

STATE OF LOUISIANA

DEPARTMENT OF ENVIRONMENTAL QUALITY

IN THE MATTER OF:	*	Settlement Tracking No.
	*	SA-AE-23-0065
VALERO REFINING-NEW ORLEANS, L.L.C.	*	
	*	Enforcement Tracking No.
AI # 26003	*	AE-CN-20-00319
	*	
PROCEEDINGS UNDER THE LOUISIANA	*	
ENVIRONMENTAL QUALITY ACT	*	Docket No. 2023-2685-DEQ
LA. R.S. 30:2001, <u>ET SEQ.</u>	*	

SETTLEMENT AGREEMENT

The following Settlement Agreement is hereby agreed to between Valero Refining-New Orleans, L.L.C. (“Respondent”) and the Department of Environmental Quality (“DEQ” or “the Department”), under authority granted by the Louisiana Environmental Quality Act, La. R.S. 30:2001, et seq. (“the Act”).

I

Respondent is a limited liability company that owns and/or operates a petroleum refinery and terminal located in Norco, St. Charles Parish, Louisiana (“the Facility”).

II

On December 1, 2021, the Department issued to Respondent a Consolidated Compliance Order & Notice of Potential Penalty, Enforcement Tracking No. AE-CN-20-00319 (Exhibit 1).

III

In response to the Consolidated Compliance Order & Notice of Potential Penalty, Respondent made a timely request for a hearing.

IV

Respondent denies it committed any violations or that it is liable for any fines, forfeitures and/or penalties.

V

Nonetheless, Respondent, without making any admission of liability under state or federal statute or regulation, agrees to pay, and the Department agrees to accept, a payment in the amount of TWO HUNDRED TWENTY THOUSAND AND NO/100 DOLLARS (\$220,000.00), of which Eight Thousand One Hundred Twenty-Eight and 24/100 Dollars (\$8,128.24) represents the Department's enforcement costs, in settlement of the claims set forth in this Settlement Agreement. The total amount of money expended by Respondent on cash payments to the Department as described above, shall be considered a civil penalty for tax purposes, as required by La. R.S. 30:2050.7(E)(1).

VI

Respondent further agrees that the Department may consider the permit record(s), the Consolidated Compliance Order & Notice of Potential Penalty and this Settlement Agreement for the purpose of determining compliance history in connection with any future enforcement or permitting action by the Department against Respondent, and in any such action Respondent shall be estopped from objecting to the above-referenced documents being considered as proving the violations alleged herein for the sole purpose of determining Respondent's compliance history.

VII

This Settlement Agreement shall be considered a final order of the Secretary for all purposes, including, but not limited to, enforcement under La. R.S. 30:2025(G)(2), and Respondent hereby waives any right to administrative or judicial review of the terms of this agreement, except such

review as may be required for interpretation of this Settlement Agreement in any action by the Department to enforce this Settlement Agreement.

VIII

This Settlement Agreement is being made in the interest of settling the state's claims and avoiding for both parties the expense and effort involved in litigation or an adjudicatory hearing. In agreeing to the compromise and Settlement Agreement, the Department considered the factors for issuing civil penalties set forth in La. R. S. 30:2025(E) of the Act.

IX

As required by law, the Department has submitted this Settlement Agreement to the Louisiana Attorney General for approval or rejection. The Attorney General's concurrence is appended to this Settlement Agreement.

X

The Respondent has caused a public notice advertisement to be placed in the official journal of the parish governing authority in St. Charles Parish, Louisiana. The advertisement, in form and wording approved by the Department, announced the availability of this Settlement Agreement for public view and comment and the opportunity for a public hearing. Respondent has submitted an original proof-of-publication affidavit and an original public notice to the Department and, as of the date this Settlement Agreement is executed on behalf of the Department, more than forty-five (45) days have elapsed since publication of the notice.

XI

Payment is to be made within ten (10) days from notice of the Secretary's signature. If payment is not received within that time, this Settlement Agreement is voidable at the option of the Department. Payments are to be made by check, payable to the Department of Environmental

Quality, and mailed or delivered to the attention of Accountant Administrator, Financial Services Division, Department of Environmental Quality, Post Office Box 4303, Baton Rouge, Louisiana, 70821-4303. Each payment shall be accompanied by a completed Settlement Payment Form attached hereto.

XII

In consideration of the above, any claims for penalties are hereby compromised and settled in accordance with the terms of this Settlement Agreement.

XIII

Each undersigned representative of the parties certifies that he or she is fully authorized to execute this Settlement Agreement on behalf of his or her respective party, and to legally bind such party to its terms and conditions.

VALERO REFINING-NEW ORLEANS,
L.L.C.

BY: Jerry D. Stumbo
(Signature)

Jerry D. Stumbo
(Printed)

TITLE: Vice President and General Manager

THUS DONE AND SIGNED in duplicate original before me this 19th day of
December, 20 23, at Norco.

Gary L. Smith, Jr.
NOTARY PUBLIC (ID # _____)
GARY L. SMITH, JR.
LA Bar #25878
Notary Public
Parish of St. Charles, LA
~~By Cop~~(stamped or printed) ~~by Dealt~~

LOUISIANA DEPARTMENT OF
ENVIRONMENTAL QUALITY

BY: Arrelia S. Licometh
Arrelia S. Licometh, Secretary

THUS DONE AND SIGNED in duplicate original before me this 6th day of
March, 20 24, at Baton Rouge, Louisiana.

Jill C. Clark
NOTARY PUBLIC (ID # 91143)
La. Bar No. 33050

Approved: Celena J. Cage
Celena J. Cage, Assistant Secretary



JOHN BEL EDWARDS
GOVERNOR



CHUCK CARR BROWN, Ph.D.
SECRETARY

State of Louisiana
DEPARTMENT OF ENVIRONMENTAL QUALITY
OFFICE OF ENVIRONMENTAL COMPLIANCE

DEC 01 2021

CERTIFIED MAIL (7019 2970 0000 6037 3121)
RETURN RECEIPT REQUESTED

VALERO REFINING-NEW ORLEANS, L.L.C.
c/o C T Corporation Service
Agent for Service of Process
3867 Plaza Tower Drive
Baton Rouge, Louisiana 70816

**RE: CONSOLIDATED COMPLIANCE ORDER
& NOTICE OF POTENTIAL PENALTY
ENFORCEMENT TRACKING NO. AE-CN-20-00319
AGENCY INTEREST NO. 26003**

Dear Sir/Madam:

Pursuant to the Louisiana Environmental Quality Act (La. R.S. 30:2001, et seq.), the attached **CONSOLIDATED COMPLIANCE ORDER & NOTICE OF POTENTIAL PENALTY** is hereby served on **VALERO REFINING-NEW ORLEANS, L.L.C. (RESPONDENT)** for the violation(s) described therein.

Compliance is expected within the maximum time period established by each part of the **COMPLIANCE ORDER**. The violation(s) cited in the **CONSOLIDATED COMPLIANCE ORDER & NOTICE OF POTENTIAL PENALTY** could result in the issuance of a civil penalty or other appropriate legal actions.

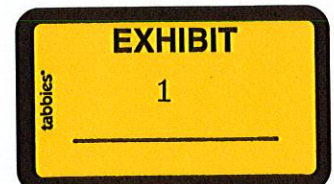
Any questions concerning this action should be directed to Antoinette Cobb at (225) 219-3072 or via email at antoinette.cobb@la.gov.

Sincerely,

A handwritten signature in black ink that reads "Angela Marse".

Angela Marse
Administrator
Enforcement Division

AM/AFC/afc
Alt ID No. 2520-00027
Attachment



**c: Valero Refining-New Orleans, L.L.C.
c/o Ms. Mary Claire Petit, Environmental Engineering Manager
14902 River Road
Norco, Louisiana 70079**

**STATE OF LOUISIANA
DEPARTMENT OF ENVIRONMENTAL QUALITY
OFFICE OF ENVIRONMENTAL COMPLIANCE**

<p>IN THE MATTER OF</p> <p>VALERO REFINING-NEW ORLEANS, L.L.C.</p> <p>ST. CHARLES PARISH</p> <p>ALT ID NO. 2520-00027</p> <p>PROCEEDINGS UNDER THE LOUISIANA ENVIRONMENTAL QUALITY ACT, La. R.S. 30:2001, ET SEQ.</p>	<p>*</p> <p>*</p> <p>*</p> <p>*</p> <p>*</p> <p>*</p> <p>*</p> <p>*</p> <p>*</p> <p>*</p>	<p>ENFORCEMENT TRACKING NO.</p> <p>AE-CN-20-00319</p> <p>AGENCY INTEREST NO.</p> <p>26003</p>
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CONSOLIDATED
COMPLIANCE ORDER & NOTICE OF POTENTIAL PENALTY

The following **CONSOLIDATED COMPLIANCE ORDER & NOTICE OF POTENTIAL PENALTY** is issued to **VALERO REFINING-NEW ORLEANS, L.L.C. (RESPONDENT)** by the Louisiana Department of Environmental Quality (the Department), under the authority granted by the Louisiana Environmental Quality Act (the Act), La. R.S. 30:2001, et seq., and particularly by La. R.S. 30:2025(C), 30:2050.2 and 30:2050.3(B).

FINDINGS OF FACT

I.

The Respondent owns and/or operates the St. Charles Refinery (facility), a petroleum refinery and terminal, located at 14902 River Road in Norco, St. Charles Parish, Louisiana. The Facility operates or has operated under the authority of the following Air Quality permits:

UNIT	PERMIT	ISSUE DATE	PERMIT EXPIRATION DATE
Entire Facility	2520-00027-V20	07/07/2021	01/04/2023
	2520-00027-V19	10/20/2020	01/04/2023
	2520-00027-V18	05/14/2020	01/04/2023
	2520-00027-V17	12/17/2018	01/04/2023
	2520-00027-V16	01/04/2018	01/04/2023
	2520-00027-V15	07/20/2016	10/02/2017

	Permit Number	Effective Date	Expiration Date
	2520-00027-V14	02/27/2015	10/02/2017
Prevention of Significant Deterioration Permit (PSD)	PSD-LA-826	01/04/2018	01/04/2028
	PSD-LA-619 (M-16)	07/07/2021	07/07/2031
	PSD-LA-619(M-15)	10/20/2020	10/20/2030
	PSD-LA-619(M-14)	05/14/2020	05/14/2030
	PSD-LA-619(M-13)	01/04/2018	01/04/2028
	PSD-LA-619(M-12)	07/20/2016	07/20/2026
	PSD-LA-619(M-11)	03/05/2014	03/05/2024

The Respondent entered into Consent Decree, Civil Action No. SA-05-CA-0569, on November 23, 2005. On or about January 29, 2018, the Consent Decree was terminated.

II.

The Department received an Unauthorized Discharge Notification Report for Incident No. T183962 dated April 13, 2018, and a follow-up Unauthorized Discharge Notification Report dated June 27, 2018. According to the reports, on April 7, 2018, a process upset occurred following a heavy rain storm that affected control instrumentation. The heavy rains caused a temperature decrease that resulted in the malfunction of the Sulfur Recovery Unit (SRU) tail gas analyzer. The SRU analyzer is used to automate the rate of air supplied to the unit in order to maintain a proper ratio of reactants to the Claus reaction process. Without the SRU tail gas analyzer, SRU combustion air control was placed in manual operation. Subsequent to the analyzer malfunction, the sulfur plant feed rates to the thermal reactor increased over time without the addition of more combustion air or enriched oxygen. The SRU's reaction went off ratio and caused increased SO₂ emissions. The Respondent determined the incident was preventable. The duration and emissions associated with the incident are listed in the tables below:

Unit	Date/Time	SO ₂ (ppm)	SO ₂ (lb/hr)
Thermal Oxidizer, 3700 TOX (EQT 0195)	04/07/2018 11:00	115.31	738.2

Thermal Oxidizer, 3700 TOX (EQT 0195)	04/07/2018 11:00	330.89
	04/07/2018 12:00	334.72
	04/07/2018 13:00	341.47
	04/07/2018 14:00	343.38
	04/07/2018 15:00	344.49
	04/07/2018 16:00	345.67
	04/07/2018 17:00	345.82
	04/07/2018 18:00	316.61
	04/07/2018 19:00	315.96
	04/07/2018 20:00	316.13
	04/07/2018 21:00	315.32
	04/07/2018 22:00	308.31

- A. Failure to operate control equipment, any device or contrivance, operating procedure or abatement scheme to prevent or reduce air pollution, in the proper manner is a violation of LAC 33:III.905.A and La. R.S. 30:2057(A)(2).
- B. Each failure to comply with the permitted emission limit is a violation of Title V Permit No. 2520-00027-V16, LAC 33:III.501.C.4, and La. R.S. 30:2057(A)(1) and 30:2057(A)(2). The violation was also reported in the following reports: the 2018 1st Semiannual CEMS Report dated July 30, 2018; the 2018 1st Semiannual Consolidated MACT Report dated August 28, 2018; and the 2018 1st Semiannual Monitoring and Deviation Report dated September 28, 2018.
- C. Failure to comply with the 250 ppmv SO₂ concentration standard is a violation of 40 CFR 60.102a(f)(1)(i), Specific Requirement 613 of Title V Permit No. 2520-00027-V16, LAC 33:III.501.C.4, and La. R.S. 30:2057(A)(2). The violation was also reported in the following reports: the 2018 1st Semiannual CEMS Report dated July 30, 2018; the 2018 1st Semiannual Consolidated MACT Report dated August 28, 2018; and the 2018 1st Semiannual Monitoring and Deviation Report dated September 28, 2018.

III.

The Department received an Unauthorized Discharge Notification Report for Incident No. T185770 dated July 19, 2018, and a follow-up Unauthorized Discharge Notification Report dated September 10, 2018. According to the reports, on July 12, 2018, a process upset occurred following a trip of the thermal reaction furnace. While preparing to complete preventative maintenance on the amine acid gas feed flow meter, an employee inadvertently disabled a master safety system bypass. When the master bypass was disabled, all safety systems returned to their normal operating states. The 3700 Sulfur Recovery Unit (SRU) reaction furnace flame scanners were in alarm due to displaced refractory blocking the field of view between the scanners and the burner flame. The flame scanners 2 out of 2 voting caused the SRU thermal reaction furnace to shut down on loss of flame. Issues with several control valves during subsequent restart delayed restoring the unit to normal operation. The Respondent determined the incident was preventable. The duration and emissions associated with the incident are listed in the tables below:

Source	Date/Time	SO ₂ (lb/hr)	NO _x (lb/hr)
Thermal Oxidizer, 3700 TOX (EQT 0195)	07/12/2018 10:00	115.31	1,985.3
	07/12/2018 11:00	115.31	333.8

Source	Date/Time	SO ₂ (lb/hr)
Thermal Oxidizer, 3700 TOX (EQT 0195)	07/12/2018 10:00	1,393
	07/12/2018 11:00	1,534
	07/12/2018 12:00	1,539
	07/12/2018 13:00	1,541
	07/12/2018 14:00	1,542

Thermal Oxidizer, 3700 TOX (EQT 0195)	07/12/2018 15:00	1,543
	07/12/2018 16:00	1,544
	07/12/2018 17:00	1,545
	07/12/2018 18:00	1,545
	07/12/2018 19:00	1,546
	07/12/2018 20:00	1,546
	07/12/2018 21:00	1,514

- A. Failure to operate control equipment, any device or contrivance, operating procedure or abatement scheme to prevent or reduce air pollution, in the proper manner is a violation of LAC 33:III.905.A and La. R.S. 30:2057(A)(2).
- B. Each failure to comply with the permitted emission limit is a violation of Title V Permit No. 2520-00027-V16, LAC 33:III.501.C.4, and La. R.S. 30:2057(A)(1) and 30:2057(A)(2). The violation was also reported in the following reports: the 2018 2nd Semiannual CEMS Report dated January 30, 2019; the 2018 2nd Semiannual Consolidated MACT Report dated February 28, 2019; and the 2018 2nd Semiannual Monitoring and Deviation Report dated March 29, 2019.
- C. Failure to comply with the 250 ppmv SO₂ concentration standard is a violation of 40 CFR 60.102a(f)(1)(i), Specific Requirement 613 of Title V Permit No. 2520-00027-V16, LAC 33:III.501.C.4, and La. R.S. 30:2057(A)(2). The violation was also reported in the following reports: the 2018 2nd Semiannual CEMS Report dated January 30, 2019; the 2018 2nd Semiannual Consolidated MACT Report dated February 28, 2019 and the 2018 2nd Semiannual Monitoring and Deviation Report dated March 29, 2019.

IV.

The Department received an Unauthorized Discharge Notification Report for Incident No. T186142 dated August 3, 2018, and a follow-up Unauthorized Discharge Notification Report dated September 27, 2018. According to the reports, on July 30, 2018, the Hydrocracker Unit (HCU) safety systems initiated a shutdown and depressurization of the unit due to a temperature increase in one of the hydrocracking catalyst beds. The incident was initiated by the isolation of the HCU and East Plant

instrument air systems to protect the HCU from issues the East Plant instrument air system was having. The HCU instrument air header pressure unexpectedly dropped due to air leaks within the unit once the two (2) systems were segregated. The pressure drop caused the recycle gas compressor spillback valve to fail open. The open spillback valve caused the quench gas flow to the reactors to decrease. Without the quench gas, temperatures rose above the high rate depressure trip setting and the unit depressurized. The Respondent determined the incident was preventable. The duration of the incident was approximately five (5) hours and resulted in the emissions listed in the table below:

Source	Pollutant	Actual Emissions (lb/day)	Permit Limit (lb/day)
Flare No. 5 (EQT 0240)	NO _x	12.57	20.1
	CO	57.30	101.7
	PM _{10/2.5}	0.33	2.2
	SO ₂	50.00	1,923.6
	H ₂ S	0.53	9.29
	VOC	74.12	0.0

- A. Failure to operate control equipment, any device or contrivance, operating procedure or abatement scheme to prevent or reduce air pollution, in the proper manner is a violation of LAC 33:III.905.A and La. R.S. 30:2057(A)(2).
- B. Each failure to comply with permitted emission limits is a violation of Title V Permit No. 2520-00027-V16, LAC 33:III.501.C.4, and La. R.S. 30:2057(A)(1) and 30:2057(A)(2).

V.

The Department received an Unauthorized Discharge Notification Report for Incident No. T190220 dated March 28, 2019, and follow-up Unauthorized Discharge Notification Reports dated May 28, 2019 and July 8, 2019. According to the reports, on March 21, 2019, the facility experienced upsets. The upset in the 3700 Sulfur Recovery Unit (SRU) was the result of a malfunction of the waste heat boiler. The upset in the 30 SRU was the result of a malfunction of a rupture disc (pressure relief valve). The upsets occurred at the same time; however, the cause and corrective actions

for the 30 SRU event are separate from the 3700 SRU event. The 3700 SRU malfunction was caused by leaks on the boiler condenser tubes. Leaks allowed boiler feed water to enter the process stream and apply back pressure to the reaction furnace, causing a trip. The Respondent determined the malfunction of the 3700 SRU was preventable. To prevent recurrence of the 3700 SRU malfunction, the Respondent implemented or will implement the following corrective actions: 1) develop a cleaning method and schedule for the 1st Pass Waste Heat Boiler shell side; 2) review the burner design; 3) redesign the No. 1 Condenser; and 4) review of the requirements for changing or exceeding design conditions with applicable personnel. The duration of the incident was approximately three (3) hours and resulted in the emissions listed in the table below.

	DATE	SO ₂	CO	NO _x
Thermal Oxidizer, 3700 TOX (EQT 0195)	03/21/2019 19:00	372.9	115.31	440.6
	03/21/2019 20:00	542.9	115.31	32.6
	03/21/2019 21:00	768.0	115.31	95.2
TOTAL				568.4

- A. Failure to operate control equipment, any device or contrivance, operating procedure or abatement scheme to prevent or reduce air pollution, in the proper manner is a violation of LAC 33:III.905.A and La. R.S. 30:2057(A)(2).
- B. Each failure to comply with the permitted emission limit is a violation of Title V Permit No. 2520-00027-V17, LAC 33:III.501.C.4, and La. R.S. 30:2057(A)(1) and 30:2057(A)(2).
- C. Failure to comply with the 250 ppmv SO₂ concentration standard is a violation of 40 CFR 60.102a(f)(1)(i), Specific Requirement 609 of Title V Permit No. 2520-00027-V17, LAC 33:III.501.C.4, and La. R.S. 30:2057(A)(1) and 30:2057(A)(2).

VI.

The Department received an Unauthorized Discharge Notification Report for Incident No. 193782 dated October 17, 2019, and a follow-up Unauthorized Discharge Notification Report date December 9, 2019. According to the reports, on October 10, 2019, there were elevated emissions from the 1600 Sulfur Recovery Unit (SRU) Thermal Oxidizer (TOX). The incident investigation determined a

malfunction of the level control valve on the Boiler Feed Water caused a low level in the waste heat boiler, which resulted in an automatic shutdown of the 1600 SRU and elevated emissions. In addition, the amine acid gas control valves were closed but allowed gas to leak by before being hard blocked in. The incident lasted for approximately three (3) hours and resulted in the release of 5,379.2 lbs of SO₂ in excess of the 115.31 max lb/hr limit. The Respondent reported the malfunction of the 1600 SRU was preventable.

- A. Failure to operate control equipment, any device or contrivance, operating procedure or abatement scheme to prevent or reduce air pollution, in the proper manner is a violation of LAC 33:III.905.A and La. R.S. 30:2057(A)(2).
- B. Each failure to comply with the permitted emission limit is a violation of Title V Permit No. 2520-00027-V17, LAC 33:III.501.C.4, and La. R.S. 30:2057(A)(1) and 30:2057(A)(2).
- C. Failure to comply with the 250 ppmv SO₂ concentration standard is a violation of 40 CFR 60.102a(f)(1)(i), Specific Requirement 609 of Title V Permit No. 2520-00027-V17, LAC 33:III.501.C.4, and La. R.S. 30:2057(A)(1) and 30:2057(A)(2).

VII.

On or about January 21-24, 2020, and September 10, 2021, the Department conducted a file review to determine the Respondent's degree of compliance with the Act, the Air Quality Regulations, and all applicable permits. While the review is not complete, the Department noted the violations found in Paragraphs VIII-XIII of the Findings of Fact portion of this enforcement action.

VIII.

The Respondent reported the following violations of permitted operating parameters:

A.	2016 1 st Semiannual CEMS Report (07/29/2016)	2520-00027-V14	EQT 0013 Flare No. 1	01/15/2016 (4 hours)	Fuel gas: Hydrogen Sulfide ≤ 162 ppm	Process conditions resulted in the generation of fuel gas in excess of what could be consumed in the heaters and boilers. H ₂ S Concentration= 200-285 ppm	40 CFR 60.103a(h), Specific Requirement 804
	2016 1 st Semiannual Monitoring and Deviation Report (09/30/2016)						
B.	2016 1 st Semiannual CEMS Report (07/29/2016)	2520-00027-V14	EQT 0013 Flare No. 1	01/31/2016 (3 hours)	Fuel gas: Hydrogen Sulfide ≤ 162 ppm	The Alkylation Unit rapidly depressured the E-Settler. H ₂ S Concentration= 227-300 ppm	40 CFR 60.103a(h), Specific Requirement 804
	2016 1 st Semiannual Monitoring and Deviation Report (09/30/2016)						

C.	2016 1 st Semiannual CEMS Report (07/29/2016)	2520- 00027-V14	EQT 0013 Flare No. 1	02/21/2016- 02/22/2016 (3 hours)	Fuel gas: Hydrogen Sulfide ≤ 162 ppm	Prior to the source being identified, the flaring ceased. H ₂ S Concentration= 130-201 ppm	40 CFR 60.103a(h), Specific Requirement 804
	2016 1 st Semiannual Monitoring and Deviation Report (09/30/2016)						
D.	2016 1 st Semiannual CEMS Report (07/29/2016)	2520- 00027-V14	EQT 0013 Flare No. 1	02/22/2016- 02/23/2016 (5 hours)	Fuel gas: Hydrogen Sulfide ≤ 162 ppm	Prior to the source being identified, the flaring ceased. H ₂ S Concentration= 180-264 ppm	40 CFR 60.103a(h), Specific Requirement 804
	2016 1 st Semiannual Monitoring and Deviation Report (09/30/2016)						
E.	2016 1 st Semiannual CEMS Report (07/29/2016)	2520- 00027-V14	EQT 0013 Flare No. 1	02/23/2016 (5 hours)	Fuel gas: Hydrogen Sulfide ≤ 162 ppm	Prior to the source being identified, the flaring ceased. H ₂ S Concentration= 163-176 ppm	40 CFR 60.103a(h), Specific Requirement 804
	2016 1 st Semiannual Monitoring and Deviation Report (09/30/2016)						
F.	2016 1 st Semiannual CEMS Report (07/29/2016)	2520- 00027-V14	EQT 0013 Flare No. 1	02/24/2016 (6 hours)	Fuel gas: Hydrogen Sulfide ≤ 162 ppm	Prior to the source being identified, the flaring ceased. H ₂ S Concentration = 177-236 ppm	40 CFR 60.103a(h), SR 804
	2016 1 st Semiannual Monitoring and Deviation Report (09/30/2016)						
G.	2016 1 st Semiannual CEMS Report (07/29/2016)	2520- 00027-V14	EQT 0013 Flare No. 1	02/24/2016 (1 hour)	Fuel gas: Hydrogen Sulfide ≤ 162 ppm	Prior to the source being identified, the flaring ceased. H ₂ S Concentration= 164 ppm	40 CFR 60.103a(h), SR 804
	2016 1 st Semiannual Monitoring and Deviation Report (09/30/2016)						
H.	2016 1 st Semiannual CEMS Report (07/29/2016)	2520- 00027-V14	EQT 0013 Flare No. 1	02/25/2016 (1 hour)	Fuel gas: Hydrogen Sulfide ≤ 162 ppm	Prior to the source being identified, the flaring ceased. H ₂ S Concentration= 170 ppm	40 CFR 60.103a(h), Specific Requirement 804
	2016 1 st Semiannual Monitoring and Deviation Report (09/30/2016)						

I.	2016 1 st Semiannual CEMS Report (07/29/2016)	2520- 00027-V14	EQT 0013 Flare No. 1	03/02/2016 (3 hours)	Fuel gas: Hydrogen Sulfide ≤ 162 ppm	Prior to the source being identified, the flaring ceased. H ₂ S Concentration= 153-188 ppm	40 CFR 60.103a(h), Specific Requirement 804
	2016 1 st Semiannual Monitoring and Deviation Report (09/30/2016)						
J.	2016 1 st Semiannual CEMS Report (07/29/2016)	2520- 00027-V14	EQT 0013 Flare No. 1	03/02/2016 (1 hour)	Fuel gas: Hydrogen Sulfide ≤ 162 ppm	Prior to the source being identified, the flaring ceased. H ₂ S Concentration= 183 ppm	40 CFR 60.103a(h), Specific Requirement 804
	2016 1 st Semiannual Monitoring and Deviation Report (09/30/2016)						
K.	2016 1 st Semiannual CEMS Report (07/29/2016)	2520- 00027-V14	EQT 0013 Flare No. 1	03/03/2016 (6 hours)	Fuel gas: Hydrogen Sulfide ≤ 162 ppm	Prior to the source being identified, the flaring ceased. H ₂ S Concentration= 184-209 ppm	40 CFR 60.103a(h), Specific Requirement 804
	2016 1 st Semiannual Monitoring and Deviation Report (09/30/2016)						
L.	2016 1 st Semiannual CEMS Report (07/29/2016)	2520- 00027-V14	EQT 0013 Flare No. 1	03/14/2016 (2 hour)	Fuel gas: Hydrogen Sulfide ≤ 162 ppm	Prior to the source being identified, the flaring ceased. H ₂ S Concentration= 168-189 ppm	40 CFR 60.103a(h), Specific Requirement 804
	2016 1 st Semiannual Monitoring and Deviation Report (09/30/2016)						
M.	2016 1 st Semiannual CEMS Report (07/29/2016)	2520- 00027-V14	EQT 0013 Flare No. 1	03/25/2016 (2 hours)	Fuel gas: Hydrogen Sulfide ≤ 162 ppm	Prior to the source being identified, the flaring ceased. H ₂ S Concentration= 165-208 ppm	40 CFR 60.103a(h), Specific Requirement 804
	2016 1 st Semiannual Monitoring and Deviation Report (09/30/2016)						
N.	2016 1 st Semiannual CEMS Report (07/29/2016)	2520- 00027-V14	EQT 0013 Flare No. 1	04/08/2016 (3 hours)	Fuel gas: Hydrogen Sulfide ≤ 162 ppm	Prior to the source being identified, the flaring ceased. H ₂ S Concentration= 172-238 ppm	40 CFR 60.103a(h), Specific Requirement 804
	2016 1 st Semiannual Monitoring and Deviation Report (09/30/2016)						

O.	2016 1 st Semiannual CEMS Report (07/29/2016)	2520- 00027-V14	EQT 0013 Flare No. 1	04/14/2016 (2 hours)	Fuel gas: Hydrogen Sulfide ≤ 162 ppm	Process conditions resulted in the generation of fuel gas in excess of what could be consumed in the heaters and boilers. H ₂ S Concentration= 170-188 ppm	40 CFR 60.103a(h), Specific Requirement 804
	2016 1 st Semiannual Monitoring and Deviation Report (09/30/2016)						
P.	2016 1 st Semiannual CEMS Report (07/29/2016)	2520- 00027-V14	EQT 0013 Flare No. 1	04/14/2016 (1 hour)	Fuel gas: Hydrogen Sulfide ≤ 162 ppm	Process conditions resulted in the generation of fuel gas in excess of what could be consumed in the heaters and boilers. H ₂ S Concentration= 179 ppm	40 CFR 60.103a(h), Specific Requirement 804
	2016 1 st Semiannual Monitoring and Deviation Report (09/30/2016)						
Q.	2016 1 st Semiannual CEMS Report (07/29/2016)	2520- 00027-V14	EQT 0013 Flare No. 1	04/14/2016 (3 hours)	Fuel gas: Hydrogen Sulfide ≤ 162 ppm	Process conditions resulted in the generation of fuel gas in excess of what could be consumed in the heaters and boilers. H ₂ S Concentration= 169-193 ppm	40 CFR 60.103a(h), Specific Requirement 804
	2016 1 st Semiannual Monitoring and Deviation Report (09/30/2016)						
R.	2016 1 st Semiannual CEMS Report (07/29/2016)	2520- 00027-V14	EQT 0013 Flare No. 1	04/25/2016 (3 hours)	Fuel gas: Hydrogen Sulfide ≤ 162 ppm	Prior to the source being identified, the flaring ceased. H ₂ S Concentration= 189-212 ppm	40 CFR 60.103a(h), Specific Requirement 804
	2016 1 st Semiannual Monitoring and Deviation Report (09/30/2016)						
S.	2016 1 st Semiannual CEMS Report (07/29/2016)	2520- 00027-V14	EQT 0013 Flare No. 1	05/02/2016- 05/03/2016 (5 hours)	Fuel gas: Hydrogen Sulfide ≤ 162 ppm	Prior to the source being identified, the flaring ceased. H ₂ S Concentration=158-270 ppm	40 CFR 60.103a(h), Specific Requirement 804
	2016 1 st Semiannual Monitoring and Deviation Report (09/30/2016)						
T.	2016 1 st Semiannual CEMS Report (07/29/2016)	2520- 00027-V14	EQT 0013 Flare No. 1	05/16/2016 (2 hours)	Fuel gas: Hydrogen Sulfide ≤ 162 ppm	Prior to the source being identified, the flaring ceased. H ₂ S Concentration=189-192 ppm	40 CFR 60.103a(h), Specific Requirement 804
	2016 1 st Semiannual Monitoring and Deviation Report (09/30/2016)						

U.	2016 1 st Semiannual CEMS Report (07/29/2016)	2520- 00027-V14	EQT 0013 Flare No. 1	06/11/2016 (2 hours)	Fuel gas: Hydrogen Sulfide ≤ 162 ppm	Process conditions resulted in the generation of fuel gas in excess of what could be consumed in the heaters and boilers. H ₂ S Concentration= 169-189 ppm	40 CFR 60.103a(h), Specific Requirement 804
	2016 1 st Semiannual Monitoring and Deviation Report (09/30/2016)						
V.	2016 1 st Semiannual CEMS Report (07/29/2016)	2520- 00027-V14	EQT 0013 Flare No. 1	06/13/2016 (2 hours)	Fuel gas: Hydrogen Sulfide ≤ 162 ppm	Process conditions resulted in the generation of fuel gas in excess of what could be consumed in the heaters and boilers. H ₂ S Concentration= 163-170 ppm	40 CFR 60.103a(h), Specific Requirement 804
	2016 1 st Semiannual Monitoring and Deviation Report (09/30/2016)						
W.	2016 1 st Semiannual CEMS Report (07/29/2016)	2520- 00027-V14	EQT 0013 Flare No. 1	06/21/2016- 06/22/2016 (26 hours)	Fuel gas: Hydrogen Sulfide ≤ 162 ppm	Process conditions resulted in the generation of fuel gas in excess of what could be consumed in the heaters and boilers. H ₂ S Concentration= 165-300 ppm	40 CFR 60.103a(h), Specific Requirement 804
	2016 1 st Semiannual Monitoring and Deviation Report (09/30/2016)						
X.	2016 1 st Semiannual CEMS Report (07/29/2016)	2520- 00027-V14	EQT 0007 Flare No. 2	06/05/2016 (2 hours)	Fuel gas: Hydrogen Sulfide ≤ 162 ppm	Prior to the source being identified, the flaring ceased. H ₂ S Concentration= 154-175 ppm	40 CFR 60.103a(h), Specific Requirement 804
	2016 1 st Semiannual Monitoring and Deviation Report (09/30/2016)						
Y.	2016 1 st Semiannual CEMS Report (07/29/2016)	2520- 00027-V14	EQT 0007 Flare No. 2	06/10/2016 (3 hours)	Fuel gas: Hydrogen Sulfide ≤ 162 ppm	Process conditions resulted in the generation of fuel gas in excess of what could be consumed in the heaters and boilers. H ₂ S Concentration= 159-257 ppm	40 CFR 60.103a(h), Specific Requirement 804
	2016 1 st Semiannual Monitoring and Deviation Report (09/30/2016)						
Z.	2016 1 st Semiannual CEMS Report (07/29/2016)	2520- 00027-V14	EQT 0007 Flare No. 2	06/11/2016 (1 hour)	Fuel gas: Hydrogen Sulfide ≤ 162 ppm	Process conditions resulted in the generation of fuel gas in excess of what could be consumed in the heaters and boilers. H ₂ S Concentration=163 ppm	40 CFR 60.103a(h), Specific Requirement 804
	2016 1 st Semiannual Monitoring and Deviation Report (09/30/2016)						

A2.	2016 1 st Semiannual CEMS Report (07/29/2016)	2520- 00027-V14	EQT 0007 Flare No. 2	06/13/2016 (3 hours)	Fuel gas: Hydrogen Sulfide ≤ 162 ppm	Process conditions resulted in the generation of fuel gas in excess of what could be consumed in the heaters and boilers. H ₂ S Concentration=172-241 ppm	40 CFR 60.103a(h), Specific Requirement 804
	2016 1 st Semiannual Monitoring and Deviation Report (09/30/2016)						
B2.	2016 1 st Semiannual CEMS Report (07/29/2016)	2520- 00027-V14	EQT 0007 Flare No. 2	06/19/2016 (3 hours)	Fuel gas: Hydrogen Sulfide ≤ 162 ppm	Process conditions resulted in the generation of fuel gas in excess of what could be consumed in the heaters and boilers. H ₂ S Concentration=186-234 ppm	40 CFR 60.103a(h), Specific Requirement 804
	2016 1 st Semiannual Monitoring and Deviation Report (09/30/2016)						
C2.	2016 1 st Semiannual CEMS Report (07/29/2016)	2520- 00027-V14	EQT 0007 Flare No. 2	06/21/2016 (2 hours)	Fuel gas: Hydrogen Sulfide ≤ 162 ppm	Process conditions resulted in the generation of fuel gas in excess of what could be consumed in the heaters and boilers. H ₂ S Concentration= 182-211 ppm	40 CFR 60.103a(h), Specific Requirement 804
	2016 1 st Semiannual Monitoring and Deviation Report (09/30/2016)						
D2.	2016 1 st Semiannual CEMS Report (07/29/2016)	2520- 00027-V14	EQT 0007 Flare No. 2	06/24/2016 (5 hours)	Fuel gas: Hydrogen Sulfide ≤ 162 ppm	Process conditions resulted in the generation of fuel gas in excess of what could be consumed in the heaters and boilers. H ₂ S Concentration=172-295 ppm	40 CFR 60.103a(h), Specific Requirement 804
	2016 1 st Semiannual Monitoring and Deviation Report (09/30/2016)						
E2.	2016 1 st Semiannual CEMS Report (07/29/2016)	2520- 00027-V14	EQT 0360 Flare No. 4	01/15/2016 (3 hours)	Fuel gas: Hydrogen Sulfide ≤ 162 ppm	Process conditions resulted in the generation of fuel gas in excess of what could be consumed in the heaters and boilers. H ₂ S Concentration= 165-204 ppm	40 CFR 60.103a(h), Specific Requirement 804
	2016 1 st Semiannual Monitoring and Deviation Report (09/30/2016)						
F2.	2016 1 st Semiannual CEMS Report (07/29/2016)	2520- 00027-V14	EQT 0360 Flare No. 4	01/31/2016 (3 hours)	Fuel gas: Hydrogen Sulfide ≤ 162 ppm	The Alkylation Unit rapidly depressured the E-Settler. H ₂ S Concentration= 167-209 ppm	40 CFR 60.103a(h), Specific Requirement 804
	2016 1 st Semiannual Monitoring and Deviation Report (09/30/2016)						

G2.	2016 1 st Semiannual CEMS Report (07/29/2016)	2520-00027-V14	EQT 0241 Thermal Oxidizer, 1600 TOX (1600 SRU)	06/04/2016 (2 hours)	For any calendar hour, permittee shall comply with the SO ₂ limit derived from Eq. 1 of 40 CFR 60.102a(f)(1)(ii) for each process train or release point, or comply, with a flow rate weighted average of 250 ppmv for all release points from the sulfur recovery plant. Sulfur dioxide ≤ 250 ppmv (0% O ₂ , 12 hr rolling average)	The 1600 sulfur accumulator pumps were not moving sulfur from the accumulator to the 3700 sulfur pit and backing up into the TOX. SO ₂ Concentration=351-416 ppm Emissions= 172 lbs <i>Per response to an information request dated July 2, 2020, a formal investigation determined the malfunction of the relay in the transformer to be the causal factor. The relay was replaced and sent to the manufacturer for further analysis. The manufacturer analysis recommended to modify the configuration to include vent caps; the relays were reconfigured to trip as alarm only.</i>	40 CFR 60.102a(f)(1)(i), Specific Requirement 847
	2016 1 st Semiannual Consolidated MACT Report (08/31/2016)						
	2016 1 st Semiannual Monitoring and Deviation Report (09/30/2016)						
H2.	2016 1 st Semiannual CEMS Report (07/29/2016)	2520-00027-V14	EQT 0016 FCCU No. 2 Regenerator	01/22/2016-01/23/2016 (11 hours)	The 3-hour rolling average liquid-to-gas ratio must not fall below the level established during the most recent performance test. Liquid to Gas (L:G) Ratio ≥ 0.052 gpm/scfm	A pump on the quench tower had reduced discharge due to an impeller issue. <i>Per response to an information request dated July 3, 2020, the pumps are on an annual preventative maintenance schedule and a spare pump is maintained onsite. Due to the abrasive solution created by catalyst carryover into the slurry system, the rate of erosion of the pumps and pump parts greatly increased. An investigation on catalyst losses identified coke formation in reactor cyclones as a possible cause for the catalyst losses. The FCCU was taken down for turnaround in First Quarter 2020 and repairs were made to the slurry system and mechanical apparatus were installed to protect the cyclones from coke formation.</i>	40 CFR 102a(c)(2)(ii), Specific Requirement 187
	2016 1 st Semiannual Consolidated MACT Report (08/31/2016)						
	2016 1 st Semiannual Monitoring and Deviation Report (09/30/2016)						

12.	2016 1 st Semiannual CEMS Report (07/29/2016)	2520-00027-V14	EQT 0016 FCCU No. 2 Regenerator	01/23/2016-01/24/2016 (4 hours)	L:G Ratio \geq 0.052 gpm/scfm	<p>A pump on the quench tower had reduced discharge due to an impeller issue.</p> <p><i>Per response to an information request dated July 3, 2020, the pumps are on an annual preventative maintenance schedule and a spare pump is maintained onsite. Due to the abrasive solution created by catalyst carryover into the slurry system, the rate of erosion of the pumps and pump parts greatly increased. An investigation on catalyst losses identified coke formation in reactor cyclones as a possible cause for the catalyst losses. The FCCU was taken down for turnaround in First Quarter 2020 and repairs were made to the slurry system and mechanical apparatus were installed to protect the cyclones from coke formation.</i></p>	40 CFR 102a(c)(2)(ii), Specific Requirement 187
	2016 1 st Semiannual Consolidated MACT Report (08/31/2016)						
	2016 1 st Semiannual Monitoring and Deviation Report (09/30/2016)						
12.	2016 1 st Semiannual CEMS Report (07/29/2016)	2520-00027-V14	EQT 0016 FCCU No. 2 Regenerator	01/25/2016-02/05/2016 (263 hours)	L:G Ratio \geq 0.052 gpm/scfm	<p>A pump on the quench tower had reduced discharge due to an impeller issue.</p> <p><i>Per response to an information request dated July 3, 2020, the pumps are on an annual preventative maintenance schedule and a spare pump is maintained onsite. Due to the abrasive solution created by catalyst carryover into the slurry system, the rate of erosion of the pumps and pump parts greatly increased. An investigation on catalyst losses identified coke formation in reactor cyclones as a possible cause for the catalyst losses. The FCCU was taken down for turnaround in First Quarter 2020 and repairs were made to the slurry system and mechanical apparatus were installed to protect the cyclones from coke formation.</i></p>	40 CFR 102a(c)(2)(ii), Specific Requirement 187
	2016 1 st Semiannual Consolidated MACT Report (08/31/2016)						
	2016 1 st Semiannual Monitoring and Deviation Report (09/30/2016)						

K2.	2016 1 st Semiannual CEMS Report (07/29/2016)	2520-00027-V14	EQT 0016 FCCU No. 2 Regenerator	05/01/2016-05/03/2016 (58 hours)	L:G Ratio \geq 0.052 gpm/scfm	<p>A quench tower pump malfunction caused the L:G to fall below 0.052.</p> <p>Per response to an information request dated July 2, 2020, the pumps are on an annual preventative maintenance schedule and a spare pump is maintained onsite. Due to the abrasive solution created by catalyst carryover into the slurry system, the rate of erosion of the pumps and pump parts greatly increased. An investigation on catalyst losses identified coke formation in reactor cyclones as a possible cause for the catalyst losses. The FCCU was taken down for turnaround in First Quarter 2020 and repairs were made to the slurry system and mechanical apparatus were installed to protect the cyclones from coke formation.</p>	40 CFR 102a(c)(2)(ii), Specific Requirement 187
	2016 1 st Semiannual Consolidated MACT Report (08/31/2016)						
	2016 1 st Semiannual Monitoring and Deviation Report (09/30/2016)						
L2.	2016 1 st Semiannual Consolidated MACT Report (08/31/2016)	2520-00027-V14	EQT 0355 Tank T-13-15	06/15/2016	Equip automatic bleeder vents and rim space vents with gaskets.	A vacuum breaker was discovered to be leaking. Repaired on 07/20/2016	40 CFR 60.112b(a)(2)(ii), Specific Requirement 137
	2016 1 st Semiannual Monitoring and Deviation Report (09/30/2016)						
M2.	2016 1 st Semiannual Consolidated MACT Report (08/31/2016)	2520-00027-V14	EQT 0356 Tank T-100-2	06/28/2016	Except for automatic bleeder vents, rim space vents, roof drains, and leg sleeves, equip each opening in the roof with a gasketed cover, seal, or lid and maintain in a closed position at all times (i.e., no visible gap) except when the device is in actual use.	A manway bolt on the roof was discovered missing causing a gasket leak, and there were multiple pin holes found in the fabric of the elephant trunk covering the guidepope seals.	40 CFR 60.112b(a)(2)(ii), 40 CFR 60.113b(b)(4)(i)(B), Specific Requirement 4
	2016 1 st Semiannual Monitoring and Deviation Report (09/30/2016)						

N2.	2016 1 st Semiannual Monitoring and Deviation Report (09/30/2016)	2520-00027-V14	GRP 0007 Thermal Oxidizers Emissions Cap	06/04/2016 (15 hours)	Shall comply with SO ₂ limits of 40 CFR 60 Subpart Ja [SO ₂ ≤ 250 ppmv (0% O ₂ , 12 hr rolling average)]	<p>The 1600 sulfur accumulator pumps were not moving sulfur from the accumulator 3700 sulfur pit and backing up into the TOX</p> <p><i>Per response to an information request dated July 3, 2020, a formal investigation determined the malfunction of the relay in the transformer to be the causal factor. The relay was replaced and sent to the manufacturer for further analysis. The manufacturer analysis recommended to modify the configuration to include vent caps; the relays were reconfigured to trip as alarm only.</i></p>	LAC 33:III.1503.C, Specific Requirement 869
O2.	2016 2 nd Semiannual Consolidated MACT Report (02/28/2017)	2520-00027-V14	EQT 0074 Tank 4-118	07/28/2016	There are to be no holes, tears, or other openings in the shoe, primary seal fabric, or seal envelope	Multiple pin holes found in guide pole sea	40 CFR 60.113b(4)(i)(B), Specific Requirement 143
P2.	2016 2 nd Semiannual CEMS Report (01/30/2017)	2520-00027-V14	EQT 0016 FCCU No. 2 Regenerator	07/02/2016 (3 hours)	L:G Ratio ≥ 0.052 gpm/scfm	<p>A pump on the quench tower had a reduced discharge due to an impeller issue.</p> <p><i>Per response to an information request dated July 3, 2020, the pumps are on an annual preventative maintenance schedule and a spare pump is maintained onsite. Due to the abrasive solution created by catalyst carryover in the slurry system, the rate of erosion of the pumps and pump parts greatly increased. An investigation on catalyst losses identified coke formation in reactor cyclones as a possible cause for the catalyst losses. The FCCU was taken down for turnaround in First Quarter 2020 and repairs were made to the slurry system and mechanical apparatus were installed to protect the cyclones from coke formation.</i></p>	40 CFR 102a(c)(2)(ii), Specific Requirement 187
	2016 2 nd Semiannual Consolidated MACT Report (02/28/2017)						

Q2.	2016 2 nd Semiannual CEMS Report (01/30/2017)	2520-00027-V14	EQT 0016 FCCU No. 2 Regenerator	07/04/2016 (2 hours)	L:G Ratio \geq 0.052 gpm/scfm	<p>A pump on the quench tower had a reduced discharge due to an impeller issue.</p> <p><i>Per response to an information request dated July 3, 2020, the pumps are on an annual preventative maintenance schedule and a spare pump is maintained onsite. Due to the abrasive solution created by catalyst carryover into the slurry system, the rate of erosion of the pumps and pump parts greatly increased. An investigation on catalyst losses identified coke formation in reactor cyclones as a possible cause for the catalyst losses. The FCCU was taken down for turnaround in First Quarter 2020 and repairs were made to the slurry system and mechanical apparatus were installed to protect the cyclones from coke formation.</i></p>	40 CFR 102a(c)(2)(ii). Specific Requirement 187
R2.	2016 2 nd Semiannual CEMS Report (01/30/2017)	2520-C0027-V14	EQT 0016 FCCU No. 2 Regenerator	07/05/2016 (3 hours)	L:G Ratio \geq 0.052 gpm/scfm	<p>A pump on the quench tower had a reduced discharge due to an impeller issue.</p> <p><i>Per response to an information request dated July 3, 2020, the pumps are on an annual preventative maintenance schedule and a spare pump is maintained onsite. Due to the abrasive solution created by catalyst carryover into the slurry system, the rate of erosion of the pumps and pump parts greatly increased. An investigation on catalyst losses identified coke formation in reactor cyclones as a possible cause for the catalyst losses. The FCCU was taken down for turnaround in First Quarter 2020 and repairs were made to the slurry system and mechanical apparatus were installed to protect the cyclones from coke formation.</i></p>	40 CFR 102a(c)(2)(ii). Specific Requirement 187
2016 2 nd Semiannual Consolidated MACT Report (02/28/2017)							

S2.	2016 2 nd Semiannual CEMS Report (01/30/2017)	2520-00027-V14	EQT 0016 FCCU No. 2 Regenerator	07/05/2016-07/06/2016 (17 hours)	L:G Ratio ≥ 0.052 gpm/scfm	<p>A pump on the quench tower had a reduced discharge due to an impeller issue.</p> <p>Per response to an information request dated July 3, 2020, the pumps are on an annual preventative maintenance schedule and a spare pump is maintained onsite. Due to the abrasive solution created by catalyst carryover into the slurry system, the rate of erosion of the pumps and pump parts greatly increased. An investigation on catalyst losses identified coke formation in reactor cyclones as a possible cause for the catalyst losses. The FCCU was taken down for turnaround in First Quarter 2020 and repairs were made to the slurry system and mechanical apparatus were installed to protect the cyclones from coke formation.</p>	40 CFR 102a(c)(2)(ii), Specific Requirement 187
	2016 2 nd Semiannual Consolidated MACT Report (02/28/2017)						
T2.	2016 2 nd Semiannual CEMS Report (01/30/2017)	2520-00027-V14	EQT 0016 FCCU No. 2 Regenerator	07/08/2016 (15 hours)	L:G Ratio ≥ 0.052 gpm/scfm	<p>A pump on the quench tower had a reduced discharge due to an impeller issue.</p> <p>Per response to an information request dated July 3, 2020, the pumps are on an annual preventative maintenance schedule and a spare pump is maintained onsite. Due to the abrasive solution created by catalyst carryover into the slurry system, the rate of erosion of the pumps and pump parts greatly increased. An investigation on catalyst losses identified coke formation in reactor cyclones as a possible cause for the catalyst losses. The FCCU was taken down for turnaround in First Quarter 2020 and repairs were made to the slurry system and mechanical apparatus were installed to protect the cyclones from coke formation.</p>	40 CFR 102a(c)(2)(ii), Specific Requirement 187
	2016 2 nd Semiannual Consolidated MACT Report (02/28/2017)						
U2.	2016 2 nd Semiannual CEMS Report (01/30/2017)	2520-00027-V15	EQT 0016 FCCU No. 2 Regenerator	07/22/2016 (2 hours)	Carbon monoxide (CO) ≤ 500 ppm	<p>Air blower (K-82-16) tripped.</p> <p>CO Concentration= 539-570 ppm Emissions= 591 lbs</p>	40 CFR 60.102a(b)(4), Specific Requirement 137
	2016 2 nd Semiannual Consolidated MACT Report (02/28/2017)						

V2.	2016 2 nd Semiannual CEMS Report (01/30/2017)	2520-00027-V15	EQT 0241 Thermal Oxidizer, 1600 TOX (1600 SRU)	09/13/2016-09/14/2016 (13 hours)	Sulfur dioxide \leq 250 ppmv (0% O ₂ , 12 hr rolling average)	The upset originated in the 30 SRU while transferring fresh solvent (MDEA) through a common transfer line that contained hydrocarbon contamination. In response to the upset in the 30 SRU, the feed to the 1600 and 3700 SRUs was increased. The rapid increase at the 1600 SRU caused an imbalance of the unit's internal H ₂ S and SO ₂ levels needed for proper operation. SO ₂ Concentration= 342-949 ppm Emissions= 935 lbs	40 CFR 60.102a(f)(1), Specific Requirement 597
	2016 2 nd Semiannual Consolidated MACT Report (02/28/2017)						
W2.	2016 2 nd Semiannual CEMS Report (01/30/2017)	2520-00027-V15	EQT 0241 Thermal Oxidizer, 1600 TOX (1600 SRU)	10/04/2016 (12 hours)	Sulfur dioxide \leq 250 ppmv (0% O ₂ , 12 hr rolling average)	During the shift of amine acid gas feed from the 30 SRU to the 1600 SRU, there was a short duration of excess emissions. Feed rates were reduced to stabilize the 1600 SRU SO ₂ Concentration= 258-340 ppm Emissions= 297 lbs	40 CFR 60.102a(f)(1), Specific Requirement 597
	2016 2 nd Semiannual Consolidated MACT Report (02/28/2017)						
X2.	2016 2 nd Semiannual CEMS Report (01/30/2017)	2520-00027-V15	EQT 0241 Thermal Oxidizer, 1600 TOX (1600 SRU)	11/04/2016-11/05/2016 (16 hours)	Sulfur dioxide \leq 250 ppmv (0% O ₂ , 12 hr rolling average)	Elevated SO ₂ and H ₂ S emissions due to a malfunction in the 1600 Sulfur Recovery Unit (SRU) during a planned shutdown. This was caused by a leak in one of the primary shut off feed valves. SO ₂ Concentration= 3,794-34,279 ppm Emissions= 7,397 lbs	40 CFR 60.102a(f)(1), Specific Requirement 597
	2016 2 nd Semiannual Consolidated MACT Report (02/28/2017)						
Y2.	2016 2 nd Semiannual CEMS Report (01/30/2017)	2520-00027-V14	EQT 0013 Flare No. 1	07/05/2016 (1 hour)	Fuel gas: Hydrogen Sulfide \leq 162 ppm	Process conditions resulted in the generation of fuel gas in excess of what could be consumed in the heaters and boilers. H ₂ S Concentration= 163 ppm	40 CFR 60.103a(h), Specific Requirement 804
Z2.	2016 2 nd Semiannual CEMS Report (01/30/2017)	2520-00027-V14	EQT 0013 Flare No. 1	07/06/2016 (2 hours)	Fuel gas: Hydrogen Sulfide \leq 162 ppm	Process conditions resulted in the generation of fuel gas in excess of what could be consumed in the heaters and boilers. H ₂ S Concentration= 221-238 ppm	40 CFR 60.103a(h), Specific Requirement 804
A3.	2016 2 nd Semiannual CEMS Report (01/30/2017)	2520-00027-V14	EQT 0013 Flare No. 1	07/08/2016 (6 hours)	Fuel gas: Hydrogen Sulfide \leq 162 ppm	Process conditions resulted in the generation of fuel gas in excess of what could be consumed in the heaters and boilers. H ₂ S Concentration= 184-300 ppm	40 CFR 60.103a(h), Specific Requirement 804
B3.	2016 2 nd Semiannual CEMS Report (01/30/2017)	2520-00027-V14	EQT 0013 Flare No. 1	07/08/2016 (3 hours)	Fuel gas: Hydrogen Sulfide \leq 162 ppm	Process conditions resulted in the generation of fuel gas in excess of what could be consumed in the heaters and boilers. H ₂ S Concentration= 1E2-225 ppm	40 CFR 60.103a(h), Specific Requirement 804

C3.	2016 2 nd Semiannual CEMS Report (01/30/2017)	2520- 00027-V14	EQT 0013 Flare No. 1	07/08/2016- 07/09/2016 (3 hours)	Fuel gas: Hydrogen Sulfide ≤ 162 ppm	Process conditions resulted in the generation of fuel gas in excess of what could be consumed in the heaters and boilers. H ₂ S Concentration= 184-202 ppm	40 CFR 60.103a(h), Specific Requirement 804
D3.	2016 2 nd Semiannual CEMS Report (01/30/2017)	2520- 00027-V15	EQT 0013 Flare No. 1	09/27/2016 (2 hours)	Fuel gas: Hydrogen Sulfide ≤ 162 ppm	Prior to the source being Identified, the flaring ceased. H ₂ S Concentration= 204-220 ppm	40 CFR 60.103a(h), Specific Requirement 804
E3.	2016 2 nd Semiannual CEMS Report (01/30/2017)	2520- 00027-V15	EQT 0013 Flare No. 1	12/15/2016 (4 hours)	Fuel gas: Hydrogen Sulfide ≤ 162 ppm	Prior to the source being Identified, the flaring ceased. H ₂ S Concentration= 184-232 ppm	40 CFR 60.103a(h), Specific Requirement 804
F3.	2016 2 nd Semiannual CEMS Report (01/30/2017)	2520- 00027-V14	EQT 0007 Flare No. 2	07/03/2016 (3 hours)	Fuel gas: Hydrogen Sulfide ≤ 162 ppm	Process conditions resulted in the generation of fuel gas in excess of what could be consumed in the heaters and boilers. H ₂ S Concentration= 200-259 ppm	40 CFR 60.103a(h), Specific Requirement 804
G3.	2016 2 nd Semiannual CEMS Report (01/30/2017)	2520- 00027-V14	EQT 0007 Flare No. 2	07/04/2016 (6 hours)	Fuel gas: Hydrogen Sulfide ≤ 162 ppm	Process conditions resulted in the generation of fuel gas in excess of what could be consumed in the heaters and boilers. H ₂ S Concentration= 206-300 ppm	40 CFR 60.103a(h), Specific Requirement 804
H3.	2016 2 nd Semiannual CEMS Report (01/30/2017)	2520- 00027-V14	EQT 0007 Flare No. 2	07/05/2016 (4 hours)	Fuel gas: Hydrogen Sulfide ≤ 162 ppm	Process conditions resulted in the generation of fuel gas in excess of what could be consumed in the heaters and boilers. H ₂ S Concentration= 171-271 ppm	40 CFR 60.103a(h), Specific Requirement 804
I3.	2016 2 nd Semiannual CEMS Report (01/30/2017)	2520- 00027-V14	EQT 0007 Flare No. 2	07/06/2016 (8 hours)	Fuel gas: Hydrogen Sulfide ≤ 162 ppm	Process conditions resulted in the generation of fuel gas in excess of what could be consumed in the heaters and boilers. H ₂ S Concentration= 199-300 ppm	40 CFR 60.103a(h), Specific Requirement 804
J3.	2016 2 nd Semiannual CEMS Report (01/30/2017)	2520- 00027-V14	EQT 0007 Flare No. 2	07/08/2016 (7 hours)	Fuel gas: Hydrogen Sulfide ≤ 162 ppm	Process conditions resulted in the generation of fuel gas in excess of what could be consumed in the heaters and boilers. H ₂ S Concentration= 186-300 ppm	40 CFR 60.103a(h), Specific Requirement 804
K3.	2016 2 nd Semiannual CEMS Report (01/30/2017)	2520- 00027-V14	EQT 0007 Flare No. 2	07/10/2016 (1 hour)	Fuel gas: Hydrogen Sulfide ≤ 162 ppm	Process conditions resulted in the generation of fuel gas in excess of what could be consumed in the heaters and boilers. H ₂ S Concentration= 168 ppm	40 CFR 60.103a(h), Specific Requirement 804
L3.	2016 2 nd Semiannual CEMS Report (01/30/2017)	2520- 00027-V14	EQT 0007 Flare No. 2	07/16/2016 (3 hours)	Fuel gas: Hydrogen Sulfide ≤ 162 ppm	Process conditions resulted in the generation of fuel gas in excess of what could be consumed in the heaters and boilers. H ₂ S Concentration= 177-223 ppm	40 CFR 60.103a(h), Specific Requirement 804

M3.	2016 2 nd Semiannual CEMS Report (01/30/2017)	2520-00027-V15	EQT 0007 Flare No. 2	07/20/2016 (7 hours)	Fuel gas: Hydrogen Sulfide ≤ 162 ppm	Process conditions resulted in the generation of fuel gas in excess of what could be consumed in the heaters and boilers. H ₂ S Concentration= 188-300 ppm	40 CFR 60.103a(h), Specific Requirement 555
N3.	2016 2 nd Semiannual CEMS Report (01/30/2017)	2520-00027-V15	EQT 0007 Flare No. 2	07/25/2016 (2 hours)	Fuel gas: Hydrogen Sulfide ≤ 162 ppm	Process conditions resulted in the generation of fuel gas in excess of what could be consumed in the heaters and boilers. H ₂ S Concentration= 195-205 ppm	40 CFR 60.103a(h), Specific Requirement 555
O3.	2016 2 nd Semiannual CEMS Report (01/30/2017)	2520-00027-V15	EQT 0007 Flare No. 2	07/25/2016-07/26/2016 (4 hours)	Fuel gas: Hydrogen Sulfide ≤ 162 ppm	Process conditions resulted in the generation of fuel gas in excess of what could be consumed in the heaters and boilers. H ₂ S Concentration= 195-272 ppm	40 CFR 60.103a(h), Specific Requirement 555
P3.	2016 2 nd Semiannual CEMS Report (01/30/2017)	2520-00027-V15	EQT 0007 Flare No. 2	07/29/2016 (4 hours)	Fuel gas: Hydrogen Sulfide ≤ 162 ppm	Process conditions resulted in the generation of fuel gas in excess of what could be consumed in the heaters and boilers. H ₂ S Concentration= 173-292 ppm	40 CFR 60.103a(h), Specific Requirement 555
Q3.	2016 2 nd Semiannual CEMS Report (01/30/2017)	2520-00027-V15	EQT 0007 Flare No. 2	07/31/2016 (5 hours)	Fuel gas: Hydrogen Sulfide ≤ 162 ppm	Process conditions resulted in the generation of fuel gas in excess of what could be consumed in the heaters and boilers. H ₂ S Concentration= 197-297 ppm	40 CFR 60.103a(h), Specific Requirement 555
R3.	2016 2 nd Semiannual CEMS Report (01/30/2017)	2520-00027-V15	EQT 0007 Flare No. 2	08/01/2016 (13 hours)	Fuel gas: Hydrogen Sulfide ≤ 162 ppm	Process conditions resulted in the generation of fuel gas in excess of what could be consumed in the heaters and boilers. H ₂ S Concentration= 180-300 ppm	40 CFR 60.103a(h), Specific Requirement 555
S3.	2016 2 nd Semiannual CEMS Report (01/30/2017)	2520-00027-V15	EQT 0007 Flare No. 2	08/02/2016 (6 hours)	Fuel gas: Hydrogen Sulfide ≤ 162 ppm	Process conditions resulted in the generation of fuel gas in excess of what could be consumed in the heaters and boilers. H ₂ S Concentration= 199-300 ppm	40 CFR 60.103a(h), Specific Requirement 555
T3.	2016 2 nd Semiannual CEMS Report (01/30/2017)	2520-00027-V15	EQT 0007 Flare No. 2	08/03/2016-08/04/2016 (6 hours)	Fuel gas: Hydrogen Sulfide ≤ 162 ppm	Process conditions resulted in the generation of fuel gas in excess of what could be consumed in the heaters and boilers. H ₂ S Concentration= 176-298 ppm	40 CFR 60.103a(h), Specific Requirement 555
U3.	2016 2 nd Semiannual CEMS Report (01/30/2017)	2520-00027-V15	EQT 0007 Flare No. 2	08/04/2016 (6 hours)	Fuel gas: Hydrogen Sulfide ≤ 162 ppm	Process conditions resulted in the generation of fuel gas in excess of what could be consumed in the heaters and boilers. H ₂ S Concentration= 199-290 ppm	40 CFR 60.103a(h), Specific Requirement 555
V3.	2016 2 nd Semiannual CEMS Report (01/30/2017)	2520-00027-V15	EQT 0007 Flare No. 2	08/06/2016 (6 hours)	Fuel gas: Hydrogen Sulfide ≤ 162 ppm	Process conditions resulted in the generation of fuel gas in excess of what could be consumed in the heaters and boilers. H ₂ S Concentration= 195-300 ppm	40 CFR 60.103a(h), Specific Requirement 555

W3.	2016 2 nd Semiannual CEMS Report (01/30/2017)	2520- 00027-V15	EQT 0007 Flare No. 2	08/07/2016 (4 hours)	Fuel gas: Hydrogen Sulfide ≤ 162 ppm	Process conditions resulted in the generation of fuel gas in excess of what could be consumed in the heaters and boilers. H ₂ S Concentration= 192-279 ppm	40 CFR 60.103a(h), Specific Requirement 555
X3.	2016 2 nd Semiannual CEMS Report (01/30/2017)	2520- 00027-V15	EQT 0007 Flare No. 2	08/09/2016 (5 hours)	Fuel gas: Hydrogen Sulfide ≤ 162 ppm	Process conditions resulted in the generation of fuel gas in excess of what could be consumed in the heaters and boilers. H ₂ S Concentration= 171-300 ppm	40 CFR 60.103a(h), Specific Requirement 555
Y3.	2016 2 nd Semiannual CEMS Report (01/30/2017)	2520- 00027-V15	EQT 0007 Flare No. 2	08/14/2016 (4 hours)	Fuel gas: Hydrogen Sulfide ≤ 162 ppm	Prior to the source being identified, the flaring ceased. H ₂ S Concentration= 195-300 ppm	40 CFR 60.103a(h), Specific Requirement 555
Z3.	2016 2 nd Semiannual CEMS Report (01/30/2017)	2520- 00027-V15	EQT 0007 Flare No. 2	08/21/2016 (8 hours)	Fuel gas: Hydrogen Sulfide ≤ 162 ppm	Process conditions resulted in the generation of fuel gas in excess of what could be consumed in the heaters and boilers. H ₂ S Concentration= 173-300 ppm	40 CFR 60.103a(h), Specific Requirement 555
A4.	2016 2 nd Semiannual CEMS Report (01/30/2017)	2520- 00027-V15	EQT 0007 Flare No. 2	09/27/2016 (1 hour)	Fuel gas: Hydrogen Sulfide ≤ 162 ppm	Prior to the source being identified, the flaring ceased. H ₂ S Concentration=184 ppm	40 CFR 60.103a(h), Specific Requirement 555
B4.	2016 2 nd Semiannual CEMS Report (01/30/2017)	2520- 00027-V14	EQT 0360 Flare No. 4	07/06/2016 (2 hours)	Fuel gas: Hydrogen Sulfide ≤ 162 ppm	Process conditions resulted in the generation of fuel gas in excess of what could be consumed in the heaters and boilers. H ₂ S Concentration= 187-212 ppm	40 CFR 60.103a(h), Specific Requirement 555
C4.	2016 2 nd Semiannual CEMS Report (01/30/2017)	2520- 00027-V14	EQT 0360 Flare No. 4	07/08/2016 (9 hours)	Fuel gas: Hydrogen Sulfide ≤ 162 ppm	Process conditions resulted in the generation of fuel gas in excess of what could be consumed in the heaters and boilers. H ₂ S Concentration=166-300 ppm	40 CFR 60.103a(h), Specific Requirement 555
D4.	2016 2 nd Semiannual CEMS Report (01/30/2017)	2520- 00027-V15	EQT 0360 Flare No. 4	08/02/2016 (1 hour)	Fuel gas: Hydrogen Sulfide ≤ 162 ppm	Process conditions resulted in the generation of fuel gas in excess of what could be consumed in the heaters and boilers. H ₂ S Concentration= 177 ppm	40 CFR 60.103a(h), Specific Requirement 555
E4.	2016 2 nd Semiannual CEMS Report (01/30/2017)	2520- 00027-V15	EQT 0360 Flare No. 4	09/14/2016 (10 hours)	Fuel gas: Hydrogen Sulfide ≤ 162 ppm	Prior to the source being identified, the flaring ceased. H ₂ S Concentration= 198-245 ppm	40 CFR 60.103a(h), Specific Requirement 555
F4.	2016 2 nd Semiannual CEMS Report (01/30/2017)	2520- 00027-V15	EQT 0360 Flare No. 4	12/09/2016 (3 hours)	Fuel gas: Hydrogen Sulfide ≤ 162 ppm	Prior to the source being identified, the flaring ceased. H ₂ S Concentration= 181-232 ppm	40 CFR 60.103a(h), Specific Requirement 555

G4.	2017 1 st Semiannual CEMS Report (07/28/2017)	2520-00027-V15	EQT 0195 Thermal Oxidizer, 3700 TOX (3700 SRU)	02/21/2017-02/22/2017 (14 hours)	SO ₂ ≤ 250 ppmv (0% O ₂ , 12 hr rolling average)	<p>During the shift of amine acid gas feed from the 1600 SRU to the 3700 SRU, the facility experienced a short duration of excess emissions. Feed rates were reduced to stabilize the 3700 SRU.</p> <p>SO₂ Concentration= 254-388 ppm Estimated emissions= 161 lbs</p>	40 CFR 60.102a(f)(1), Specific Requirement 597
	2017 1 st Semiannual Monitoring and Deviation Report (09/29/2017)						
	2017 1 st Semiannual Consolidated MACT Report (08/28/2017)						
H4.	2017 1 st Semiannual CEMS Report (07/28/2017)	2520-00027-V15	EQT 0196 Thermal Oxidizer, 30 TOX (30 SRU)	04/28/2017-04/29/2017 (10 hours)	SO ₂ ≤ 250 ppmv (0% O ₂ , 12 hr rolling average)	<p>A rupture disc failed on piping from a sulfur condenser and sent a H₂S rich stream to the thermal oxidizer. The rupture disc design and burst pressure were changed and modifications were made to the piping.</p> <p>SO₂ Concentration= 2±3-268 ppm Estimated emissions= 272 lbs</p>	40 CFR 60.102a(f)(1), Specific Requirement 597
	2017 1 st Semiannual Consolidated MACT Report (08/28/2017)						
	2017 1 st Semiannual Monitoring and Deviation Report (09/29/2017)						
I4.	2017 1 st Semiannual CEMS Report (07/28/2017)	2520-00027-V15	EQT 0196 Thermal Oxidizer, 30 TOX (30 SRU)	05/03/2017-05/04/2017 (12 hours)	SO ₂ ≤ 250 ppmv (0% O ₂ , 12 hr rolling average)	<p>A rupture disc failed on piping from a sulfur condenser and sent a H₂S rich stream to the thermal oxidizer. The rupture disc design and burst pressure were changed and modifications were made to the piping.</p> <p>SO₂ Concentration= 280-305 ppm Estimated emissions= 320 lbs</p>	40 CFR 60.102a(f)(1), Specific Requirement 597
	2017 1 st Semiannual Consolidated MACT Report (08/28/2017)						
	2017 1 st Semiannual Monitoring and Deviation Report (09/29/2017)						

J4.	2017 1 st Semiannual CEMS Report (07/28/2017)	2520-00027-V15	EQT 0016 FCCU No. 2 Regenerator	01/08/2017 (6 hours)	L:G Ratio ≥ 0.041	<p>A pump on the quench tower had a reduced discharge due to an impeller issue.</p> <p><i>Per response to an information request dated July 3, 2020, the pumps are on an annual preventative maintenance schedule and a spare pump is maintained onsite. Due to the abrasive solution created by catalyst carryover into the slurry system, the rate of erosion of the pumps and pump parts greatly increased. An investigation on catalyst losses identified coke formation in reactor cyclones as a possible cause for the catalyst losses. The FCCU was taken down for turnaround in First Quarter 2020 and repairs were made to the slurry system and mechanical apparatus were installed to protect the cyclones from coke formation.</i></p>	40 CFR 60.102a(c)(2)(ii), Specific Requirement 138
	2017 1 st Semiannual Monitoring and Deviation Report (09/29/2017)						
K4.	2017 1 st Semiannual CEMS Report (07/28/2017)	2520-00027-V15	EQT 0016 FCCU No. 2 Regenerator	01/09/2017 (17 hours)	L:G Ratio ≥ 0.041	<p>A pump on the quench tower had a reduced discharge due to an impeller issue.</p> <p><i>Per response to an information request dated July 3, 2020, the pumps are on an annual preventative maintenance schedule and a spare pump is maintained onsite. Due to the abrasive solution created by catalyst carryover into the slurry system, the rate of erosion of the pumps and pump parts greatly increased. An investigation on catalyst losses identified coke formation in reactor cyclones as a possible cause for the catalyst losses. The FCCU was taken down for turnaround in First Quarter 2020 and repairs were made to the slurry system and mechanical apparatus were installed to protect the cyclones from coke formation.</i></p>	40 CFR 60.102a(c)(2)(ii), Specific Requirement 138
	2017 1 st Semiannual Consolidated MACT Report (08/28/2017)						
	2017 1 st Semiannual Monitoring and Deviation Report (09/29/2017)						

L4.	2017 1 st Semiannual CEMS Report (07/28/2017)	2520- 00027-V15	EQT 0016 FCCU No. 2 Regenerator	01/19/2017 (4 hours)	Carbon monoxide (CO) ≤ 500 ppm	The average catalyst particle size was elevated and caused the unit to shutdown. CO Concentration= 537-669 ppm Estimated emissions= 435 lbs	40 CFR 60.102a(b)(4), Specific Requirement 137
	2017 1 st Semiannual Consolidated MACT Report (08/28/2017)						
	2017 1 st Semiannual Monitoring and Deviation Report (09/29/2017)						
M4.	2017 1 st Semiannual CEMS Report (07/28/2017)	2520- 00027-V15	EQT 0013 Flare No. 1	01/06/2017 (1 hour)	Fuel gas: Hydrogen Sulfide ≤ 162 ppm	Prior to the source being identified, the flaring ceased. H ₂ S Concentration= 178-300 ppm	40 CFR 60.103a(h), Specific Requirement 555
	2017 1 st Semiannual Monitoring and Deviation Report (09/29/2017)						
N4.	2017 1 st Semiannual CEMS Report (07/28/2017)	2520- 00027-V15	EQT 0013 Flare No. 1	02/02/2017- 02/03/2017 (19 hours)	Fuel gas: Hydrogen Sulfide ≤ 162 ppm	Process conditions resulted in the generation of fuel gas in excess of what could be consumed in the heaters or boilers. H ₂ S Concentration= 167-300 ppm	40 CFR 60.103a(h), Specific Requirement 555
	2017 1 st Semiannual Monitoring and Deviation Report (09/29/2017)						
O4.	2017 1 st Semiannual CEMS Report (07/28/2017)	2520- 00027-V15	EQT 0013 Flare No. 1	03/12/2017- 03/13/2017 (5 hours)	Fuel gas: Hydrogen Sulfide ≤ 162 ppm	Prior to the source being identified, the flaring ceased. H ₂ S Concentration=170-257 ppm	40 CFR 60.103a(h), Specific Requirement 555
	2017 1 st Semiannual Monitoring and Deviation Report (09/29/2017)						
P4.	2017 1 st Semiannual CEMS Report (07/28/2017)	2520- 00027-V15	EQT 0013 Flare No. 1	03/13/2017 (1 hour)	Fuel gas: Hydrogen Sulfide ≤ 162 ppm	Prior to the source being identified, the flaring ceased. H ₂ S Concentration= 177 ppm	40 CFR 60.103a(h), Specific Requirement 555
	2017 1 st Semiannual Monitoring and Deviation Report (09/29/2017)						

Q4.	2017 1 st Semiannual CEMS Report (07/28/2017)	2520-00027-V15	EQT 0007 Flare No. 2	01/31/2017 (5 hours)	Fuel gas: Hydrogen Sulfide ≤ 162 ppm	Process conditions resulted in the generation of fuel gas in excess of what could be consumed in the heaters or boilers. H ₂ S Concentration= 213-300 ppm	40 CFR 60.103a(h), Specific Requirement 555
	2017 1 st Semiannual Monitoring and Deviation Report (09/29/2017)						
R4.	2017 1 st Semiannual CEMS Report (07/28/2017)	2520-00027-V15	EQT 0007 Flare No. 2	02/02/2017-02/03/2017 (21 hours)	Fuel gas: Hydrogen Sulfide ≤ 162 ppm	Process conditions resulted in the generation of fuel gas in excess of what could be consumed in the heaters or boilers. H ₂ S Concentration= 163-300 ppm	40 CFR 60.103a(h), Specific Requirement 555
	2017 1 st Semiannual Monitoring and Deviation Report (09/29/2017)						
S4.	2017 1 st Semiannual CEMS Report (07/28/2017)	2520-00027-V15	EQT 0360 Flare No. 4	03/12/2017-03/13/2017 (8 hours)	Fuel gas: Hydrogen Sulfide ≤ 162 ppm	Prior to the source being identified, the flaring ceased. H ₂ S Concentration= 163-300 ppm	40 CFR 60.103a(h), Specific Requirement 555
	2017 1 st Semiannual Monitoring and Deviation Report (09/29/2017)						
T4.	2017 1 st Semiannual CEMS Report (07/28/2017)	2520-00027-V15	EQT 0013 Flare No. 1	04/10/2017 (1 hour)	Opacity ≤ 20%; except emissions may have an average opacity in excess of 20% for not more than one six-minute period in any 60 consecutive minutes	Pump around flow in the FCCU was lost due to a pump malfunction. This caused increased pressure in the #3 debutanizer and resulted in the PSV lifting. The material was diverted to the flares and flare gas recovery unit. Unrecovered gas was combusted at the flares. <i>Per response to an information request dated July 3, 2020, the cause of the pump malfunction is unknown as the flow was reestablished with the pump that was initially lost. It is possible that restriction was present in the suction line that shifted and passed through when restarting the pump. No other issues were caused by the pump following this event.</i>	LAC 33:III.1311.C, Specific Requirement 589
	2017 1 st Semiannual Monitoring and Deviation Report (09/29/2017)						

U4.	2017 1 st Semiannual CEMS Report (07/28/2017)	2520-00027-V15	EQT 0013 Flare No. 1	04/10/2017 (1 hour)	Design and operate for no visible emissions except for periods not to exceed a total of 5 minutes during any two consecutive hours.	Pump around flow in the FCCU was lost due to a pump malfunction. This caused increased pressure in the #3 debutanizer and resulted in the PSV lifting. The material was diverted to the flares and flare gas recovery unit. Unrecovered gas was combusted at the flares. <i>Per response to an information request date July 3, 2020, the cause of the pump malfunction is unknown as the flow was reestablished with the pump that was initially lost. It is possible that restriction was present in the suction line that shifted and passed through when restarting the pump. No other issues were caused by the pump following this event.</i>	40 CFR 60.18(c)(1), 40 CFR 63.11(b)(4), Specific Requirements 567 and 576
	2017 1 st Semiannual Monitoring and Deviation Report (09/29/2017)						
V4.	2017 1 st Semiannual Consolidated MACT Report (08/28/2017)	2520-00027-V15	EQT 0012 Flare No. 3	01/16/2017 (195 minutes)	Design and operate for no visible emissions except for periods not to exceed a total of 5 minutes during any two consecutive hours.	During the startup of the Hydrocracker Unit after a planned shutdown, a control valve was leaking gas to the debutanizer overhead drum in the 3700 Sulfur Recover Unit causing the drum to overpressure. The gases were routed to the flares and flare gas recovery unit.	40 CFR 60.18(c), 40 CFR 63.11(b)(4), Specific Requirements 567 and 576
	2017 1 st Semiannual Monitoring and Deviation Report (09/29/2017)						
W4.	2017 1 st Semiannual Consolidated MACT Report (08/28/2017)	2520-00027-V15	EQT 0356 Tank T-100-2	06/28/2017	There are to be no holes, tears, or other openings in the secondary seal or seal fabric.	Multiple pin holes and tears found in secondary seal fabric and guidepole seal. Date of repair or Tank taken out of service 08/22/2017	40 CFR 60.113b(b)(4)(ii)(C), Specific Requirement 17
	2017 1 st Semiannual Monitoring and Deviation Report (09/29/2017)						
X4.	2017 1 st Semiannual Monitoring and Deviation Report (09/29/2017)	2520-00027-V15	GRP 0006 Flare Cap and Common Requirements Flare No. 4	01/07/2017-01/08/2017 (8 hours)	Heat Content >= 300 BTU/scf (11.2 MJ/scm)	The heat content for Flare No. 4 was less than 300 BTU/scf due to hydrogen flaring.	40 CFR 60.18(c)(3)(ii), 40 CFR 63.11(b)(6)(ii), Specific Requirements 569 and 579
Y4.	2017 1 st Semiannual Monitoring and Deviation Report (09/29/2017)	2520-00027-V15	GRP 0006 Flare Cap and Common Requirements Flare No. 5	01/08/2017-01/16/2017 (18 hours)	Heat Content >= 300 BTU/scf (11.2 MJ/scm)	During the planned shutdown of the hydrocracking unit, the heat content for Flare No. 5 was less than 300 BTU/scf due to a unit nitrogen sweep.	40 CFR 60.18(c)(3)(ii), 40 CFR 63.11(b)(6)(ii), Specific Requirements 569 and 579
Z4.	2017 1 st Semiannual Monitoring and Deviation Report (09/29/2017)	2520-00027-V15	GRP 0006 Flare Cap and Common Requirements Flare No. 4	01/20/2017-03/01/2017 (163 hours)	Heat Content >= 300 BTU/scf (11.2 MJ/scm)	During the planned shutdown for the Hydrotreater Unit, the heat content for Flare No. 4 was less than 300 BTU/scf.	40 CFR 60.18(c)(3)(ii), 40 CFR 63.11(b)(6)(ii), Specific Requirements 569 and 579

A5.	2017 1 st Semiannual Monitoring and Deviation Report (09/29/2017)	2520- 00027-V15	GRP 0006 Flare Cap and Common Requirements Flare No. 4	03/17/2017- 03/19/2017 (28 hours)	Heat Content >= 300 BTU/scf (11.2 MJ/scm)	During the planned startup of the SMR B-Train, the heat content for Flare No. 4 was less than 300 BTU/scf.	40 CFR 60.18(c)(3)(ii), 40 CFR 63.11(b)(6)(ii), Specific Requirements 569 and 579
B5.	2017 1 st Semiannual Monitoring and Deviation Report (09/29/2017)	2520- 00027-V15	GRP 0006 Flare Cap and Common Requirements Flare No. 4	03/27/2017- 03/28/2017 (29 hours)	Heat Content >= 300 BTU/scf (11.2 MJ/scm)	During the planned startup of the SMR A-Train, the heat content for Flare No. 4 was less than 300 BTU/scf.	40 CFR 60.18(c)(3)(ii), 40 CFR 63.11(b)(6)(ii), Specific Requirements 569 and 579
C5.	2017 1 st Semiannual Monitoring and Deviation Report (09/29/2017)	2520- 00027-V15	GRP 0006 Flare Cap and Common Requirements Flare No. 4	04/08/2017- 04/09/2017 (24 hours)	Heat Content >= 300 BTU/scf (11.2 MJ/scm)	The SMR A-Train tripped due to a malfunctioning inlet valve on a Pressure Swing Absorber (PSA) vessel and delayed the restart of the unit. The faulty valve was removed and the unit was restarted. On April 9, 2017, the SMR A-Train tripped offline again and caused flaring. The heat content for Flare No. 4 was less than 300 BTU/scf.	40 CFR 60.18(c)(3)(ii), 40 CFR 63.11(b)(6)(ii), Specific Requirements 569 and 579
D5.	2017 1 st Semiannual Monitoring and Deviation Report (09/29/2017)	2520- 00027-V15	GRP 0006 Flare Cap and Common Requirements Flare No. 1	04/19/2017 (4 hours)	Heat Content >= 300 BTU/scf (11.2 MJ/scm)	During the planned shutdown of the Diesel Hydrotreater Unit A- Train Unit, the heat content for Flare No. 4 was less than 300 BTU/scf.	40 CFR 60.18(c)(3)(ii), 40 CFR 63.11(b)(6)(ii), Specific Requirements 569 and 579
E5.	2017 1 st Semiannual Monitoring and Deviation Report (09/29/2017)	2520- 00027-V15	GRP 0006 Flare Cap and Common Requirements Flare No. 1	04/27/2017- 04/29/2017 (37 hours)	Heat Content >= 300 BTU/scf (11.2 MJ/scm)	During the planned startup of the Diesel Hydrotreater Unit A-Train and shutdown of B-Train. The heat content for Flare No. 1 less than 300 BTU/scf.	40 CFR 60.18(c)(3)(ii), 40 CFR 63.11(b)(6)(ii), Specific Requirements 569 and 579
F5.	2017 1 st Semiannual Monitoring and Deviation Report (09/29/2017)	2520- 00027-V15	GRP 0006 Flare Cap and Common Requirements Flare No. 4	06/07/2017 (4 hours)	Heat Content >= 300 BTU/scf (11.2 MJ/scm)	The heat content for Flare No. 4 was less than 300 BTU/scf due to hydrogen flaring.	40 CFR 60.18(c)(3)(ii), 40 CFR 63.11(b)(6)(ii), Specific Requirements 569 and 579
G5.	2017 1 st Semiannual Monitoring and Deviation Report (09/29/2017)	2520- 00027-V15	GRP 0006 Flare Cap and Common Requirements Flare No. 4	01/07/2017- 01/08/2017 (8 hours)	Heat Content >= 300 BTU/scf (11.2 MJ/scm)	During the planned startup of the PSA, the heat content for Flare No. 4 was less than 300 BTU/scf.	40 CFR 60.18(c)(3)(ii), 40 CFR 63.11(b)(6)(ii), Specific Requirements 569 and 579
H5.	2017 1 st Semiannual Monitoring and Deviation Report (09/29/2017)	2520- 00027-V15	GRP 0006 Flare Cap and Common Requirements Flare No. 5	01/08/2017- 01/16/2017 (18 hours)	Heat Content >= 300 BTU/scf (11.2 MJ/scm)	During the planned shutdown for the Hydrocracker Unit, the heat content for Flare No. 5 was less than 300 BTU/scf.	40 CFR 60.18(c)(3)(ii), 40 CFR 63.11(b)(6)(ii), Specific Requirements 569 and 579
I5.	2017 2 nd Semiannual CEMS Report-Revised (02/15/2018) 2017 2 nd Semiannual Monitoring and Deviation Report (03/29/2018)	2520- 00027-V15	EQT 0441 Fuel Gas Ja-Ja Fuel Gas System East Plant Fuel Gas H ₂ S Analyzer	11/18/2017 (3 hours)	Fuel gas: Hydrogen Sulfide ≤ 162 ppm	The amine flow was adjusted to correct a high differential pressure in the H ₂ S absorber on the #2 Light Ends Unit (LEU). This resulted in ineffective scrubbing of H ₂ S from fuel gas H ₂ S Concentration= 325 ppm	40 CFR 60.102a(g)(1)(ii), Specific Requirement 531

JS	2017 2 nd Semiannual CEMS Report- Revised (02/15/2018)	2520-00027-V15	EQT 0441 Fuel Gas Ja-Ja Fuel Gas System West Plant Fuel Gas H ₂ S Analyzer	11/18/2017 (3 hours)	Fuel gas: Hydrogen Sulfide ≤ 162 ppm	The amine flow was adjusted to correct a high differential pressure in the H ₂ S absorber on the #2 Light Ends Unit (LEU). This resulted in ineffective scrubbing of H ₂ S from fuel gas. H ₂ S Concentration= 384 ppm	40 CFR 60.102a(g)(3)(ii), Specific Requirement 531
	2017 2 nd Semiannual Monitoring and Deviation Report (03/29/2018)						
KS	2017 2 nd Semiannual CEMS Report- Revised (02/15/2018)	2520-00027-V15	EQT 0312 Fuel Gas J-I Fuel Gas System CCR Fuel Gas H ₂ S Analyzer	11/18/2017 (3 hours)	Fuel gas: Hydrogen Sulfide ≤ 162 ppm	The amine flow was adjusted to correct a high differential pressure in the H ₂ S absorber on the #2 Light Ends Unit (LEU). This resulted in ineffective scrubbing of H ₂ S from fuel gas. H ₂ S Concentration= 342 ppm	40 CFR 60.104(a)(1), Specific Requirement 353
	2017 2 nd Semiannual Monitoring and Deviation Report (03/29/2018)						
LS	2017 2 nd Semiannual CEMS Report- Revised (02/15/2018)	2520-00027-V15	EQT 0012 Flare No. 3	12/01/2017 (5 hours)	Fuel gas: Hydrogen Sulfide ≤ 162 ppm	The 3700 Sour Water Stripper operations was purging a filter to the flare system. The nitrogen being used to purge the filter increased the MW of the flare gas thus reducing the capacity of the flare gas recovery unit compressor. The reduced capacity resulted in sour gas reaching the flare. H ₂ S Concentration= not reported	40 CFR 60.103a(h), Specific Requirement 555
	2017 2 nd Semiannual Monitoring and Deviation Report (03/29/2018)						
MS	2017 2 nd Semiannual Consolidated MACT Report (02/28/2018)	2520-00027-V15	EQT 0013 Flare No. 1	11/11/2017 (13 minutes)	Design and operate for no visible emissions except for periods not to exceed a total of 5 minutes during any two consecutive hours.	A PSV in the Fluidized Catalytic Cracking Unit (FCCU) lifted due to increased pressure in the Splitter Column. Gases from the PSV exceeded the capacity of flare gas recovery and the unrecovered gases were combusted at the flare.	40 CFR 60.18(c)(1), 40 CFR 63.11(b)(4), Specific Requirements 567 and 576
	2017 2 nd Semiannual Monitoring and Deviation Report (03/29/2018)						
NS	2017 2 nd Semiannual Consolidated MACT Report (02/28/2018)	2520-00027-V15	EQT 0016 FCCU No. 2 Regenerator	10/21/2017 (1 hour)	L:G Ratio ≥ 0.035 gpm/scfm	A pump on the quench tower had a reduced discharge due to impeller wear. An additional pump was started to increase the flow rate and bring the L:G ratio into an acceptable range.	40 CFR 60.102a(c)(2)(ii), Specific Requirement 138
	2017 2 nd Semiannual Monitoring and Deviation Report (03/29/2018)						

05.	2017 2 nd Semiannual Consolidated MACT Report (02/28/2018)	2520-00027-V15	EQT 0016 FCCU No. 2 Regenerator	12/31/2017 (1 hour)	L:G Ratio \geq 0.035 gpm/scfm	A pump on the filter module had reduced pumping capacity. The malfunctioning pump was taken out of service and a different pump was started.	40 CFR 60.102a(c)(2)(ii), Specific Requirement 138
	2017 2 nd Semiannual Monitoring and Deviation Report (03/29/2018)						
P5.	2017 2 nd Semiannual Consolidated MACT Report (02/28/2018)	2520-00027-V15	EQT 0016 FCCU No. 2 Regenerator	12/06/2017 (1 hour)	L:G Ratio \geq 0.035 gpm/scfm	The L:G ratio was lowered to set the operating envelope test conditions while performing a stack test. The L:G ratio returned to within limits after the stack test was complete.	40 CFR 60.102a(c)(2)(ii), Specific Requirement 138
	2017 2 nd Semiannual Monitoring and Deviation Report (03/29/2018)						
Q5.	2017 2 nd Semiannual Consolidated MACT Report (02/28/2018)	2520-00027-V15	EQT 0016 FCCU No. 2 Regenerator	12/17/2017 (3 hours)	L:G Ratio \geq 0.035 gpm/scfm	The L:G ratio was lowered to set the operating envelope test conditions while performing a stack test. The L:G ratio returned to within limits after the stack test was complete.	40 CFR 60.102a(c)(2)(ii), Specific Requirement 138
	2017 2 nd Semiannual Monitoring and Deviation Report (03/29/2018)						
R5.	2017 2 nd Semiannual Consolidated MACT Report (02/28/2018)	2520-00027-V15	EQT 0016 FCCU No. 2 Regenerator	12/31/2017 (1 hour)	L:G Ratio \geq 0.035 gpm/scfm	A pump on the spray tower had reduced discharge due to impeller wear. The pump was taken out of service and a different pump was started.	40 CFR 60.102a(c)(2)(ii), Specific Requirement 138
	2017 2 nd Semiannual Monitoring and Deviation Report (03/29/2018)						
S5.	2017 2 nd Semiannual Consolidated MACT Report (02/28/2018)	2520-00027-V15	EQT 0404 P004 Driver for P-19-46	01/01/2017-12/31/2017	Change oil and filter every 500 hours of operation or annually, whichever comes first	Oil and oil filter were not changed in calendar year 2017	40 CFR 63.6640(a) Specific Requirement 414
	2017 2 nd Semiannual Monitoring and Deviation Report (03/29/2018)						
T5.	2017 2 nd Semiannual Monitoring and Deviation Report (03/29/2018)	2520-00027-V15	GRP 0006 Flare Cap and Common Requirements Flare No. 4	07/25/2017 (4 hours)	Heat Content \geq 300 BTU/scf (11.2 Mi/scm)	The SMR B-Train tripped due to a loss of purge gas on a Pressure Swing Adsorber (PSA) vessel. The loss of purge gas was caused by a solenoid failure. The heat content for Flare No. 4 was less than 300 BTU/scf.	40 CFR 60.18(c)(3)(ii), 40 CFR 63.11(b)(6)(ii), Specific Requirements 569 and 579

U.S.	2017 2 nd Semiannual Monitoring and Deviation Report (03/29/2018)	2520-00027-V15	GRP 0006 Flare Cap and Common Requirements Flare No. 4	08/01/2017 (1 hour)	Heat Content >= 300 BTU/scf (11.2 MJ/scm)	The heat content for Flare No. 4 was less than 300 BTU/scf due to hydrogen flaring.	40 CFR 60.18(c)(3)(ii), 40 CFR 63.11(b)(6)(ii), Specific Requirements 569 and 579
V.S.	2017 2 nd Semiannual Monitoring and Deviation Report (03/29/2018)	2520-00027-V15	GRP 0006 Flare Cap and Common Requirements Flare No. 4	08/20/2017-08/21/2017 (30 hours)	Heat Content >= 300 BTU/scf (11.2 MJ/scm)	During the planned shutdown of the SMR B-Train, the heat content for Flare No. 4 was less than 300 BTU/scf.	40 CFR 60.18(c)(3)(ii), 40 CFR 63.11(b)(6)(ii), Specific Requirements 569 and 579
W.S.	2017 2 nd Semiannual Monitoring and Deviation Report (03/29/2018)	2520-00027-V15	GRP 0006 Flare Cap and Common Requirements Flare No. 4	09/02/2017-09/03/2017 (19 hours)	Heat Content >= 300 BTU/scf (11.2 MJ/scm)	During the planned startup of the SMR B-Train, the heat content for Flare No. 4 was less than 300 BTU/scf.	40 CFR 60.18(c)(3)(ii), 40 CFR 63.11(b)(6)(ii), Specific Requirements 569 and 579
X.S.	2017 2 nd Semiannual Monitoring and Deviation Report (03/29/2018)	2520-00027-V15	GRP 0006 Flare Cap and Common Requirements Flare No. 4	12/08/2017 (4 hours)	Heat Content >= 300 BTU/scf (11.2 MJ/scm)	The SMR B-Train tripped due to multiple valve malfunctions in Pressure Swing Adsorber (PSA) skid. The loss of purge gas was caused by a solenoid failure.	40 CFR 60.18(c)(3)(ii), 40 CFR 63.11(b)(6)(ii), Specific Requirements 569 and 579
Y.S.	2017 2 nd Semiannual Monitoring and Deviation Report (03/29/2018)	2520-00027-V15	GRP 0006 Flare Cap and Common Requirements Flare No. 4	12/16/2017 (6 hours)	Heat Content >= 300 BTU/scf (11.2 MJ/scm)	The heat content for Flare No. 4 was less than 300 BTU/scf due to hydrogen flaring.	40 CFR 60.18(c)(3)(ii), 40 CFR 63.11(b)(6)(ii), Specific Requirements 569 and 579
Z.S.	2017 Annual Compliance Certification (03/29/2018)	2520-00027-V15	UNF 0001 St. Charles Refinery	Not reported	<p>Permittee shall comply with the Part 70 General Conditions set forth in LAC 33:III.535 and the Louisiana General Conditions as set forth in LAC 33:III.537</p> <p><i>General Condition T: The permittee shall comply with the standards for recycling and emissions reduction in 40 CFR 82, Subpart F, except as provided for Motor Vehicle Air Conditioners (MVACs) in Subpart B</i></p>	The calculation used by a third party contractor to determine the refrigerant leak rate was not performed correctly.	LAC 33:III.535, Specific Requirement 687

A6.	2017 Annual Compliance Certification (03/29/2018)	2520-00027-V15	UNF 0001 St. Charles Refinery	Not reported	Comply with the provisions in 40 CFR 68, except as specified in LAC 33:III.5901	Not all instrumentation that had been credited as a safeguard in the development and documentation of Health/Safety Consequences Category III or IV risk reduction scenarios was included in the site instrumentation inspection, testing and preventative maintenance (ITPM) program.	LAC 33:III.5901.A, Specific Requirement 692
B6.	2017 Annual Compliance Certification (03/29/2018)	2520-00027-V15	UNF 0001 St. Charles Refinery	Not reported	Comply with the provisions in 40 CFR 68, except as specified in LAC 33:III.5901	Tests and inspections for deep well pump cans were in progress, but had not yet been completed.	LAC 33:III.5901 A, Specific Requirement 692
C6.	2018 1 st Semiannual CEMS Report (07/30/2018)	2520-00027-V16	EQT 0196 Thermal Oxidizer, 30 TOX (30 SRU)	02/22/2018-02/23/2018 (11 hours)	SO ₂ ≤ 250 ppmv (0% O ₂ , 12 hr rolling average)	A rupture disc failed on piping from a sulfur condenser and sent a H ₂ S rich stream to the thermal oxidizer. The failure was due to pressure generated by heat tracing while the rupture disc was being placed in service. The procedures for placing the rupture disc in service were updated to prevent premature failure of the discs. SO ₂ Concentration=314-333 ppm Estimate emissions= 408 lbs	40 CFR 60.102a(f)(1), Specific Requirement 613
	2018 1 st Semiannual Consolidated MACT Report (08/28/2018)						
	2018 1 st Semiannual Monitoring and Deviation Report (09/28/2018)						
D6.	2018 1 st Semiannual CEMS Report (07/30/2018)	2520-00027-V16	EQT 0007 Flare No. 2	01/18/2018 (7 hours)	Fuel gas: Hydrogen Sulfide ≤ 162 ppm	Process conditions resulted in the generation of fuel gas in excess of what could be consumed in the heaters and boilers. H ₂ S Concentration= 170-270 ppm	40 CFR 60.103a(h), Specific Requirement 570
	2018 1 st Semiannual Monitoring and Deviation Report (09/28/2018)						
E6.	2018 1 st Semiannual CEMS Report (07/30/2018)	2520-00027-V16	EQT 0007 Flare No. 2	01/18/2018 (4 hours)	Fuel gas: Hydrogen Sulfide ≤ 162 ppm	Process conditions resulted in the generation of fuel gas in excess of what could be consumed in the heaters and boilers. H ₂ S Concentration= 169-247 ppm	40 CFR 60.103a(h), Specific Requirement 570
	2018 1 st Semiannual Monitoring and Deviation Report (09/28/2018)						
F6.	2018 1 st Semiannual CEMS Report (07/30/2018)	2520-00027-V16	EQT 0360 Flare No. 4	01/19/2018 (1 hour)	Fuel gas: Hydrogen Sulfide ≤ 162 ppm	Process conditions resulted in the generation of fuel gas in excess of what could be consumed in the heaters and boilers. H ₂ S Concentration= 162 ppm	40 CFR 60.103a(h), Specific Requirement 570
	2018 1 st Semiannual Monitoring and Deviation Report (09/28/2018)						

G6.	2018 1 st Semiannual CEMS Report (07/30/2018)	2520-00027-V16	EQT 0360 Flare No. 4	01/19/2018 (6 hours)	Fuel gas: Hydrogen Sulfide ≤ 162 ppm	Process conditions resulted in the generation of fuel gas in excess of what could be consumed in the heaters and boilers. H ₂ S Concentration= 216-276 ppm	40 CFR 60.103a(h), Specific Requirement 570
	2018 1 st Semiannual Monitoring and Deviation Report (09/28/2018)						
H6.	2018 1 st Semiannual Consolidated MACT Report (08/28/2018)	2520-00027-V16	EQT 0013 Flare No. 1	05/08/2018 (150 minutes)	Design and operate for no visible emissions except for periods not to exceed a total of 5 minutes during any two consecutive hours.	Flare No. 1 emitted smoke during the startup of the Fluidized Catalytic Cracking Unit (FCCU). The unrecovered gases from flare gas recovery were combusted at the flare.	40 CFR 60.18(c)(1), 40 CFR 63.11(b)(4), Specific Requirements 582 and 591
I6.	2018 1 st Semiannual Consolidated MACT Report (08/28/2018)	2520-00027-V16	EQT 0013 Flare No. 1	06/25/2018 (14 minutes)	Design and operate for no visible emissions except for periods not to exceed a total of 5 minutes during any two consecutive hours.	Three (3) compressors in the Fluidized Catalytic Cracking Unit (FCCU) malfunctioned causing Flare No. 1 to smoke. <i>Per response to an information request dated July 3, 2020, the motor status relay, and poor connection with the UPS and fuses were identified as root causes of the compressor trips.</i>	40 CFR 60.18(c)(1), 40 CFR 63.11(b)(4), Specific Requirements 582 and 591
J6.	2018 1 st Semiannual Consolidated MACT Report (08/28/2018)	2520-00027-V16	EQT 0007 Flare No. 2	06/25/2018 (10 minutes)	Design and operate for no visible emissions except for periods not to exceed a total of 5 minutes during any two consecutive hours.	Three (3) compressors in the Fluidized Catalytic Cracking Unit (FCCU) malfunctioned causing Flare No. 2 to smoke. <i>Per response to an information request dated July 3, 2020, the motor status relay and poor connection with the UPS and fuses were identified as root causes of the compressor trips.</i>	40 CFR 60.18(c)(1), 40 CFR 63.11(b)(4), Specific Requirements 582 and 591

K6.	2018 1 st Semiannual Consolidated MACT Report (08/28/2018)	2520- 00027-V16	EQT 0355 Tank 13-15	06/13/2018	Except for automatic bleeder vents, roof drains, and leg sleeves, equip each opening in the roof with a gasketed cover, seal, or lid and maintain in a closed position at all times except when the device is in actual use.	During an informal inspection, eight (8) roof legs were found to be leaking and vapors were discovered with the FLIR camera.	Specific Requirement 38
L6.	2018 1 st Semiannual Consolidated MACT Report (08/28/2018)	2520- 00027-V16	EQT 0074 Tank T-118	06/13/2018	Equip automatic bleeder vents and rim space vents with gaskets.	A vacuum breaker was found to be leaking and a second vacuum breaker was found to be leaking after the initial repair.	40 CFR 60.112b(a)(2)(ii), Specific Requirement 38
M6.	2018 1 st Semiannual Monitoring and Deviation Report (09/28/2018)	2520- 00027-V16	GRP 0006 Flare Cap and Common Requirements Flare No. 4	01/01/2018 (6 hours)	Heat Content >= 300 BTU/scf (11.2 MJ/scm)	During the planned startup of the Hydrogen Unit, the heat content for Flare No. 4 was less than 300 BTU/scf.	40 CFR 60.18(c)(3)(ii), 40 CFR 63.11(b)(6)(ii), Specific Requirements 584 and 594
N6.	2018 1 st Semiannual Monitoring and Deviation Report (09/28/2018)	2520- 00027-V16	GRP 0006 Flare Cap and Common Requirements Flare No. 4	01/01/2018 (7 hours)	Heat Content >= 300 BTU/scf (11.2 MJ/scm)	During the planned startup of the Hydrogen Unit, the heat content for Flare No. 4 was less than 300 BTU/scf.	40 CFR 60.18(c)(3)(ii), 40 CFR 63.11(b)(6)(ii), Specific Requirements 584 and 594
O6.	2018 1 st Semiannual Monitoring and Deviation Report (09/28/2018)	2520- 00027-V16	GRP 0006 Flare Cap and Common Requirements Flare No. 4	01/02/2018 (12 hours)	Heat Content >= 300 BTU/scf (11.2 MJ/scm)	During the planned startup of the Hydrogen Unit, the heat content for Flare No. 4 was less than 300 BTU/scf.	40 CFR 60.18(c)(3)(ii), 40 CFR 63.11(b)(6)(ii), Specific Requirements 584 and 594
P6.	2018 1 st Semiannual Monitoring and Deviation Report (09/28/2018)	2520- 00027-V16	GRP 0006 Flare Cap and Common Requirements Flare No. 4	01/05/2018- 01/06/2018 (15 hours)	Heat Content >= 300 BTU/scf (11.2 MJ/scm)	During the planned startup of the Hydrogen Unit, the heat content for Flare No. 4 was less than 300 BTU/scf.	40 CFR 60.18(c)(3)(ii), 40 CFR 63.11(b)(6)(ii), Specific Requirements 584 and 594
Q6.	2018 1 st Semiannual Monitoring and Deviation Report (09/28/2018)	2520- 00027-V16	GRP 0006 Flare Cap and Common Requirements Flare No. 4	01/18/2018 (2 hours)	Heat Content >= 300 BTU/scf (11.2 MJ/scm)	During the planned startup of the Hydrogen Unit, the heat content for Flare No. 4 was less than 300 BTU/scf.	40 CFR 60.18(c)(3)(ii), 40 CFR 63.11(b)(6)(ii), Specific Requirements 584 and 594
R6.	2018 1 st Semiannual Monitoring and Deviation Report (09/28/2018)	2520- 00027-V16	GRP 0006 Flare Cap and Common Requirements Flare No. 4	01/18/2018 (4 hours)	Heat Content >= 300 BTU/scf (11.2 MJ/scm)	During the planned startup of the Hydrogen Unit, the heat content for Flare No. 4 was less than 300 BTU/scf.	40 CFR 60.18(c)(3)(ii), 40 CFR 63.11(b)(6)(ii), Specific Requirements 584 and 594
S6.	2018 1 st Semiannual Monitoring and Deviation Report (09/28/2018)	2520- 00027-V16	GRP 0006 Flare Cap and Common Requirements Flare No. 1	04/12/2018- 04/13/2018 (18 hours)	Heat Content >= 300 BTU/scf (11.2 MJ/scm)	During the planned shutdown of the Fluidized Catalyst Cracking Unit, the heat content for Flare No. 1 was less than 300 BTU/scf.	40 CFR 60.18(c)(3)(ii), 40 CFR 63.11(b)(6)(ii), Specific Requirements 584 and 594
T6.	2018 1 st Semiannual Monitoring and Deviation Report (09/28/2018)	2520- 00027-V16	GRP 0006 Flare Cap and Common Requirements Flare No. 1	04/13/2018 (8 hours)	Heat Content >= 300 BTU/scf (11.2 MJ/scm)	During the planned shutdown of the Fluidized Catalytic Cracking Unit, the heat content for Flare No. 1 was less than 300 BTU/scf.	40 CFR 60.18(c)(3)(ii), 40 CFR 63.11(b)(6)(ii), Specific Requirements 584 and 594

U6.	2018 1 st Semiannual Monitoring and Deviation Report (09/28/2018)	2520-00027-V16	EQT 0381 Tank 20-1/Scrubber TO	01/27/2018 (1 hour)	Permittee may demonstrate compliance with 40 CFR 60 Subpart Kb by ensuring the PSV is un-lifted by monitoring tank overhead pressure	While using nitrogen to clear the spent acid rundown line in preparation for maintenance Tank 20-1 exceeded the PVRV set pressure of 20 in WC. The nitrogen purge used to clear the rundown line was decreased and the PSV reset.	40 CFR 60.110b, Specific Requirement 327
V6.	2018 2 nd Semiannual Consolidated MACT Report (02/28/2019)	2520-00027-V17	EQT 0007 Flare No. 2	12/17/2018 (2:55 hours)	Operate with a flame present at all times	Pilot went out due to condensate buildup at the flare tip.	40 CFR 63.11(b)(5), Specific Requirement
	2018 2 nd Semiannual Monitoring and Deviation Report (03/29/2019)						
W6.	2018 2 nd Semiannual Consolidated MACT Report (02/28/2019)	2520-00027-V17	EQT 0007 Flare No. 2	12/19/2018 (39 minutes)	Operate with a flame present at all times	Pilot went out due to condensate buildup at the flare tip.	40 CFR 63.11(b)(5), Specific Requirement
	2018 2 nd Semiannual Monitoring and Deviation Report (03/29/2019)						
X6.	2018 2 nd Semiannual Consolidated MACT Report (02/28/2019)	2520-00027-V16	EQT 0240 Flare No. 5	07/31/2018 (7 minutes)	Design and operate for no visible emissions except for periods not to exceed a total of 5 minutes during any two consecutive hours.	Flare No. 5 emitted smoke during the high rate depressure of the Hydrocracker Unit (HCU).	40 CFR 60.18(c)(1), 40 CFR 63.11(b)(4), Specific Requirements 582 and 591
	2018 2 nd Semiannual Monitoring and Deviation Report (03/29/2019)						
Y6.	2018 2 nd Semiannual Consolidated MACT Report (02/28/2019)	2520-00027-V16	EQT 0240 Flare No. 5	07/31/2018 (7 minutes)	Opacity ≤ 20%; except emissions may have an average opacity in excess of 20% for not more than one six-minute period in any 60 consecutive minutes	Flare No. 5 emitted smoke during the high rate depressure of the Hydrocracker Unit (HCU).	LAC 33:III.1311.C, Specific Requirement 606
	2018 2 nd Semiannual Monitoring and Deviation Report (03/29/2019)						

26.	2018 2 nd Semiannual Consolidated MACT Report (02/28/2019)	2520-00027-V16	EQT 0016 FCCU No. 2 Regenerator	10/31/2018-11/02/2018 (47 hours)	L:G Ratio ≥ 0.036 gpm/scfm	<p>A pump on the quench tower had a reduced discharge pressure due to impeller wear caused by high catalyst loading in the quench liquid.</p> <p><i>Per response to an information request dated July 3, 2020, the pumps are on an annual preventative maintenance schedule. Additionally, a spare pump is maintained onsite. However, due to the abrasive solution created by a catalyst carryover into the slurry system, the rate of erosion of the pumps and pump parts greatly increased. An investigation on catalyst losses identified coke formation in reactor cyclones as a possible cause for the catalyst losses. The FCCU was taken down for turnaround in First Quarter 2020 and repairs were made to the slurry system and mechanical apparatus were installed to protect the cyclones from coke formation.</i></p>	40 CFR 60.102a(c)(2)(ii), Specific Requirement 89		
	2018 2 nd Semiannual Monitoring and Deviation Report (03/29/2019)					A7.	2018 2 nd Semiannual Consolidated MACT Report (02/28/2019)	2520-00027-V16	EQT 0016 FCCU No. 2 Regenerator

B7.	2018 2 nd Semiannual CEMS Report (01/30/2019)	2520-00027-V16	EQT 0016 FCCU No. 2 Regenerator	10/22/2018 (12 hours)	CO ≤ 500 ppm	Excess emissions due to malfunction of the variable orifice valve resulting in a unit trip and subsequent restart. CO Concentration 569-1917 Estimated emissions=236-564 lbs	40 CFR 60.102a(b)(4), Specific Requirement 88
	2018 2 nd Semiannual Monitoring and Deviation Report (03/29/2019)						
C7.	2018 2 nd Semiannual Consolidated MACT Report (02/28/2019)	2520-00027-V16	EQT 0195 Thermal Oxidizer, 3700 TOX (3700 SRU)	07/12/2018 (13 hours)	SO ₂ ≤ 250 ppmv (0% O ₂ , 12 hr rolling average)	Elevated SO ₂ emissions from the 3700 SRU TOX due to a process upset following a trip of the thermal reaction furnace. SO ₂ Concentration= 395-1,546 ppm Emissions=2,019 lbs	40 CFR 60.102a(f)(1), Specific Requirement 613
	2018 2 nd Semiannual Monitoring and Deviation Report (03/29/2019)						
D7.	2018 2 nd Semiannual CEMS Report (01/30/2019)	2520-00027-V16	EQT 0195 Thermal Oxidizer, 3700 TOX (3700 SRU)	09/08/2018-09/09/2018 (12 hours)	SO ₂ ≤ 250 ppmv (0% O ₂ , 12 hr rolling average)	An outage of the 3700 SRU tailgas analyzer. Without this analyzer the ratio control system which controls combustion air was unable to properly function. SO ₂ emissions from the SRU increased as a result of off ratio operation. SO ₂ Concentration=372-408 ppm Estimated emissions=448 lbs	40 CFR 60.102a(f)(1), Specific Requirement 613
	2018 2 nd Semiannual Consolidated MACT Report (02/28/2019)						
	2018 2 nd Semiannual Monitoring and Deviation Report (03/29/2019)						
E7.	2018 2 nd Semiannual CEMS Report (01/30/2019)	2520-00027-V16	EQT 0241 Thermal Oxidizer, 1600 TOX (1600 SRU)	09/21/2018 (12 hours)	SO ₂ ≤ 250 ppmv (0% O ₂ , 12 hr rolling average)	A rupture disc downstream of the SRU thermal reactor failed, resulting in high sulfur gases being sent to the 1600 thermal oxidizer (TOX). SRU was shutdown in order to replace the rupture disc and minimize SO ₂ emissions from the TOX. SO ₂ Concentration=411-441 ppm Estimated emissions=486 lbs	40 CFR 60.102a(f)(1), Specific Requirement 613
	2018 2 nd Semiannual Consolidated MACT Report (02/28/2019)						
	2018 2 nd Semiannual Monitoring and Deviation Report (03/29/2019)						

F7.	2018 2 nd Semiannual CEMS Report (01/30/2019)	2520-00027-V16	EQT 0241 Thermal Oxidizer, 1600 TOX (1600 SRU)	12/10/2018 (21 hours)	SO ₂ ≤ 250 ppmv (0% O ₂ , 12 hr rolling average)	A combustion air control valve malfunction in the 1600 Tailgas Unit (TGU) and subsequent shutdown resulted in excess SO ₂ emissions from the 1600 TOX. Emissions remained elevated after the unit was shut down due to a leaking acid gas feed control valve. SO ₂ Concentration= 368-17,018 ppm Estimated emissions=5,667 lbs	40 CFR 60.102a(f)(1), Specific Requirement 613
	2018 2 nd Semiannual Consolidated MACT Report (02/28/2019)						
	2018 2 nd Semiannual Monitoring and Deviation Report (03/29/2019)						
G7.	2018 2 nd Semiannual Monitoring and Deviation Report (03/29/2019)	2520-00027-V16	GRP 0006 Flare Cap and Common Requirements Flare No. 4	07/09/2018-07/10/2018 (11 hours)	Heat Content ≥ 300 BTU/scf (11.2 MJ/scm)	During the planned shutdown for the Steam Methane Reformer (SMR) B-Train, the heat content for Flare No. 4 was less than 300 BTU/scf. Heat content=156-293 BTU/scf	40 CFR 60.18(c)(3)(ii), 40 CFR 63.11(b)(6)(ii), Specific Requirements 584 and 594
H7.	2018 2 nd Semiannual Monitoring and Deviation Report (03/29/2019)	2520-00027-V16	GRP 0006 Flare Cap and Common Requirements Flare No. 4	07/18/2018-07/20/2018 (22 hours)	Heat Content ≥ 300 BTU/scf (11.2 MJ/scm)	During the planned startup of the SMR B-Train, the heat content for Flare No. 4 was less than 300 BTU/scf. Heat content=15-279 BTU/scf	40 CFR 60.18(c)(3)(ii), 40 CFR 63.11(b)(6)(ii), Specific Requirements 584 and 594
I7.	2018 2 nd Semiannual Monitoring and Deviation Report (03/29/2019)	2520-00027-V16	GRP 0006 Flare Cap and Common Requirements Flare No. 4	07/22/2018-07/23/2018 (8 hours)	Heat Content ≥ 300 BTU/scf (11.2 MJ/scm)	During the planned shutdown for the SMR A-Train, the heat content for Flare No. 4 was less than 300 BTU/scf. Heat content=33-299 BTU/scf	40 CFR 60.18(c)(3)(ii), 40 CFR 63.11(b)(6)(ii), Specific Requirements 584 and 594
J7.	2018 2 nd Semiannual Monitoring and Deviation Report (03/29/2019)	2520-00027-V16	GRP 0006 Flare Cap and Common Requirements Flare No. 4	07/31/2018-08/02/2018 (12 hours)	Heat Content ≥ 300 BTU/scf (11.2 MJ/scm)	During the planned startup of the SMR A-Train, the heat content for Flare No. 4 was less than 300 BTU/scf. Heat content=123-283 BTU/scf	40 CFR 60.18(c)(3)(ii), 40 CFR 63.11(b)(6)(ii), Specific Requirements 584 and 594
K7.	2018 2 nd Semiannual Monitoring and Deviation Report (03/29/2019)	2520-00027-V16	GRP 0006 Flare Cap and Common Requirements Flare No. 4	08/02/2018 (3 hours)	Heat Content ≥ 300 BTU/scf (11.2 MJ/scm)	The SMR train tripped due to a malfunctioning valve on a Pressure Swing Adsorber (PSA) vessel. The faulty valve was repaired and the unit was restarted. The heat content for Flare No. 4 was less than 300 BTU/scf. Heat content=197-268 BTU/scf	40 CFR 60.18(c)(3)(ii), 40 CFR 63.11(b)(6)(ii), Specific Requirements 584 and 594
L7.	2018 2 nd Semiannual Monitoring and Deviation Report (03/29/2019)	2520-00027-V16	EQT 0016 FCCU No. 2 Regenerator	08/23/2018 (2 hours)	L:G Ratio ≥ 0.036 gpm/scfm	When starting an additional air blower (K-82-16), the regenerator flue gas rate increased resulting in an L:G ratio lower than the minimum target identified during June 2018 stack test. L:G Ratio= 0.034-0.035 gpm/scfm	40 CFR 63.1564(c)(1), Specific Requirement 97

M7.	2018 2 nd Semiannual Monitoring and Deviation Report (03/29/2019)	2520-00027-V16	EQT 0016 FCCU No. 2 Regenerator	08/28/2018 (2 hours)	L:G Ratio ≥ 0.036 gpm/scfm	Degrading performance of the quench liquid circulating pump P-82-894B due to increased catalyst carryover, resulted in reduced liquid accumulation rate to the wet scrubber spray tower. L:G Ratio= 0.035 gpm/scfm	40 CFR 63.1564(c)(1), Specific Requirement 97
N7.	2018 2 nd Semiannual Monitoring and Deviation Report (03/29/2019)	2520-00027-V16	EQT 0016 FCCU No. 2 Regenerator	08/29/2018 (1 hour)	L:G Ratio ≥ 0.036 gpm/scfm	Degrading performance of the quench liquid circulating pump P-82-894B due to increased catalyst carryover, resulted in reduced liquid accumulation rate to the wet scrubber spray tower. L:G Ratio= 0.035 gpm/scfm	40 CFR 63.1564(c)(1), Specific Requirement 97
O7.	2018 2 nd Semiannual Monitoring and Deviation Report (03/29/2019)	2520-00027-V16	EQT 0016 FCCU No. 2 Regenerator	08/29/2018-08/30/2018 (5 hours)	L:G Ratio ≥ 0.036 gpm/scfm	Degrading performance of the quench liquid circulating pump P-82-894B due to increased catalyst carryover, resulted in reduced liquid accumulation rate to the wet scrubber spray tower. L:G Ratio= 0.034-0.035 gpm/scfm	40 CFR 63.1564(c)(1), Specific Requirement 97
P7.	2018 2 nd Semiannual Monitoring and Deviation Report (03/29/2019)	2520-00027-V16	EQT 0016 FCCU No. 2 Regenerator	08/29/2018 (2 hours)	L:G Ratio ≥ 0.036 gpm/scfm	Degrading performance of the quench liquid circulating pump P-82-894B due to increased catalyst carryover, resulted in reduced liquid accumulation rate to the wet scrubber spray tower. L:G Ratio= 0.035 gpm/scfm	40 CFR 63.1564(c)(1), Specific Requirement 97
Q7.	2018 2 nd Semiannual Monitoring and Deviation Report (03/29/2019)	2520-00027-V16	EQT 0016 FCCU No. 2 Regenerator	08/30/2018 (3 hours)	L:G Ratio ≥ 0.036 gpm/scfm	Degrading performance of the quench liquid circulating pump P-82-894B due to increased catalyst carryover, resulted in reduced liquid accumulation rate to the wet scrubber spray tower. L:G Ratio= 0.035 gpm/scfm	40 CFR 63.1564(c)(1), Specific Requirement 97
R7.	2018 2 nd Semiannual Monitoring and Deviation Report (03/29/2019)	2520-00027-V16	GRP 0006 Flare Cap and Common Requirements Flare No. 4	09/14/2018 (1 hour)	Heat Content ≥ 300 BTU/scf (11.2 MJ/scm)	The heat content for Flare No. 4 was less than 300 BTU/scf due to hydrogen flaring. Heat content=241-299 BTU/scf	40 CFR 60.18(c)(3)(ii), 40 CFR 63.11(b)(6)(ii), Specific Requirements 584 and 594
S7.	2018 2 nd Semiannual Monitoring and Deviation Report (03/29/2019)	2520-00027-V16	EQT Flare No. 2	09/27/2018-09/28/2018 (31 hours)	Fuel gas: Hydrogen Sulfide ≤ 162 ppm	While performing a test on Flare 2 to meet the Refinery Sector Rule standard for the new heating valve, fuel gas was flared and hydrogen enriched gas was introduced to increase the net heating value. The test was stopped. H ₂ S concentration=163-256 ppm	40 CFR 60.103a(h), Specific Requirement 570
T7.	2018 2 nd Semiannual Monitoring and Deviation Report (03/29/2019)	2520-00027-V16	GRP 0006 Flare Cap and Common Requirements Flare No. 4	09/30/2018 (1 hour)	Heat Content ≥ 300 BTU/scf (11.2 MJ/scm)	The heat content for Flare No. 4 was less than 300 BTU/scf due to hydrogen flaring. Heat content= 260-283 BTU/scf	40 CFR 60.18(c)(3)(ii), 40 CFR 63.11(b)(6)(ii), Specific Requirements 584 and 594

U7.	2018 2 nd Semiannual Monitoring and Deviation Report (03/29/2019)	2520-00027-V16	GRP 0006 Flare Cap and Common Requirements Flare No. 5	10/05/2018-10/06/2018 (33 hours)	Heat Content >= 300 BTU/scf (11.2 MJ/scm)	During the planned shutdown of the Hydrocracker Unit, the heat content for Flare No. 5 was less than 300 BTU/scf. Heat content= 1-298 BTU/scf	40 CFR 60.18(c)(3)(ii), 40 CFR 63.11(b)(6)(ii), Specific Requirements 584 and 594
V7.	2018 2 nd Semiannual Monitoring and Deviation Report (03/29/2019)	2520-00027-V16	UNF 0001 St Charles Refinery	11/13/2018 (1 hour)	Opacity ≤ 20%; except emissions may have an average opacity in excess of 20% for not more than one six-minute period in any 60 consecutive minutes	The Dock 3 MVCU was observed smoking for greater than 6 minutes in a one (1) hour period. The refinery was not loading light liquids at the time. The MVCU was being used to relieve residual pressure on the receiving vessel before a light product transfer could begin.	LAC 33:III.1311.C, Specific Requirement 687
W7.	2018 2 nd Semiannual Monitoring and Deviation Report (03/29/2019)	2520-00027-V17	GRP 0006 Flare Cap and Common Requirements Flare No. 4	12/18/2018 (1 hour)	Heat Content >= 300 BTU/scf (11.2 MJ/scm)	The heat content for Flare No. 4 was less than 300 BTU/scf due to hydrogen flaring. Heat content= 168-224 BTU/scf	40 CFR 60.18(c)(3)(ii), 40 CFR 63.11(b)(6)(ii), Specific Requirements 580 and 590
X7.	2018 2 nd Semiannual Monitoring and Deviation Report (03/29/2019)	2520-00027-V17	GRP 0006 Flare Cap and Common Requirements Flare No. 4	12/19/2018 (1 hour)	Heat Content >= 300 BTU/scf (11.2 MJ/scm)	The SMR B-Train due to a malfunctioning valve on a Pressure Swing Adsorber (PSA) vessel. The faulty valve was replaced and the unit was restarted. The heat content for Flare No. 4 was less than 300 BTU/scf. Heat content= 174-290 BTU/scf	40 CFR 60.18(c)(3)(ii), 40 CFR 63.11(b)(6)(ii), Specific Requirements 580 and 590
Y7.	2019 1 st Semiannual CEMS Report (07/30/2019)	2520-00027-V17	EQT 0007 Flare No. 2	01/31/2019 (1 hour)	Fuel gas: Hydrogen Sulfide ≤ 162 ppm	Prior to the source being identified, the flaring ceased. H ₂ S Concentration= 167 ppm	40 CFR 60.103a(h), Specific Requirement 566
	2019 1 st Semiannual Monitoring and Deviation Report (09/30/2019)						
Z7.	2019 1 st Semiannual CEMS Report (07/30/2019)	2520-00027-V17	EQT 0007 Flare No. 2	03/29/2019 (7 hours)	Fuel gas: Hydrogen Sulfide ≤ 162 ppm	Prior to the source being identified, the flaring ceased. H ₂ S Concentration= 299 ppm	40 CFR 60.103a(h), Specific Requirement 566
	2019 1 st Semiannual Monitoring and Deviation Report (09/30/2019)						
A8.	2019 1 st Semiannual CEMS Report (07/30/2019)	2520-00027-V17	EQT 0007 Flare No. 2	04/05/2019-04/06/2019 (3 hours)	Fuel gas: Hydrogen Sulfide ≤ 162 ppm	Prior to the source being identified, the flaring ceased. H ₂ S Concentration= 258 ppm	40 CFR 60.103a(h), Specific Requirement 566
	2019 1 st Semiannual Monitoring and Deviation Report (09/30/2019)						

B8.	2019 1 st Semiannual Consolidated MACT Report (08/30/2019)	2520- 00027-V17	EQT 0007 Flare No. 2	03/19/2019	NHV _{cz} ≥ 270 BTU/scf	Light Naphtha and Coker Blowdown from the Degassing Drum.	40 CFR 63.670(e), Specific Requirement 592
	2019 1 st Semiannual Monitoring and Deviation Report (09/30/2019)					Minimum 15-minute block NHV _{cz} = 196 BTU/scf	
C8.	2019 1 st Semiannual Consolidated MACT Report (08/30/2019)	2520- 00027-V17	EQT 0007 Flare No. 2	03/19/2019	NHV _{cz} ≥ 270 BTU/scf	Light Naphtha and Coker Blowdown from the Degassing Drum.	40 CFR 63.670(e), Specific Requirement 592
	2019 1 st Semiannual Monitoring and Deviation Report (09/30/2019)					Minimum 15-minute block NHV _{cz} = 129 BTU/scf	
D8.	2019 1 st Semiannual Consolidated MACT Report (08/30/2019)	2520- 00027-V17	EQT 0007 Flare No. 2	03/20/2019	NHV _{cz} ≥ 270 BTU/scf	Light Naphtha and Coker Blowdown from the Degassing Drum.	40 CFR 63.670(e), Specific Requirement 592
	2019 1 st Semiannual Monitoring and Deviation Report (09/30/2019)					Minimum 15-minute block NHV _{cz} = 135 BTU/scf	
E8.	2019 1 st Semiannual Consolidated MACT Report (08/30/2019)	2520- 00027-V17	EQT 0007 Flare No. 2	03/20/2019	NHV _{cz} ≥ 270 BTU/scf	Light Naphtha and Coker Blowdown from the Degassing Drum.	40 CFR 63.670(e), Specific Requirement 592
	2019 1 st Semiannual Monitoring and Deviation Report (09/30/2019)					Minimum 15-minute block NHV _{cz} = 211 BTU/scf	
F8.	2019 1 st Semiannual Consolidated MACT Report (08/30/2019)	2520- 00027-V17	EQT 0007 Flare No. 2	04/05/2019	NHV _{cz} ≥ 270 BTU/scf	Flaring source is unknown.	40 CFR 63.670(e), Specific Requirement 592
	2019 1 st Semiannual Monitoring and Deviation Report (09/30/2019)					Minimum 15-minute block NHV _{cz} = 185 BTU/scf	
G8.	2019 1 st Semiannual Consolidated MACT Report (08/30/2019)	2520- 00027-V17	EQT 0007 Flare No. 2	05/19/2019	NHV _{cz} ≥ 270 BTU/scf	A power fault occurred in a motor control center which resulted in the loss of various equipment.	40 CFR 63.670(e), Specific Requirement 592
	2019 1 st Semiannual Monitoring and Deviation Report (09/30/2019)					Minimum 15-minute block NHV _{cz} = 143 BTU/scf	

H8.	2019 1 st Semiannual Consolidated MACT Report (08/30/2019)	2520- 00027-V17	EQT 0007 Flare No. 2	05/19/2019	NHV _{ca} ≥ 270 BTU/scf	A power fault occurred in a motor control center which resulted in the loss of various equipment. Minimum 15-minute block NHV _{ca} = 217 BTU/scf	40 CFR 63.670(e), Specific Requirement 592
	2019 1 st Semiannual Monitoring and Deviation Report (09/30/2019)						
I8.	2019 1 st Semiannual Consolidated MACT Report (08/30/2019)	2520- 00027-V17	EQT 0007 Flare No. 2	05/31/2019	NHV _{ca} ≥ 270 BTU/scf	A cooling water valve failed in the Alkylation Unit lead to flaring. Minimum 15-minute block NHV _{ca} = 145 BTU/scf	40 CFR 63.670(e), Specific Requirement 592
	2019 1 st Semiannual Monitoring and Deviation Report (09/30/2019)						
J8.	2019 1 st Semiannual Consolidated MACT Report (08/30/2019)	2520- 00027-V17	EQT 0007 Flare No. 2	05/31/2019	NHV _{ca} ≥ 270 BTU/scf	A cooling water valve failed in the Alkylation Unit lead to flaring. Minimum 15-minute block NHV _{ca} = 151 BTU/scf	40 CFR 63.670(e), Specific Requirement 592
	2019 1 st Semiannual Monitoring and Deviation Report (09/30/2019)						
K8.	2019 1 st Semiannual Consolidated MACT Report (08/30/2019)	2520- 00027-V17	EQT 0007 Flare No. 2	05/31/2019	NHV _{ca} ≥ 270 BTU/scf	A cooling water valve failed in the Alkylation Unit lead to flaring. Minimum 15-minute block NHV _{ca} = 166 BTU/scf	40 CFR 63.670(e), Specific Requirement 592
	2019 1 st Semiannual Monitoring and Deviation Report (09/30/2019)						
L8.	2019 1 st Semiannual Consolidated MACT Report (08/30/2019)	2520- 00027-V17	EQT 0007 Flare No. 2	06/20/2019	NHV _{ca} ≥ 270 BTU/scf	During the planned maintenance of V-14-01A, the Flare Gas Recovery aftercooler plugged which contributed to additional flaring. Minimum 15-minute block NHV _{ca} = 219 BTU/scf	40 CFR 63.670(e), Specific Requirement 592
	2019 1 st Semiannual Monitoring and Deviation Report (09/30/2019)						
M8.	2019 1 st Semiannual Consolidated MACT Report (08/30/2019)	2520- 00027-V17	EQT 0007 Flare No. 2	06/20/2019	NHV _{ca} ≥ 270 BTU/scf	During the planned maintenance of V-14-01A, the Flare Gas Recovery aftercooler plugged which contributed to additional flaring. Minimum 15-minute block NHV _{ca} = 208 BTU/scf	40 CFR 63.670(e), Specific Requirement 592
	2019 1 st Semiannual Monitoring and Deviation Report (09/30/2019)						

N8.	2019 1 st Semiannual Consolidated MACT Report (08/30/2019)	2520- 00027-V17	EQT 0007 Flare No. 2	06/20/2019	NHV _{ca} ≥ 270 BTU/scf	During the planned maintenance of V-14-01A, the Flare Gas Recovery aftercooler plugged which contributed to additional flaring. Minimum 15-minute block NHV _{ca} =222 BTU/scf	40 CFR 63.670(e), Specific Requirement 592
	2019 1 st Semiannual Monitoring and Deviation Report (09/30/2019)						
O8.	2019 1 st Semiannual Consolidated MACT Report (08/30/2019)	2520- 00027-V17	EQT 0007 Flare No. 2	06/20/2019	NHV _{ca} ≥ 270 BTU/scf	During the planned maintenance of V-14-01A, the Flare Gas Recovery aftercooler plugged which contributed to additional flaring. Minimum 15-minute block NHV _{ca} =200 BTU/scf	40 CFR 63.670(e), Specific Requirement 592
	2019 1 st Semiannual Monitoring and Deviation Report (09/30/2019)						
P8.	2019 1 st Semiannual Consolidated MACT Report (08/30/2019)	2520- 00027-V17	EQT 0007 Flare No. 2	06/20/2019	NHV _{ca} ≥ 270 BTU/scf	During the planned maintenance of V-14-01A, the Flare Gas Recovery aftercooler plugged which contributed to additional flaring. Minimum 15-minute block NHV _{ca} =147 BTU/scf	40 CFR 63.670(e), Specific Requirement 592
	2019 1 st Semiannual Monitoring and Deviation Report (09/30/2019)						
Q8.	2019 1 st Semiannual Consolidated MACT Report (08/30/2019)	2520- 00027-V17	EQT 0007 Flare No. 2	06/20/2019	NHV _{ca} ≥ 270 BTU/scf	During the planned maintenance of V-14-01A, the Flare Gas Recovery aftercooler plugged which contributed to additional flaring. Minimum 15-minute block NHV _{ca} =141 BTU/scf	40 CFR 63.670(e), Specific Requirement 592
	2019 1 st Semiannual Monitoring and Deviation Report (09/30/2019)						
R8.	2019 1 st Semiannual Consolidated MACT Report (08/30/2019)	2520- 00027-V17	EQT 0007 Flare No. 2	06/24/2019	NHV _{ca} ≥ 270 BTU/scf	The PSV on V-17-01B malfunctioned and relieved to the flare header. During the isolation of the vessel, a nitrogen purge to the flare was used to prepare the equipment for repair. Minimum 15-minute block NHV _{ca} =196 BTU/scf	40 CFR 63.670(e), Specific Requirement 592
	2019 1 st Semiannual Monitoring and Deviation Report (09/30/2019)						
S8.	2019 1 st Semiannual Consolidated MACT Report (08/30/2019)	2520- 00027-V17	EQT 0007 Flare No. 2	06/24/2019	NHV _{ca} ≥ 270 BTU/scf	The PSV on V-17-01B malfunctioned and relieved to the flare header. During the isolation of the vessel, a nitrogen purge to the flare was used to prepare the equipment for repair. Minimum 15-minute block NHV _{ca} =81 BTU/scf	40 CFR 63.670(e), Specific Requirement 592
	2019 1 st Semiannual Monitoring and Deviation Report (09/30/2019)						

T8.	2019 1 st Semiannual Consolidated MACT Report (08/30/2019)	2520- 00027-V17	EQT 0360 Flare No. 4	04/05/2019	NHV _{cz} ≥ 270 BTU/scf	Unknown flaring. Minimum 15-minute block NHV _{cz} =158 BTU/scf	40 CFR 63.670(e), Specific Requirement 592
	2019 1 st Semiannual Monitoring and Deviation Report (09/30/2019)						
U8.	2019 1 st Semiannual Consolidated MACT Report (08/30/2019)	2520- 00027-V17	EQT 0360 Flare No. 4	04/05/2019	NHV _{cz} ≥ 270 BTU/scf	Unknown flaring. Minimum 15-minute block NHV _{cz} =119 BTU/scf	40 CFR 63.670(e), Specific Requirement 592
	2019 1 st Semiannual Monitoring and Deviation Report (09/30/2019)						
V8.	2019 1 st Semiannual Consolidated MACT Report (08/30/2019)	2520- 00027-V17	EQT 0360 Flare No. 4	06/22/2019	NHV _{cz} ≥ 270 BTU/scf	HTHC Make-Up Compressor Trips. Minimum 15-minute block NHV _{cz} =202 BTU/scf	40 CFR 63.670(e), Specific Requirement 592
	2019 1 st Semiannual Monitoring and Deviation Report (09/30/2019)						
W8.	2019 1 st Semiannual Consolidated MACT Report (08/30/2019)	2520- 00027-V17	EQT 0360 Flare No. 4	06/22/2019	NHV _{cz} ≥ 270 BTU/scf	HTHC Make-Up Compressor Trips. Minimum 15-minute block NHV _{cz} =155 BTU/scf	40 CFR 63.670(e), Specific Requirement 592
	2019 1 st Semiannual Monitoring and Deviation Report (09/30/2019)						
X8.	2019 1 st Semiannual Consolidated MACT Report (08/30/2019)	2520- 00027-V17	EQT 0360 Flare No. 4	06/22/2019	NHV _{cz} ≥ 270 BTU/scf	HTHC Make-Up Compressor Trips. Minimum 15-minute block NHV _{cz} =209 BTU/scf	40 CFR 63.670(e), Specific Requirement 592
	2019 1 st Semiannual Monitoring and Deviation Report (09/30/2019)						
Y8.	2019 1 st Semiannual Consolidated MACT Report (08/30/2019)	2520- 00027-V17	EQT 0360 Flare No. 4	06/22/2019	NHV _{cz} ≥ 270 BTU/scf	HTHC Make-Up Compressor Trips. Minimum 15-minute block NHV _{cz} =172 BTU/scf	40 CFR 63.670(e), Specific Requirement 592
	2019 1 st Semiannual Monitoring and Deviation Report (09/30/2019)						

Z8.	2019 1 st Semiannual Consolidated MACT Report (08/30/2019)	2520-00027-V17	EQT 0360 Flare No. 4	06/22/2019	NHV _{cz} ≥ 270 BTU/scf	HTHC Make-Up Compressor Trips. Minimum 15-minute block NHV _{cz} = 234 BTU/scf	40 CFR 63.670(e), Specific Requirement 592
	2019 1 st Semiannual Monitoring and Deviation Report (09/30/2019)						
A9.	2019 1 st Semiannual Consolidated MACT Report (08/30/2019)	2520-00027-V17	EQT 0360 Flare No. 4	06/22/2019	NHV _{cz} ≥ 270 BTU/scf	HTHC Make-Up Compressor Trips. Minimum 15-minute block NHV _{cz} = 178 BTU/scf	40 CFR 63.670(e), Specific Requirement 592
	2019 1 st Semiannual Monitoring and Deviation Report (09/30/2019)						
B9.	2019 1 st Semiannual Consolidated MACT Report (08/30/2019)	2520-00027-V17	EQT 0195 Thermal Oxidizer, 3700 TOX (3700 SRU)	01/13/2019 (14 hours)	SO ₂ ≤ 250 ppmv (0% O ₂ , 12 hr rolling average)	The incident was caused by unit back pressure that occurred due to the flashing of water in the sulfur rundown leg. Water entered the rundown leg through a small leak in the boiler tubes of the #1 sulfur accumulator. SO ₂ Concentration = 284-1,267 ppm Emissions = 1552.3 lbs	40 CFR 60.102a(f)(1)(i), Specific Requirement 609
	2019 1 st Semiannual Monitoring and Deviation Report (09/30/2019)						
C9.	2019 1 st Semiannual Consolidated MACT Report (08/30/2019)	2520-00027-V17	EQT 0195 Thermal Oxidizer, 3700 TOX (3700 SRU)	03/15/2019-03/16/2019 (11 hours)	SO ₂ ≤ 250 ppmv (0% O ₂ , 12 hr rolling average)	The incident was caused by unit back pressure that occurred due to the flashing of water in the sulfur rundown leg. Water entered the rundown leg through a small leak in the boiler tubes of the #1 sulfur accumulator. SO ₂ Concentration = 255-796 ppm Emissions = 97.4 lbs	40 CFR 60.102a(f)(1)(i), Specific Requirement 609
	2019 1 st Semiannual Monitoring and Deviation Report (09/30/2019)						
D9.	2019 1 st Semiannual Consolidated MACT Report (08/30/2019)	2520-00027-V17	EQT 0195 Thermal Oxidizer, 3700 TOX (3700 SRU)	03/21/2019 (3 hours)	SO ₂ ≤ 250 ppmv (0% O ₂ , 12 hr rolling average)	The incident was caused by unit back pressure that occurred due to the flashing of water in the sulfur rundown leg. Water entered the rundown leg through a small leak in the boiler tubes of the #1 sulfur accumulator. SO ₂ Concentration = 1,153-1,563 ppm Emissions = 914.3 lbs	40 CFR 60.102a(f)(1)(i), Specific Requirement 609
	2019 1 st Semiannual Monitoring and Deviation Report (09/30/2019)						

E9.	2019 1 st Semiannual CEMS Report (07/30/2019)	2520- 00027-V17	EQT 0196 Thermal Oxidizer, 30 TOX (30 SRU)	03/14/2019- 03/15/2019 (12 hours)	SO ₂ ≤ 250 ppmv (0% O ₂ , 12 hr rolling average)	While making the MDEA transfer to increase amine strength in the 30 Tail Gas Treating Unit. Shortly after commencing the transfer, the Thermal Oxidizer tripped due to high temperature. After troubleshooting the issue, hydrocarbons were found to be present in the amine. SO ₂ Concentration= 303-437 ppm	40 CFR 60.102a(f)(1)(i), Specific Requirement 609
	2019 1 st Semiannual Consolidated MACT Report (08/30/2019)						
F9.	2019 1 st Semiannual CEMS Report (07/30/2019)	2520- 00027-V17	EQT 0196 Thermal Oxidizer, 30 TOX (30 SRU)	03/21/2019- 03/22/2019 (12 hours)	SO ₂ ≤ 250 ppmv (0% O ₂ , 12 hr rolling average)	A rupture disc failed on piping from the sulfur condenser and sent a H ₂ S rich stream to the thermal oxidizer. SO ₂ Concentration= 467-614 ppm Emissions= 555.1 lbs	40 CFR 60.102a(f)(1)(i), Specific Requirement 609
	2019 1 st Semiannual Consolidated MACT Report (08/30/2019)						
G9.	2019 1 st Semiannual CEMS Report (07/30/2019)	2520- 00027-V17	EQT 0196 Thermal Oxidizer, 30 TOX (30 SRU)	04/01/2019 (12 hours)	SO ₂ ≤ 250 ppmv (0% O ₂ , 12 hr rolling average)	The oxygen flow to the reaction furnace was interrupted due to an O ₂ flow transmitter malfunction. SO ₂ Concentration= 250-326 ppm Emissions= 505.2 lbs	40 CFR 60.102a(f)(1)(i), Specific Requirement 609
	2019 1 st Semiannual Consolidated MACT Report (08/30/2019)						
H9.	2019 1 st Semiannual CEMS Report (07/30/2019)	2520- 00027-V17	EQT 0196 Thermal Oxidizer, 30 TOX (30 SRU)	05/01/2019 (9 hours)	SO ₂ ≤ 250 ppmv (0% O ₂ , 12 hr rolling average)	A card failure caused a loss of multiple points causing an upset with the coker off-gas amine contactor and the TOX. SO ₂ Concentration= 250-273 ppm Emissions= 93.7 lbs	40 CFR 60.102a(f)(1)(i), Specific Requirement 609
	2019 1 st Semiannual Consolidated MACT Report (08/30/2019)						
I9.	2019 1 st Semiannual CEMS Report (07/30/2019)	2520- 00027-V17	EQT 0196 Thermal Oxidizer, 30 TOX (30 SRU)	05/16/2019 (12 hours)	SO ₂ ≤ 250 ppmv (0% O ₂ , 12 hr rolling average)	A rupture disc failed, causing the TOX to trip offline on high temperature. SO ₂ Concentration= 622-652 ppm Emissions= 426.8 lbs	40 CFR 60.102a(f)(1)(i), Specific Requirement 609
	2019 1 st Semiannual Consolidated MACT Report (08/30/2019)						

Each failure to operate according to permitted requirements is a violation of any applicable permit and associated requirement(s) listed above, LAC 33:III.501.C.4, La. R.S. 30:2057(A)(1), and 30:2057(A)(2).

IX.

The Respondent reported the following violations of 40 CFR 60 Subpart QQQ requirements:

A.	NSPS Subpart QQQ Periodic Report (07/29/2016)	2520-00027-V14	New Plant Sump Q073.01	04/25/2016-04/28/2016	Junction box covers shall have a tight seal around the edge and shall be kept in place at all time, except during inspection and maintenance.	Junction box-A gap was observed in the sump cover.	40 CFR 60.692-2(b)(2)
	2016 1 st Semiannual Monitoring and Deviation Report (09/30/2016)						
B.	NSPS Subpart QQQ Periodic Report (01/30/2017)	2520-00027-V15	Expansion storm water sump P-72-756 A/B	08/10/2016-08/24/2016	Junction box covers shall have a tight seal around the edge and shall be kept in place at all time, except during inspection and maintenance.	Junction box-Lid was not properly sealed after maintenance work.	40 CFR 60.692-2(b)(2)
C.	NSPS Subpart QQQ Periodic Report (01/30/2017)	2520-00027-V15	Sump S of the East Plant Sump 20ft E TK-13-16	08/23/2016-09/07/2016	Junction boxes shall be equipped with a cover and may have an open vent pipe. The vent pipe shall be at least 90 cm (3 ft) in length and shall not exceed 10.2 (4 in) in diameter.	Junction box-Vent piping broken.	40 CFR 60.692-2(b)(1)
D.	NSPS Subpart QQQ Periodic Report (01/30/2017)	2520-00027-V15	LPG Sump (SE-17-01)	08/25/2016-08/26/2016	Junction box covers shall have a tight seal around the edge and shall be kept in place at all time, except during inspection and maintenance.	Junction box-Gap identified between the cover and hatch.	40 CFR 60.692-2(b)(2)
E.	NSPS Subpart QQQ Periodic Report (01/30/2017)	2520-00027-V15	New East Plant Sump E of T-13-16	08/25/2016-08/26/2016	Junction box covers shall have a tight seal around the edge and shall be kept in place at all time, except during inspection and maintenance.	Junction box-Gap identified on cover.	40 CFR 60.692-2(b)(2)
F.	NSPS Subpart QQQ Periodic Report (01/30/2017)	2520-00027-V15	Bain #1 FCCU Q049	08/31/2016	Junction box covers shall have a tight seal around the edge and shall be kept in place at all time, except during inspection and maintenance.	Junction box-Gap identified on cover.	40 CFR 60.692-2(b)(2)
G.	NSPS Subpart QQQ Periodic Report (01/30/2017)	2520-00027-V15	New East Plant Sump E of T-13-16	09/16/2016	Junction box covers shall have a tight seal around the edge and shall be kept in place at all time, except during inspection and maintenance.	Junction box-Gap identified on cover.	40 CFR 60.692-2(b)(2)

H.	NSPS Subpart QQQ Periodic Report (01/30/2017)	2520-00027- V15	Sump S of the East Plant Sump 20ft E TK-13- 16	10/05/2016- 10/11/2016	Junction boxes shall be equipped with a cover and may have an open vent pipe. The vent pipe shall be at least 90 cm (3 ft) in length and shall not exceed 10.2 (4 in) in diameter.	Junction box-Vent piping broken.	40 CFR 60.692-2(b)(1)
I.	NSPS Subpart QQQ Periodic Report (01/30/2017)	2520-00027- V15	Crude 2 Sump 10 ft. E V-713	11/02/2016- 11/03/2016	Junction box covers shall have a tight seal around the edge and shall be kept in place at all time, except during inspection and maintenance.	Junction box-Gap identified between the cover and hatch.	40 CFR 60.692-2(b)(2)
J.	NSPS Subpart QQQ Periodic Report (01/30/2017)	2520-00027- V15	Expansion storm water sump P-72- 756 A/B	11/02/2016- 11/03/2016	Junction box covers shall have a tight seal around the edge and shall be kept in place at all time, except during inspection and maintenance.	Junction box-Gap identified on cover.	40 CFR 60.692-2(b)(2)
K.	NSPS Subpart QQQ Periodic Report (07/28/2017)	2520-00027- V15	Sump S of the East Plant Sump 20ft E TK-13- 16	01/24/2017- 02/06/2017	Junction boxes shall be equipped with a cover and may have an open vent pipe. The vent pipe shall be at least 90 cm (3 ft) in length and shall not exceed 10.2 (4 in) in diameter.	Junction box-Vent piping broken.	40 CFR 60.692-2(b)(1)
	2017 1 st Semiannual Monitoring and Deviation Report (09/29/2017)						
L.	NSPS Subpart QQQ Periodic Report (07/28/2017)	2520-00027- V15	Crude 2 Sump 10 ft. E V-713	02/27/2017	Junction box covers shall have a tight seal around the edge and shall be kept in place at all time, except during inspection and maintenance.	Junction box-Gap identified between the cover and hatch.	40 CFR 60.692-2(b)(2)
	2017 1 st Semiannual Monitoring and Deviation Report (09/29/2017)						
M.	NSPS Subpart QQQ Periodic Report (07/28/2017)	2520-00027- V15	LPG Sump (5E-17-01)	03/09/2017- 03/10/2017	Junction box covers shall have a tight seal around the edge and shall be kept in place at all time, except during inspection and maintenance.	Junction box-Gap identified on cover.	40 CFR 60.692-2(b)(2)
	2017 1 st Semiannual Monitoring and Deviation Report (09/29/2017)						
N.	NSPS Subpart QQQ Periodic Report (07/28/2017)	2520-00027- V15	Coker Lift Station	05/17/2017	Junction box covers shall have a tight seal around the edge and shall be kept in place at all time, except during inspection and maintenance.	Junction box-The hatch on the lid of the lift station was not properly closed after a maintenance event.	40 CFR 60.692-2(b)(2)
	2017 1 st Semiannual Monitoring and Deviation Report (09/29/2017)						
O.	NSPS Subpart QQQ Periodic Report (07/28/2017)	2520-00027- V15	Crude 2 Sump 10 ft. E V-713	05/17/2017	Junction box covers shall have a tight seal around the edge and shall be kept in place at all time, except during inspection and maintenance.	Junction box-Gap identified on cover.	40 CFR 60.692-2(b)(2)
	2017 1 st Semiannual Monitoring and Deviation Report (09/29/2017)						

P.	NSPS Subpart QQQ Periodic Report (07/28/2017)	2520-00027- V15	Coker Lift Station	06/13/2017	Junction box covers shall have a tight seal around the edge and shall be kept in place at all time, except during inspection and maintenance.	Junction box-The hatch on the lid of the lift station was not properly closed after a maintenance event.	40 CFR 60.692-2(b)(2)
	2017 1 st Semiannual Monitoring and Deviation Report (09/29/2017)						
Q.	NSPS Subpart QQQ Periodic Report (01/30/2018)	2520-00027- V15	New East Plant Sump E of T-13-16	07/06/2017- 07/19/2017	Junction box covers shall have a tight seal around the edge and shall be kept in place at all time, except during inspection and maintenance.	Junction box-Gap identified on cover.	40 CFR 60.692-2(b)(2)
	2017 2 nd Semiannual Monitoring and Deviation Report (03/29/2018)						
R.	NSPS Subpart QQQ Periodic Report (01/30/2018)	2520-00027- V15	Coker Lift Station	09/06/2017	Junction box covers shall have a tight seal around the edge and shall be kept in place at all time, except during inspection and maintenance.	Junction box-The hatch on the lid of the lift station was not properly closed after a maintenance event.	40 CFR 60.692-2(b)(2)
	2017 2 nd Semiannual Monitoring and Deviation Report (03/29/2018)						
S.	NSPS Subpart QQQ Periodic Report (01/30/2018)	2520-00027- V15	Crude 2 Sump 10 ft. E V-713	09/08/2017	Junction box covers shall have a tight seal around the edge and shall be kept in place at all time, except during inspection and maintenance.	Junction box-Gap Identified on cover.	40 CFR 60.692-2(b)(2)
	2017 2 nd Semiannual Monitoring and Deviation Report (03/29/2018)						
T.	NSPS Subpart QQQ Periodic Report (01/30/2018)	2520-00027- V15	Culver West of Old Control Room	10/31/2017	Junction box covers shall have a tight seal around the edge and shall be kept in place at all time, except during inspection and maintenance.	Junction box-Gap Identified between the cover and hatch.	40 CFR 60.692-2(b)(2)
	2017 2 nd Semiannual Monitoring and Deviation Report (03/29/2018)						
U.	NSPS Subpart QQQ Periodic Report (01/30/2018)	2520-00027- V15	New East Plant Sump E of T-13-16	12/12/2017	Junction box covers shall have a tight seal around the edge and shall be kept in place at all time, except during inspection and maintenance.	Junction box-Gap Identified on cover.	40 CFR 60.692-2(b)(2)
	2017 2 nd Semiannual Monitoring and Deviation Report (03/29/2018)						
V.	NSPS Subpart QQQ Periodic Report (01/15/2019)	2520-00027- V16	Crude oil sump	07/18/2018	Junction box covers shall have a tight seal around the edge and shall be kept in place at all time, except during inspection and maintenance.	Junction box-Gap identified on cover.	40 CFR 60.692-2(b)(2)
	2018 2 nd Semiannual Monitoring and Deviation Report (03/29/2019)						
W.	NSPS Subpart QQQ Periodic Report (01/15/2019)	2520-00027- V16	FCC Q049 Basin #1	11/06/2018	Junction box covers shall have a tight seal around the edge and shall be kept in place at all time, except during inspection and maintenance.	Junction box-Gap identified on cover.	40 CFR 60.692-2(b)(2)
	2018 2 nd Semiannual Monitoring and Deviation Report (03/29/2019)						

X.	NSPS Subpart QQQ Periodic Report (01/15/2019)	2520-00027-V16	East Plant Sump	12/06/2018	Junction box covers shall have a tight seal around the edge and shall be kept in place at all time, except during inspection and maintenance.	Junction box-Gap identified on cover.	40 CFR 60.692-2(b)(2)
	2018 2 nd Semiannual Monitoring and Deviation Report (03/29/2019)						
Y.	NSPS Subpart QQQ Periodic Report (07/30/2019)	2520-00027-V17	Crude oil sump	03/27/2019	Junction box covers shall have a tight seal around the edge and shall be kept in place at all time, except during inspection and maintenance.	Method 21 Inspection discovered sump leak.	40 CFR 60.692-2(b)(2)
	2019 1 st Semiannual Monitoring and Deviation Report (09/30/2019)						
Z.	NSPS Subpart QQQ Periodic Report (07/30/2019)	2520-00027-V17	Crude oil sump	05/21/2019	Junction box covers shall have a tight seal around the edge and shall be kept in place at all time, except during inspection and maintenance.	Junction box-Gap identified on cover.	40 CFR 60.692-2(b)(2)
	2019 1 st Semiannual Monitoring and Deviation Report (09/30/2019)						
A2.	NSPS Subpart QQQ Periodic Report (07/30/2019)	2520-00027-V17	FCC Q049 Basin #1	05/21/2019	Junction box covers shall have a tight seal around the edge and shall be kept in place at all time, except during inspection and maintenance.	Junction box-Gap identified on cover.	40 CFR 60.692-2(b)(2)
	2019 1 st Semiannual Monitoring and Deviation Report (09/30/2019)						

Each failure to comply with the listed requirement(s) is a violation of any applicable permit and associated requirement(s) listed above, LAC 33:III.501.C.4, La. R.S. 30:2057(A)(1), and 30:2057(A)(2).

X.

The Respondent reported the following violations of monitoring requirements:

A.	2016 1 st Semiannual LDAR Monitoring Report (08/31/2016)	2520-00027-V14	CRG 0017 REFFUG Refinery Fugitive Common Requirements	04/15/2016-04/19/2016	Valves in gas/vapor service and in light liquid service: VOC, Total monitored by the regulation's specified method(s) quarterly, as specified in Subsection I.1 of the Louisiana MACT Determination for Refinery Equipment Leaks (July 26, 1994).	Four (4) valves in the GDU were inadvertently not included in the retagging project. The components were incorporated in the LDAR program and passed Method 21 monitoring. Valves: GDU #03142, GDU #01094B, GDU #01094A, & Area 10 #00237	LAC 33:III.5109.A, Specific Requirement 136
	2016 1 st Semiannual Monitoring and Deviation Report (09/30/2016)						

B.	2016 1 st Semiannual LDAR Monitoring Report (08/31/2016)	2520-00027-V14	CRG 0017 REFFUG Refinery Fugitive Common Requirements	04/18/2016-04/19/2016	Valves in gas/vapor service and in light liquid service: VOC, Total monitored by the regulation's specified method(s) quarterly, as specified in Subsection I.1 of the Louisiana MACT Determination for Refinery Equipment Leaks (July 26, 1994).	A valve, GDU01119, in the GDU was inadvertently left out during the retagging project. The component was incorporated in the LDAR program and passed Method 21 monitoring.	LAC 33:III.5109.A, Specific Requirement 136
	2016 1 st Semiannual Monitoring and Deviation Report (09/30/2016)						
C.	2016 1 st Semiannual LDAR Monitoring Report (08/31/2016)	2520-00027-V14	CRG 0017 REFFUG Refinery Fugitive Common Requirements	05/23/2016	Valves in gas/vapor service and in light liquid service: VOC, Total monitored by the regulation's specified method(s) quarterly, as specified in Subsection I.1 of the Louisiana MACT Determination for Refinery Equipment Leaks (July 26, 1994).	A valve, LPG 17 #1034A, in the LPG-17 Unit was inadvertently left out during the retagging project. The component was incorporated in the LDAR program and passed Method 21 monitoring.	LAC 33:III.5109.A, Specific Requirement 136
	2016 1 st Semiannual Monitoring and Deviation Report (09/30/2016)						
D.	2016 1 st Semiannual LDAR Monitoring Report (08/31/2016)	2520-00027-V14	CRG 0017 REFFUG Refinery Fugitive Common Requirements	5/23/2016	Connectors in gas/vapor service and in light liquid service >= one inch inside diameter size (percent of leaking connectors <=2): VOC, Total monitored by the regulation's specified method(s) annually, as specified in Subsections O.2 and O.4 of the Louisiana MACT Determination for Refinery Equipment Leaks (July 26, 1994).	Three (3) connectors in the LPG 17 Unit were inadvertently not included in the retagging project. The components were incorporated in the LDAR program and passed Method 21 monitoring. Connectors: LPG 17#1034A.01, LPG 17#10374A.02, LPG 17#1034A.03	LAC 33:III.5109.A, Specific Requirement 93
	2016 1 st Semiannual Monitoring and Deviation Report (09/30/2016)						
E.	2016 1 st Semiannual LDAR Monitoring Report (08/31/2016)	2520-00027-V14	CRG 0017 REFFUG Refinery Fugitive Common Requirements	06/05/2016-06/10/2016	Attach a weatherproof and readily visible identification, marked with the equipment identification, to leaking equipment as specified in Subsection Q.2 of the Louisiana MACT Determination for Refinery Equipment Leaks (July 26, 1994).	Two (2) untagged components were discovered. Components: EP Flare 001173A, EP Flare 001173B	LAC 33:III.5109.A, Specific Requirement 77
	2016 1 st Semiannual Monitoring and Deviation Report (09/30/2016)						
F.	2016 1 st Semiannual LDAR Monitoring Report (08/31/2016)	2520-00027-V14	CRG 0017 REFFUG Refinery Fugitive Common Requirements	06/05/2016-06/10/2016	A first attempt at repair shall be made no later than five (5) calendar days after each leak is detected.	An initial attempt at repair was not completed for one (1) identified internal valve leak.	LAC 33:III.5109.A, Specific Requirement 102
	2016 1 st Semiannual Monitoring and Deviation Report (09/30/2016)						

G.	2016 1 st Semiannual LDAR Monitoring Report (08/31/2016)	2520 00027-V14	CRG 0017 REFFUG Refinery Fugitive Common Requirements	06/05/2016-06/10/2016	Equipment/operational data recordkeeping by electronic or hard copy continuously. Keep records of the information specified in Subsections Q.1 through Q.13 as applicable, as specified in Section Q of the Louisiana MACT Determination for Refinery Equipment Leaks (July 26, 1994).	The rationale for 14 unsafe to monitor components and 906 difficult to monitor components were not included in the LDAR database.	LAC 33:III.5109.A, Specific Requirement 100
	2016 1 st Semiannual Monitoring and Deviation Report (09/30/2016)						
H.	2016 1 st Semiannual LDAR Monitoring Report (08/31/2016)	2520-00027-V14	CRG 0017 REFFUG Refinery Fugitive Common Requirements	06/17/2016	Valves in gas/vapor service and in light liquid service: VOC, Total monitored by the regulation's specified method(s) quarterly, as specified in Subsection I.1 of the Louisiana MACT Determination for Refinery Equipment Leaks (July 26, 1994).	Six (6) valves in the CCR Unit were inadvertently not included in the retagging project. The components were incorporated in the LDAR program and passed Method 21 monitoring. Valves: CCR #000861A, CCR #000861B, CCR#000861C, CCR #000861D, CCR #000861E, CCR #000861F	LAC 33:III.5109.A, Specific Requirement 136
	2016 1 st Semiannual Monitoring and Deviation Report (09/30/2016)						
I.	2016 1 st Semiannual Monitoring and Deviation Report (09/30/2016)	2520-00027-V14	CRG 0017 REFFUG Refinery Fugitive Common Requirements	03/03/2016	Valves in gas/vapor service and in light liquid service: VOC, Total monitored by the regulation's specified method(s) quarterly, as specified in Subsection I.1 of the Louisiana MACT Determination for Refinery Equipment Leaks (July 26, 1994).	Five (5) valves in the FCC Unit were inadvertently left out of a retagging project following a 2015 maintenance turnaround. Valves: FCCU 89/92 #03553, FCCU 82/92 #03554, FCCU 82/92 #03555, FCCU 82/92 #03556, FCCU 82/92 #03557	LAC 33:III.5109.A, Specific Requirement 136
J.	2016 1 st Semiannual Monitoring and Deviation Report (09/30/2016)	2520-00027-V14	CRG 0017 REFFUG Refinery Fugitive Common Requirements	03/03/2016	Connectors in gas/vapor service and in light liquid service >= one inch inside diameter size (percent of leaking connectors <=2): VOC, Total monitored by the regulation's specified method(s) annually, as specified in Subsections O.2 and O.4 of the Louisiana MACT Determination for Refinery Equipment Leaks (July 26, 1994).	Eleven (11) connectors in the FCC Unit were inadvertently left out of a retagging project following a 2015 maintenance turnaround. Connectors: FCCU 89/92 #03553.01 FCCU 82/92 #03553.02 FCCU 82/92 #03554.01 FCCU 82/92 #03554.02 FCCU 82/92 #03554.03 FCCU 89/92 #03555.01 FCCU 82/92 #03555.02 FCCU 82/92 #03555.03 FCCU 82/92 #03555.04 FCCU 82/92 #03555.05 FCCU 82/92 #03556.01	LAC 33:III.5109.A, Specific Requirement 93

K.	2016 2nd Semiannual CEMS Report (01/30/2017)	2520-00027-V15	EQT 0016 FCCU No. 2 Regenerator	07/22/2016	Each CEMS must be audited at least once each calendar quarter. Successive quarterly audits shall occur no closer than 2 months.	A performance test was scheduled for verification of the FCCU outlet parameters which include NO _x , SO ₂ , and CO. However, operational issues moved the test to the 3 rd quarter. A Relative Accuracy Test (RATA) was performed at the same time as the performance test and was within the two (2) month window from the previous audit.	40 CFR 60.105a(f,g,h), Specific Requirement 141
L.	2016 2 nd Semiannual Monitoring and Deviation Report (03/31/2017)	2520-0027-V15	GRF 0007 Sulfur Recovery Units	NA	The span value for the SO ₂ monitor is two times the applicable SO ₂ emission limit at the highest O ₂ concentration in the air/oxygen stream used in the Claus burner, if applicable.	The span of the SO ₂ CEMS analyzers on the Thermal Oxidizer, 3700 TOX (3700 SRU)(EQT 0195), Thermal Oxidizer, 30 TOX (30 SRU) (EQT 0196) and Thermal Oxidizer, 1600 TOX (1600 SRU) (EQT 0241) as part of a larger effort to make use of the expanded limit allowed by Equation 1 of NSPS Subpart Ja (60.102a(f)(1)(i)). However, use of this expanded limit requires monitoring of O ₂ concentrations of the air/oxygen mixture used in the Claus burner or of the flow rates of ambient air oxygen enriched gas supplied to the Claus burner.	40 CFR 30.106a(j)(1)(i) Specific Requirement 619
M.	2017 1 st Semiannual CEMS Report (07/28/2017)	2520-00027-V15	EQT 0013 Flare No. 1	December 2016- January 2017	Each CEMS must be audited at least once each calendar quarter. Successive quarterly audits shall occur no closer than 2 months.	The Flare No. 1 H ₂ S RATA was scheduled for November 21, 2016, but was unable to be performed until December 1, 2016. The 1 st quarter 2017 CGA for this same analyzer was performed on January 25 th as scheduled based on the planned date of the previous audit. Therefore, less than two (2) month had passed between successive audits.	40 CFR 60.107a(e)(1), Specific Requirement 563

N.	2017 1 st Semiannual CEMS Report (07/28/2017)	2520-00027-V15	GRP 0006 Flare Cap and Common Requirements	03/31/2017-04/01/2017 (24 hours)	At least quarterly, perform a visual inspection of all components of the monitor for physical and operational integrity and all electrical connections for oxidation and galvanic corrosion if the flow monitor is not equipped with a redundant flow sensor.	The flow meter was not visually inspected in the first quarter. The inspection was completed on April 4, 2017.	40 CFR 60.107a(f)(1)(iv), Specific Requirement 564
O.	2018 1 st Semiannual LDAR Monitoring Report (08/27/2018)	2520-00027-V16	FUG 0026 Refinery Fugitive Emissions	04/01/2018-06/30/2018	Valves in gas/vapor service and in light liquid service: VOC, Total monitored by the regulation's specified method(s) quarterly, as specified in Subsection 1.1 of the Louisiana MACT Determination for Refinery Equipment Leaks (July 26, 1994).	Twenty-two (22) valves were not monitored during the second quarter of 2018. The valves were associated with a pump that was out of service during the beginning of the quarter; however, the pump was placed back into service prior to the end of the quarter.	LAC 33:III.5109.A, Specific Requirement 552
P.	2018 1 st Semiannual LDAR Monitoring Report (08/27/2018)	2520-00027-V16	FUG 0026 Refinery Fugitive Emissions	01/01/2018-06/30/2018	Valves in gas/vapor service and in light liquid service: VOC, Total monitored by the regulation's specified method(s) quarterly, as specified in Subsection 1.1 of the Louisiana MACT Determination for Refinery Equipment Leaks (July 26, 1994).	A needle valve in the Continuous Catalytic Reforming Unit was not in the LDAR database; therefore, quarterly monitoring did not occur.	LAC 33:III.5109.A, Specific Requirement 552
Q.	2018 1 st Semiannual LDAR Monitoring Report (08/27/2018)	2520-00027-V16	FUG 0026 Refinery Fugitive Emissions	01/21/2018-01/29/2018	Pumps in light liquid service: Presence of a leak monitored by visual inspection/determination weekly (calendar), as specified in Paragraph D.1.b of the Louisiana MACT Determination for Refinery Equipment Leaks (July 26, 1994).	Weekly visual pump inspections did not occur in the Alky Unit during the week of January 21, 2018. (27 pumps).	LAC 33:III.5109.A, Specific Requirement 532
R.	2018 2 nd Semiannual Monitoring and Deviation Report (03/29/2019)	2520-00027-V16	UNF 0001 St. Charles Refinery	07/17/2018-07/18/2018	Permittee shall conduct sampling along the facility property boundary, analyze the samples, maintain records, report, and perform corrective actions as specified in 40 CFR 63.658.	Fenceline monitoring for 07/02/2018 sample period exceeded the 14 days +/- 1 day sampling frequency.	40 CFR 63.658, Specific Requirement 708

Each failure to monitor as required is a violation of any applicable permit and associated requirement(s) listed above, LAC 33:III.501.C.4, La. R.S. 30:2057(A)(1), and 30:2057(A)(2).

XI.

The Respondent reported the following emission exceedances:

A.	2016 1 st Semiannual CEMS Report (07/29/2016)	2520-00027-V14	EQT 0241 Thermal Oxidizer, 1600 TOX (1600 SRU)	06/04/2016 (2 hours)	SO ₂ (115.31 max lb/hr)	Not reported	Elevated SO ₂ emissions from the 1600 Sulfur Recovery Unit (SRU) Thermal Oxidizer (TOX) due to loss of sulfur flow from the sulfur accumulator to the sulfur pit. The loss of flow was caused by a lower temperature in the pipe, which allowed the molten sulfur to solidify. Additional insulation was added to sections of the pipe to reduce the number of cold spots.	Emission Rates for Criteria Pollutants
	2016 1 st Semiannual Monitoring and Deviation Report (09/30/2016)							
B.	2016 1 st Semiannual CEMS Report (07/29/2016)	2520-00027-V14	EQT 0195 Thermal Oxidizer, 3700 TOX (3700 SRU)	04/14/2016 (1 hour)	SO ₂ (115.31 max lb/hr)	Not reported	The 3700 SRU furnace tripped on low air due to a controls malfunction. Air was increased to the furnace to bring the unit back on ratio and programming changes were made to the controller logic to prevent reoccurrence.	Emission Rates for Criteria Pollutants
	2016 1 st Semiannual Monitoring and Deviation Report (09/30/2016)							
C.	2016 1 st Semiannual CEMS Report (07/29/2016)	2520-00027-V14	EQT 0029 Boiler 401-E	02/26/2016 (3 hours)	CO (34.59 max lb/hr)	Not reported	There was insufficient oxygen for complete combustion resulting in elevated CO levels. E-Boiler was taken out of service on July 11, 2016 to complete an inspection of all the internals and to perform re-tune.	Emission Rates for Criteria Pollutants
	2016 1 st Semiannual Monitoring and Deviation Report (09/30/2016)							
D.	2016 1 st Semiannual CEMS Report (07/29/2016)	2520-00027-V14	EQT 0029 Boiler 401-E	06/23/2016-06/24/2016 (4 hours)	CO (34.59 max lb/hr)	Not reported	There was insufficient oxygen for complete combustion resulting in elevated CO levels. E-Boiler was taken out of service on July 11, 2016 to complete an inspection of all the internals and to perform re-tune.	Emission Rates for Criteria Pollutants
	2016 1 st Semiannual Monitoring and Deviation Report (09/30/2016)							

E.	2016 1 st Semiannual CEMS Report (07/29/2016)	2520-00027-V14	EQT 0029 Boiler 401-E-	06/27/2016 (1 hour)	CO (34.59 max lb/hr)	Not reported	There was insufficient oxygen for complete combustion resulting in elevated CO levels. E-Boiler was taken out of service on July 11, 2016 to complete an inspection of all the internals and to perform re-tune.	Emission Rates for Cr teria Pollutants
	2016 1 st Semiannual Monitoring and Deviation Report (09/30/2016)							
F.	2016 1 st Semiannual CEMS Report (07/29/2016)	2520-00027-V14	EQT 0379 FCCU Off-Gas Diversion to Flares	01/14/2016 (2 hours)	VOC (63.00 max lb/hr)	Not reported	More fuel was generated than could be consumed in the process heaters. The excess gas had to be flared.	Emission Rates for Criteria Pollutants
	2016 1 st Semiannual Monitoring and Deviation Report (09/30/2016)							
G.	2016 1 st Semiannual CEMS Report (07/29/2016)	2520-00027-V14	EQT 0379 FCCU Off-Gas Diversion to Flares	01/15/2016 (3 hours)	VOC (63.00 max lb/hr)	Not reported	More fuel was generated than could be consumed in the process heaters. The excess gas had to be flared.	Emission Rates for Criteria Pollutants
	2016 1 st Semiannual Monitoring and Deviation Report (09/30/2016)							
H.	2016 1 st Semiannual CEMS Report (07/29/2016)	2520-00027-V14	EQT 0013 Flare No. 1	01/15/2016 (1 hour)	SO ₂ (50.00 max lb/hr)	Not reported	More fuel was generated than could be consumed in the process heaters. The excess gas had to be flared.	Emission Rates for Criteria Pollutants
	2016 1 st Semiannual Monitoring and Deviation Report (09/30/2016)							
I.	2016 1 st Semiannual CEMS Report (07/29/2016)	2520-00027-V14	EQT 0379 FCCU Off-Gas Diversion to Flares	01/21/2016 (2 hours)	VOC (63.00 max lb/hr)	Not reported	More fuel was generated than could be consumed in the process heaters. The excess gas had to be flared.	Emission Rates for Criteria Pollutants
	2016 1 st Semiannual Monitoring and Deviation Report (09/30/2016)							

J.	2016 1 st Semiannual CEMS Report (07/29/2016)	2520-00027-V14	EQT 0360 Flare No. 4	01/26/2016 (1 hour)	CO (28.05 max lb/hr)	Not reported	Prior to the source being identified, the flaring ceased.	Emission Rates for Criteria Pollutants
	2016 1 st Semiannual Monitoring and Deviation Report (09/30/2016)			01/26/2016 (2 hours)	VOC (4.74 max lb/hr)	Not reported		
K.	2016 1 st Semiannual CEMS Report (07/29/2016)	2520-00027-V14	EQT 0360 Flare No. 4	01/31/2016 (1 hour)	VOC (4.74 max lb/hr)	Not reported	The Alkylation Unit rapidly depressured the E-Settler. Material was diverted to the flare and the flare gas recovery unit. Unrecovered gas was combusted at the flare.	Emission Rates for Criteria Pollutants
L.	2016 1 st Semiannual Monitoring and Deviation Report (09/30/2016)		EQT 0360 Flare No. 1		VOC (28.5 max lb/hr)	Not reported		
M.	2016 1 st Semiannual CEMS Report (07/29/2016)	2520-00027-V14	EQT 0013 Flare No. 1	02/12/2016 (1 hour)	VOC (28.5 max lb/hr)	Not reported	Prior to the source being identified, the flaring ceased.	Emission Rates for Criteria Pollutants
	2016 1 st Semiannual Monitoring and Deviation Report (09/30/2016)							
N.	2016 1 st Semiannual CEMS Report (07/29/2016)	2520-00027-V14	EQT 0034 Flare No. 3	02/15/2016 (1 hour)	VOC (4.74 max lb/hr)	Not reported	Prior to the source being identified, the flaring ceased.	Emission Rates for Criteria Pollutants
	2016 1 st Semiannual Monitoring and Deviation Report (09/30/2016)							
O.	2016 1 st Semiannual CEMS Report (07/29/2016)	2520-00027-V14	EQT 0360 Flare No. 4	02/15/2016-02/17/2016 (34 hours)	NOx (12.95 max lb/hr)	Not reported	Due to unforeseen circumstances, the SMR production of hydrogen was in excess of what could be consumed within the process.	Emission Rates for Criteria Pollutants
	2016 1 st Semiannual Monitoring and Deviation Report (09/30/2016)							

P.	2016 1 st Semiannual CEMS Report (07/29/2016)	2520-00027-V14	EQT 0013 Flare No. 1	02/24/2016 (1 hour)	VOC (28.5 max lb/hr)	Not reported	Prior to the source being identified, the flaring ceased.	Emission Rates for Criteria Pollutants
	2016 1 st Semiannual Monitoring and Deviation Report (09/30/2016)							
Q.	2016 1 st Semiannual CEMS Report (07/29/2016)	2520-00027-V14	EQT 0013 Flare No. 1	03/01/2016 (1 hour)	VOC (28.5 max lb/hr)	Not reported	Prior to the source being identified, the flaring ceased.	Emission Rates for Criteria Pollutants
	2016 1 st Semiannual Monitoring and Deviation Report (09/30/2016)							
R.	2016 1 st Semiannual CEMS Report (07/29/2016)	2520-00027-V14	EQT 0013 Flare No. 1	03/04/2016 (1 hour)	SO ₂ (50.00 max lb/hr)	Not reported	A PSV in the Alkyltion Unit lifted prematurely during the restart of the compressor. Material was diverted to the flares and flare gas recovery unit. Unrecovered gas was combusted at the flares. The compressor speed was lowered and then the PSV was isolated to stop the flaring.	Emission Rates for Criteria Pollutants
	2016 1 st Semiannual Monitoring and Deviation Report (09/30/2016)							
S.	2016 1 st Semiannual CEMS Report (07/29/2016)	2520-00027-V14	EQT 0013 Flare No. 1	03/25/2016 (1 hour)	VOC (28.5 max lb/hr)	Not reported	Prior to the source being identified, the flaring ceased.	Emission Rates for Criteria Pollutants
T.	2016 1 st Semiannual Monitoring and Deviation Report (09/30/2016)		EQT 0360 Flare No. 4		VOC (4.74 max lb/hr)			
U.	2016 1 st Semiannual CEMS Report (07/29/2016)	2520-00027-V14	EQT 0360 Flare No. 4	03/31/2016 (1 hour)	VOC (4.74 max lb/hr)	Not reported	Prior to the source being identified, the flaring ceased.	Emission Rates for Criteria Pollutants
	2016 1 st Semiannual Monitoring and Deviation Report (09/30/2016)							

								QUALITY ASSURANCE COMMENTS
V.	2016 1 st Semiannual CEMS Report (07/29/2016)	2520-00027-V14	EQT 0013 Flare No. 1	04/05/2016 (1 hour)	VOC (28.5 max lb/hr)	Not reported	The CCR Net Gas Compressor second stage spillback valve failed open and caused the separator pressure controller to open to the flare. The valve was quickly bypassed to halt the flaring.	Emission Rates for Criteria Pollutants
	2016 1 st Semiannual Monitoring and Deviation Report (09/30/2016)				SO ₂ (50.00 max lb/hr)	Not reported		
W.	2016 1 st Semiannual CEMS Report (07/29/2016)	2520-00027-V14	EQT 0007 Flare No. 2	04/14/2016 (1 hour)	VOC (28.5 max lb/hr)	Not reported	More fuel gas was generated than could be consumed in the process heaters. The excess gas was flared.	Emission Rates for Criteria Pollutants
	2016 1 st Semiannual Monitoring and Deviation Report (09/30/2016)							
X.	2016 1 st Semiannual CEMS Report (07/29/2016)	2520-00027-V14	EQT 0360 Flare No. 4	04/14/2016 (1 hour)	VOC (4.74 max lb/hr)	Not reported	More fuel gas was generated than could be consumed in the process heaters. The excess gas was flared.	Emission Rates for Criteria Pollutants
	2016 1 st Semiannual Monitoring and Deviation Report (09/30/2016)							
Y.	2016 1 st Semiannual CEMS Report (07/29/2016)	2520-00027-V14	EQT 0013 Flare No. 1	04/14/2016 (1 hour)	SO ₂ (50.00 max lb/hr)	Not reported	More fuel gas was generated than could be consumed in the process heaters. The excess gas was flared.	Emission Rates for Criteria Pollutants
	2016 1 st Semiannual Monitoring and Deviation Report (09/30/2016)			04/14/2016 (6 hours)	VOC (28.5 max lb/hr)	Not reported		
Z.	2016 1 st Semiannual CEMS Report (07/29/2016)	2520-00027-V14	EQT 0013 Flare No. 1	04/28/2016 (2 hours)	VOC (28.5 max lb/hr)	Not reported	More fuel gas was generated than could be consumed in the process heaters. The excess gas was flared.	Emission Rates for Criteria Pollutants
	2016 1 st Semiannual Monitoring and Deviation Report (09/30/2016)							

A2.	2016 1 st Semiannual CEMS Report (07/29/2016)	2520-00027-V14	EQT 0013 Flare No. 1	05/02/2016 (2 hours)	VOC (28.5 max lb/hr)	Not reported	Prior to the source being identified, the flaring ceased.	Emission Rates for Criteria Pollutants
	2016 1 st Semiannual Monitoring and Deviation Report (09/30/2016)							
B2.	2016 1 st Semiannual CEMS Report (07/29/2016)	2520-00027-V14	EQT 0013 Flare No. 1	05/04/2016 (5 hours)	VOC (28.5 max lb/hr)	Not reported	Prior to the source being identified, the flaring ceased.	Emission Rates for Criteria Pollutants
	2016 1 st Semiannual Monitoring and Deviation Report (09/30/2016)							
C2.	2016 1 st Semiannual CEMS Report (07/29/2016)	2520-00027-V14	EQT 0360 Flare No. 4	05/16/2016 (1 hour)	NOx (12.95 max lb/hr)	Not reported	The Steam Methane Reformer (SMR) was increasing hydrogen production rates when the adsorber equalization valve on a pressure swing adsorber bed failed. Material was diverted to the flares and flare gas recovery unit. Unrecovered gas was combusted at the flares. The SMR rates were reduced and the valve was repaired.	Emission Rates for Criteria Pollutants
	2016 1 st Semiannual Monitoring and Deviation Report (09/30/2016)							
D2.	2016 1 st Semiannual CEMS Report (07/29/2016)	2520-00027-V14	EQT 0007 Flare No. 2	05/16/2016 (2 hours)	VOC (28.5 max lb/hr)	Not reported	Prior to the source being identified, the flaring ceased.	Emission Rates for Criteria Pollutants
	2016 1 st Semiannual Monitoring and Deviation Report (09/30/2016)							
E2.	2016 1 st Semiannual CEMS Report (07/29/2016)	2520-00027-V14	EQT 0013 Flare No. 1	05/27/2016 (9 hours)	VOC (28.5 max lb/hr)	Not reported	More fuel gas was generated than could be consumed in the process heaters. The excess gas was flared.	Emission Rates for Criteria Pollutants
	2016 1 st Semiannual Monitoring and Deviation Report (09/30/2016)							

F2.	2016 1 st Semiannual CEMS Report (07/29/2016)	2520-00027-V14	EQT 0007 Flare No. 2	05/27/2016 (1 hour)	VOC (28.5 max lb/hr)	Not reported	More fuel gas was generated than could be consumed in the process heaters. The excess gas was flared.	Emission Rates for Criteria Pollutants
	2016 1 st Semiannual Monitoring and Deviation Report (09/30/2016)			05/27/2016 (3 hours)	VOC (28.5 max lb/hr)	Not reported		
G2.	2016 1 st Semiannual CEMS Report (07/29/2016)	2520-00027-V14	EQT 0360 Flare No. 4	05/27/2016 (1 hour)	VOC (4.74 max lb/hr)	Not reported	More fuel gas was generated than could be consumed in the process heaters. The excess gas was flared.	Emission Rates for Criteria Pollutants
	2016 1 st Semiannual Monitoring and Deviation Report (09/30/2016)				PM10/2.5 (1.00 max lb/hr)	Not reported		
H2.	2016 1 st Semiannual CEMS Report (07/29/2016)	2520-00027-V14	EQT 0013 Flare No. 1	05/28/2016 (1 hour)	VOC (28.5 max lb/hr)	Not reported	Prior to the source being identified, the flaring ceased.	Emission Rates for Criteria Pollutants
	2016 1 st Semiannual Monitoring and Deviation Report (09/30/2016)							
J2.	2016 1 st Semiannual CEMS Report (07/29/2016)	2520-00027-V14	EQT 0013 Flare No. 1	05/31/2016 (4 hours)	VOC (28.5 max lb/hr)	Not reported	Prior to the source being identified, the flaring ceased.	Emission Rates for Criteria Pollutants
	2016 1 st Semiannual Monitoring and Deviation Report (09/30/2016)							
J2.	2016 1 st Semiannual CEMS Report (07/29/2016)	2520-00027-V14	EQT 0013 Flare No. 1	06/06/2016 (5 hours)	VOC (28.5 max lb/hr)	Not reported	More fuel gas was generated than could be consumed in the process heaters. The excess gas was flared.	Emission Rates for Criteria Pollutants
	2016 1 st Semiannual Monitoring and Deviation Report (09/30/2016)							

								EMISSION RATE LIMIT REQUIREMENTS
K2.	2016 1 st Semiannual CEMS Report (07/29/2016)	2520-00027-V14	EQT 0360 Flare No. 4	06/06/2016 (2 hours)	VOC (4.74 max lb/hr)	Not reported	More fuel gas was generated than could be consumed in the process heaters. The excess gas was flared.	Emission Rates for Criteria Pollutants
	2016 1 st Semiannual Monitoring and Deviation Report (09/30/2016)							
L2.	2016 1 st Semiannual CEMS Report (07/29/2016)	2520-00027-V14	EQT 0013 Flare No. 1	06/10/2016 (17 hours)	VOC (28.5 max lb/hr)	Not reported	More fuel gas was generated than could be consumed in the process heaters. The excess gas was flared.	Emission Rates for Criteria Pollutants
	2016 1 st Semiannual Monitoring and Deviation Report (09/30/2016)							
M2.	2016 1 st Semiannual CEMS Report (07/29/2016)	2520-00027-V14	EQT 0007 Flare No. 2	06/10/2016 (1 hour)	SO ₂ (50.00 max lb/hr)	Not reported	More fuel gas was generated than could be consumed in the process heaters. The excess gas was flared.	Emission Rates for Criteria Pollutants
	2016 1 st Semiannual Monitoring and Deviation Report (09/30/2016)							
N2.	2016 1 st Semiannual CEMS Report (07/29/2016)	2520-00027-V14	EQT 0360 Flare No. 4	06/10/2016 (1 hour)	VOC (4.74 max lb/hr)	Not reported	More fuel gas was generated than could be consumed in the process heaters. The excess gas was flared.	Emission Rates for Criteria Pollutants
	2016 1 st Semiannual Monitoring and Deviation Report (09/30/2016)							
O2.	2016 1 st Semiannual CEMS Report (07/29/2016)	2520-00027-V14	EQT 0007 Flare No. 2	06/11/2016 (1 hour)	VOC (28.5 max lb/hr)	Not reported	More fuel gas was generated than could be consumed in the process heaters. The excess gas was flared.	Emission Rates for Criteria Pollutants
	2016 1 st Semiannual Monitoring and Deviation Report (09/30/2016)							

P2.	2016 1 st Semiannual CEMS Report (07/29/2016)	2520-00027-V14	EQT 0360 Flare No. 4	06/11/2016 (2 hour)	VOC (4.74 max lb/hr)	Not reported	More fuel gas was generated than could be consumed in the process heaters. The excess gas was flared.	Emission Rates for Criteria Pollutants
	2016 1 st Semiannual Monitoring and Deviation Report (09/30/2016)							
Q2.	2016 1 st Semiannual CEMS Report (07/29/2016)	2520-00027-V14	EQT 0379 FCCU Off Gas Diversion to Flares	06/16/2016 (1 hour)	VOC (28.5 max lb/hr)	Not reported	More fuel gas was generated than could be consumed in the process heaters. The excess gas was flared.	Emission Rates for Criteria Pollutants
	2016 1 st Semiannual Monitoring and Deviation Report (09/30/2016)							
R2.	2016 1 st Semiannual CEMS Report (07/29/2016)	2520-00027-V14	EQT 0013 Flare No. 1	06/21/2016 (2 hours)	SO ₂ (50.00 max lb/hr)	Not reported	More fuel gas was generated than could be consumed in the process heaters. The excess gas was flared.	Emission Rates for Criteria Pollutants
	2016 1 st Semiannual Monitoring and Deviation Report (09/30/2016)			06/21/2016 (1 hour)	VOC (28.5 max lb/hr)	Not reported		
S2.	2016 1 st Semiannual CEMS Report (07/29/2016)	2520-00027-V14	EQT 0007 Flare No. 2	06/23/2016 (1 hour)	VOC (28.5 max lb/hr)	Not reported	The Steam Methane Reformer (SMR) shut down during non-routine calibration of the purge gas flow transmitter in the SMR. This transmitter regulates the amount of purge gas to the reformer. There was also a BTU analyzer on the reformer burners that are dependent on purge gas transmitter. During the calibration at the upper limit, the fuel flow to the reformed burners falsely decreased based on the purge gas flow reading high. As a result, the reformer tripped on low fuel flow.	Emission Rates for Criteria Pollutants
	2016 1 st Semiannual Monitoring and Deviation Report (09/30/2016)							

Unit	Reporting Period	Unit ID	Flare No.	Date	Pollutant	Value	Notes	Regulatory Requirements
T2.	2016 1 st Semiannual CEMS Report (07/29/2016)	2520-00027-V14	EQT 0360 Flare No. 4	06/23/2016 (2 hours)	NO _x	(12.95 max lb/hr)	Not reported	Emission Rates for Criteria Pollutants
	2016 1 st Semiannual Monitoring and Deviation Report (09/30/2016)			06/23/2016 (1 hour)	VOC	(4.74 max lb/hr)	Not reported	
U2.	2016 1 st Semiannual CEMS Report (07/29/2016)	2520-00027-V14	EQT 0379 FCCU Off-Gas Diversion to Flares	06/24/2016 (1 hour)	VOC	(63.00 max lb/hr)	Not reported	Emission Rates for Criteria Pollutants
	2016 1 st Semiannual Monitoring and Deviation Report (09/30/2016)							
V2.	2016 1 st Semiannual CEMS Report (07/29/2016)	2520-00027-V14	EQT 0007 Flare No. 2	06/24/2016 (1 hour)	SO ₂	(50.00 max lb/hr)	Not reported	Emission Rates for Criteria Pollutants
	2016 1 st Semiannual Monitoring and Deviation Report (09/30/2016)							
W2.	2016 1 st Semiannual CEMS Report (07/29/2016)	2520-00027-V14	EQT 0013 Flare No. 1	06/28/2016 (1 hour)	SO ₂	(50.00 max lb/hr)	Not reported	Emission Rates for Criteria Pollutants
	2016 1 st Semiannual Monitoring and Deviation Report (09/30/2016)				VOC	(28.5 max lb/hr)	Not reported	

X2.	2016 1 st Semiannual Monitoring and Deviation Report (09/30/2016)	2520-00027-V14	EQT 0013 Flare No. 1	05/03/2016 (1 hour)	VOC (28.5 max lb/hr)	Not reported	Prior to the source being identified, the flaring ceased.	Emission Rates for Criteria Pollutants
Y2.	2016 1 st Semiannual Monitoring and Deviation Report (09/30/2016)	2520-00027-V14	EQT 0013 Flare No. 1	05/13/2016 (2 hours)	H ₂ S (1.28 max lb/hr)	Not reported	The Wet Gas Compressor in the Fluid Catalytic Cracker Unit (FCCU) malfunctioned. There were upset emissions with Flare No. 1.	Emission Rates for Criteria Pollutants
				05/13/2016 (4 hours)	VOC (28.5 max lb/hr)	Not reported		
Z2.	2016 2 nd Semiannual CEMS Report (01/30/2017)	2520-00027-V15	EQT 0093 CCR Heater	07/31/2016 (1 hour)	SO ₂ (10.46 max lb/hr)	Not reported	There were elevated levels of sulfur in the fuel gas. As a result, the amine used for scrubbing sulfur from the refinery fuel gas increased recirculation levels.	Emission Rates for Criteria Pollutants
A3.			EQT 0094 GDU Heater		SO ₂ (5.13 max lb/hr)	Not reported		
B3.			EQT 0212 HCU Fractionator Charge Heater		SO ₂ (30.54 max lb/hr)	Not reported		
C3.			EQT 0060 DHT Stripper Reboiler		SO ₂ (2.77 max lb/hr)	Not reported		
D3.			EQT 0203 Crude Heater		SO ₂ (24.16 max lb/hr)	Not reported		
E3.			EQT 0204 Vacuum Heater		SO ₂ (12.26 max lb/hr)	Not reported		
F3.			GRP 0013 DHT Heater Cap		SO ₂ (3.59 max lb/hr)	Not reported		
G3.	2016 2 nd Semiannual CEMS Report (01/30/2017)	2520-00027-V15	EQT 0094 GDU Heater	09/13/2016 (1 hour)	SO ₂ (5.13 max lb/hr)	Not reported	The Sulfur Recovery Unit (SRU) tripped offline while transferring fresh solvent (MDEA) through a common transfer line that contained hydrocarbon contamination. During this period, the SRU was unable to regenerate the amine used for scrubbing sulfur from the refinery gas resulting in elevated fuel gas sulfur.	Emission Rates for Criteria Pollutants

H3.	2016 2 nd Semiannual CEMS Report (01/30/2017)	2520-00027-V15	EQT 0060 DHT Stripper Reboiler	09/13/2016 (1 hour)	SO ₂ (2.77 max lb/hr)	Not reported	The Sulfur Recovery Unit (SRU) tripped offline while transferring fresh solvent (MDEA) through a common transfer line that contained hydrocarbon contamination. During this period, the SRU was unable to regenerate the amine used for scrubbing sulfur from the refinery gas resulting in elevated fuel gas sulfur.	Emission Rates for Criteria Pollutants
I3.	2016 2 nd Semiannual CEMS Report (01/30/2017)	2520-00027-V15	EQT 0013 Flare No. 1	07/01/2016 (3 hours)	VOC (28.5 max lb/hr)	Not reported	More fuel gas was generated than could be consumed in the process heaters. The excess gas was flared.	Emission Rates for Criteria Pollutants
				07/01/2016 (4 hours)		Not reported		
J3.	2016 2 nd Semiannual CEMS Report (01/30/2017)	2520-00027-V14	EQT 0007 Flare No. 2	07/01/2016 (1 hour)	VOC (28.5 max lb/hr)	Not reported	A PSV in the Fluid Catalytic Cracking Unit (FCCU) lifted prematurely. The PSV material was diverted to the flares and flare gas recovery unit. Unrecovered gas was combusted at the flares. The PSV was isolated.	Emission Rates for Criteria Pollutants
K3.	2016 2 nd Semiannual CEMS Report (01/30/2017)	2520-00027-V15	EQT 0360 Flare No. 4	07/02/2016 (1 hour)	VOC (4.74 max lb/hr)	Not reported	More fuel gas was generated than could be consumed in the process heaters. The excess gas was flared.	Emission Rates for Criteria Pollutants
L3.	2016 2 nd Semiannual CEMS Report (01/30/2017)	2520-00027-V14	EQT 0013 Flare No. 1	07/02/2016-07/03/2016 (34 hours)	VOC (28.5 max lb/hr)	Not reported	More fuel gas was generated than could be consumed in the process heaters. The excess gas was flared.	Emission Rates for Criteria Pollutants
M3.	2016 2 nd Semiannual CEMS Report (01/30/2017)	2520-00027-V14	EQT 0379 FCCU Off-Gas Diversion to Flares	07/04/2016 (1 hour)	VOC (63.00 max lb/hr)	Not reported	More fuel gas was generated than could be consumed in the process heaters. The excess gas was flared.	Emission Rates for Criteria Pollutants
N3.	2016 2 nd Semiannual CEMS Report (01/30/2017)	2520-00027-V14	EQT 0013 Flare No. 1	07/04/2016 (2 hours)	VOC (28.5 max lb/hr)	Not reported	More fuel gas was generated than could be consumed in the process heaters. The excess gas was flared.	Emission Rates for Criteria Pollutants
O3.	2016 2 nd Semiannual CEMS Report (01/30/2017)	2520-00027-V14	EQT 0013 Flare No. 1	07/04/2016-07/05/2016 (11 hours)	VOC (28.5 max lb/hr)	Not reported	More fuel gas was generated than could be consumed in the process heaters. The excess gas was flared.	Emission Rates for Criteria Pollutants

P3.	2016 2 nd Semiannual CEMS Report (01/30/2017)	2520-00027-V14	EQT 0007 Flare No. 2	07/04/2016 (1 hour)	VOC (28.5 max lb/hr)	Not reported	More fuel gas was generated than could be consumed in the process heaters. The excess gas was flared.	Emission Rates for Criteria Pollutants
				07/04/2016 (1 hour)	SO ₂ (50.00 max lb/hr)	Not reported		
Q3.	2016 2 nd Semiannual CEMS Report (01/30/2017)	2520-00027-V14	EQT 0360 Flare No. 4	07/04/2016 (1 hour)	VOC (4.74 max lb/hr)	Not reported	More fuel gas was generated than could be consumed in the process heaters. The excess gas was flared.	Emission Rates for Criteria Pollutants
R3.	2016 2 nd Semiannual CEMS Report (01/30/2017)	2520-00027-V14	EQT 0013 Flare No.1	07/05/2016 (1 hour)	VOC (28.5 max lb/hr)	Not reported	More fuel gas was generated than could be consumed in the process heaters. The excess gas was flared.	Emission Rates for Criteria Pollutants
S3.	2016 2 nd Semiannual CEMS Report (01/30/2017)	2520-00027-V14	EQT 0013 Flare No.1	07/05/2016-07/07/2016 (36 hours)	VOC (28.5 max lb/hr)	Not reported	More fuel gas was generated than could be consumed in the process heaters. The excess gas was flared.	Emission Rates for Criteria Pollutants
T3.	2016 2 nd Semiannual CEMS Report (01/30/2017)	2520-00027-V14	EQT 0360 Flare No. 4	07/06/2016 (1 hour)	VOC (4.74 max lb/hr)	Not reported	More fuel gas was generated than could be consumed in the process heaters. The excess gas was flared.	Emission Rates for Criteria Pollutants
				07/06/2016 (4 hours)		Not reported		
U3.	2016 2 nd Semiannual CEMS Report (01/30/2017)	2520-00027-V14	EQT 0007 Flare No. 2	07/06/2016 (1 hour)	VOC (28.5 max lb/hr)	Not reported	More fuel gas was generated than could be consumed in the process heaters. The excess gas was flared.	Emission Rates for Criteria Pollutants
				07/06/2016 (2 hours)	VOC (28.5 max lb/hr)	Not reported		
				07/06/2016 (3 hours)	SO ₂ (50.00 max lb/hr)	Not reported		
V3.	2016 2 nd Semiannual CEMS Report (01/30/2017)	2520-00027-V14	EQT 0360 Flare No. 4	07/07/2016 (1 hour)	VOC (4.74 max lb/hr)	Not reported	More fuel gas was generated than could be consumed in the process heaters. The excess gas was flared.	Emission Rates for Criteria Pollutants
W3.	2016 2 nd Semiannual CEMS Report (01/30/2017)	2520-00027-V14	EQT 0007 Flare No. 2	07/08/2016 (2 hours)	VOC (28.5 max lb/hr)	Not reported	More fuel gas was generated than could be consumed in the process heaters. The excess gas was flared.	Emission Rates for Criteria Pollutants
				07/08/2016 (1 hour)	VOC (28.5 max lb/hr)	Not reported		
				07/08/2016 (3 hours)	SO ₂ (50.00 max lb/hr)	Not reported		

X3.	2016 2 nd Semiannual CEMS Report (01/30/2017)	2520-00027-V14	EQT 0360 Flare No. 4	07/08/2016 (4 hours)	VOC (4.74 max lb/hr)	Not reported	More fuel gas was generated than could be consumed in the process heaters. The excess gas was flared.	Emission Rates for Criteria Pollutants
				07/08/2016 (1 hour)	VOC (4.74 max lb/hr)	Not reported		
				07/08/2016 (1 hour)	SO ₂ (25.0 max lb/hr)	Not reported		
Y3.	2016 2 nd Semiannual CEMS Report (01/30/2017)	2520-00027-V14	EQT 0013 Flare No.1	07/08/2016 (3 hours)	VOC (28.5 max lb/hr)	Not reported	More fuel gas was generated than could be consumed in the process heaters. The excess gas was flared.	Emission Rates for Criteria Pollutants
				07/08/2016 (5 hours)	VOC (28.5 max lb/hr)	Not reported		
				07/08/2016 (5 hours)	VOC (28.5 max lb/hr)	Not reported		
Z3.	2016 2 nd Semiannual CEMS Report (01/30/2017)	2520-00027-V14	EQT 0013 Flare No.1	07/08/2016-07/09/2016 (17 hours)	VOC (28.5 max lb/hr)	Not reported	More fuel gas was generated than could be consumed in the process heaters. The excess gas was flared.	Emission Rates for Criteria Pollutants
A4.	2016 2 nd Semiannual CEMS Report (01/30/2017)	2520-00027-V14	EQT 0360 Flare No. 4	07/16/2016 (2 hours)	VOC (4.74 max lb/hr)	Not reported	More fuel gas was generated than could be consumed in the process heaters. The excess gas was flared.	Emission Rates for Criteria Pollutants
B4.	2016 2 nd Semiannual CEMS Report (01/30/2017)	2520-00027-V14	EQT 0007 Flare No. 2	07/16/2016 (1 hour)	VOC (28.5 max lb/hr)	Not reported	More fuel gas was generated than could be consumed in the process heaters. The excess gas was flared.	Emission Rates for Criteria Pollutants
C4.	2016 2 nd Semiannual CEMS Report (01/30/2017)	2520-00027-V14	EQT 0013 Flare No.1	07/19/2016 (2 hours)	VOC (28.5 max lb/hr)	Not reported	More fuel gas was generated than could be consumed in the process heaters. The excess gas was flared.	Emission Rates for Criteria Pollutants
D4.				07/19/2016 (3 hours)	VOC (28.5 max lb/hr)	Not reported		
E4.	2016 2 nd Semiannual CEMS Report (01/30/2017)	2520-00027-V15	EQT 0007 Flare No. 2	07/20/2016 (1 hour)	SO ₂ (50.00 max lb/hr)	Not reported	More fuel gas was generated than could be consumed in the process heaters. The excess gas was flared.	Emission Rates for Criteria Pollutants
F4.	2016 2 nd Semiannual CEMS Report (01/30/2017)	2520-00027-V15	EQT 0013 Flare No.1	07/25/2016 (1 hour)	SO ₂ (50.00 max lb/hr)	Not reported	More fuel gas was generated than could be consumed in the process heaters. The excess gas was flared.	Emission Rates for Criteria Pollutants
G4.	2016 2 nd Semiannual CEMS Report (01/30/2017)	2520-00027-V15	EQT 0007 Flare No. 2	07/27/2016 (2 hours)	SO ₂ (50.00 max lb/hr)	Not reported	More fuel gas was generated than could be consumed in the process heaters. The excess gas was flared.	Emission Rates for Criteria Pollutants

								REGULATORY REQUIREMENTS
H4.	2016 2 nd Semiannual CEMS Report (01/30/2017)	2520-00027-V15	EQT 0013 Flare No.1	07/27/2016 (1 hour)	SO ₂ (50.00 max lb/hr)	Not reported	More fuel gas was generated than could be consumed in the process heaters. The excess gas was flared.	Emission Rates for Criteria Pollutants
I4.	2016 2 nd Semiannual CEMS Report (01/30/2017)	2520-00027-V15	EQT 0007 Flare No. 2	07/31/2016 (1 hour)	SO ₂ (50.00 max lb/hr)	Not reported	More fuel gas was generated than could be consumed in the process heaters. The excess gas was flared.	Emission Rates for Criteria Pollutants
J4.	2016 2 nd Semiannual CEMS Report (01/30/2017)	2520-00027-V15	EQT 0007 Flare No. 2	08/01/2016 (1 hour)	SO ₂ (50.00 max lb/hr)	Not reported	More fuel gas was generated than could be consumed in the process heaters. The excess gas was flared.	Emission Rates for Criteria Pollutants
K4.				08/01/2016 (1 hour)		Not reported		
L4.				08/01/2016 (1 hour)		Not reported		
M4.	2016 2 nd Semiannual CEMS Report (01/30/2017)	2520-00027-V15	EQT 0013 Flare No. 1	08/01/2016 (2 hours)	SO ₂ (50.00 max lb/hr)	Not reported	More fuel gas was generated than could be consumed in the process heaters. The excess gas was flared.	Emission Rates for Criteria Pollutants
N4.	2016 2 nd Semiannual CEMS Report (01/30/2017)	2520-00027-V15	EQT 0007 Flare No. 2	08/02/2016 (3 hours)	SO ₂ (50.00 max lb/hr)	Not reported	More fuel gas was generated than could be consumed in the process heaters. The excess gas was flared.	Emission Rates for Criteria Pollutants
O4.	2016 2 nd Semiannual CEMS Report (01/30/2017)	2520-00027-V15	EQT 0007 Flare No. 2	08/03/2016 (1 hour)	SO ₂ (50.00 max lb/hr)	Not reported	More fuel gas was generated than could be consumed in the process heaters. The excess gas was flared.	Emission Rates for Criteria Pollutants
P4.	2016 2 nd Semiannual CEMS Report (01/30/2017)	2520-00027-V15	EQT 0007 Flare No. 2	08/06/2016 (1 hour)	SO ₂ (50.00 max lb/hr)	Not reported	More fuel gas was generated than could be consumed in the process heaters. The excess gas was flared.	Emission Rates for Criteria Pollutants
Q4.	2016 2 nd Semiannual CEMS Report (01/30/2017)	2520-00027-V15	EQT 0007 Flare No. 2	08/14/2016 (1 hour)	SO ₂ (50.00 max lb/hr)	Not reported	Prior to the source being identified, the flaring ceased.	Emission Rates for Criteria Pollutants
				08/14/2016 (1 hour)		Not reported		
R4.	2016 2 nd Semiannual CEMS Report (01/30/2017)	2520-00027-V15	EQT 0007 Flare No. 2	08/19/2016 (1 hour)	SO ₂ (50.00 max lb/hr)	Not reported	A barge was brought onsite due to excess propane/propylene (PPs) inventory from a malfunction in a third party pipeline. After completing the transfer line pressure test, a PSV lifted diverting material to the flares and flare gas recovery unit. The unrecovered gas was combusted at the flares. The PSV was isolated.	Emission Rates for Criteria Pollutants

S4.	2016 2 nd Semiannual CEMS Report (01/30/2017)	2520-00027-V15	EQT 0007 Flare No. 2	08/21/2016 (1 hour)	SO ₂ (50.00 max lb/hr)	Not reported	More fuel gas was generated than could be consumed in the process heaters. The excess gas was flared.	Emission Rates for Criteria Pollutants
T4.	2016 2 nd Semiannual CEMS Report (01/30/2017)	2520-00027-V15	EQT 0013 Flare No. 1	09/01/2016 (1 hour)	SO ₂ (50.00 max lb/hr)	Not reported	More fuel gas was generated than could be consumed in the process heaters. The excess gas was flared.	Emission Rates for Criteria Pollutants
U4.	2016 2 nd Semiannual CEMS Report (01/30/2017)	2520-00027-V15	EQT 0013 Flare No. 1	11/25/2016 (1 hour)	SO ₂ (50.00 max lb/hr)	Not reported	The Flare Gas Recovery compressor, K-102B, was not pumping causing spill back. The unrecovered gas was combusted at the flare. The compressor was taken out of service and repaired.	Emission Rates for Criteria Pollutants
V4.	2016 2 nd Semiannual CEMS Report (01/30/2017)	2520-00027-V15	EQT 0013 Flare No. 1	12/08/2016 (2 hours)	SO ₂ (50.00 max lb/hr)	Not reported	The feed compressor to the Platformer unit shutdown as a result of a separator pump malfunction. The unit was shutdown but some material was diverted to the flares and flare gas recovery unit. Unrecovered gas was combusted at the flares. A secondary pump was used to allow the compressor to be placed back into service.	Emission Rates for Criteria Pollutants
				12/08/2016 (1 hour)	H ₂ S (0.5 max lb/hr)	Not reported		
W4.	2016 2 nd Semiannual CEMS Report (01/30/2017)	2520-00027-V15	EQT 0240 Flare No. 5	12/10/2016 (1 hour)	SO ₂ (50.00 max lb/hr)	Not reported	A PSV in the Hydrocracker Unit (HCU) lifted prematurely. The PSV material was diverted to the flares and flare gas recovery unit. Unrecovered gas was combusted at the flares. The PSV was isolated.	Emission Rates for Criteria Pollutants
					H ₂ S (0.5 max lb/hr)	Not reported		
					PM10/2.5 (1.00 max lb/hr)	Not reported		
					SO ₂ (50.00 max lb/hr)	Not reported		
X4.	2016 2 nd Semiannual CEMS Report (01/30/2017)	2520-00027-V15	EQT 0013 Flare No. 1	12/15/2016 (1 hour)	SO ₂ (50.00 max lb/hr)	Not reported	A PSV in the Hydrocracker Unit (HCU) lifted prematurely. The PSV material was diverted to the flares and flare gas recovery unit. Unrecovered gas was combusted at the flares. The PSV was isolated.	Emission Rates for Criteria Pollutants

								PERMIT REQUIREMENTS
Y4.	2016 2 nd Semiannual CEMS Report (01/30/2017)	2520-00027-V15	EQT 0013 Flare No. 1	12/15/2016 (1 hour)	SO ₂ (50.00 max lb/hr)	Not reported	Prior to the source being identified, the flaring ceased.	Emission Rates for Criteria Pollutants
Z4.	2016 2 nd Semiannual CEMS Report (01/30/2017)	2520-00027-V15	EQT 0013 Flare No. 1	12/21/2016 (1 hour)	SO ₂ (50.00 max lb/hr)	Not reported	The Platformer Unit feed valve failed closed causing material to be diverted to the flares and flare gas recovery unit. Unrecovered gas was combusted at the flares. The valve was bypassed and rates were reduced. Once the valve was repaired, it was placed back into service.	Emission Rates for Criteria Pollutants
A5.	2016 2 nd Semiannual CEMS Report (01/30/2017)	2520-00027-V15	EQT 0094 GDU Heater	07/31/2016 (1 hour)	NO _x (8.00 max lb/hr)	Not reported	The GDU Heater experienced increased NO _x emission likely caused by temperature fluctuations in the heater. The temperature stabilized and the NO _x emissions quickly decreased.	Emission Rates for Criteria Pollutants
B5.	2016 2 nd Semiannual Monitoring and Deviation Report (03/31/2017)	2520-0027-V15	EQT 0211 H002 2 nd Stage Charge Heater	07/31/2016 (1 hour)	SO ₂ (3.18 max lb/hr)	Not reported	There were elevated levels of sulfur in the fuel gas.	Emission Rates for Criteria Pollutants
C5.	2016 2 nd Semiannual Monitoring and Deviation Report (03/31/2017)	2520-0027-V15	EQT 0241 Thermal Oxidizer, 1600 TOX	10/04/2016 (1 hour)	SO ₂ (115.31 max lb/hr)	Not reported	During the shift of amine acid gas feed from the 30 SRU to the 1600 SRU, excess emissions occurred. Feed rates were reduced to stabilize the 1600 SRU.	Emission Rates for Criteria Pollutants
D5.	2016 2 nd Semiannual Monitoring and Deviation Report (03/31/2017)	2520-0027-V15	EQT 0240 Flare No. 5	12/10/2016-12/11/2016 (21 hours)	Permittee shall limit sulfur dioxide emissions from EQT 0240 to no more than 240 pounds per any 24 consecutive hour periods.	Not reported	A PSV in the Hydrocracker Unit (HCU) lifted prematurely. The flow from the PSV was diverted to the flares and the flare gas recovery unit. Unrecovered gas was combusted at the flares.	Specific Requirement 593

ES.	2017 1 st Semiannual CEMS Report (07/28/2017)	2520-00027-V15	EQT 0196 Thermal Oxidizer, 30 TOX (30 SRU)	04/28/2017 (2 hours)	SO ₂ (115.31 max lb/hr)	Not reported	A rupture disc failed on piping from a sulfur condenser and sent a H ₂ S rich stream to the thermal oxidizer.	Emission Rates for Criteria Pollutants
	2017 1 st Semiannual Monitoring and Deviation Report (09/29/2017)							
FS.	2017 1 st Semiannual CEMS Report (07/28/2017)	2520-00027-V15	EQT 0196 Thermal Oxidizer, 30 TOX (30 SRU)	05/03/2017 (1 hour)	SO ₂ (115.31 max lb/hr)	Not reported	A rupture disc failed on piping from a sulfur condenser and sent a H ₂ S rich stream to the thermal oxidizer.	Emission Rates for Criteria Pollutants
	2017 1 st Semiannual Monitoring and Deviation Report (09/29/2017)							
GS.	2017 1 st Semiannual CEMS Report (07/28/2017)	2520-00027-V15	EQT 0423 Refinery Startup/Shutdown to Flares	01/21/2017 (1 hour)	H ₂ S (2.2 max lb/hr)	Not reported	During the startup of the Fluid Catalytic Cracking Unit (FCCU), a PSV lifted prematurely. The PSV material was diverted to the flares and flare gas recovery unit. Unrecovered gas was combusted at the flares. The PSV was isolated to stop flaring. The PSV undergoes routine inspection and testing to verify proper operations.	Emission Rates for Criteria Pollutants
	2017 1 st Semiannual Monitoring and Deviation Report (09/29/2017)				VOC (28.5 max lb/hr)	Not reported		
					SO ₂ (428.9 max lb/hr)	Not reported		
HS.	2017 1 st Semiannual CEMS Report (07/28/2017)	2520-00027-V15	EQT 0423 Refinery Startup/Shutdown to Flares	01/21/2017 (1 hour)	H ₂ S (2.2 max lb/hr)	Not reported	During the startup of the Fluid Catalytic Cracking Unit (FCCU), a PSV lifted prematurely. The PSV material was diverted to the flares and flare gas recovery unit. Unrecovered gas was combusted at the flares. The PSV was isolated to stop flaring. The PSV undergoes routine inspection and testing to verify proper operations.	Emission Rates for Criteria Pollutants
	2017 1 st Semiannual Monitoring and Deviation Report (09/29/2017)							

IS.	2017 1 st Semiannual CEMS Report (07/28/2017)	2520-00027-V15	EQT 0379 FCCU Off-Gas Diversion to Flares	01/30/2017 (1 hour)	SO ₂ (40.19 max lb/hr)	Not reported	A neighboring facility that purchased FCCU off-gas experienced a malfunction in one of their units. As a result, off-gas was unable to be sent to the facility. This resulted in a fuel gas long scenario, where more fuel gas was generated than what could be consumed in the process heaters. The excess gas had to be flared.	Emission Rates for Criteria Pollutants
	2017 1 st Semiannual Monitoring and Deviation Report (09/29/2017)				H ₂ S (0.22 max lb/hr)	Not reported		
JS.	2017 1 st Semiannual CEMS Report (07/28/2017)	2520-00027-V15	EQT 0379 FCCU Off-Gas Diversion to Flares	01/31/2017 (1 hour)	SO ₂ (40.19 max lb/hr)	Not reported	A neighboring facility that purchased FCCU off-gas experienced a malfunction in one of their units. As a result, off-gas was unable to be sent to the facility. This resulted in a fuel gas long scenario, where more fuel gas was generated than what could be consumed in the process heaters. The excess gas had to be flared.	Emission Rates for Criteria Pollutants
	2017 1 st Semiannual Monitoring and Deviation Report (09/29/2017)				H ₂ S (0.22 max lb/hr)	Not reported		
KS.	2017 1 st Semiannual CEMS Report (07/28/2017)	2520-00027-V15	EQT 0013 Flare No. 1	02/02/2017 (3 hours)	SO ₂ (50.00 max lb/hr)	Not reported	More fuel was generated than could be consumed in the process heaters. The excess gas was flared.	Emission Rates for Criteria Pollutants
	2017 1 st Semiannual Monitoring and Deviation Report (09/29/2017)							
LS.	2017 1 st Semiannual CEMS Report (07/28/2017)	2520-00027-V15	EQT 0013 Flare No. 1	02/03/2017 (1 hour)	SO ₂ (50.00 max lb/hr)	Not reported	More fuel was generated than could be consumed in the process heaters. The excess gas was flared.	Emission Rates for Criteria Pollutants
	2017 1 st Semiannual Monitoring and Deviation Report (09/29/2017)							

								EMISSION RATES FOR CRITERIA POLLUTANTS	
M5.	2017 1 st Semiannual CEMS Report (07/28/2017)	2520-00027-V15	EQT 0007 Flare No. 2	02/07/2017-02/08/2017 (2 hours)	NOx (31.0 max lb/hr)	Not reported	A PSV on a propane sphere lifted during transfer to rail bullets. The PSV material was diverted to the flares and flare gas recovery unit. Unrecovered gas was combusted at the flares.	Emission Rates for Criteria Pollutants	
					CO (139.1 max lb/hr)	Not reported			
	PM _{10/2.5} (0.78 max lb/hr)				Not reported				
	SO ₂ (50.0 max lb/hr)				Not reported				
	VOC (185.35 max lb/hr)				Not reported				
2017 1 st Semiannual Monitoring and Deviation Report (09/29/2017)									
N5.	2017 1 st Semiannual CEMS Report (07/28/2017)	2520-00027-V15	EQT 0360 Flare No. 4	03/12/2017 (1 hour)	SO ₂ (25.0 max lb/hr)	Not reported	Prior to the source being identified, the flaring ceased.	Emission Rates for Criteria Pollutants	
	2017 1 st Semiannual Monitoring and Deviation Report (09/29/2017)								
O5.	2017 1 st Semiannual CEMS Report (07/28/2017)	2520-00027-V15	EQT 0013 Flare No. 1	04/10/2017 (1 hour)	NOx (31.0 max lb/hr)	Not reported	Pump around flow in the FCCU was lost due to a pump malfunction. This caused increased pressure in the #3 debutanizer and resulted in the PSV lifting. The material was diverted to the flares and flare gas recovery unit. Unrecovered gas was combusted at the flares.	Emission Rates for Criteria Pollutants	
					PM _{10/2.5} (0.78 max lb/hr)	Not reported			
	2017 1 st Semiannual Monitoring and Deviation Report (09/29/2017)					SO ₂ (50.0 max lb/hr)			Not reported
						VOC (185.35 max lb/hr)			Not reported
PS.	2017 2 nd Semiannual CEMS Report-Revised (02/15/2018)	2520-00027-V15	EQT 0029 Boiler B401-E	12/16/2017 (1 hour)	NOx (16.80 max lb/hr)	Not reported	A flue gas recycle valve failed. The boiler was fired down manually to control the NOx emissions.	Emission Rates for Criteria Pollutants	
	2017 2 nd Semiannual Monitoring and Deviation Report (03/29/2018)								

Q5.	2017 2 nd Semiannual CEMS Report- Revised (02/15/2018)	2520-00027-V15	EQT 0094 GDU Heater	11/18/2017 (1 hour)	SO ₂ (5.13 max lb/hr)	Not reported	The amine flow was adjusted to correct a high differential pressure in the H ₂ S absorber on the #2 Light Ends Unit (LEU). This resulted in ineffective scrubbing of H ₂ S from fuel gas.	Emission Rates for Criteria Pollutants		
R5.			EQT 0210 1 st Stage Charge Heater	11/18/2017 (1 hour)	SO ₂ (3.18 max lb/hr)	Not reported				
S5.			EQT 0211 2 nd Stage Charge Heater	11/18/2017 (1 hour)	SO ₂ (3.18 max lb/hr)	Not reported				
T5.			EQT 0212 Fractionator Charge Heater	11/18/2017 (1 hour)	SO ₂ (10.54 max lb/hr)	Not reported				
U5.			EQT 0080 Boiler B-401C	11/18/2017 (1 hour)	SO ₂ (9.08 max lb/hr)	Not reported				
V5.			EQT 0081 Boiler B-401D	11/18/2017 (1 hour)	SO ₂ (9.08 max lb/hr)	Not reported				
W5.	2017 2 nd Semiannual Monitoring and Deviation Report (03/29/2018)	2520-00027-V15	EQT 0029 Boiler B-401E	11/18/2017 (1 hour)	SO ₂ (10.77 max lb/hr)	Not reported			A PSV in the FCCU lifted due to increased pressure in the Splitter Column. The PSV material was diverted to the flares and flare gas recovery unit. Unrecovered gas was combusted at the flares. The cooling water and product flow through the overhead exchangers were adjusted.	Emission Rates for Criteria Pollutants
X5.			GRP 0005 Coker Cap	11/18/2017 (1 hour)	SO ₂ (19.90 max lb/hr)	Not reported				
Y5.			EQT 0203 Crude Heater	11/18/2017 (2 hours)	SO ₂ (24.16 max lb/hr)	Not reported				
Z5.			EQT 0078 Heater H-39-01	11/18/2017 (1 hour)	SO ₂ (1.54 max lb/hr)	Not reported				
A6.			GRP 0013 DHT Heater Cap	11/18/2017 (1 hour)	SO ₂ (3.59 max lb/hr)	Not reported				
B6.			EQT 0060 DHT Stripper Reboiler	11/18/2017 (2 hours)	SO ₂ (2.77 max lb/hr)	Not reported				
C6.			EQT 0093 CCR Heater	11/18/2017 (1 hour)	SO ₂ (10.46 max lb/hr)	Not reported				
D6.	2017 2 nd Semiannual CEMS Report- Revised (02/15/2018)	2520-00027-V15	EQT 0013 Flare No. 1	11/11/2017 (1 hour)	VOC (185.31 max lb/hr)	Not reported				
	2017 2 nd Semiannual Monitoring and Deviation Report (03/29/2018)				1,3-butadiene (0.38 max lb/hr)	Not reported				

E6.	2017 2 nd Semiannual CEMS Report- Revised (02/15/2018)	2520-00027-V15	EQT 0034 Flare No. 3	12/01/2017 (1 hour)	SO ₂ (25.00 max lb/hr)	Not reported	The 6700 Sour Water Stripper operations was purging a filter to the flare system. The nitrogen being used to purge the filter increased the molecular weight of the flare gas thus reducing the capacity of the flare gas recovery unit compressor. The unrecovered gas was combusted at the flare.	Emission Rates for Criteria Pollutants
	2017 2 nd Semiannual Monitoring and Deviation Report (03/29/2018)							
F6.	2017 2 nd Semiannual CEMS Report- Revised (02/15/2018)	2520-00027-V15	EQT 0007 Flare No. 2	12/14/2017 (1 hour)	SO ₂ (50.00 max lb/hr)	Not reported	The level in the degassing drum increased allowing light hydrocarbon carryover to the flares and flare gas recovery unit. The liquid level in the drum was reduced and unrecovered gas was combusted the flare.	Emission Rates for Criteria Pollutants
	2017 2 nd Semiannual Monitoring and Deviation Report (03/29/2018)							
G6.	2018 1 st Semiannual CEMS Report (07/30/2018)	2520-00027-V15/16	EQT 0029 Boiler B401-E	05/25/2018	NO _x (16.80 max lb/hr)	Not reported	Boiler B401-C (EQT 0080) shutdown due to low water level when a level indicator failed. Operations quickly changed the controller over to another level indicator and attempted to place the boiler on pilot. The operator noticed the igniter was not sparking so the igniter was replaced.	Emission Rates for Criteria Pollutants

H6.	2018 1 st Semiannual CEMS Report (07/30/2018)	2520-00027-V15/16	EQT 0195 Thermal Oxidizer, 3700 (3700 SRU)	01/19/2018 (1 hour)	SO ₂ (115.31 max lb/hr)	Not reported	A malfunction of the SRU tailgas analyzer resulted in the operation of the SRU thermal reaction furnace to be off ratio. The combustion air control was placed in manual and adjusted to decrease excess emissions.	Emission Rates for Criteria Pollutants
I6.	2018 1 st Semiannual CEMS Report (07/30/2018)	2520-00027-V15/16	EQT 0196 30 SRU TOX	01/01/2018 (1 hour)	SO ₂ (115.31 max lb/hr)	Not reported	A failure of the K-30-301B combustion air blower resulted in a shutdown of the 30 TOX furnace. A subsequent malfunction of the TOX furnace ignitor delayed the restart of the 30 TOX furnace. Ignitor was repaired and 30 TOX furnace was restarted.	Emission Rates for Criteria Pollutants
					H ₂ S (1.73 max lb/hr)	Not reported		
J6.	2018 1 st Semiannual CEMS Report (07/30/2018)	2520-00027-V15/16	EQT 0196 Thermal Oxidizer, 30 (30 SRU) 30 SRU TOX	01/01/2018-01/02/2018 (28 hours)	SO ₂ (115.31 max lb/hr)	Not reported	A failure of the K-30-301B combustion air blower resulted in a shutdown of the 30 TOX furnace. A subsequent malfunction of the TOX furnace ignitor delayed the restart of the 30 TOX furnace. Ignitor was repaired and 30 TOX furnace was restarted.	Emission Rates for Criteria Pollutants
					H ₂ S (1.73 max lb/hr)	Not reported		
K6.	2018 1 st Semiannual CEMS Report (07/30/2018)	2520-00027-V15/16	EQT 0196 Thermal Oxidizer, 30 (30 SRU)	02/22/2018-02/23/2018 (11 hours)	SO ₂ (115.31 max lb/hr)	Not reported	The failure was due to pressure generated by heat tracing while the rupture disc was being placed in service. The procedures for placing the rupture disc in service were updated to prevent premature failure of the discs.	Emission Rates for Criteria Pollutants
L6.	2018 1 st Semiannual CEMS Report (07/30/2018)	2520-00027-V16	EQT 0423 Refinery Startup/Shutdown to Flares	02/21/2018 (2 hours)	H ₂ S (2.12 max lb/hr)	Not reported	During the startup of the Platformer Unit after a planned maintenance activity, some material was diverted to the flare and flare gas recovery. Unrecovered gas was combusted at the flares.	Emission Rates for Criteria Pollutants
					SO ₂ (428.9 max lb/hr)	Not reported		

M6.	2018 1 st Semiannual CEMS Report (07/30/2018)	2520-00027-V16	EQT 0013 Flare No. 1	02/22/2018 (1 hour)	SO ₂ (50.00 max lb/hr)	Not reported	A PSV in the Alkylation Unit was leaking. The PSV material was diverted to the flare and flare gas recovery unit. Unrecovered gas was combusted at the flare. The PSV was isolated.	Emission Rates for Criteria Pollutants
N6.	2018 1 st Semiannual CEMS Report (07/30/2018)	2520-00027-V16	EQT 0034 Flare No. 3	03/19/2018-03/20/2018 (7 hours)	H ₂ S (0.27 max lb/hr)	Not reported	A level transmitter on the Debutanizer water boot in the Light Ends Unit (LEU) malfunctioned. This resulted in increased pressure to the Sour Water Flash Drum. Material was diverted to the flare and flare gas recovery unit. Unrecovered gas was combusted at the flare.	Emission Rates for Criteria Pollutants
				03/19/2018-03/20/2018 (6 hours)	SO ₂ (50.00 max lb/hr)	Not reported		
O6.	2018 1 st Semiannual CEMS Report (07/30/2018)	2520-00027-V16	EQT 0423 Refinery Startup/Shutdown to Flares	04/12/2018 (1 hour)	H ₂ S (2.12 max lb/hr)	Not reported	During the shutdown of the Fluid Catalytic Cracking Unit (FCCU) after planned maintenance activities, material was diverted to the flares and flare gas recovery. Unrecovered gas was combusted at the flares.	Emission Rates for Criteria Pollutants
					SO ₂ (428.9 max lb/hr)	Not reported		
P6.	2018 1 st Semiannual CEMS Report (07/30/2018)	2520-00027-V16	EQT 0423 Refinery Startup/Shutdown to Flares	04/12/2018 (3 hours)	SO ₂ (428.9 max lb/hr)	Not reported	During the shutdown of the Fluid Catalytic Cracking Unit (FCCU) after planned maintenance activities, material was diverted to the flares and flare gas recovery. Unrecovered gas was combusted at the flares.	Emission Rates for Criteria Pollutants

Q6.	2018 1 st Semiannual CEMS Report (07/30/2018)	2520-00027-V16	EQT 0423 Refinery Startup/Shutdown to Flares	04/12/2018-04/13/2018 (5 hours)	H ₂ S (2.12 max lb/hr)	Not reported	During the shutdown of the Fluid Catalytic Cracking Unit (FCCU) after planned maintenance activities, material was diverted to the flares and flare gas recovery. Unrecovered gas was combusted at the flares.	Emission Rates for Criteria Pollutants
R6.	2018 1 st Semiannual CEMS Report (07/30/2018)	2520-00027-V16	EQT 0423 Refinery Startup/Shutdown to Flares	04/13/2018 (1 hour)	H ₂ S (2.12 max lb/hr)	Not reported	During the startup of the Fluid Catalytic Cracking Unit (FCCU) after planned maintenance activities, material was diverted to the flares and flare gas recovery. Unrecovered gas was combusted at the flares.	Emission Rates for Criteria Pollutants
					SO ₂ (428.9 max lb/hr)	Not reported		
S6.	2018 1 st Semiannual CEMS Report (07/30/2018)	2520-00027-V16	EQT 0423 Refinery Startup/Shutdown to Flares	05/10/2018 (2 hours)	H ₂ S (2.12 max lb/hr)	Not reported	During the startup of the Fluid Catalytic Cracking Unit (FCCU) after planned maintenance activities, material was diverted to the flares and flare gas recovery. Unrecovered gas was combusted at the flares.	Emission Rates for Criteria Pollutants
					SO ₂ (428.9 max lb/hr)	Not reported		
T6.	2018 1 st Semiannual CEMS Report (07/30/2018)	2520-00027-V16	EQT 0013 Flare No. 1	06/21/2018 (1 hour)	NO _x (31.05 max lb/hr)	Not reported	A compressor in the Coker Unit shutdown as a result of high interstage drum level. The material was diverted to the flares and flare gas recovery unit. Unrecovered gas was combusted at the flares. The level was lowered in the interstage drum and the compressor was restarted.	Emission Rates for Criteria Pollutants
PM10/2.5 (0.8 max lb/hr)								
SO ₂ (50.00 max lb/hr)								
H ₂ S (1.33 max lb/hr)								
VOC (185.31 max lb/hr)								

Emission Rates for Criteria Pollutants								
U6.	2018 1 st Semiannual CEMS Report (07/30/2018)	2520-00027-V16	EQT 0007 Flare No. 2	06/21/2018 (1 hour)	NOx (30.52 max lb/hr)	Not reported	A compressor in the Coker Unit shutdown as a result of high interstage drum level. The material was diverted to the flares and flare gas recovery unit. Unrecovered gas was combusted at the flares. The level was lowered in the interstage drum and the compressor was restarted.	Emission Rates for Criteria Pollutants
					PM _{10/2.5} (0.78 max lb/hr)			
					VOC (185.35 max lb/hr)			
V6.	2018 1 st Semiannual CEMS Report (07/30/2018)	2520-00027-V16	EQT 0007 Flare No. 2	06/21/2018 (2 hours)	SO ₂ (50.00 max lb/hr)	Not reported	A compressor in the Coker Unit shutdown as a result of high interstage drum level. The material was diverted to the flares and flare gas recovery unit. Unrecovered gas was combusted at the flares. The level was lowered in the interstage drum and the compressor was restarted.	Emission Rates for Criteria Pollutants
					H ₂ S (1.33 max lb/hr)			
W6.	2018 1 st Semiannual CEMS Report (07/30/2018)	2520-00027-V16	EQT 0013 Flare No. 1	06/25/2018 (1 hour)	SO ₂ (50.00 max lb/hr)	Not reported	Three compressors in the Fluid Catalytic Cracking Unit (FCCU) unexpectedly shutdown. The material was diverted to the flares and flare gas recovery unit. Unrecovered gas was combusted at the flare.	Emission Rates for Criteria Pollutants
X6.	2018 1 st Semiannual CEMS Report (07/30/2018)	2520-00027-V16	EQT 0007 Flare No. 2	06/25/2018 (1 hour)	NOx (30.52 max lb/hr)	Not reported	Three compressors in the Fluid Catalytic Cracking Unit (FCCU) unexpectedly shutdown. The material was diverted to the flares and flare gas recovery unit. Unrecovered gas was combusted at the flare.	Emission Rates for Criteria Pollutants
					PM _{10/2.5} (0.78 max lb/hr)	Not reported		
					SO ₂ (50.00 max lb/hr)	Not reported		
					VOC (185.35 max lb/hr)	Not reported		

Y6.	2018 2 nd Semiannual CEMS Report (01/30/2019)	2520-00027-V16	EQT 0195 Thermal Oxidizer, 3700 TOX (3700 SRU)	07/12/2018 (2 hours)	SO ₂ (115.31 max lb/hr)	Not reported	Elevated SO ₂ emissions from the 370 Sulfur Recovery Unit (SRU) Thermal Oxidizer (TOX) due to a process upset following a trip of the thermal reaction furnace. Issues with several control valves during the subsequent restart delayed restoring the unit to normal operation.	Emission Rates for Criteria Pollutants
Z6.	2018 2 nd Semiannual CEMS Report (01/30/2019)	2520-00027-V16	EQT 0195 Thermal Oxidizer, 3700 TOX (3700 SRU)	09/08/2018-09/09/2018 (1 hour)	SO ₂ (115.31 max lb/hr)	Not reported	A malfunction of the SRU tailgas analyzer caused the combustion air to the thermal reactor to be placed in manual operation. The combustion air flow was manually adjusted to reduce the emissions from the SRU. The shelter protecting the analyzer has since been modified to prevent ambient conditions from affecting the reliability of the analyzer.	Emission Rates for Criteria Pollutants
A7	2018 2 nd Semiannual CEMS Report (01/30/2019)	2520-00027-V16	EQT 0196 Thermal Oxidizer, 30 TOX (30 SRU)	07/12/2018 (1 hour)	SO ₂ (115.31 max lb/hr)	Not reported	An unplanned shutdown of the 3700 SRU resulted in a large swing of acid gas feed to the 30 SRU. This resulted in the 30 SRU process going off ratio.	Emission Rates for Criteria Pollutants
B7.	2018 2 nd Semiannual CEMS Report (01/30/2019)	2520-00027-V16	EQT 0196 Thermal Oxidizer, 30 TOX (30 SRU)	08/19/2018 (1 hour)	SO ₂ (115.31 max lb/hr)	Not reported	During startup of an upstream process unit, hydrocarbon material overwhelmed the 30 SRU sour water flash drum. The increased hydrocarbon content in the sour water acid gas to the SRU thermal reactor required a reduction in rates to stabilize the SRU.	Emission Rates for Criteria Pollutants

C7.	2019 1 st Semiannual CEMS Report (07/30/2019)	2520-00027-V17	EQT 0196 Thermal Oxidizer, 30 TOX (30 SRU)	03/14/2019 (2 hours)	SO ₂ (115.31 max lb/hr)	318.5 lbs	While making the MDEA transfer to increase amine strength in the 30 Tail Gas Treating Unit. Shortly after commencing the transfer, the Thermal Oxidizer tripped due to high temperature. After troubleshooting the issue, hydrocarbons were found to be present in the amine.	Emission Rates for Criteria Pollutants
D7.	2019 1 st Semiannual CEMS Report (07/30/2019)	2520-00027-V17	EQT 0196 Thermal Oxidizer, 30 TOX (30 SRU)	03/21/2019 (1 hour)	SO ₂ (115.31 max lb/hr)	260.9 lbs	The sour water acid gas flow meter failed and pulled air from the furnace causing the unit to go off ratio.	Emission Rates for Criteria Pollutants
E7.	2019 1 st Semiannual CEMS Report (07/30/2019)	2520-00027-V17	EQT 0212 Fractionator Charge Heater	05/01/2019 (1 hour)	SO ₂ (10.54 max lb/hr)	11.82 lbs	Elevated levels of sulfur in fuel gas as a result of an upset in the amine contactor. The 30 Sulfur Recovery Unit tripped offline and was unable to regenerate the amine used for scrubbing sulfur for the refinery fuel gas. Fuel gas sulfur concentration returned to normal after the unit was put back in service.	Emission Rates for Criteria Pollutants
F7.			EQT 0211 2 nd Stage Charge Heater		SO ₂ (3.18 max lb/hr)	4.01 lbs		
G7.			EQT 0094 Low Sulfur Gasoline Unit Heater		SO ₂ (5.13 max lb/hr)	6.37 lbs		
H7.			EQT 0028 Hydro Treater Heater No. 3		SO ₂ (1.33 max lb/hr)	1.55 lbs		
I7.	2019 1 st Semiannual CEMS Report (07/30/2019)	2520-00027-V17	EQT 0423 Refinery Startup/Shutdown to Flares	01/20/2019 (1 hour)	SO ₂ (1,295.97 max lb/hr)	1,495 lbs	While shutting down units in preparation for the West Plant Turnaround, the 1600 Sour Water Stripper and the DHT reactors were purged to the flare at the same time. This increased the sulfur concentration in the flare. Operations was notified and decreased the flow to the flare which reduced the sulfur emissions.	Emission Rates for Criteria Pollutants
			01/20/2019 (2 hours)	H ₂ S (2.49 max lb/hr)	15.16 lbs			
			01/20/2019 (1 hour)					

J7.	2019 1 st Semiannual CEMS Report (07/30/2019)	2520-00027-V17	EQT 0423 Refinery Startup/Shutdown to Flares	05/20/2019 (1 hour)	VOC (350.00 max lb/hr)	367.19 lbs	A power fault occurred in a motor control center which resulted in the loss of various equipment in the West Plant and shutdown of the Crude, Vacuum, Coker, and DHT Units. The fault was isolated and power was restored.	
K7.	2019 1 st Semiannual CEMS Report (07/30/2019)	2520-00027-V17	EQT 0360 Flare No. 4	06/21/2019 (3 hours)	NOx (12.60 max lb/hr)	545.68 lbs	The Make Up Gas Compressor in the HTHC unexpectedly shutdown. The material was diverted to the flares and flare gas recovery unit. Unrecovered gas was combusted at the flares. Rates were reduced to the units and the compressor was restarted. The following casual factors were identified during the Root Cause Analysis: possible loose wires between field power supply Kepco rack I/O connectors, possible misalignment of Kepco field power supply I/O pins to rack I/O connector, failure of field power supply and both compressors share a common PLC cabinet and field power supplies.	Emission Rates for Criteria Pollutants
				06/21/2019 (2 hours)	PM _{10/2.5} (0.33 max lb/hr)	23.47 lbs		
				06/21/2019 (6 hours)	SO ₂ (50.00 max lb/hr)	657.51 lbs		
				06/21/2019 (5 hours)	H ₂ S (1.33 max lb/hr)	3.22 lbs		

Each emission exceedance is a violation of any applicable permit and associated requirement(s) listed above, LAC 33:III.501.C.4, La. R.S. 30:2057(A)(1), and 30:2057(A)(2).

XII.

The Respondent reported the following deviations from fugitive emission requirements:

A.	2016 1 st Semiannual LDAR Monitoring Report (08/31/2016)	2520-00027-V14	CRG 0017 REFFUG Refinery Fugitive Common Requirements	04/28/2016	Six (6) open ended lines (OELs) were discovered during a routine internal audit. The OELs were closed upon discovery.	LAC 33:III.5109 A, Specific Requirement 105
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B.	2016 1 st Semiannual LDAR Monitoring Report (08/31/2016)	2520-00027-V14	CRG 0017 REFFUG Refinery Fugitive Common Requirements	06/05/2016-06/30/2016	Seven (7) OELs were discovered.	LAC 33:III.5109.A, Specific Requirement 105
C.	2016 2 nd Semiannual LDAR Monitoring Report (02/24/2017)	2520-00027-V14/15	CRG 0017 REFFUG Refinery Fugitive Common Requirements	07/01/2016-12/31/2016	Two (2) OELs were discovered on the desalter sample stations in the Crude Unit.	LAC 33:III.5109.A, Specific Requirement 105 (V14) Specific Requirement 73 (V15)
D.	2017 1 st Semiannual LDAR Monitoring Report (08/31/2017)	2520-00027-V15	CRG 0017 REFFUG Refinery Fugitive Common Requirements	01/01/2017-06/09/2017	Two (2) OELs were discovered on the desalter sample stations in the Crude Unit during the third party Consent Decree Audit in June 2016. The OELs were closed upon discovery.	LAC 33:III.5109.A, Specific Requirement 73
E.	2017 1 st Semiannual LDAR Monitoring Report (08/31/2017)	2520-00027-V15	CRG 0017 REFFUG Refinery Fugitive Common Requirements	02/21/2017	Six (6) OELs were discovered during a routine internal audit. The OELs were closed upon discovery.	LAC 33:III.5109.A, Specific Requirement 73
F.	2017 2 nd Semiannual LDAR Monitoring Report (02/28/2018)	2520-00027-V15	CRG 0017 REFFUG Refinery Fugitive Common Requirements	08/01/2017	One (1) OEL was discovered on a stripped sour water line. The OEL was corrected upon discovery.	LAC 33:III.5109.A, Specific Requirement 73
G.	2017 2 nd Semiannual LDAR Monitoring Report (02/28/2018)	2520-00027-V15	CRG 0017 REFFUG Refinery Fugitive Common Requirements	10/03/2017-10/04/2017	Four (4) OELs were discovered in the Wastewater Treatment Plant. The OELs were corrected the following day by Operations.	LAC 33:III.5109.A, Specific Requirement 73
H.	2017 2 nd Semiannual LDAR Monitoring Report (02/28/2018)	2520-00027-V15	CRG 0017 REFFUG Refinery Fugitive Common Requirements	12/01/2017	One (1) OEL was discovered in the Crude Unit. The OEL was corrected upon discovery.	LAC 33:III.5109.A, Specific Requirement 73
I.	2018 1 st Semiannual LDAR Monitoring Report (08/27/2018)	2520-00027-V16	FUG 0026 Refinery Fugitive Emissions	02/08/2018	Six (6) OELs were discovered in the Gasoline Desulfurization unit. The OELs were corrected upon discovery.	LAC 33:III.5109.A, Specific Requirement 521
J.	2018 1 st Semiannual LDAR Monitoring Report (08/27/2018)	2520-00027-V16	FUG 0026 Refinery Fugitive Emissions	06/18/2018	Three (3) OELs were discovered in the Coker. The OELs were corrected upon discovery.	LAC 33:III.5109.A, Specific Requirement 521
K.	2018 1 st Semiannual LDAR Monitoring Report (08/27/2018)	2520-00027-V16	FUG 0026 Refinery Fugitive Emissions	06/25/2018	One (1) OEL was discovered in the Hydrocracker Unit. The OEL was corrected upon discovery.	LAC 33:III.5109.A, Specific Requirement 521
L.	2018 1 st Semiannual LDAR Monitoring Report (08/27/2018)	2520-00027-V16	FUG 0026 Refinery Fugitive Emissions	06/27/2018	One (1) OEL was discovered in the New Sarpy Tank Farm. The OEL was corrected upon discovery.	LAC 33:III.5109.A, Specific Requirement 521

M.	2018 2 nd Semiannual LDAR Monitoring Report (02/15/2019)	2520-00027-V16	FUG 0026 Refinery Fugitive Emissions	07/18/2018	One (1) OEL was discovered in the Crude Unit. The OEL was corrected upon discovery.	LAC 33:III.5109.A, Specific Requirement 521
N.	2018 2 nd Semiannual LDAR Monitoring Report (02/15/2019)	2520-00027-V16	FUG 0026 Refinery Fugitive Emissions	10/04/2018	Two (2) OELs were discovered in the Gasoline Desulfurization unit. The OELs were corrected upon discovery.	LAC 33:III.5109.A, Specific Requirement 521
O.	2018 2 nd Semiannual LDAR Monitoring Report (02/15/2019)	2520-00027-V16	FUG 0026 Refinery Fugitive Emissions	10/15/2018-10/18/2018	One (1) OEL was discovered in the Flare Unit. The OEL was corrected in a timely manner.	LAC 33:III.5109.A, Specific Requirement 521
P.	2018 2 nd Semiannual LDAR Monitoring Report (02/15/2019)	2520-00027-V16	FUG 0026 Refinery Fugitive Emissions	10/16/2018-10/17/2018	One (1) OEL was discovered in the Wastewater Unit. The OEL was corrected in a timely manner.	LAC 33:III.5109.A, Specific Requirement 521
Q.	2018 2 nd Semiannual LDAR Monitoring Report (02/15/2019)	2520-00027-V16	FUG 0026 Refinery Fugitive Emissions	10/22/2018	Three (3) OELs were discovered in the Section 3 Tank Farm. The OELs were corrected upon discovery.	LAC 33:III.5109.A, Specific Requirement 521
R.	2018 2 nd Semiannual LDAR Monitoring Report (02/15/2019)	2520-00027-V17	FUG 0026 Refinery Fugitive Emissions	12/20/2018-01/29/2019	One (1) OEL was discovered in the Hydrocracker Unit. The piping was modified to eliminate the OEL.	LAC 33:III.5109.A, Specific Requirement 518
S.	2019 1 st Semiannual LDAR Monitoring Report (08/30/2019)	2520-00027-V17	FUG 0026 Refinery Fugitive Emissions	03/26/2019	Three (3) OELs were discovered in the East Plant Utilities unit. The OELs were corrected upon discovery.	LAC 33:III.5109.A, Specific Requirement 518
T.	2019 1 st Semiannual LDAR Monitoring Report (08/30/2019)	2520-00027-V17	FUG 0026 Refinery Fugitive Emissions	04/02/2019	One (1) OEL was discovered in the 1600 Sulfur Recovery unit. The OEL was corrected upon discovery.	LAC 33:III.5109.A, Specific Requirement 518
U.	2019 1 st Semiannual LDAR Monitoring Report (08/30/2019)	2520-00027-V17	FUG 0026 Refinery Fugitive Emissions	05/14/2019	Two (2) OELs were discovered in the Fluidized Catalytic Cracking unit. The OELs were corrected upon discovery.	LAC 33:III.5109.A, Specific Requirement 518

Each failure to meet fugitive emission requirements is a violation of any applicable permit and associated requirement(s) listed above, LAC 33:III.501.C.4, LAC 33:III.2122.C.3, La. R.S. 30:2057(A)(1), and 30:2057(A)(2).

XIII.

The Respondent reported the following recordkeeping violations:

A.	2016 2 nd Semiannual CEMS Report (01/30/2017)	2520-00027-V15	EQT 0037 SMR B Train	September 2016	The minimum degree of data availability shall be at least 90% (based on a monthly average) of the operating time of the emissions unit or activity being monitored.	The NOx analyzer readings were drifting through the reporting period.	LAC 33:III.535 Specific Requirement 687
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B.	2016 2 nd Semiannual CEMS Report (01/30/2017)	2520-00027-V15	EQT 0037 SMR B Train	December 2016	The minimum degree of data availability shall be at least 90% (based on a monthly average) of the operating time of the emissions unit or activity being monitored.	The NOx analyzer readings were drifting through the reporting period.	LAC 33:III.535 Specific Requirement 687
C.	2016 2 nd Semiannual CEMS Report (01/30/2017)	2520-00027-V15	EQT 0094 GDU Heater	October 2016	The minimum degree of data availability shall be at least 90% (based on a monthly average) of the operating time of the emissions unit or activity being monitored.	The NOx analyzer central processing unit (CPU) board malfunctioned and needed to be replaced. The board was ordered from the supplier and installed in the analyzer.	LAC 33:III.535 Specific Requirement 687
D.	2016 2 nd Semiannual CEMS Report (01/30/2017)	2520-00027-V15	EQT 0036 SMR A Train	October 2016	The minimum degree of data availability shall be at least 90% (based on a monthly average) of the operating time of the emissions unit or activity being monitored.	The sample line for the analyzer system plugged causing false readings. The line was steamed out and air dried. Once the line was dry, it was returned to service.	LAC 33:III.535 Specific Requirement 687
E.	2017 1 st Semiannual CEMS Report (07/28/2017)	2520-00027-V15	EQT 0037 SMR B Train	January 2017	The minimum degree of data availability shall be at least 90% (based on a monthly average) of the operating time of the emissions unit or activity being monitored.	CO analyzer 72% data retention; a malfunctioning pressure switch and a leak at the filter housing in the sample box contributed to downtime.	LAC 33:III.535 Specific Requirement 687
F.	2017 1 st Semiannual CEMS Report (07/28/2017)	2520-00027-V15	EQT 0037 SMR B Train	January 2017	The minimum degree of data availability shall be at least 90% (based on a monthly average) of the operating time of the emissions unit or activity being monitored.	NOx analyzer 72% data retention; a malfunctioning pressure switch and a leak at the filter housing in the sample box contributed to downtime.	LAC 33:III.535 Specific Requirement 687

G.	2017 1 st Semiannual CEMS Report (07/28/2017)	2520-00027-V15	EQT 0037 SMR B Train	February 2017	The minimum degree of data availability shall be at least 90% (based on a monthly average) of the operating time of the emissions unit or activity being monitored	Not reported	LAC 33:III.535 Specific Requirement 687
H.	2017 1 st Semiannual CEMS Report (07/28/2017)	2520-00027-V15	EQT 0037 SMR B Train	February 2017	The minimum degree of data availability shall be at least 90% (based on a monthly average) of the operating time of the emissions unit or activity being monitored	Not reported	LAC 33:III.535 Specific Requirement 687
I.	2017 2 nd Semiannual CEMS Report- Revised (02/15/2018)	2520-00027-V15	EQT 0094 GDU Heater	July 2017	The minimum degree of data availability shall be at least 90% (based on a monthly average) of the operating time of the emissions unit or activity being monitored	CO analyzer 86.6% data retention; A manual calibration and an auto validation were run before putting the unit back into service.	LAC 33:III.535 Specific Requirement 687
J.	2017 2 nd Semiannual CEMS Report- Revised (02/15/2018)	2520-00027-V15	EQT 0094 GDU Heater	July 2017	The minimum degree of data availability shall be at least 90% (based on a monthly average) of the operating time of the emissions unit or activity being monitored	NOx analyzer 86.6% data retention; A manual calibration and an auto validation were run before putting the unit back into service.	LAC 33:III.535, SR Specific Requirement 687
K.	2017 Annual Compliance Certification (03/29/2018)	2520-00027-V15	EQT 0029 Boiler 8-401E	Not reported	Submit reports containing the nitrogen dioxide emission rate information recorded under 40 CFR 60.49b(g).	The results of the daily CEMS drift tests were not included in the CEMS excess emissions reports.	40 CFR 60.49b(i), Specific Requirement 176

L.	2018 2 nd Semiannual CEMS Report (01/30/2019)	2520-00027-V16/17	EQT 0094 GDU Heater	12/01/2018-01/01/2019	The minimum degree of data availability shall be at least 90% (based on a monthly average) of the operating time of the emissions unit or activity being monitored.	The analyzer failed calibration due to a bad output card. NOx and CO output card was replaced, a manual calibration and an auto validation were completed before putting the analyzer back into service.	LAC 33:III.535, Specific Requirement 715
M.	2018 2 nd Semiannual Consolidated MACT Report (02/28/2019)	2520-00027-V16	EQT Thermal Oxidizer	08/01/2018-09/01/2018	The minimum degree of data availability shall be at least 90% (based on a monthly average) of the operating time of the emissions unit or activity being monitored.	Vendor supplied controller malfunctioned preventing communication to data historian.	LAC 33:III.535, Specific Requirement 724
N.	2018 2 nd Semiannual Consolidated MACT Report (02/28/2019)	2520 00027-V16	EQT 0016 FCCU No. 2 Regenerator	09/13/2018-11/13/2018 (1,464 hours)	The minimum degree of data availability shall be at least 90% (based on a monthly average) of the operating time of the emissions unit or activity being monitored.	52.3% downtime Monitor equipment malfunction or maintenance. The CPMS relies on 6 liquid flow transmitters, 3 air flow transmitters, and 2 pressure indicators. Four ultrasonic flow transmitters located on the supply lines to the Flue Gas Quench tower experienced significant signal loss due to increased catalyst loading in the scrubbing solution that attenuates the meters' signals. The increased catalyst loading has developed over time despite proper operation of the unit. Flow meter signal loss was unable to be resolved through relocation of the meters, or servicing and calibration performed by Valero and GE technicians.	LAC 33:III.535, Specific Requirement 724
				11/19/2018-11/26/2018 (166 hours)			
				12/03/2018-01/1/2019 (679 hours)			

O.	2019 1 st Semiannual CEMS Report (07/30/2019)	2520-00027-V17	EQT 0016 FCCU No. 2 Regenerator	01/01/2019-01/12/2019 (265 hours)	Shall install, operate, calibration, and maintain instruments for continuously monitoring and recoding the volumetric concentration of NO _x , SO ₂ , and CO emissions into the atmosphere.	Monitor equipment malfunction or maintenance The CPMS relies on pressure indicators, liquid flow transmitters, and air flow transmitters. Four (4) ultrasonic flow transmitters located on the supply lines to the Flue Gas Quench tower experienced significant signal loss due to increased catalyst loading in the scrubbing solution that attenuates the meters' signals. The increased catalyst loading developed over time despite proper operation of the unit. Flow meter signal loss was unable to be resolved through the relocation of the meters or servicing and calibration performed by technicians.	40 CFR 105a(f), (g), & (h), Specific Requirement 89
				02/05/2019-03/04/2019 (641 hours)			
				03/25/2019-03/27/2019 (44 hours)			
P.	2019 1 st Semiannual CEMS Report (07/30/2019)	2520-00027-V17	GRP 0015 HCU 1 st and 2 nd Stage Charge Heater	June 2019	The minimum degree of data availability shall be at least 90% (based on a monthly average) of the operating time of the emissions unit or activity being monitored.	CO data retention 82.6%; The analyzer failed calibration due to a greater than 10 percent drift on the NO _x span. An alarm was received but the alarm indicated that the analyzer was in calibration. A manual calibration and an auto validated were completed before putting the analyzer back in service. Additionally, the wording of the alarm was changed to indicate a fault.	LAC 33:III.535, Specific Requirement 715

Each failure to maintain the required records is a violation of: the applicable permit, any associated permit requirement listed above, LAC 33:III.501.C.4, La. R.S. 30:2057(A)(1) and (2).

COMPLIANCE ORDER

Based on the foregoing, the Respondent is hereby ordered:

I.

To take, immediately upon receipt of this **COMPLIANCE ORDER**, any and all steps necessary to meet and maintain compliance with the Act, the Air Quality Regulations, and all applicable permits.

II.

To submit to the Enforcement Division, within thirty (30) days after receipt of this **COMPLIANCE ORDER**, the actual heat content (in BTU/scf) of the flares for the violations cited in Paragraph VIII.X4-H5, T5-Y5, and M6-T6 of the **FINDINGS OF FACT** portion of this action.

III.

To submit to the Enforcement Division, within thirty (30) days after receipt of this **COMPLIANCE ORDER**, a summary detailing the duration of the refrigerant leak rate violation, the completion of the corrective action plan, and any noncompliance associated with the incorrect calculation rates (as applicable), as it relates to the violation cited in Paragraph VIII.Z5 of the **FINDINGS OF FACT** portion of this action.

IV.

To submit to the Enforcement Division, within thirty (30) days after receipt of this **COMPLIANCE ORDER**, a summary detailing the duration and the date compliance was achieved as it relates to the violation cited in Paragraph VIII.A6 of the **FINDINGS OF FACT** portion of this action.

V.

To submit to the Enforcement Division, within thirty (30) days after receipt of this **COMPLIANCE ORDER**, a summary detailing the duration, the number of wells, and the date(s) compliance was achieved as it relates to the violation cited in Paragraph VIII.B6 of the **FINDINGS OF FACT** portion of this action.

VI.

To submit to the Enforcement Division, within thirty (30) days after receipt of this **COMPLIANCE ORDER**, the number of missed monitoring events for the monitoring violation cited in Paragraph IX. A-D and H-J of the **FINDINGS OF FACT** portion of this action.

VII.

To submit to the Enforcement Division, within sixty (60) days after receipt of this **COMPLIANCE ORDER**, a written report that includes the quantities for the emission exceedances not reported in Paragraph XI.Z2-B7 of the **FINDINGS OF FACT** portion of this action.

VIII.

To submit to the Enforcement Division, within thirty (30) days after receipt of this **COMPLIANCE ORDER**, the root cause(s) of the data retention requirement not being met as cited in Paragraph XII.G-H of the **FINDINGS OF FACT** portion of this action.

IX.

To submit to the Enforcement Division, within thirty (30) days after receipt of this **COMPLIANCE ORDER**, a written report that includes a detailed description of the circumstances surrounding the cited violations and actions taken or to be taken to achieve compliance with the Order. Portion of this **COMPLIANCE ORDER**. This report and all other reports or information required to be submitted to the Enforcement Division by this **COMPLIANCE ORDER** shall be submitted to:

Office of Environmental Compliance
Post Office Box 4312
Baton Rouge, Louisiana 70821-4312
Attn: **Antoinette Cobb**
Re: **Enforcement Tracking No. AE-CN-20-00319**
Agency Interest No. 26003

THE RESPONDENT SHALL FURTHER BE ON NOTICE THAT:

I.

The Respondent has a right to an adjudicatory hearing on a disputed issue of material fact or of law arising from this **COMPLIANCE ORDER**. This right may be exercised by filing a written request with the Secretary no later than thirty (30) days after receipt of this **COMPLIANCE ORDER**.

II.

The request for an adjudicatory hearing shall specify the provisions of the **COMPLIANCE ORDER** on which the hearing is requested and shall briefly describe the basis for the request. This request should reference the Enforcement Tracking Number and Agency Interest Number, which are located in the upper right-hand corner of the first page of this document and should be directed to the following:

Department of Environmental Quality
Office of the Secretary
Post Office Box 4302
Baton Rouge, Louisiana 70821-4302
Attn: **Hearings Clerk, Legal Division**
Re: **Enforcement Tracking No. AE-CN-20-00319**
Agency Interest No. 26003

III.

Upon the Respondent's timely filing a request for a hearing, a hearing on the disputed issue of material fact or of law regarding this **COMPLIANCE ORDER** may be scheduled by the Secretary of the Department. The hearing shall be governed by the Act, the Administrative Procedure Act (La. R.S. 49:950, et seq.), and the Division of Administrative Law (DAL) Procedural Rules. The Department may

amend or supplement this **COMPLIANCE ORDER** prior to the hearing, after providing sufficient notice and an opportunity for the preparation of a defense for the hearing.

IV.

This **COMPLIANCE ORDER** shall become a final enforcement action unless the request for hearing is timely filed. Failure to timely request a hearing constitutes a waiver of the Respondent's right to a hearing on a disputed issue of material fact or of law under Section 2050.4 of the Act for the violation(s) described herein.

V.

The Respondent's failure to request a hearing or to file an appeal or the Respondent's withdrawal of a request for hearing on this **COMPLIANCE ORDER** shall not preclude the Respondent from contesting the findings of facts in any subsequent penalty action addressing the same violation(s), although the Respondent is estopped from objecting to this **COMPLIANCE ORDER** becoming a permanent part of its compliance history.

VI.

Civil penalties of not more than twenty-seven thousand five hundred dollars (\$27,500) for each day of violation for the violation(s) described herein may be assessed. For violations which occurred on August 15, 2004, or after, civil penalties of not more than thirty-two thousand five hundred dollars (\$32,500) may be assessed for each day of violation. The Respondent's failure or refusal to comply with this **COMPLIANCE ORDER** and the provisions herein will subject the Respondent to possible enforcement procedures under La. R.S. 30:2025, which could result in the assessment of a civil penalty in an amount of not more than fifty thousand dollars (\$50,000) for each day of continued violation or noncompliance.

VII.

For each violation described herein, the Department reserves the right to seek civil penalties in any manner allowed by law, and nothing herein shall be construed to preclude the right to seek such penalties.

NOTICE OF POTENTIAL PENALTY

I.

Pursuant to La. R.S. 30:2050.3(B), you are hereby notified that the issuance of a penalty assessment is being considered for the violation(s) described herein. Written comments may be filed regarding the violation(s) and the contemplated penalty. If you elect to submit comments, it is requested that they be submitted within ten (10) days of receipt of this notice.

II.

Prior to the issuance of additional appropriate enforcement action(s), you may request a meeting with the Department to present any mitigating circumstances concerning the violation(s). If you would like to have such a meeting, please contact Antoinette Cobb at (225) 219-3072 within ten (10) days of receipt of this **NOTICE OF POTENTIAL PENALTY**.

III.

The Department is required by La. R.S. 30:2025(E)(3)(a) to consider the gross revenues of the Respondent and the monetary benefits of noncompliance to determine whether a penalty will be assessed and the amount of such penalty. Please forward the Respondent's most current annual gross revenue statement along with a statement of the monetary benefits of noncompliance for the cited violation(s) to the above named contact person within ten (10) days of receipt of this **NOTICE OF POTENTIAL PENALTY**. Include with your statement of monetary benefits the method(s) you utilized to arrive at the sum. If you assert that no monetary benefits have been gained, you are to fully justify that statement. If the Respondent chooses not to submit the requested most current annual gross revenues statement within ten (10) days, it will be viewed by the Department as an admission that the Respondent has the ability to pay the statutory maximum penalty as outlined in La. R.S. 30:2025.

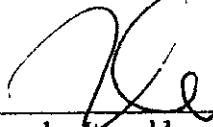
IV.

The Department assesses civil penalties based on LAC 33:I.Subpart1.Chapter7. To expedite closure of this **NOTICE OF POTENTIAL PENALTY** portion, the Respondent may offer a settlement amount to resolve any claim for civil penalties for the violation(s) described herein. The Respondent may offer a settlement amount, but the Department is under no obligation to enter into settlement negotiations. The decision to proceed with a settlement is at the discretion of the Department. The settlement offer amount may be entered on the attached "**CONSOLIDATED COMPLIANCE ORDER AND NOTICE OF POTENTIAL PENALTY REQUEST TO CLOSE**" form. The Respondent must include a justification of the offer. **DO NOT** submit payment of the offer amount with the form. The Department will review the settlement offer and notify the Respondent as to whether the offer is or is not accepted.

V.

This **CONSOLIDATED COMPLIANCE ORDER & NOTICE OF POTENTIAL PENALTY**
is effective upon receipt.


Baton Rouge, Louisiana, this 18th day of December, 2021.



Lourdes Iturralde
Assistant Secretary
Office of Environmental Compliance

Copies of a request for a hearing and/or related correspondence should be sent to:

Louisiana Department of Environmental Quality
Office of Environmental Compliance
Enforcement Division
P.O. Box 4312
Baton Rouge, LA 70821-4312
Attention: Antoinette Cobb

LOUISIANA DEPARTMENT OF ENVIRONMENTAL QUALITY OFFICE OF ENVIRONMENTAL COMPLIANCE ENFORCEMENT DIVISION POST OFFICE BOX 4312 BATON ROUGE, LOUISIANA 70821-4312		CONSOLIDATED COMPLIANCE ORDER & NOTICE OF POTENTIAL PENALTY REQUEST TO CLOSE		
Enforcement Tracking No.	AE-CN-20-00319	Contact Name	Antoinette Cobb	
Agency Interest (AI) No.	26003	Contact Phone No.	(225) 219-3072	
Alternate ID No.	2520-00027			
Respondent:	Valero Refining-New Orleans, L.L.C.	Facility Name:	St. Charles Refinery	
	c/o C T Corporation Services	Physical Location:	14902 River Road	
	Agent for Service of Process			
	3867 Plaza Tower Drive	City, State, Zip:	Norco, Louisiana 70079	
	Baton Rouge, Louisiana 70816	Parish:	St. Charles	
STATEMENT OF COMPLIANCE				
STATEMENT OF COMPLIANCE		Date Completed	Copy Attached?	
A written report was submitted in accordance with Paragraph(s) IX of the "Order" portion of the COMPLIANCE ORDER.				
All necessary documents were submitted to the Department within 30 days of receipt of the COMPLIANCE ORDER in accordance with Paragraph(s) II-VIII of the "Order" portion of the COMPLIANCE ORDER.				
All necessary documents were submitted to the Department within 45 days of receipt of the COMPLIANCE ORDER in accordance with Paragraph(s) ? of the "Order" portion of the COMPLIANCE ORDER.				
All necessary documents were submitted to the Department within 90 days of receipt of the COMPLIANCE ORDER in accordance with Paragraph(s) ? of the "Order" portion of the COMPLIANCE ORDER.				
All items in the "Findings of Fact" portion of the COMPLIANCE ORDER were addressed and the facility is being operated to meet and maintain the requirements of the "Order" portion of the COMPLIANCE ORDER. Final compliance was achieved as of:				
SETTLEMENT OFFER (OPTIONAL)				
<i>(check the applicable option)</i>				
_____	The Respondent is not interested in entering into settlement negotiations with the Department with the understanding that the Department has the right to assess civil penalties based on LAC 33:I.Subpart1.Chapter7.			
_____	In order to resolve any claim for civil penalties for the violations in NOTICE OF POTENTIAL PENALTY (AE-CN-20-00319), the Respondent is interested in entering into settlement negotiations with the Department and would like to set up a meeting to discuss settlement procedures.			
_____	In order to resolve any claim for civil penalties for the violations in NOTICE OF POTENTIAL PENALTY (AE-CN-20-0319), the Respondent is interested in entering into settlement negotiations with the Department and offers to pay \$ _____ which shall include LDEQ enforcement costs and any monetary benefit of non-compliance. <ul style="list-style-type: none"> • Monetary component = \$ _____ • Beneficial Environmental Project (BEP) component (optional)= \$ _____ • DO NOT SUBMIT PAYMENT OF THE OFFER WITH THIS FORM- the Department will review the settlement offer and notify the Respondent as to whether the offer is or is not accepted. 			
	The Respondent has reviewed the violations noted in NOTICE OF POTENTIAL PENALTY (AE-CN-20-00319) and has attached a justification of its offer and a description of any BEPs if included in settlement offer.			

CERTIFICATION STATEMENT

I certify, under provisions in Louisiana and United States law that provide criminal penalties for false statements, that based on information and belief formed after reasonable inquiry, the statements and information attached and the compliance statement above, are true, accurate, and complete. I also certify that I do not owe outstanding fees or penalties to the Department for this facility or any other facility I own or operate. I further certify that I am either the Respondent or an authorized representative of the Respondent.

Respondent's Signature	Respondent's Printed Name	Respondent's Title
Respondent's Physical Address	Respondent's Phone #	Date

MAIL COMPLETED DOCUMENT TO THE ADDRESS BELOW:

Louisiana Department of Environmental Quality
 Office of Environmental Compliance
 Enforcement Division
 P.O. Box 4312
 Baton Rouge, LA 70821
 Attn: Antoinette Cobb