



**FACILITY PERMIT TO OPERATE
CHEVRON PRODUCTS COMPANY**

SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

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

Equipment	ID No.	Connect To	RECLAIM Source	Emissions and Requirements	Conditions
PROCESS 4: HYDROTREATING					P13.1
SYSTEM 4: ISOMAX NHT HEATERS					S31.15
HEATER, NHT-1 REACTOR CHARGE, F-4531, TULSA MODEL NO. J01-343, NATURAL GAS, REFINERY GAS, WITH LOW NO _x BURNERS, 78 MMBTU/HR, WITH BURNER, NATURAL GAS, REFINERY GAS, JOHN ZINK, MODEL QMR-CR-PC-16, 8 BURNERS, WITH LOW NO _x BURNER, 78 MMBTU/HR A/N: 405267	D3778	C3780	NOX: MAJOR SOURCE**, SOX: MAJOR SOURCE**	CO: 25 PPMV (4) [RULE 1303(a)(1)-BACT, 5-10-1996]; CO: 2000 PPMV (5) [RULE 407, 4-2-1982]; NOX: 5 PPMV REFINERY/ NATURAL GAS (4) [RULE 2005, 4-20-2001]; PM: (9) [RULE 404, 2-7-1986]; PM: 0.1 GRAINS/SCF (5) [RULE 409, 8-7-1981]	A63.27, A99.7, A195.1, A195.27, B61.3, B61.6, C1.83, C1.85, D29.17, D82.5, D90.20, E54.14, H23.2, H23.50
SELECTIVE CATALYTIC REDUCTION, R-4540, HALDOR TOPSOE, WITH CERAMIC PLATE, DNX 930 CATALYST, 92.17 CU. FT. TOTAL; SPACE VELOCITY – 18,448/HR, WIDTH: 20 FT; HEIGHT: 5 FT 6 IN.; LENGTH: 7 FT 3 IN WITH AMMONIA INJECTION, 29% AQUEOUS NH ₃ , WITH TWO-15 KW VAPORIZERS/ INLINE HTRS, TWO-5 CFM AIR BLOWERS, NH ₃ INJECTION GRID, PIPING AND INSTRUMENTATION A/N: 405265	C3780	D3778 S3782		NH ₃ : 9 PPMV (4) [RULE 1303(a)(1)-BACT, 5-10-1996]	A99.8, D12.40, D12.42, D29.17, D82.5, E71.19
STACK A/N: 405265	D3782				

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, 7, 8, 9, 10, 11, 12, 13, 14, 16]



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

System Conditions

S31.15 The following BACT requirements shall apply to VOC service fugitive components associated with the devices that are covered by application number(s) 378811, 380595, 380596, 380597, 380611, 385371, 385372, 385373, 385374 and 475142:

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, 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 R1173, 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 two years, and shall be made available to the Executive Officer or his authorized representative upon request.

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



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[Systems subject to this condition: Process 1, System 18; Process 3, System 5; Process 4, System 3, 4; Process 8, System 8; Process 14, System 28; Process 16, System 8, 10]

Device Conditions

A63.27 The operator shall limit emissions from this equipment as follows:

Contaminant	Emissions Limit
VOC	Less than or equal to 11.23 lbs in any one day
PM10	Less than or equal to 18.72 lbs in any one day
CO	Less than or equal to 35.57 lbs in any one day

The operator shall calculate the emission limit(s) for compliance determination purposes for VOC and PM10 based on At least three one-hour source tests using District-approved test methods for emission rates and fuel usage as determined by a RECLAIM-certified fuel meter during the day of the test (0000 – 2400 hours). For compliance determination purposes, CO emissions shall be calculated based on certified continuous monitor, which shall have the capability to show cumulative daily emissions.

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

[Devices subject to this condition: D3778]

A99.7 The 5 PPM NOx emission limit(s) shall not apply during refractory dryout, startup or shutdown.

[RULE 2005, 5-6-2005]

Devices subject to this condition: D3778]

A99.8 The 9 PPM NH3 emission limit(s) shall not apply during refractory dryout, startup or shutdown.

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

[Devices subject to this condition: C3780]

A195.1 The 5 PPMV NOx emission limit(s) is averaged over 3 hours, 3 percent O2, dry.

[RULE 2005, 5-6-2005]

[Devices subject to this condition: D3530, D3778]

A195.3 The 9 PPMV NH3 emission limit(s) is averaged over 3 consecutive hours, 3 percent oxygen, dry basis.

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

[Devices subject to this condition: C3780]



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

A195.27 The 25 PPMV CO emission limit(s) is averaged over 1 hour, 3 percent O2, dry basis.

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

[Devices subject to this condition: D3778]

B61.3 The operator shall not use refinery gas containing the following specified compounds:

Compound	ppm by volume
Total Sulfur as H2S greater than	40

The 40 ppmv total sulfur limit shall be averaged over 4 hours.

[RULE 2005, 5-6-2005]

[Devices subject to this condition: D3778]

B61.6 The operator shall not use fuel gas, except uncombined natural 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]

[Devices subject to this condition: D84, D471, D472, D473, D641, D643, D2198, D2199, D2207, D2208, D2216, D3031, D3054, D3778, C3148, C3530, C3805, C3806, D3973]

C1.83 The operator shall limit the firing rate to no more than 78 MM Btu per hour.

For the purpose of this condition, firing rate shall be defined as energy or heat input to the equipment combustion chamber based on the higher heating value (HHV) of the natural gas and/or refinery fuel gas used.

To comply with this condition, the operator shall install and maintain a(n) continuous monitoring system that includes a continuous fuel flow meter for natural gas and refinery gas and continuous or semi-continuous HHV analyzer for refinery gas and use the RECLAIM default HHV value for natural gas.

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

This limit shall be based on a rolling 1 hour averaging period.

[RULE 1303(b)(2)-Offset, 5-10-1996; RULE 2012, 5-6-2005]

[Devices subject to this condition: D3778]



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

C1.85 The operator shall limit the duration of startup or shutdown to no more than 48 hour(s).

The operator shall not be subject to the NO_x, CO and NH₃ emission limits specified for this equipment during refractory dryout, startup or shutdown.

The duration of refractory dryout operation shall not exceed 48 hours.

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

[**RULE 2005, 4-20-2001**]

[Devices subject to this condition: D3778]

D12.40 The operator shall install and maintain a(n) differential pressure gauge to accurately indicate the differential pressure across the SCR catalyst beds in inches water column except during calibration checks, or routine maintenance and repair lasting 60 minutes or less.

The measuring device or gauge shall be accurate to within +/- 5 percent. It shall be calibrated once every twelve months.

The operator shall also install and maintain a device to continuously record the parameter being measured except during calibration checks, or routine maintenance and repair lasting 60 minutes or less.

For the purpose of this condition, continuously record shall be defined as recording at least once every week and shall be calculated based upon the average of the continuous monitoring for that week.

In the event of a monitoring and/or recording system malfunction or failure, which exceeds 24 hours, the operator shall notify the Executive Officer within 24 hours or the next working day. During the system failure, compliance with the requirement to continuously monitor and record data is waived for a period not to exceed 96 consecutive hours.

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

[Devices subject to this condition: C2213, C3780]

D12.42 The operator shall install and maintain a(n) temperature reading device to accurately indicate the temperature at the inlet to the SCR catalyst bed except during calibration checks, or routine maintenance and repair lasting 60 minutes or less.

The measuring device or gauge shall be accurate to within +/- 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 except during calibration checks, or routine maintenance and repair lasting 60 minutes or less.



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

For the purpose of this condition, continuously record shall be defined as recording at least once every hour and shall be calculated based upon the average of the continuous monitoring for that hour.

In the event of a monitoring and/or recording system malfunction or failure, which exceeds 24 hours, the operator shall notify the Executive Officer within 24 hours or the next working day. During the system failure, compliance with the requirement to continuously monitor and record data is waived for a period not to exceed 96 consecutive hours.

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

[Devices subject to this condition: C2213, C3780]

D29.17 The operator shall conduct source test(s) for the pollutant(s) identified below.

Pollutant(s) to be tested	Required Test	Averaging Time	Test Location
NOx emissions	District Method 100.1	1 hour	Stack Outlet
SOx emissions	District Method 100.1 or 6.1	1 hour	Stack Outlet
CO emissions	District Method 100.1 or 10.1	1 hour	Stack Outlet
ROG emissions	District Method 25.1 or 25.3	1 hour	Stack Outlet
PM emissions	District Method 5.2	District-approved averaging time	Stack Outlet
PM10 emissions	EPA Method 201A	District-approved averaging time	Stack Outlet
NH3 Emissions	District Method 207.1	District-approved averaging time	Stack Outlet

The test shall be conducted when this equipment is operating at 80 percent or greater of its maximum design capacity or within a capacity approved by the District.

The test shall be conducted to determine and report the concentration and mass emission rate in pounds per day for NOx, SOx, ROG, CO, Total PM and PM10.

The test shall be conducted at least every five years. Once certified, CO, NOx and NH3 source test data may be substituted with CEMS data. The CEMS data shall be included in the source test report.

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 after District approval of a source test protocol submitted in accordance with Section E - Administrative Conditions.



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The test shall be conducted and test report submitted to the District in accordance with Section E - Administrative Conditions.

[RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(b)(2)-Offset, 5-10-1996; RULE 1401, 3-5-2005; RULE 3004(a)(4)-Periodic Monitoring, 12-12-1997; RULE 407, 4-2-1982]

[Devices subject to this condition : D3778, C3780]

D82.5 The operator shall install and maintain a CEMS to measure the following parameters:

CO concentration in ppmv

NOx concentration in ppmv

NH3 concentration in ppmv

Oxygen concentration in percent volume

CO, NOx and NH3 concentrations shall be corrected to 3 percent oxygen on a dry basis.

The CEMS will convert the actual NOx and CO concentrations to mass emission rates (lbs/hr) and record the hourly emission rates on a continuous basis.

The NH3 CEMS shall be accurate to within plus or minus 20 percent relative accuracy. It shall be calibrated at least once every 12 months or as outlined in the Quality Control and Performance Evaluation plan.

[RULE 1303(a)(1)-BACT, 5-10-1996; RULE 2012, 5-6-2005; RULE 3004(a)(4)-Periodic Monitoring, 12-12-1997; RULE 407, 4-2-1982]

[Devices subject to this condition: D3778, C3780]

D90.20 The operator shall continuously monitor the H2S concentration in fuel gases before being burned in this device according to the following specifications:

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

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

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

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

[Devices subject to this condition: D84, D471, D472, D473, D641, D643, D2198, D2199, D2207, D2208, D2216, D3031, D3054, D3530, D3778, D3973]

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: C3780 [SELECTIVE CATALYTIC REDUCTION, R-4540]



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

Requirement number 1: During startups and shutdowns. For the purpose of this condition, start-up and shutdown shall be defined as the time period during the startup and shutdown of the heater when the temperature of the exhaust gas at the inlet to SCR is below 450 degree F.

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

[Devices subject to this condition: D3778]

E71.19 The operator shall only inject ammonia into this equipment if the flue gas inlet temperature is at least 450 degrees F.

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

[Devices subject to this condition: C3780]

H23.2 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]

[Devices subject to this condition: D84, D471, D472, D473, D641, D643, D3031, C3148, D3530, D3778, C3805, C3806, D3973]

H23.50 This equipment is subject to the applicable requirements of the following rules or regulations:

Contaminant	Rule	Rule/Subpart
HAP	40CFR63, Subpart	DDDDD

[40CFR 63 Subpart DDDDD, 4-1-2013]

[Devices subject to this condition: D3778]