HEIGHT: 11 IN; DIAMETER: 4 IN A/N 504560 <u>501004</u>	D485			
DRUM, CHLORIDE TRAP, RPV 4017, HEIGHT: 36 FT; DIAMETER: 7 FT 6 IN A/N 504560 <u>501004</u>	D486			
FUGITIVE EMISSIONS, MISCELLANEOUS A/N 504560 <u>501004</u>	D2490		HAP: (10) [40CFR 63 Subpart CC, #5A, 6- 23-2003]	H23.3
PROCESS 6		SYSTEM 3		
CATALYTIC REFORMING		NO. 3 CATALYTIC REFORMER UNIT		
[EXISTING EQUIPMENT]		System Conditions: S4.3, S4.4, S13.2, S56.1		
Equipment	ID No.	Connected To	Emissions and Requirements	Conditions



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KNOCK OUT POT, RPV 2366, HYDROGEN RECYCLE, HEIGHT: 10 FT; DIAMETER: 7 FT <u>A/N 395834 501002</u>	D487			
DRUM, RPV 2781, STABILIZER REBOILER CONDENSATE, HEIGHT: 2 FT 4 IN; DIAMETER: 1 FT 8 IN <u>A/N 395834 501002</u>	D488			
ACCUMULATOR, RPV 2849, STABILIZER OVERHEAD, HEIGHT: 8 FT; DIAMETER: 4 FT <u>A/N 395834 501002</u>	D489			
TOWER, REFORMATE STABILIZER, RPV 2850, HEIGHT: 77 FT; DIAMETER: 6 FT <u>A/N 395834 501002</u>	D490			
COLUMN, WASH, RPV 2800, RAFFINATE WATER, HEIGHT: 24 FT; DIAMETER: 3 FT <u>A/N 395834 501002</u>	D491			
COLUMN, WASH, RPV 2801, RAFFINATE WATER, HEIGHT: 24 FT; DIAMETER: 3 FT <u>A/N 395834 501002</u>	D492			
VESSEL, EXTRACTOR, RPV 2806, HEIGHT: 77 FT; DIAMETER: 8 FT <u>A/N 395834 501002</u>	D493			
COLUMN, STRIPPER, RPV 2807A, HEIGHT: 118 FT; DIAMETER: 7 FT <u>A/N 395834 501002</u>	D494			
TANK, STRIPPER FLASH, RPV 2807B, HEIGHT: 9 FT 7 IN; DIAMETER: 7 FT <u>A/N 395834 501002</u>	D495			
VESSEL, RECEIVER, EXTRACTOR, RPV 2810, LENGTH: 16 FT; DIAMETER: 4 FT <u>A/N 395834 501002</u>	D496			



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VESSEL, RECEIVER, RPV 2816, STRIPPER OVERHEAD, LENGTH: 16 FT; DIAMETER: 5 FT 6 IN <u>A/N 395834 501002</u>	D497			
VESSEL, RECEIVER, RPV 2819, WATER, LENGTH: 16 FT; DIAMETER: 3 FT <u>A/N 395834 501002</u>	D498			
REGENERATOR, RPV 2822, SOLVENT, HEIGHT: 27 FT 6 IN; DIAMETER: 6 FT <u>A/N 395834 501002</u>	D499			
COLUMN, RPV 2823, WATER, HEIGHT: 32 FT; DIAMETER: 3 FT 6 IN <u>A/N 395834 501002</u>	D500			
DRUM, TRAP, RPV 2872, SULFUR, HEIGHT: 6 FT 9 IN; DIAMETER: 9 FT 10 IN <u>A/N 395834 501002</u>	D501			
KNOCK OUT POT, RPV 2896, FUEL GAS <u>A/N 395834 501002</u>	D503			
FILTER, RPV 2948, SOLVENT W, HEIGHT: 2 FT 8 IN; DIAMETER: 10 IN <u>A/N 395834 501002</u>	D504			
FILTER, RPV 2949, SOLVENT E, HEIGHT: 2 FT 8 IN; DIAMETER: 10 IN <u>A/N 395834 501002</u>	D505			
DRUM, CHLORIDE TRAP, RPV 4015, HEIGHT: 7 FT 10 IN; DIAMETER: 5 FT 10 IN <u>A/N 395834 501002</u>	D506			
TANK, SURGE, RPV 2836, FEED, LENGTH: 32 FT; DIAMETER: 9 FT <u>A/N 395834 501002</u>	D507			



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BP WEST COAST PROD. LLC BP CARSON REF.**

SECTIONS D & H: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

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

ACCUMULATOR, RPV 2843, OVERHEAD, VENTED TO VAPOR RECOVERY SYSTEM, LENGTH: 20 FT; DIAMETER: 8 FT <u>A/N 395834 501002</u>	D508			E71.9
COLUMN, NO. 3 REFORMER FRACTIONATOR DEISOPENTANIZER, RPV 2845, HEIGHT: 93 FT 6 IN; DIAMETER: 8 FT <u>A/N 395834 501002</u>	D509			
POT, INJECTION, RPV 4045, CHLORIDE, HEIGHT: 5 FT 8 IN; DIAMETER: 2 FT <u>A/N 395834 501002</u>	D510			
VESSEL, RECEIVER, RPV 5109, WATER COLUMN, HEIGHT: 12 FT; DAIMETER: 2 FT <u>A/N 395834 501002</u>	C511			
TANK, FLASH, RPV 2863, REFORMATE, HEIGHT: 15 FT; DIAMETER: 6 FT 6 IN <u>A/N 395834 501002</u>	D512			
KNOCK OUT POT, RPV 2864, HYDROGEN GAS, HEIGHT: 6 FT; DIAMETER: 2 FT 6 IN <u>A/N 395834 501002</u>	D513			
REACTOR, RPV 2871, NO. 1, HEIGHT: 11 FT 6 IN; DIAMETER: 6 FT 6 IN <u>A/N 395834 501002</u>	D514		HAP: (10) [40CFR 63 Subpart UUU, #1, 4- 20-2006]	<u>E336.X1,</u> <u>E336.X4</u>
REACTOR, RPV 5115, NO. 4, HEIGHT: 12 FT 7 IN; DIAMETER: 15 FT 6 IN <u>A/N 395834 501002</u>	D515	<u>DX8</u>	HAP: (10) [40CFR 63 Subpart UUU, #1, 4- 20-2006]	<u>E336.X1,</u> <u>E336.X4</u>
REACTOR, RPV 2873, NO. 2, HEIGHT: 11 FT 6 IN; DIAMETER: 5 FT 6 IN <u>A/N 395834 501002</u>	D516		HAP: (10) [40CFR 63 Subpart UUU, #1, 4- 20-2006]	<u>E336.X1,</u> <u>E336.X4</u>
REACTOR, RPV 2874, NO. 3, HEIGHT: 11 FT 1 IN; DIAMETER: 7 FT <u>A/N 395834 501002</u>	D517		HAP: (10) [40CFR 63 Subpart UUU, #1, 4- 20-2006]	<u>E336.X1,</u> <u>E336.X4</u>



**FACILITY PERMIT TO CONSTRUCT
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SECTIONS D & H: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS
The operator shall comply with the terms and conditions set forth below:

<u>SCRUBBER, NO. 3 REFORMER, INTERNAL TO PROCESS PIPING, SODA ASH/WATER SOLUTION INJECTION INTO COOLER, WITH COOLER, REFORMER EFFLUENT COOLER TOP, RPV 2865, AND REFORMER EFFLUENT COOLER BOTTOM, RPV 2866</u> <u>A/N 501002</u>	<u>DX8</u>	<u>D515 D1439</u>		
KNOCK OUT POT, RPV 2876, HEIGHT: 8 FT; DIAMETER: 2 FT <u>A/N 395834 501002</u>	<u>D518</u>			
POT, STRIPPER REBOILER CONDENSATE, RPV 5110, HEIGHT: 3 FT; DIAMETER: 1 FT 8 IN <u>A/N 395834 501002</u>	<u>D519</u>			
FILTER, RPV 5754, FUEL GAS, HEIGHT: 10 FT; DIAMETER: 1 FT 5 IN <u>A/N 395834 501002</u>	<u>D520</u>			
KNOCK OUT POT, VAPOR RECOVERY, RPV 2891, HEIGHT: 12 FT; DIAMETER: 6 FT <u>A/N 395834 501002</u>	<u>D521</u>			
DRUM, RPV 5108, FRACTIONATOR REBOILER CONDENSATE, HEIGHT: 2FT 2 IN; DIAMETER: 1 FT 10 IN <u>A/N 395834 501002</u>	<u>D522</u>			
COMPRESSOR, RW 0005-087.06, RECYCLE GAS, CENTRIFUGAL <u>A/N 395834 501002</u>	<u>D523</u>			
<u>RESERVOIR, LUBE OIL, FOR COMPRESSOR RW 0005-087.06, NITROGEN PURGE, LENGTH: 6 FT 11.5 IN; HEIGHT: 3 FT; WIDTH: 8 FT 11.5 IN</u> <u>A/N 501002</u>	<u>DX9</u>	<u>D1313 D1314 D2807</u>		<u>E74.2</u>



FACILITY PERMIT TO CONSTRUCT BP WEST COAST PROD. LLC BP CARSON REF.

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

TANK, HOLDING, NO. 930, SODA ASH, 300 BBL; DIAMETER: 13 FT 6 IN; HEIGHT: 12 FT <u>A/N 395834 501002</u>	D525	D1313 D1314 D1656 D2807		
TANK, HOLDING, NO. 931, UDEX FEED, 1570 BBL; DIAMETER: 25 FT; HEIGHT: 18 FT <u>A/N 395834 501002</u>	D526	D1313 D1314 D1656 D2807		
TANK, HOLDING, NO. 932, PLANT SOLVENT, 1000 BBL, DIAMETER: 20 FT; HEIGHT: 18 FT <u>A/N 395834 501002</u>	D527	D1313 D1314 D1656 D2807		
TANK, HOLDING, NO. 934, WET SOLVENT, 300 BBL; DIAMETER: 12 FT 3 IN; HEIGHT: 12 FT <u>A/N 395834 501002</u>	D528	D1313 D1314 D1656 D2807		
SUMP, CONCRETE SOLVENT, WITH METAL COVER, WIDTH: 6 FT; DEPTH: 8 FT; LENGTH: 6 FT <u>A/N 395834 501002</u>	D529			
ADSORBER, DRIER, SECONDARY EAST, RPV 2981, HEIGHT: 10 FT 6 IN; DIAMETER: 3 FT 6 IN <u>A/N 395834 501002</u>	D530			
ADSORBER, DRIER, SECONDARY WEST, RPV 2982, HEIGHT: 10 FT 6 IN; DIAMETER: 3 FT 6 IN <u>A/N 395834 501002</u>	D531			
FUGITIVE EMISSIONS, MISCELLANEOUS <u>A/N 395834 501002</u>	D2491		HAP: (10) [40CFR 63 Subpart CC, #5A, 6-23-2003]	H23.3
PROCESS 21		SYSTEM 4		
AIR POLLUTION CONTROL PROCESS		REFINERY VAPOR RECOVERY SYSTEM		
<i>[EXISTING EQUIPMENT]</i>		System Conditions: S18.6, S31.6, S56.1		
Equipment	ID No.	Connected To	Emissions and Requirements	Conditions



**FACILITY PERMIT TO CONSTRUCT
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SECTIONS D & H: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS
The operator shall comply with the terms and conditions set forth below:

<p>COMPRESSOR, TWO STAGE, NO. 5, RW 7078.03</p> <p>A/N 506084 <u>501005</u></p>	<p>D1313</p>	<p><u>DX1 DX9</u> D80 D525 D526 D527 D528 D847 D848 D875 D1067 D1069 D1072 D1073 D1074 D1075 D1078 D1079 D1084 D1085 D1089 D1092 D1093 D1098 D1103 D1106 D1111 D1120 D1139 D1141 D2907 D2908</p>	<p>E73.5</p>
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DRAFT



**FACILITY PERMIT TO CONSTRUCT
BP WEST COAST PROD. LLC BP CARSON REF.**

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

<p>COMPRESSOR, TWO STAGE, NO. 6, RW 26087.32</p> <p>A/N <u>506084</u> <u>501005</u></p>	<p>D1314</p>	<p><u>DX1 DX9</u> D80 D525 D526 D527 D528 D847 D848 D875 D1067 D1069 D1072 D1073 D1074 D1075 D1078 D1079 D1084 D1085 D1089 D1092 D1093 D1098 D1103 D1106 D1111 D1120 D1139 D1141 D2907 D2908</p>	<p>E73.5</p>
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DRAFT



**FACILITY PERMIT TO CONSTRUCT
BP WEST COAST PROD. LLC BP CARSON REF.**

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

<p>COMPRESSOR, TWO STAGE, NO. 8, DUAL SEALS WITH BARRIER FLUID SYSTEM, RW-0059-087.32, 140000 CU. FT./HR</p> <p>A/N <u>506084 501005</u></p>	<p>D2807</p>	<p><u>DX1 DX9</u> D80 D525 D526 D527 D528 D847 D848 D875 D1067 D1069 D1072 D1073 D1074 D1075 D1078 D1079 D1084 D1085 D1089 D1092 D1093 D1098 D1103 D1106 D1111 D1120 D1139 D1141 D2907 D2908</p>	<p>E73.5 H23.33</p>
<p>DRUM, KNOCK OUT, VERTICAL, SFIA VAPOR RECOVERY WEST; RW-6968-289.02, HEIGHT: 16 FT; DIAMETER: 7 FT</p> <p>A/N <u>506084 501005</u></p>	<p>D2808</p>		
<p>KNOCK OUT POT, BLOWDOWN, WEST, RPV 1067, LENGTH: 6 FT; DIAMETER: 2 FT</p> <p>A/N <u>506084 501005</u></p>	<p>D1315</p>		
<p>VESSEL SEPARATOR, STEAM-OIL, RPV 1069, HEIGHT: 8 FT; DIAMETER: 4 FT</p> <p>A/N <u>506084 501005</u></p>	<p>D1316</p>	<p>D1067</p>	
<p>KNOCK OUT POT, FIELD LOCATED WEST HEADER, RPV 2089, LENGTH: 10 FT; DIAMETER: 4 FT</p> <p>A/N <u>506084 501005</u></p>	<p>D1319</p>		



**FACILITY PERMIT TO CONSTRUCT
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SECTIONS D & H: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS
The operator shall comply with the terms and conditions set forth below:

KNOCK OUT POT, BLOWCASE FOR RPV 1244, RPV 2699, LENGTH: 10 FT 5 IN; DIAMETER: 1 FT 4 IN A/N <u>506084 501005</u>	D1320			
SCRUBBER, RPV 1011, WEST WET GAS, HEIGHT: 6 FT 10 IN; DIAMETER: 5 FT A/N <u>506084 501005</u>	D1321			
SCRUBBER, RPV 1137, EAST WET GAS, HEIGHT: 6 FT 10 IN; DIAMETER: 5 FT A/N <u>506084 501005</u>	D1322			
SCRUBBER, RPV 1055, DRY GAS, HEIGHT: 6 FT 10 IN; DIAMETER: 5 FT A/N <u>506084 501005</u>	D1323			
SCRUBBER, CAUSTIC, RPV-1247, HEIGHT: 42 FT; DIAMETER: 6 FT A/N <u>506084 501005</u>	D1324			
KNOCK OUT POT, VAPOR RECOVERY, RPV 3268, HEIGHT: 7 FT; DIAMETER: 4 FT A/N <u>506084 501005</u>	D1325		BENZENE: (10) [40CFR 61 Subpart FF_02, 12-4-2003]; VOC: 500 PPMV (8) [40CFR 61 Subpart FF, 12-4-2003]	H23.12
SCRUBBER, RW 5794, WEST CAUSTIC, HEIGHT: 57 FT 2 IN; DIAMETER: 4 FT A/N <u>506084 501005</u>	D1659			
SCRUBBER, (SPARE), RW 5795, HEIGHT: 5 FT 6 IN; DIAMETER: 5 FT A/N <u>506084 501005</u>	D1660			
FILTER, COALESCER A/N <u>506084 501005</u>	D2098			
DRUM, KNOCK OUT, VERTICAL EAST HEADER SUCTION, RPV 7028, HEIGHT: 16 FT; DIAMETER: 7 FT A/N <u>506084 501005</u>	D2875			



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

TANK, 30-DAY OIL, RW-7035-289.02, HEIGHT: 5 FT; DIAMETER: 1 FT 11 IN A/N <u>506084 501005</u>	D2876			
FUGITIVE EMISSIONS, MISCELLANEOUS A/N <u>506084 501005</u>	D2545		HAP: (10) [40CFR 63 Subpart CC, #5A, 6- 23-2003]	H23.3
PROCESS 21		SYSTEM 11		
AIR POLLUTION CONTROL PROCESS		NORTH AREA FLARE GAS RECOVERY SYSTEM		
[EXISTING EQUIPMENT]		System Conditions: S15.40, S15.41, S31.10, S58.1		
Equipment	ID No.	Connected To	Emissions and Requirements	Conditions
COMPRESSOR, THREE STAGE, FGR NO 2, RW 0061-087.32, DUAL SEALS WITH BARRIER FLUID SYSTEM, 150000 CU.FT./HR A/N <u>484944 501006</u>	D2800			E73.4, H23.33
KNOCK OUT POT, FGR COMPRESSOR NO 2 DISCHARGE, RW 6999-289.02, HEIGHT: 18 FT ; DIAMETER: 4 FT 6 IN A/N <u>484944 501006</u>	D2801			
VESSEL, AUTOPUMP, RW-6901-289.09, HEIGHT: 3 FT 11 IN; DIAMETER: 1 FT A/N: <u>484944 501006</u>	D2874			
TANK, 30-DAY OIL, RW-7036-289.02, COMMON TO NORTH AND SOUTH AREA FGRS, HEIGHT: 5 FT ; DIAMETER: 2 FT 5 IN A/N: <u>484943 501006</u>	D2877			
FUGITIVE EMISSIONS, MISCELLANEOUS A/N: <u>484944 501006</u>	D2802			H23.3

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

Contaminant	Rule	Rule/Subpart
VOC	District Rule	1123

[RULE 1123, 12-7-1990]



FACILITY PERMIT TO CONSTRUCT BP WEST COAST PROD. LLC BP CARSON REF.

SECTIONS D & H: 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, 2, 3]

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

All sour gases shall be directed to amine contactor system located within this system.

This process/system shall not be operated unless the amine contactor 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 6, System 1, 2]

S15.40 The vent gases from all affected devices of this process/system shall be vented as follows:

All sour gases during normal operation shall be directed to the sour gas treating system located in the Coker Unit (Process 2, System 11).

This process/system shall not be operated unless the above equipment 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 21, System 11]

S15.41 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 flare.

This process/system shall not be operated unless the above air pollution control equipment 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 21, System 11]

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 CONSTRUCT BP WEST COAST PROD. LLC BP CARSON REF.

SECTIONS D & H: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

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

- Crude Distillation Units (Process: 1, System: 1, 2 & 3))
- Vacuum Distillation Units (Process: 1, System: 5 & 6)
- Slop Oil Rerun Unit (Process: 1, System: 7)
- Coking Units (Process: 2, System: 1 & 2)
- Coker Blowdown Facility (Process: 2, System: 3)
- Coker Gas Compression Systems (Process: 2, System: 5 & 6)
- Coker Gas Treating Unit (Process: 2, System: 11)
- Fluid Catalytic Cracking Unit (Process: 3, System: 1 & 2)
- FCCU Gas Compression & Hydrogen Sulfide Removal Unit (Process: 3, System: 3)
- FCCU Catalyst Handling Facility (Process: 3, System: 4)
- Propylene Tetramer Unit (Process: 3, System: 6)
- FCCU Heaters (Process: 3, System: 7)
- Superfractionation Unit (Process: 4, System: 1)
- Naphtha Splitter Unit (Process: 4, System: 2)
- Light Ends Depropanizer Units (Process: 4, System: 3 & 4)
- North Area Deisobutanizer Unit (Process: 4, System: 5)
- Coker Gasoline Fractionation Unit (Process: 4, System: 7)
- Liquid Recovery Unit (Process: 4, System: 8)
- Propane/Propylene Splitter Unit (Process: 4, System: 9)
- Jet Fuel Hydrotreating Unit (Process: 5, System: 1)
- Mid-Barrel Desulfurizer Unit (Process: 5, System: 2)



FACILITY PERMIT TO CONSTRUCT BP WEST COAST PROD. LLC BP CARSON REF.

SECTIONS D & H: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

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

Fluid Feed HDS Unit (Process: 5, System: 3)

Light Gasoline Hydrogenation unit (Process: 5, System: 4)

Naphtha HDS Unit (Process: 5, System: 5)

Catalytic Reformer Units (Process: 6, System: 1, 2 & 3)

Hydrogen Plant (Process: 7, System: 1)

Hydrogen Unit No. 2 (Process: 7, System: 2)

Hydrocracking Units (Process: 8, System: 1 & 2)

C4 Alkylation Unit (Process: 9, System: 1)

Catalytic Polymerization Unit (Process: 9, System: 2)

C5 Alky Depentanizer Unit (Process: 9, System: 6)

Naphtha Isomerization Unit (Process: 9, System: 8)

Iso-Octene Unit (Process: 9, System: 9)

Butane Isomerization Unit (Process: 9, System: 10)

Fuel Gas Mix System (Process: 10, System: 1)

LPG Recovery System (Process: 10, System: 2)

Liquid Petroleum Gas Drying Facility (Process: 10, System: 3)

Gasoline Blending Unit (Process: 11, System: 1)

Petresco Stove Oil-Treaters No. 1, 2 & 4 (Process: 12, System: 1, 2 & 3)

Catalytic Rerun Gasoline Treating Unit (Process: 12, System: 4)

Straight Run Gasoline Treating Unit (Process: 12, System: 5)



FACILITY PERMIT TO CONSTRUCT BP WEST COAST PROD. LLC BP CARSON REF.

SECTIONS D & H: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

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

Fixed Bed Merox Treating Unit (Process: 12, System: 7)

UOP Merox Treating Unit (Process: 12, System: 8)

MDEA Regeneration Systems No. 1, 2, 3, 4 & 5 (Process: 12, System: 9, 10, 11, 12 & 13)

North & South Sour Water Treatment Systems (Process: 12, System: 14 & 15)

Sour Water Treater (Process: 12, System: 16)

Sour Water Oxidizer No. 3 (Process: 12, System: 17)

Spent Caustic Separation System (Process: 12, System: 20)

Diesel Oil Dehazing Facility (Process: 12, System: 22)

Refinery Gas Treating Units (Process: 12, System: 24 & 25)

Spent Acid Storage Facility (Process: 12, System: 27)

Mixed Light Ends Tank Car Loading/Unloading (Process: 14, System: 2)

LPG Tank Truck Loading/Unloading Rack (Process: 14, System: 10)

LPG Rail Car Load/Unloading Rack (Process: 14, System: 11)

Oil Water Treating (Benzene Neshaps) System (Process: 15, System: 7)

Waste Oil Recovery Unit (Process: 15, System: 8)

Fixed Roof Tanks (Process: 16, System: 1)

Pressurized Tanks (Process: 16, System: 3)

No. 4 Steam Plant (Process: 18, System: 1)

South Area Flare System (Process: 21, System: 1)

FCCU Flare System (Process: 21, System: 2)

Refinery Vapor Recovery System (Process: 21, System: 4)



FACILITY PERMIT TO CONSTRUCT BP WEST COAST PROD. LLC BP CARSON REF.

SECTIONS D & H: 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 21, System 4]

S31.4 The following BACT requirements shall apply to VOC service fugitive components associated with the devices that are covered by application number(s) 427414, 376189:

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, flange, fitting, pump, compressor, pressure relief device, diaphragm, hatch, sight-glass, and meter, which are not exempted by Rule 1173.

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

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 Section 60.692-5.

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

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 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.

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.



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SECTIONS D & H: 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 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. A leak greater than 1,000 ppm shall be repaired according to Rule 1173.

All components are subject to 40CFR60, Subpart GGG

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

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

S31.6 The following BACT requirements shall apply to VOC service fugitive components associated with the devices that are covered by application number(s) 434526,434527,434528,436040, 436041 and 454560:

The operator shall provide to the District, no later than 60 days after initial startup, a recalculation of the fugitive emissions based on actual components installed and removed from service. The valves and flanges shall be categorized by size and service. The operator shall submit a listing of all new non-bellows seal valves which shall be categorized by tag no., size, type, operating temperature, operating pressure, body material, application, and reasons why bellows seal valves were not used

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

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



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SECTIONS D & H: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

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

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 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

If 98.0 percent or greater of the new (non-bellows seal) valves and the new flange population inspected is found to leak gaseous or liquid volatile organic compounds at a rate less than 500 ppmv for two consecutive months, then the operator may change to a quarterly inspection program with the approval of the District

The operator shall revert from quarterly to monthly inspection program if less than 98.0 percent of the new (non-bellows seal) valves and the new flange population inspected is found to leak gaseous or liquid volatile organic compounds at a rate less than 500 ppmv

All new components in VOC service with a leak greater than 500 ppmv but less than 1,000 ppmv, as methane, measured above background using EPA Method 21 shall be repaired within 14 days of detection. Components shall be defined as any valve, fitting, pump, compressor, pressure relief valve, diaphragm, hatch, sight-glass, and meter, which are not exempted by Rule 1173

The operator shall keep records of the monthly inspection (quarterly where applicable), subsequent repair, and reinspection, in a manner approved by the District. Records shall be kept and maintained for at least five years, and shall be made available to the Executive Officer or his authorized representative upon request.

The operator shall replace 4 additional existing valves in VOC service with bellow sealed valves to offset the emission increase from the modification to the above referenced applications. The operator shall submit to the District within 90 days of startup, copies of the as-built piping and instrumentation diagram identifying the replacement valves and copies of requisition data sheet for the new bellow sealed valves. The additional valves to be replaced shall include the following valves with Rule 1173 tag numbers: NESHAP 1351, 1352, 1354, and 1355

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.



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

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

All components are subject to 40CFR60, Subpart GGG

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

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

S31.10 The following BACT requirements shall apply to VOC service fugitive components associated with the devices that are covered by application number(s) 454566, 454567, 454568, 458598, 458600, 458610, 459257, 459284 & 459286:

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 valves and flanges shall be categorized by size and service. The operator shall submit a listing of all new non-bellows seal valves which shall be categorized by tag no., size, type, operating temperature, operating pressure, body material, application, and reasons why bellows seal valves were not used

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

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 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

If 98.0 percent or greater of the new (non-bellows seal) valves and the new flange population inspected is found to leak gaseous or liquid volatile organic compounds at a rate less than 500 ppmv for two consecutive months, then the operator may change to a quarterly inspection program with the approval of the District



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

The operator shall revert from quarterly to monthly inspection program if less than 98.0 percent of the new (non-bellows seal) valves and the new flange population inspected is found to leak gaseous or liquid volatile organic compounds at a rate less than 500 ppmv

All new components in VOC service with a leak greater than 500 ppmv but less than 1,000 ppmv, as methane, measured above background using EPA Method 21 shall be repaired within 14 days of detection. Components shall be defined as any valve, fitting, pump, compressor, pressure relief valve, diaphragm, hatch, sight-glass, and meter, which are not exempted by Rule 1173

The operator shall keep records of the monthly inspection (quarterly where applicable), subsequent repair, and reinspection, in a manner approved by the District. Records shall be kept and maintained for at least five years, and shall be made available to the Executive Officer or his authorized representative upon request.

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

All pressure relief valves shall be connected to a closed vent system or equipped with a rupture disc and telltale indicator

All pumps shall utilize double seals and be connected to a closed vent system.

All compressors to have a seal system with a higher pressure barrier fluid.

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

[Systems subject to this condition: Process 21, System 11]

S46.1 The following conditions shall apply to VOC service fugitive components in this system:

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, flange, fitting, pump, compressor, pressure relief device, diaphragm, hatch, sight-glass, and meter, which are not exempted by Rule 1173.

For the purpose of this condition, existing component shall be defined as any component that was installed under a permit to construct/operate that was issued prior to June 1, 1993. New component shall be defined as any component that was installed or modified under a permit to construct that was issued between June 1, 1993 and December 27, 2001.



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

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.

All new valves and new major components, as defined in Rule 1173, shall be physically identified in the field with special marking that distinguishes the components from existing. Additionally all new components shall be distinctly identified from existing components through their tag numbers (e.g. numbers ending in the letter "N"), and shall be noted in the records.

All new components in VOC service with a leak greater than 500 ppm but less than 1,000 ppm, as methane, measured above background using EPA Method 21, shall be repaired within 14 days of detection. A leak greater than 1,000 ppm shall be repaired according to Rule 1173.

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

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

All components are subject to 40CFR60, Subpart GGG.

[RULE 1173, 5-13-1994; RULE 1173, 2-6-2009; RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(b)(2)-Offset, 5-10-1996; 40CFR 60 Subpart GGG, 6-2-2008]

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

S46.2 The following conditions shall apply to VOC service fugitive components in this system:

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, flange, fitting, pump, compressor, pressure relief device, diaphragm, hatch, sight-glass, and meter, which are not exempted by Rule 1173.

For the purpose of this condition, existing component shall be defined as any component that was installed under a permit to construct/operate that was issued prior to June 1, 1993.



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

New component shall be defined as any component that was installed or modified under a permit to construct that was issued between June 1, 1993 and December 27, 2001.

The operator shall provide to the District, no later than August 29, 2003, a complete, as built, process instrumentation diagram(s) with a listing showing by functional grouping, location, type, accessibility, and application of each new valve in VOC service. The operator shall provide 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.

The operator shall provide to the District, no later than August 29, 2003, a list of the following components broken down into the categories contained in District Form E-18A entitled "Fugitive Component Count": existing components, new components proposed to be installed under applicable permit(s) to construct, and new components that were actually installed under applicable permit(s) to construct.

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

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

S56.1 Vent gases from all affected devices of this process/system shall be directed to a gas recovery system, except for the venting of gases from equipment specifically identified in a permit condition, and for the following events for which vent gases may be directed to a flare:

- 1) Vent gases during an Emergency as defined in Rule 1118;
- 2) Vent gases resulting from Planned Shutdowns, Startups and/or Turnarounds as defined in Rule 1118, provided that the owner/operator follows the applicable options and any associated limitations to reduce flaring that were identified, evaluated and most recently submitted by the owner/operator to the Executive Officer pursuant to Rule 1118, or any other option(s) which reduces flaring for such events; and
- 3) Vent gases due to and resulting from from an Essential Operating Need, as defined in Rule 1118.

The evaluation of options to reduce flaring during Planned Shutdowns, Startups and/or Turnarounds shall be updated annually to reflect any revisions, and submitted to the Executive Officer in the first quarter of each year, but no later than March 31st of that year.

This process/system shall not be operated unless its designated flare(s) are in full use and have valid permits to receive vent gases from this process/system.



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

Vent gases shall not be released to the atmosphere except from the existing safety devices or relief valves on the following equipment:

- Process 1, System 2: 10, 12, 14
- Process 1, System 3: 19, 20, 24 to 26
- Process 1, System 5: 35, 39, 41, 42, 2726
- Process 1, System 6: 43, 49, 57, 58
- Process 1, System 7: 59, 60, 61, 62
- Process 2, System 1: 74, 77, 2388
- Process 2, System 2: 82, 89, 90, 92, 2389
- Process 2, System 3: 94, 95
- Process 2, System 5: 98, 101, 102
- Process 2, System 6: 111, 112, 113
- Process 2, System 11: 159, 160
- Process 3, System 1: 164 to 167, 170, 172 to 181, 184, 1336 to 1349, 2382, 2387
- Process 3, System 2: 186, 188, 189, 191, 196, 199, 201, 204, 1352 to 1355
- Process 3, System 4: 241
- Process 3, System 6: 242, 245 to 247, 249
- Process 3, System 7: 1363
- Process 4, System 1: 253 to 256, 258, 262, 265, 268, 270, 272, 277, 278, 282, 283, 287, 1364, 1366, 1367, 1372, 1374 to 1376, 1378 to 1381
- Process 4, System 2: 291, 1400 to 1403
- Process 4, System 3: 292, 293, 297, 299
- Process 4, System 4: 302, 304
- Process 4, System 5: 308, 310, 311
- Process 4, System 7: 1975 to 1977, 1980, 1981, 1986
- Process 5, System 1: 314 to 317, 319, 320, 323 to 332
- Process 5, System 2: 335 to 338, 340, 343, 348 to 353
- Process 5, System 3: 356, 360, 1413
- Process 5, System 4: 401, 406, 407, 412, 414
- Process 6, System 1: 426, 427, 429, 431, 434, 435, ~~to~~ 437, 440, 444, 445, 451, 454 455 to 456, 458, 460
- Process 6, System 2: 462, 469, 474 to 475, 477 to 481, 483, 486
- Process 6, System 3: 490, 494, 495, 498, 501, 503, 506, 507, 509, 510, 512, 513, 518, 520, 521, 525 to 528
- Process 7, System 1: 542 to 548, 550, 552 to 558, 560, 562 to 569
- Process 7, System 2: 2892, 2893
- Process 8, System 1: 583, 584, 593 to 597
- Process 8, System 2: 608, 610, 612 to 614, 622, 624



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

Process 9, System 1: 631, 632, 638 to 652, 659 to 663, 666 to 668, 1482, 1483, 1486 to 1488, 1491, 1493 to 1495, 1497 to 1502, 1528, 1533 to 1536, 2019
Process 9, System 2: 672 to 681, 685
Process 9, System 9: 637, 653, 656, 658, 664
Process 10, System 1: 706
Process 10, System 2: 709, 711 to 715, 720, 721
Process 10, System 3: 725
Process 11, System 1: 730
Process 12, System 1: 756, 759
Process 12, System 2: 760 to 762, 764
Process 12, System 3: 765 to 770
Process 12, System 4: 771, 772, 774
Process 12, System 8: 785, 790, 2365, 2366
Process 12, System 9: 794, 797 to 799
Process 12, System 10: 806
Process 12, System 12: 815, 818
Process 12, System 13: 823, 826, 828
Process 12, System 16: 830
Process 12, System 22: 853, 854
Process 12, System 24: 860, 861, 863, 864, 865
Process 12, System 25: 866, 867, 869, 870, 871, 2003
Process 12, System 27: 873 to 875
Process 15, System 7: 1644 to 1646, 1648, 1649
Process 16, System 3: 2115 to 2120, 2353, 2394
Process 21, System 1: 1304
Process 21, System 2: 1307
Process 21, System 4: 1315, 1316, 1319, 1323 to 1325, 1659

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

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

S58.1 The South Area Flare Gas Recovery System and North Area Flare Gas Recovery System shall only be used to receive and handle vent gases from the following Process(es) and System(s):

- No. 1 Crude Unit (Process: 1, System: 1)
- Coking Units (Process: 2, System: 1 & 2)
- Coker Blowdown Facility (Process: 2, System: 3)
- Coker Gas Compression & Absorption Unit (Process: 2, System: 5)
- Blowdown Gas Compression System (Process: 2, System: 6)



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

Coker Gas Treating / H₂S Absorption Unit (Process: 2, System: 11)
Fluid Catalytic Cracking Units (Process: 3, System: 1, 2 & 3)
Propylene Tetramer Unit (Process: 3, System: 6)
Superfractionation Unit (Process: 4, System: 1)
Naphtha Splitter Unit (Process: 4, System: 2)
Light Ends Depropanizer Unit (Process: 4, System: 3)
Straight Run Light Ends Depropanizer Unit (Process: 4, System: 4)
North Area Deisobutanizer Unit (Process: 4, System: 5)
Coker Gasoline Fractionation Unit (Process: 4, System: 7)
Liquid Recovery Unit (Process: 4, System: 8)
C3 Splitter Unit (Process: 4, System: 9)
Jet Fuel Hydrotreating Unit (Process: 5, System: 1)
Mid-Barrel Desulfurizer Unit (Process: 5, System: 2)
Fluid Feed Hds Unit (Process: 5, System: 3)
Light Gasoline Hydrogenation Unit (Process: 5, System: 4)
Naphtha HDS Unit (Process: 5, System: 5)
Naphtha HDS Reactor Heater (Process: 5, System: 6)
Catalytic Reformer Units (Process: 6, System: 1, 2 & 3)
Hydrogen Plants (Process: 7, System: 1 & 2)
Hydrocracking Units (Process: 8, System: 1 & 2)
Alkylation Unit (Process: 9, System: 1)
Catalytic Polymerization Unit (Process: 9, System: 2)
C5 Alkylation Depentanizer Unit (Process: 9, System: 6)
C5 Alkylation Unit (Process: 9, System: 7)
Naphtha Isomerization Unit (Process: 9, System: 8)
Iso-Octene Unit (Process: 9, System: 9)
Butane Isomerization Unit (Process: 9, System: 10)
Fuel Gas Mix System (Process: 10, System: 1)
LPG Recovery System (Process: 10, System: 2)
Liquid Petroleum Gas Drying Facilities (Process: 10, System: 3)
Uop Merox Unit (Process: 12, System: 8)
MDEA Regeneration Units (Process: 12, System: 9, 10, 11, 12 & 13)
North & South Sour Water Treatment Systems (Process: 12, System: 14 & 15)
Sulfur Recovery Units (Process: 13, System: 1, 2, 3 & 4)
Claus Tail Gas Treating Units (Process: 13, System: 5 & 7)
LPG Tank Truck Loading/Unloading Rack (Process: 14, System: 10)
LPG Rail Car Loading/Unloading Rack (Process: 14, System: 11)
Refinery Vapor Recovery System (Process: 21, System: 4)

The flare gas recovery system shall be operated in full use when any of the above Process(es) and System(s) is in operation. Full use means one of two compressor trains



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

(Process 21, System 10 and Process 21, System 11) is online at any given time, except during planned startups or shutdowns when both compressors trains shall be online.

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

[Systems subject to this condition: Process 21, System 11]

B61.4 The operator shall not use fuel gas, except uncombined natural gas which is not regulated by the condition, containing the following specified compounds:

Compound	ppm by volume
H2S greater than	160

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

[Devices subject to this condition: D532, D535, D1439]

C1.19 The operator shall limit the heat input to no more than 255 MM Btu per hour.

[RULE 1301, 12-7-1995]

[Devices subject to this condition: D532]

C1.20 The operator shall limit the heat input to no more than 310 MM Btu per hour.

[RULE 1301, 12-7-1995]

[Devices subject to this condition: D535]

D90.4 The operator shall continuously monitor the H2S concentration in the fuel gases before being burned in this device according to the following specifications:

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

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

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



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

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

[Devices subject to this condition: D532, D535, D1439]

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 the 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: D532, D535, D1439]

E71.9 The operator shall not operate this equipment to process VOC unless the pressure control valve 29-PV-410B connected to the vapor recovery system is closed at all times except during startup, shut down, breakdown, or emergency. The operator shall continuously monitor and record the valve stem position. Such records shall be maintained for at least two years and made available to District personnel upon request.

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

[Devices subject to this condition: D508]

E73.4 Notwithstanding the requirements of Section E conditions, the operator is not required to use both the North and South Area Flare Gas Recovery Systems (Process 21, System 10 & Process 21, System 11) concurrently if:

The load on the flare gas recovery system is not sufficient to require both compressor systems to be online.

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

[Devices subject to this condition: D2800]

E73.5 Notwithstanding the requirements of Section E conditions, the operator is not required to use all three vapor recovery compressors concurrently if:



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

The load on the vapor recovery system is not sufficient to require all three compressors to be online.

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

[Devices subject to this condition: D1313, D1314, D807]

E74.2 Notwithstanding the requirements of Section E conditions, the operator is not required to vent this equipment to the refinery vapor recovery system during periods of maintenance, equipment malfunction, or emergency. The operator shall not disconnect from the refinery vapor recovery system unless it has been established through sampling/analysis that the product stored has an initial boiling point greater than 302 deg. Fahrenheit, or has an organic vapor pressure of 0.1 psia or less. Weekly sampling/analysis, according to district approved methods, is required.

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

[Devices subject to this condition: DX1, DX9, D2907, D2908]

E193.X1 The operator shall operate and maintain this equipment according to the following specifications:

The seal system serving the compressor shall be supplied with nitrogen gas. The operator shall monitor and record the nitrogen gas volumetric flow rate on a weekly basis. The atmospheric vent of the nitrogen seal gas shall be monitored for VOC emissions using EPA Reference Method 21, with the frequency required by District Rule 1173 or when the nitrogen seal flow rate indicates packing wear. When a VOC leak is detected, the seal system shall be repaired according to the schedule stated in District Rule 1173, or alternately the seal vent shall be connected to the Refinery Vapor Recovery System (Process 21, System 4).

[RULE 1173, 5-13-1994; RULE 1173, 2-6-2009; 40 CFR 60 Subpart GGG, 6-2-2008]

[Devices subject to this condition : D434, D435, D477, D478]

E193.X2 The operator shall operate and maintain this equipment according to the following specifications:

Offgases from compressor shall be vented to the North Area Flare Gas Recovery System (Process 21, System 11).



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

[RULE 1173, 5-13-1994; RULE 1173, 2-6-2009; 40 CFR 60 Subpart GGG, 6-2-2008]

[Devices subject to this condition : D451, D476]

E336.X1 The operator shall vent the vent gases from this equipment as follows:

All vent gases from initial catalyst depressurization and catalyst purging operations of catalyst regeneration shall be directed to either the FCCU Flare System (Process 21, System 2) or to the Hydocracker Flare System (Process 21, System 3). Venting shall only occur to one of these flare systems at any one time.

Initial catalyst depressurization and catalyst purging operations in this equipment shall not be undertaken unless either of these flare systems is in full use and has a valid permit to receive vent gases from this equipment.

[40CFR 63 Subpart UUU, 4-20-2006]

[Devices subject to this condition : D446, D447, D448, D449, D457, D461, D463, D464, D465, D514, D515, D516, D517]

E336.X2 The operator shall vent the vent gases from this equipment as follows:

During the coke burnoff and catalyst rejuvenation steps of catalyst regeneration, vent gases from catalytic reactors shall be treated by Internal Scrubber (DX2) and then shall be directed through the Reformer Flash Tank (D440) and into the flame zone of the No. 1 Reformer Heater (D532).

Coke burnoff and catalyst rejuvenation steps in this equipment shall not be undertaken unless Internal Scrubber (DX2) and No. 1 Reformer Heater (D532) are in full use have valid permits to receive vent gases from this equipment.

[40CFR 63 Subpart UUU, 4-20-2006]

[Devices subject to this condition : D446, D447, D448, D449, D457]

E336.X3 The operator shall vent the vent gases from this equipment as follows:

During the coke burnoff and catalyst rejuvenation steps of catalyst regeneration, vent gases from catalytic reactors shall be treated by Internal Scrubber (DX7) and then shall be



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

directed through the Reformer Flash Tank (D474) and into the flame zone of the No. 2 Reformer Heater (D535).

Coke burnoff and catalyst rejuvenation steps in this equipment shall not be undertaken unless Internal Scrubber (DX7) and No. 2 Reformer Heater (D535) are in full use and have valid permits to receive vent gases from this equipment.

[40CFR 63 Subpart UUU, 4-20-2006]

[Devices subject to this condition : D461, D463, D464, D465]

E336.X4 The operator shall vent the vent gases from this equipment as follows:

During the coke burnoff and catalyst rejuvenation steps of catalyst regeneration, vent gases from catalytic reactors shall be treated by Internal Scrubber (DX8) and then shall be directed through the Reformer Flash Tank (D512) and into the flame zone of the No. 3 Reformer Heater (D1439).

Coke burnoff and catalyst rejuvenation steps in this equipment shall not be undertaken unless Internal Scrubber (DX8) and No. 3 Reformer Heater (D1439) are in full use and have valid permits to receive vent gases from this equipment.

[40CFR 63 Subpart UUU, 4-20-2006]

[Devices subject to this condition : D514, D515, D516, D517]

H23.1 This equipment is subject to the applicable requirements of the following rules or regulations:

Contaminant	Rule	Rule/Subpart
H2S	40CFR60, SUBPART	J

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

[Devices subject to this condition: D532, D535, D1439]

H23.3 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



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

[RULE 1173, 5-13-1994; RULE 1173, 2-6-2009; 40 CFR 60 Subpart GGG, 6-2-2008]

[Devices subject to this condition: D2489, D2490, D2491, D2545, D2802]

H23.12 This equipment is subject to the applicable requirements of the following rules or regulations:

Contaminant	Rule	Rule/Subpart
Benzene	40CFR61, SUBPART	FF

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

[Devices subject to this condition: D430, D1325]

H23.33 This equipment is subject to the applicable requirements of the following rules or regulations:

Contaminant	Rule	Rule/Subpart
ROG	40CFR60, SUBPART	GGGa

[40 CFR 60 Subpart GGa, 6-2-2008]

[Devices subject to this condition: D2800, D2807]

K67.1 The operator shall keep records, in a manner approved by the District, for the following parameter(s) or item(s):

- fuel rate consumed
- heating value of the fuel gas (HHV)

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

[Devices subject to this condition : D532, D535, D1439]

K67.X1 The operator shall keep records, in a manner approved by the District, for the following parameter(s) or item(s):

- Volumetric flow rate of nitrogen buffer gas to the compressor seal system



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

[RULE 1173, 5-13-1994; RULE 1173, 2-6-2009; 40 CFR 60 Subpart GGG, 6-2-2008]

[Devices subject to this condition : D434, D435, D477, D478]

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