

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

COMPLIANCE and ENGINEERING

APPLICATION EVALUATION AND CALCULATIONS

Page 1 of 15 pages
 Appl. No.: see below
 Processed by: Hanh Le
 Checked by:
 Date: 1/06/2010

PERMIT TO CONSTRUCT

COMPANY NAME: BP WEST COAST PRODUCTS LLC

MAILING ADDRESS: P.O. BOX 6210
 CARSON, CA 90749

EQUIPMENT ADDRESS: 2350 E. 223rd STREET
 CARSON, CA 90810

FACILITY PERMIT SECTION H				
DESCRIPTION	ID No.	Connected to	EMISSIONS and Requirements	CONDITIONS
PROCESS 7: HYDROGEN PRODUCTION				
SYSTEM 2: HYDROGEN PRODUCTION NO. 2 PLANT (KT1 SYSTEM)			S2.1, S13.2, S13.4, S56.1, S46.1, S46.2	
COMPRESSOR RW 0052, FEED GAS, MECHANICAL SEAL, OIL FILLED, W/BUFFER GAS A/N: 395977 497869	D1443			
TANK, SURGE, RW 6123, PENTANE, LENGTH: 14 FT; DIAMETER: 4 FT A/N: 395977 497869	D1444			
REACTOR COMO, RW 6158, LENGTH: 14 FT; DIAMETER: 5 FT A/N: 395977 497869	D1446			
REACTOR CHLORIDE/SULFUR GUARD, RW 6159, LENGTH: 28 FT, DIAMETER: 8 FT A/N: 395977 497869	D1447			
REACTOR CHLORIDE/SULFUR GUARD, RW 6160, LENGTH: 28 FT, DIAMETER: 8 FT A/N: 395977 497869	D1448			
REACTOR, HIGH TEMPERATURE SHIFT, RW 6161, LENGTH: 14 FT, DIAMETER: 9 FT A/N: 395977 497869	D1449			
KNOCK OUT POT, RW 6114, HOT CONDENSATE, LENGTH: 9 FT 6 IN; DIAMETER: 5 FT A/N: 395977 497869	D1450			
KNOCK OUT POT, RW 6115, COLD CONDENSATE, LENGTH: 12 FT; DIAMETER: 4 FT A/N: 395977 497869	D1451			
VESSEL, DEAERATOR, RW 6122, PROCESS CONDENSATE, LENGTH: 7 FT 4 IN; DIAMETER: 8 FT A/N: 395977	D1452			
VESSEL, DEAERATOR, RW 7109 289.02, VERTICAL SECTION, HEIGHT: 21 FT; DIAMETER: 7 FT A/N: 395977 497869	D2892			
VESSEL, DEAERATOR, RW 6227, HORIZONTAL	D2893			

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SECTION, LENGTH: 22 FT; DIAMETER: 9 FT A/N: 395977 497869				
DRUM, RW 6119, FLARE CONDENSATE, LENGTH: 9 FT; DIAMETER: 3 FT 6 IN A/N: 395977 497869	D1453			
ADSORBER PRESSURE SWING, RW 6145, HEIGHT: 21 FT; DIAMETER: 8 FT 6 IN A/N: 395977 497869	D1455			
ADSORBER PRESSURE SWING, RW 6146, HEIGHT: 21 FT; DIAMETER: 8 FT 6 IN A/N: 395977 497869	D1456			
ADSORBER PRESSURE SWING, RW 6147, HEIGHT: 21 FT; DIAMETER: 8 FT 6 IN A/N: 395977 497869	D1457			
ADSORBER PRESSURE SWING, RW 6148, HEIGHT: 21 FT; DIAMETER: 8 FT 6 IN A/N: 395977 497869	D1458			
ADSORBER PRESSURE SWING, RW 6149, HEIGHT: 21 FT; DIAMETER: 8 FT 6 IN A/N: 395977 497869	D1459			
ADSORBER PRESSURE SWING, RW 6150, HEIGHT: 21 FT; DIAMETER: 8 FT 6 IN A/N: 395977 497869	D1460			
ADSORBER PRESSURE SWING, RW 6151, HEIGHT: 21 FT; DIAMETER: 8 FT 6 IN A/N: 395977 497869	D1461			
ADSORBER PRESSURE SWING, RW 6152, HEIGHT: 21 FT; DIAMETER: 8 FT 6 IN A/N: 395977 497869	D1462			
DRUM, RW 6118, PSA TAIL GAS, LENGTH: 80 FT; DIAMETER: 12 FT A/N: 395977 497869	D1463			
FILTER, RW 6153, FUEL GAS, BASKET TYPE A/N: 395977 497869	D1464			
FILTER, RW 6245, PRODUCT HYDROGEN, BASKET TYPE A/N: 395977 497869	D2049			
DRUM, SILENCER, RW 0006, PSA PURGE GAS, LENGTH: 5 FT; DIAMETER: 5 FT 6 IN A/N: 395977 497869	D2055			
FUGITIVE EMISSIONS, MISCELLANEOUS A/N: 395977 497869	D2493		HAP: (10) [40CFR 63 Subpart CC, #5A,6-23-2003]	H23. 3

BACKGROUND

Application No. 497869 was submitted to modify the Hydrogen Plant No. 2 by replacing an existing deaerator, D1452, with a new and more efficient deaerator, and venting its two vents to the atmosphere. Also, the existing horizontal section of this deaerator (shown in PC's drawings) will be added to the equipment description. There will be no other changes to the system.

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Permit history

The permit history of the above systems is shown in the following table.

Table 1 – Permit history

A/N	Received Date	Type	Permit Issue Date	Comments
497869	5/5/09	Modification		Replacing deaerator
395977	12/27/01	Change of ownership	PO F52156	C/O
305323	7/20/95	Modification	PC issued 1/22/02	Changing equip description
284289	8/13/93	Permit to Construct	PC issued 4/4/94	Permit issued to Arco refinery

COMPLIANCE RECORD REVIEW

A check of the AQMD Compliance Database for the compliance activity of this facility from 12/01/07 until the present determined that there were no specific violations reported for the Hydrogen No. 2 plant. There were 5 notices of violation issued to the refinery for other units as summarized below.

Table 2 – Violation Records as of 12/1/09

Notice No.	Notice Type	Issue Date	Violation Date	Violations
P12137	NOV	6/25/08	6/24/08	BLUE SKY OPERATION R1173 2 COUNT >50K PPM, 4 COUNTS OF OPEN ENDED LINE. R1178 2 COUNT OF NON VAPOT TIGHT HATCHES ON TNKS #1 &17.
P12138	NOV	6/27/08	6/25/08	BLUE SKY OPERATION R1173(d)(1)(B) >50K PPM 6 COUNT VIOLATION. R1173(d)(1)(E) OPEN ENDED LINE = 1 COUNT VIOLATION. R1178(d)(4)(A)(iii) 2 COUNT NON VAPOR TIGHT HATCH TNK # 192,169. 40CFR SUB PART GGG 6C.692(2)(A)(i) 14 COUNT VIOLATION OF NON-SEAL PROCESS.

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P12139	NOV	6/27/08	6/26/08	WASTE WATER SEPARATOR #9 GAP IN SEAL > 1/2" VIOLATED R1176(e)(2)(B) & SP GGG 6c.693.
P39630	NOV	2/24/09	2/23/09	DISCHARGE OF AIR CONTAMINANTS OR OTHER MATERIAL WHICH CAUSE INJURY, DETRIMENT, NUISANCE, OR ANNOYANCE TO ANY CONSIDERABLE NUMBER OF PERSONS.
P39631	NOV	3/10/09	3/4/09	BUILD, ERECT, INSTALL, ALTER OR REPLACE EQUIPMENT WITHOUT FIRST OBTAINING WRITTEN AUTHORIZATION FOR SUCH CONSTRUCTION FROM THE E.O. 2) OPERATE OR USE ANY EQUIPMENT WITHOUT FIRST OBTAINING A WRITTEN PERMIT TO OPERATE FROM THE E.O.

PROCESS DESCRIPTION

The hydrogen production plant employed the reforming reactions between compressed gaseous hydrocarbons and steam producing carbon monoxide, carbon dioxide, and hydrogen. The reactions are endothermic and conducted in the reforming heater where natural gas and PSA tail gases are combusted to supply the heat. The hydrocarbon feed consists of natural gas, Isom off gases, pentane, and Prism gases. Pentane is used as alternative feed consisting less than 50 ppm of sulfur compounds. The Prism gases which consist mainly of hydrogen provide the hydrogen for the reduction of mercaptan to hydrogen sulfide in the feed gases. Sulfur and chloride contents in the feed gases are then reduced to less than 0.1 ppmv in the chloride/sulfur guard reactors to prevent deactivation of the catalyst in the reforming heater. Waste heat of the product gases is recovered in the steam generator.

Part of the carbon monoxide produced is converted to carbon dioxide by the shift reaction in the high temperature shift reactor. A 68% conversion is achieved in the shift reactor where conversion decreases with increasing temperature. Excess steam is removed from product stream through a series of knockout drums drained to the deaerator. Carbon monoxide, carbon dioxide, and unreacted hydrocarbons are removed from the product stream through the Pressure Swing Adsorbers (PSA) and sent to the reforming heater as PSA tail gas for combustion. The PSA tail gas containing some amounts of carry-over hydrogen has a low heating value and when combined with natural gas at certain ration will supply a fuel gas having a heating value of 412.2 BTU/SCF to the reforming heater. These gases are released to flare during startup, shutdown, emergency and other essential operational need.

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The proposed modification is to replace the existing deaerator which uses low pressure steam to remove oxygen and carbonates from the process water and condensate streams. In this existing vessel, the waters commingle and the high condensate pH binds the carbonates in the process water leading to inability to strip per the original design. The salt formation breaks down to an acid in down stream units causing corrosion.

The new proposed vessel will have two chambers to improve deaeration effectiveness. The new vessel will use the same quantity of steam, but have two atmospheric vents (venting steam and air) whereas the current vessel has one. There will be no changes to the total amount of vapors vented to the atmosphere.

EMISSIONS:

Fugitive emissions are the main concerned air contaminant in this proposed modification. The replacement of the existing deaerator with the new one will cause an insignificant increase (0.01 lb/day) in VOC emissions as shown in Table 3 below:

Table 3 - Fugitive Emissions for Hydrogen Plant No. 2

Sources	Nos. of Existing Sources*	# Compts Removed	# Compts Added	Final Compts Count	Emission Factor (lb/yr)	Net Change in VOC's	After Modif Emission (lb/yr)
Valves							
Sealed bellows-Gas/V & L Liquid	234			234	0		
Live loaded w/dual seal syst: Nat gas							
Gas Vapor	280			280	23		6440
Light Liquid	72			72	19		1368
Heavy Liquid		4	4		3		
Pumps							
Sealess type - LL					0		
Double or Tandem Mech. Seal - LL	2			2	104		208
Single Mech. Seal (HL)					80		
Fittings (flanges, connts and others)	1519	8	10	1521	1.5	3	2282
Process Drains - P-Trap or Seal Pot	38			38	80		3040
Compressor (Gas/Vapor)	1			1	514		514
PRVs	22			22	0		
Total ROG emissions	13,849/yr 38.47 lb 30-dy ave					3 lb/yr or 0.01 lb/day	13,852/yr or 38.48 lb/ 30-day Ave.

* Submitted by BP - updated fugitive components used as baseline emissions

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RULE REVIEW

Part 1 District Rules

Rule 212 - Standards for Approving Permits

The proposed modification to the Hydrogen Plant No. 2 meets all criteria in Rule 212 for permit approval. The replacement of the new deaerator will increase the system efficiency and minimize the corrosion problem in the down stream of the deaerator.

This replacement does not constitute a significant project because 1) the modified permit unit is not located within 1000 feet of a school; 2) the emission decreases; and 3) the modified permit unit does not have an increase cancer risk greater than, or equal to, one in a million (1×10^{-6}) during a lifetime of 70 years or pose a risk of nuisance.

Rule 401 & 402 - Visible Emissions & Nuisance

Visible emission violations and public nuisance complaints associated with the above project are not expected under normal operating conditions.

Rule 466.1 - Valves and Flanges

The new valves and flanges will be equipped BACT and subject to the applicable inspection, maintenance and recordkeeping requirements specified by Rule 1173. The permit unit is expected to comply with this rule.

Rule 1123 - Refinery Process Turnarounds

The refinery is subject to the requirements of this rule during a process turnaround. BP refinery is required to submit a compliance plan to the AQMD for review and approval if the refinery uses inert gases or vacuum education in the process turnaround. Since the process will not undergo turnaround at this time, this rule is not applicable to the process unit. The permit unit is expected to comply with this rule in future process turnarounds.

Rule 1173 - Control of Volatile Organic Compound Leaks and Releases from Components at Petroleum Facilities and Chemical Plants

The process is equipped with valves, flanges, pumps, pressure relief devices (PRDs), drains, diaphragms, hatches, sigh-glasses and meters in VOC service. Therefore, these components are subject to the following applicable requirements:

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Leak standards: the new components will be equipped with BACT; hence, they are expected to comply with the requirements specified in this paragraph.

Identification: all new major components (>4 in valves and PRDs and >5 HP pumps) will be identified in Piping and Instrumentation (P&ID) flow diagrams.

Inspection: BP will continue to inspect the components in accordance to the applicable requirements specified by this paragraph.

Maintenance: BP will continue to repair or replace components in accordance to the time table specified by Table 2 of this paragraph.

Atmospheric PRDs: all atmospheric PRDs in the process unit are listed in the compliance plan application submitted as required by this paragraph. Two new vents to be installed on the new deaerator will release the same amount of steam and air. Compliance with this rule is expected.

Recordkeeping and reporting: BP will continue keeping records and report of all leaks, repairs and re-inspections in accordance to the applicable requirements specified by this paragraph.

BP is expected to comply with all applicable requirements of this rule.

Rule 1189 - Emissions from Hydrogen Plant Process Vents

Rule 1189(c)(3) limits the total VOC emissions from the hydrogen plant process vents to 2.5 lb of VOC per mmscf hydrogen produced. Based on the test reports from the past five years (Attachment A), the plant has been in compliance with this Rule. The installations of two atmospheric vents on the replaced deaerator will not cause any changes on the total VOC emission of the process vents. BP will continue to comply with requirement of this rule.

Reg. XIII - New Source Review:

This regulation applies to any new, modified or relocated source which results in an emission increase of any non-attainment air contaminant, any ozone depleting compound, or ammonia.

Rule 1303(a)(1) – BACT:

The proposed replacement of the deaerator will cause an insignificant emission increase (0.01 lb/day) of VOC emissions. BACT is not required.

Rule 1303(b) - Modeling and Emission Offsets:

The main source of emission increase is from the new fugitive source added in the proposed modification. Since the estimated VOC emission increase is 0.01 lb/day, no modeling and emission offset are required for VOC emissions

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The previous A/N and NSR emissions of the above system were entered incorrectly and required to be adjusted as shown in the Table 4 below.

Table 4 - NSR Emissions

Equipment	NSR ROG Emissions – lb/day	
	Previous	Current
No. 2 Hydrogen Plant	A/N 395977: 0	A/N 497869: 38.48

Reg. XIV - New Source Review of Carcinogenic Air Contaminants

This rule requires a permit applicant to assess the cancer risk due to the cumulative emission impacts of new/modified sources in the facility.

The proposed modification will result in an increase of 0.01 lb/day of VOC, which is considered insignificant. The cancer risk and hazard index thresholds are not expected to be exceeded at any receptor location. No health risk analyses are required.

Reg. XVII - Prevention of Significant Deterioration (PSD)

ROG is a non-attainment pollutant. PSD does not apply.

Reg. XX – Regional Clean Air Incentives Market (RECLAIM)

BP Carson refinery is a cycle II RECLAIM facility. There are no emissions of NOx and SOx associated with the above modification. Therefore, this regulation is not applicable to the proposed modification. The facility is expected to continue complying with the requirements of this regulation.

Reg. XXX - Title V Operating Permits

Rule 3002 requires that no person shall construct, modify, or operate equipment located at a Title V facility without first obtaining a Title V permit or permit revision that allows the construction, or modification. This facility is subject to and complies with Title V requirements. On September 1, 2009, BP’s initial Title V permit became effective.

This project is considered to be a “De Minimis Significant Revision” which means any Title V revision where the cumulative emission increase of non-RECLAIM pollutants or hazardous pollutants from this permit revision during the term of the permit is not greater than any of the emission threshold levels listed in this rule section. The proposed Title V permit revision will be submitted to EPA for a 45-day review.

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Part 2 State Regulations

California Environmental Quality Act (CEQA)

This proposed modification is not a significant project. Therefore, preparation of a CEQA document is not required.

Part 3 Federal Regulations

40 CFR60 Subpart GGG - Standards of Performance for Equipment Leaks of VOC in Petroleum Refineries.

The process unit is subject to the applicable requirements of this subpart.

§60.592(a) requires new devices to comply with section §60.482-1 through §60.482-10.

§60.482-2 defines the inspection and maintenance requirements for pumps in light liquid service. The pumps will also be sealless or tandem sealed that comply to BACT of < 500 ppmv ROG emissions. This section is not applicable since there will be no pumps to be installed for this project.

§60.482-3 requires compressors to be equipped with a seal system that includes a barrier fluid. This section is not applicable since there is no compressor to be installed in this project.

§60.482-4 defines the requirements for pressure relief devices in gas/vapor service. This section exempts the PRVs being connected to the control equipment. Compliance with this section is expected as the proposed PSV will be vented to the flare.

§60.482-5 defines the requirements for sampling connection systems. This section is not applicable to this project as there will be no sampling systems to be installed.

§60.482-6 requires each open ended valve or line to be equipped with: a cap, blind flange, plug, or a second valve that will be sealed at all times. These standards do not apply as the project will not involve with open ended valve or line.

§60.482-7 defines the inspection and maintenance requirements for valves in light liquid service. This section is not applicable to this project as there will be no new valves to be installed.

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§60.482-8 defines the requirements for pumps and valves in heavy liquid service. There will be no new components in heavy liquid service to be installed in this project. The existing components are expected to continue operated in compliance with these standards.

§60.482-9 provides allowances for delaying the repair of leaking components. Any repairs of leaked components will be subject to the time limits specified by AQMD Rule 1173 – Table 2 or in this section, whichever is more stringent. The components are expected to comply with the requirements.

BP refinery is expected to comply with all applicable requirements of this subpart.

40 CFR Part 63 Subpart CC – National Emission Standards for Hazardous Air Pollutants From Petroleum Refineries

§63.640(c)(4) indicates that this subpart applies to equipment leaks from petroleum product refining units. This process unit is, therefore, subject to the equipment leak standards for existing sources as specified in §63.648.

§63.648 requires devices subject to this subpart to comply with the equipment leak requirements of 40 CFR60 Subpart VV.

The ability of this project to comply with the requirements of 40 CFR60 Subpart VV is described in the evaluation of 40 CFR60 Subpart GGG in the evaluation. In general, the equipment leak inspection and monitoring requirements of Rule 1173 are more stringent, but pertinent requirements of this regulation have been incorporated into BP’s Inspection and Monitoring Program for fugitive emissions.

BP is expected to be in compliance with requirements of this regulation.

CONCLUSION/ RECOMMENDATION:

The above equipment will operate in compliance with all applicable rules and regulations of the District. A Permit to Construct is recommended to be issued to BP Carson Refinery subject to the following conditions:

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Conditions:

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]

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

CONTAMINANT | RULE | RULE/SUBPART

VOC | DISTRICT RULE | 1123
[RULE 1123, 12-7-1990]

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

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.

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.

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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]

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. 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

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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**]

S56.1 VENT GASES FROM ALL AFFECTED DEVICES OF THIS PROCESS/SYSTEM SHALL BE DIRECTED TO A GAS RECOVERY SYSTEM, EXCEPT FOR VENTING FROM THOSE EQUIPMENT SPECIFICALLY INDICATED IN A PERMIT CONDITION, AND FOR THE FOLLOWING VENT GASES WHICH MAY BE DIRECTED TO A FLARE:

- 1) VENT GASES DURING AN EMERGENCY AS DEFINED IN RULE 1118(B)(2) ;
- 2) VENT GASES DURING STARTUPS OR SHUTDOWNS AS DEFINED IN _RULE 1118(B)(21) AND (B)(19), RESPECTIVELY_, PROVIDED THAT ALL FLARES HAVE BEEN OPERATED IN ACCORDANCE WITH FLARING MINIMIZATION PROCEDURES AS DESCRIBED IN _RULE 1118(C)(4); AND
- 3) VENT GAS DUE TO ESSENTIAL OPERATING NEED, AS DEFINED IN RULE 1118(B)(4)(A) THAT WOULD RESULT IN A TEMPORARY FUEL GAS SYSTEM IMBALANCE, OR AS DEFINED IN _RULE 1118(B)(4)(C) THAT WOULD RESULT IN STREAMS THAT CANNOT BE RECOVERED DUE TO INCOMPATIBILITY WITH RECOVERY SYSTEM EQUIPMENT OR WITH REFINERY FUEL GAS SYSTEMS, PROVIDED THAT ALL FLARES HAVE BEEN OPERATED IN ACCORDANCE WITH FLARING MINIMIZATION PROCEDURES AS DESCRIBED IN RULE 1118(C)(4).

THE FLARING MINIMIZATION PROCEDURES AND ANY SUBSEQUENT CHANGES SHALL BE SUBMITTED TO THE DISTRICT AS DESCRIBED IN RULE 1118(C)(3).

THIS PROCESS/SYSTEM SHALL NOT BE OPERATED UNLESS ITS DESIGNATED FLARE(S) AND THE GAS RECOVERY SYSTEM ARE BOTH IN FULL USE AND HAVE VALID PERMITS TO RECEIVE VENT GASES FROM THIS SYSTEM.

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

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

H23.3 This equipment is subject to the applicable requirements of the following rules and 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]