Valero

October 30, 2023

CERTIFIED: 7016 2710 0000 3305 6498

Department of Environmental Quality
Office of Environmental Compliance
Enforcement Division
P.O. Box 4312
Baton Rouge, LA 70821-4312

Re: NSPS Excess Emissions & CEM Performance Report – 3rd Quarter 2023
Valero Refining - Meraux LLC, Agency Interest # 1238
2235 Jacob Drive, St. Bernard Parish, Meraux, LA
Title V Permit Numbers: 2500-00001-V19

Gentlemen,

Valero Refining – Meraux LLC is submitting this Excess Emissions and Monitoring Systems Reports, per LAC 33:III, Chapter 30, 40 CFR 60.7(c), 40 CFR 60.108a(d) and 40 CFR 63.1575 for the Third Quarter 2023.

For this reporting period, no CEMS had excess emissions greater than 1% of the total operating time and no CEMS had downtime greater than 5% of the total operating time.

Enclosed are the Data Assessment Reports for the appropriate CEMs and information required by NSPS Subpart Ja, 40 CFR 60.108a(d). Subpart Ja root cause and corrective action analysis reports that were completed prior to the date of this submittal are included. If the 45 day deadline extends past the date of this submittal, those reports will be included in next quarter's submittal. Updates to previously submitted Subpart Ja root cause and corrective action analysis reports are also included if corrective actions were completed in this reporting period.

Should you have any questions regarding this submission, please contact Mr. JC Martin at (504) 271-4141.

I certify, based on information and belief formed after reasonable inquiry, the statements and information in this document are true, accurate, and complete.

Regards,

Leslie Sullivan 10/26/23
Leslie Sullivan
Vice President and General Manager
Meraux Refinery

Enclosures
cc: Mr. Jeff Leonick, LDEQ SE Regional Office, New Orleans, LA

SUMMARY REPORT - GASEOUS AND OPACITY EXCESS EMISSIONS AND MONITORING SYSTEMS PERFORMANCE

(per 40 CFR 60.7(d) and 60.108a(d))

Pollutant: **SO_2**

Applicable NSPS Subpart: Ja

Reporting period dates: 7/1/23 to 9/30/23

Date submitted: 10/30/23

Company: Valero Refining - Meraux LLC

Address: 2500 East St. Bernard Highway, Meraux, LA 70075

Emission Limitation: SO_2 corrected to 0% O_2 shall not exceed 250 ppm on a 12-hour rolling average

Monitor Manufacturer and Model No.: Ametek 9900 (SO_2 and O_2)

Date of Latest CMS Certification or Audit: CGA on 9/25/23

Process Unit(s) Description: #2 SRU Incinerator (EPN 1-93, EQT 0019)

Total source operating time in reporting period: 2,208 hours

Emissions Data Summary[1]	
1. Duration of excess emissions in reporting period due to:	*(hours)*
a. Startup/shutdown	0
b. Control equipment problems	0
c. Process problems	0
d. Other known causes	0
e. Unknown causes	0
2. Total duration of excess emission	0
3. Total duration of excess emissions x (100) [Total source operating time][2]	0.0 %

CMS Performance Summary[1]	
1. CMS downtime in reporting period due to:	*(hours)*
a. Monitor equipment malfunctions	0
b. Non-Monitor equipment malfunctions	0
c. Quality assurance calibration	0
d. Other known causes	0
e. Unknown causes	0
2. Total CMS Downtime	0
3. Total duration of CMS Downtime x (100) [Total source operating time][2]	0.0 %

[1] For opacity, record all times in minutes. For gases, record all times in hours.

[2] For the reporting period: If the total duration of excess emissions is 1 percent or greater of the total operating time or the total CMS downtime is 5 percent or greater of the total operating time, both the summary report form and the excess emission report described in §60.7(c) shall be submitted.

SUMMARY REPORT - GASEOUS AND OPACITY EXCESS EMISSIONS AND MONITORING SYSTEMS PERFORMANCE

(per 40 CFR 60.7(d) and 60.108a(d))

Pollutant: SO_2

Applicable NSPS Subpart: Ja

Reporting period dates: 7/1/23 to 9/30/23

Date submitted: 10/30/23

Company: Valero Refining - Meraux LLC

Address: 2500 East St. Bernard Highway, Meraux, LA 70075

Emission Limitation: SO_2 corrected to 0% O_2 shall not exceed 250 ppm on a 12-hour rolling average

Monitor Manufacturer and Model No.: ABB AO2000 Uras 26 (SO_2)/ Magnos 206 (O_2)

Date of Latest CMS Certification or Audit: CGA on 8/17/23

Process Unit(s) Description: #3 SRU Incinerator (EPN 5-00, EQT 0079)

Total source operating time in reporting period: 2,208 hours

Emissions Data Summary[1]	
1. Duration of excess emissions in reporting period due to:	*(hours)*
a. Startup/shutdown	0
b. Control equipment problems	0
c. Process problems	0
d. Other known causes	0
e. Unknown causes	0
2. Total duration of excess emission	0
3. Total duration of excess emissions x (100) [Total source operating time][2]	0.0 %

CMS Performance Summary[1]	
1. CMS downtime in reporting period due to:	*(hours)*
a. Monitor equipment malfunctions	0
b. Non-Monitor equipment malfunctions	0
c. Quality assurance calibration	32
d. Other known causes	7
e. Unknown causes	0
2. Total CMS Downtime	39
3. Total duration of CMS Downtime x (100) [Total source operating time][2]	1.8 %

[1] For opacity, record all times in minutes. For gases, record all times in hours.

[2] For the reporting period: If the total duration of excess emissions is 1 percent or greater of the total operating time or the total CMS downtime is 5 percent or greater of the total operating time, both the summary report form and the excess emission report described in §60.7(c) shall be submitted.

SUMMARY REPORT - GASEOUS AND OPACITY EXCESS EMISSIONS AND MONITORING SYSTEMS PERFORMANCE

(per 40 CFR 60.7(d))

Pollutant: **H_2S**

Applicable NSPS Subpart: J

Reporting period dates: 7/1/23 to 9/30/23

Date submitted: 10/30/23

Company: Valero Refining - Meraux LLC

Address: 2500 East St. Bernard Highway, Meraux, LA 70075

Emission Limitation: Hydrogen Sulfide shall not exceed 162 ppm on a 3-hour rolling average

Monitor Manufacturer and Model No.: Ametek 4661

Date of Latest CMS Certification or Audit: CGA on 9/25/23

Process Unit(s) Description: Area 1 Fuel Drum for Boiler TB-01 (EPN 1-06, EQT 0010); Boiler B-7 (EPN 1-07, EQT 0011); MDH Product and Fractionator Heaters (EPN 2-92, EQT 0033); DHT Charge Heater (EPN 5-73, EQT 0058)

Total source operating time in reporting period: EQT 0010-2,075 hours, EQT 0011-2,208 hours, EQT 0033-2,208 hours, EQT 0058-2,087 hours

Emissions Data Summary[1]	
1. Duration of excess emissions in reporting period due to:	*All EQT's (hours)*
a. Startup/shutdown	0
b. Control equipment problems	0
c. Process problems	0
d. Other known causes	0
e. Unknown causes	0
2. Total duration of excess emission	0
3. Total duration of excess emissions x (100) [Total source operating time][2]	0.0 %

CMS Performance Summary[1]			
1. CMS downtime in reporting period due to:	*EQT's 0010, (hours)*	*EQT's 0011, 0033 (hours)*	*EQT 0058 (hours)*
a. Monitor equipment malfunctions	7	8	0
b. Non-Monitor equipment malfunctions	0	0	0
c. Quality assurance calibration	0	0	0
d. Other known causes	10	10	10
e. Unknown causes	0	0	0
2. Total CMS Downtime	17	18	10
3. Total duration of CMS Downtime x (100) [Total source operating time][2]	0.8 %	0.8 %	0.5 %

[1] For opacity, record all times in minutes. For gases, record all times in hours.

[2] For the reporting period: If the total duration of excess emissions is 1 percent or greater of the total operating time or the total CMS downtime is 5 percent or greater of the total operating time, both the summary report form and the excess emission report described in §60.7(c) shall be submitted. (Percentage based on the lowest operating time.)

SUMMARY REPORT - GASEOUS AND OPACITY EXCESS EMISSIONS AND MONITORING SYSTEMS PERFORMANCE

(per 40 CFR 60.7(d))

Pollutant: H_2S

Applicable NSPS Subpart: J

Reporting period dates: 7/1/23 to 9/30/23

Date submitted: 10/30/23

Company: Valero Refining - Meraux LLC

Address: 2500 East St. Bernard Highway, Meraux, LA 70075

Emission Limitation: Subpart J: Hydrogen Sulfide shall not exceed 162 ppm on a 3-hour rolling average

Monitor Manufacturer and Model No.: Ametek 4661

Date of Latest CMS Certification or Audit: CGA on 9/25/23

Process Unit(s) Description: Area 2 Fuel Drum for: Vacuum Heater (EPN 1-76, EQT 0013); No.1 Crude Heater (EPN 12-72A, EQT 0022); NHT Debut Reboiler (EPN 15-72, EQT 0024); NHT Depent Reboiler (EPN 16-72 EQT 0027); Platformer Charge Heater (EPN 17-72 a,b,c, EQT 0028); Platformer Debut Reboiler (EPN 19-72, EQT 0029); ROSE Heater (EPN 1-80, EQT 0014)

Total source operating time in reporting period: EQT 0013-2,208 hours; EQT 0022-2,207 hours; EQT 0024-2,058 hours; EQT 0027-2,051 hours; EQT 0028-2,059 hours; EQT 0029-2,035 hours; EQT 0014-2,208 hours

Emissions Data Summary[1]	
1. Duration of excess emissions in reporting period due to:	*All EQT's (hours)*
a. Startup/shutdown	0
b. Control equipment problems	0
c. Process problems	0
d. Other known causes	0
e. Unknown causes	0
2. Total duration of excess emission	0
3. Total duration of excess emissions x (100) [Total source operating time][2]	0.0 %

CMS Performance Summary[1]	
1. CMS downtime in reporting period due to:	*All EQT's (hours)*
a. Monitor equipment malfunctions	0
b. Non-Monitor equipment malfunctions	0
c. Quality assurance calibration	0
d. Other known causes	0
e. Unknown causes	0
2. Total CMS Downtime	0
3. Total duration of CMS Downtime x (100) [Total source operating time][2]	0.0 %

[1] For opacity, record all times in minutes. For gases, record all times in hours.

[2] For the reporting period: If the total duration of excess emissions is 1 percent or greater of the total operating time or the total CMS downtime is 5 percent or greater of the total operating time, both the summary report form and the excess emission report described in §60.7(c) shall be submitted.

SUMMARY REPORT - GASEOUS AND OPACITY EXCESS EMISSIONS AND MONITORING SYSTEMS PERFORMANCE

(per 40 CFR 60.7(d) and 60.108a(d))

Pollutant: **H_2S**

Applicable NSPS Subpart: Ja

Reporting period dates: 7/1/23 to 9/30/23

Date submitted: 10/30/23

Company: Valero Refining - Meraux LLC

Address: 2500 East St. Bernard Highway, Meraux, LA 70075

Emission Limitation: Subpart Ja: Hydrogen Sulfide shall not exceed 162 ppm on a 3-hour rolling average and 60 ppm on a 365-day rolling average

Monitor Manufacturer and Model No.: Ametek 4661

Date of Latest CMS Certification or Audit: CGA on 9/25/23

Process Unit(s) Description: Area 2 Fuel Drum for: Benzene Recovery Unit Reboiler (EPN 1-09, EQT 0127); NHT Charge Heater (EPN 1-17, EQT 0159)

Total source operating time in reporting period: EQT 0127-1,919 hours; EQT 0159-2,069 hours

Emissions Data Summary[1]	
1. Duration of excess emissions in reporting period due to:	*All EQT's (hours)*
a. Startup/shutdown	0
b. Control equipment problems	0
c. Process problems	0
d. Other known causes	0
e. Unknown causes	0
2. Total duration of excess emission	0
3. Total duration of excess emissions x (100) [Total source operating time][2]	0.0 %

CMS Performance Summary[1]		
1. CMS downtime in reporting period due to:	*EQT 0127 (hours)*	*EQT 0159 (hours)*
a. Monitor equipment malfunctions	0	0
b. Non-Monitor equipment malfunctions	0	0
c. Quality assurance calibration	0	0
d. Other known causes	0	0
e. Unknown causes	0	0
2. Total CMS Downtime	0	0
3. Total duration of CMS Downtime x (100) [Total source operating time][2]	0.0 %	0.0 %

[1] For opacity, record all times in minutes. For gases, record all times in hours.

[2] For the reporting period: If the total duration of excess emissions is 1 percent or greater of the total operating time or the total CMS downtime is 5 percent or greater of the total operating time, both the summary report form and the excess emission report described in §60.7(c) shall be submitted.

SUMMARY REPORT - GASEOUS AND OPACITY EXCESS EMISSIONS AND MONITORING SYSTEMS PERFORMANCE

(per 40 CFR 60.7(d))

Pollutant: **H_2S**

Applicable NSPS Subpart: J

Reporting period dates: 7/1/23 to 9/30/23

Date submitted: 10/30/23

Company: Valero Refining - Meraux LLC

Address: 2500 East St. Bernard Highway, Meraux, LA 70075

Emission Limitation: Hydrogen Sulfide shall not exceed 162 ppm on a 3-hour rolling average

Monitor Manufacturer and Model No.: Ametek 4661

Date of Latest CMS Certification or Audit: CGA on 9/25/23

Process Unit(s) Description: Area 4 Fuel Drum for Merox Disulfide Separator to Platformer Charge Heater

Total source operating time in reporting period: 0 hours

Emissions Data Summary[1]	
1. Duration of excess emissions in reporting period due to:	*(hours)*
a. Startup/shutdown	0
b. Control equipment problems	0
c. Process problems	0
d. Other known causes	0
e. Unknown causes	0
2. Total duration of excess emission	0
3. Total duration of excess emissions x (100) [Total source operating time][2]	0.0 %

CMS Performance Summary[1]	
1. CMS downtime in reporting period due to:	*(hours)*
a. Monitor equipment malfunctions	0
b. Non-Monitor equipment malfunctions	0
c. Quality assurance calibration	0
d. Other known causes	0
e. Unknown causes	0
2. Total CMS Downtime	0
3. Total duration of CMS Downtime x (100) [Total source operating time][2]	0.0 %

[1] For opacity, record all times in minutes. For gases, record all times in hours.

[2] For the reporting period: If the total duration of excess emissions is 1 percent or greater of the total operating time or the total CMS downtime is 5 percent or greater of the total operating time, both the summary report form and the excess emission report described in §60.7(c) shall be submitted.

SUMMARY REPORT - GASEOUS AND OPACITY EXCESS EMISSIONS AND MONITORING SYSTEMS PERFORMANCE

(per 40 CFR 60.7(d))

Pollutant: **H_2S**

Applicable NSPS Subpart: J

Reporting period dates: 7/1/23 to 9/30/23

Date submitted: 10/30/23

Company: Valero Refining - Meraux LLC

Address: 2500 East St. Bernard Highway, Meraux, LA 70075

Emission Limitation: Hydrogen Sulfide shall not exceed 162 ppm on a 3-hour rolling average

Monitor Manufacturer and Model No.: Ametek 4661

Date of Latest CMS Certification or Audit: CGA on 9/25/23

Process Unit(s) Description: Area 6 Fuel Drum for Hydrocracker & Hydrotreater Charge Heaters (EPN 1-00, EQT 0009)

Total source operating time in reporting period: 2,208 hours

Emissions Data Summary[1]	
1. Duration of excess emissions in reporting period due to:	*(hours)*
a. Startup/shutdown	0
b. Control equipment problems	0
c. Process problems	3
d. Other known causes	0
e. Unknown causes	0
2. Total duration of excess emission	3
3. Total duration of excess emissions x (100) [Total source operating time][2]	0.1 %

CMS Performance Summary[1]	
1. CMS downtime in reporting period due to:	*(hours)*
a. Monitor equipment malfunctions	0
b. Non-Monitor equipment malfunctions	0
c. Quality assurance calibration	0
d. Other known causes	5
e. Unknown causes	0
2. Total CMS Downtime	5
3. Total duration of CMS Downtime x (100) [Total source operating time][2]	0.2 %

[1] For opacity, record all times in minutes. For gases, record all times in hours.

[2] For the reporting period: If the total duration of excess emissions is 1 percent or greater of the total operating time or the total CMS downtime is 5 percent or greater of the total operating time, both the summary report form and the excess emission report described in §60.7(c) shall be submitted.

SUMMARY REPORT - GASEOUS AND OPACITY EXCESS EMISSIONS AND MONITORING SYSTEMS PERFORMANCE

(per 40 CFR 60.7(d))

Pollutant: **H_2S**

Applicable NSPS Subpart: J

Reporting period dates: 7/1/23 to 9/30/23

Date submitted: 10/30/23

Company: Valero Refining - Meraux LLC

Address: 2500 East St. Bernard Highway, Meraux, LA 70075

Emission Limitation: Hydrogen Sulfide shall not exceed 162 ppm on a 3-hour rolling average

Monitor Manufacturer and Model No.: Ametek 4661

Date of Latest CMS Certification or Audit: CGA on 9/25/23

Process Unit(s) Description: Area 6 Fuel Drum for Boiler B-5 (EPN 2-00, EQT 0030) and Boiler B-6 (EPN 3-00, EQT 0048)

Total source operating time in reporting period: EQT 0030-2,197 hours; EQT 0048-0 hours[3]

Emissions Data Summary[1]		
1. Duration of excess emissions in reporting period due to:	*EQT 0030 (hours)*	*EQT 0048 (hours)*
a. Startup/shutdown	0	0
b. Control equipment problems	0	0
c. Process problems	0	0
d. Other known causes	0	0
e. Unknown causes	0	0
2. Total duration of excess emission	0	0
3. Total duration of excess emissions x (100) [Total source operating time][2]	0.0 %	0.0 %

CMS Performance Summary[1]		
1. CMS downtime in reporting period due to:	*EQT 0030 (hours)*	*EQT 0048 (hours)*
a. Monitor equipment malfunctions	0	0
b. Non-Monitor equipment malfunctions	0	0
c. Quality assurance calibration	0	0
d. Other known causes	0	0
e. Unknown causes	0	0
2. Total CMS Downtime	0	0
3. Total duration of CMS Downtime x (100) [Total source operating time][2]	0.0 %	0.0 %

[1] For opacity, record all times in minutes. For gases, record all times in hours.

[2] For the reporting period: If the total duration of excess emissions is 1 percent or greater of the total operating time or the total CMS downtime is 5 percent or greater of the total operating time, both the summary report form and the excess emission report described in §60.7(c) shall be submitted.

[3] Boiler B-6 ran on purchased natural gas for the entire Quarter.

SUMMARY REPORT - GASEOUS AND OPACITY EXCESS EMISSIONS AND MONITORING SYSTEMS PERFORMANCE

(per 40 CFR 60.7(d))

Pollutant: NO_x

Applicable NSPS Subpart: Db

Reporting period dates: 7/1/23 to 9/30/23

Date submitted: 10/30/23

Company: Valero Refining - Meraux LLC

Address: 2500 East St. Bernard Highway, Meraux, LA 70075

Emission Limitation: Nitrogen Oxide shall not exceed 0.1 pound/MMBtu on a 30-day rolling average

Monitor Manufacturer and Model No.: ABB AO2000 Uras 26 (NO_x)/ Magnos 28 (O_2)

Date of Latest CMS Certification or Audit: CGA on 8/17/23

Process Unit(s) Description: Boiler B-5 (EPN 2-00, EQT 0030)

Total source operating time in reporting period: 2,197 hours

Emissions Data Summary[1]	
1. Duration of excess emissions in reporting period due to:	*(hours)*
a. Startup/shutdown	0
b. Control equipment problems	0
c. Process problems	0
d. Other known causes	0
e. Unknown causes	0
2. Total duration of excess emission	0
3. Total duration of excess emissions x (100) [Total source operating time][2]	0.0 %

CMS Performance Summary[1]	
1. CMS downtime in reporting period due to:	*(hours)*
a. Monitor equipment malfunctions	0
b. Non-Monitor equipment malfunctions	0
c. Quality assurance calibration	1
d. Other known causes	0
e. Unknown causes	0
2. Total CMS Downtime	1
3. Total duration of CMS Downtime x (100) [Total source operating time][2]	0.0 %

[1] For opacity, record all times in minutes. For gases, record all times in hours.

[2] For the reporting period: If the total duration of excess emissions is 1 percent or greater of the total operating time or the total CMS downtime is 5 percent or greater of the total operating time, both the summary report form and the excess emission report described in §60.7(c) shall be submitted.

SUMMARY REPORT - GASEOUS AND OPACITY EXCESS EMISSIONS AND MONITORING SYSTEMS PERFORMANCE

(per 40 CFR 60.7(d))

Pollutant: **NO_x**

Applicable NSPS Subpart: Db

Reporting period dates: 7/1/23 to 9/30/23

Date submitted: 10/30/23

Company: Valero Refining - Meraux LLC

Address: 2500 East St. Bernard Highway, Meraux, LA 70075

Emission Limitation: Nitrogen Oxide shall not exceed 0.1 pound/MMBtu on a 30-day rolling average

Monitor Manufacturer and Model No.: ABB AO2000 Uras 26 (NO_x)/ Magnos 28 (O_2)

Date of Latest CMS Certification or Audit: CGA on 8/17/23

Process Unit(s) Description: Boiler B-6 (EPN 3-00, EQT 0048)

Total source operating time in reporting period: 2,208 hours

Emissions Data Summary[1]	
1. Duration of excess emissions in reporting period due to:	*(hours)*
a. Startup/shutdown	0
b. Control equipment problems	0
c. Process problems	0
d. Other known causes	0
e. Unknown causes	0
2. Total duration of excess emission	0
3. Total duration of excess emissions x (100) [Total source operating time][2]	0.0 %

CMS Performance Summary[1]	
1. CMS downtime in reporting period due to:	*(hours)*
a. Monitor equipment malfunctions	0
b. Non-Monitor equipment malfunctions	0
c. Quality assurance calibration	1
d. Other known causes	0
e. Unknown causes	0
2. Total CMS Downtime	1
3. Total duration of CMS Downtime x (100) [Total source operating time][2]	0.0 %

[1] For opacity, record all times in minutes. For gases, record all times in hours.

[2] For the reporting period: If the total duration of excess emissions is 1 percent or greater of the total operating time or the total CMS downtime is 5 percent or greater of the total operating time, both the summary report form and the excess emission report described in §60.7(c) shall be submitted.

SUMMARY REPORT - GASEOUS AND OPACITY EXCESS EMISSIONS AND MONITORING SYSTEMS PERFORMANCE

(per 40 CFR 60.7(d))

Pollutant: **NO_x**

Applicable NSPS Subpart: Db

Reporting period dates: 7/1/23 to 9/30/23

Date submitted: 10/30/23

Company: Valero Refining - Meraux LLC

Address: 2500 East St. Bernard Highway, Meraux, LA 70075

Emission Limitation: Nitrogen Oxide shall not exceed 0.1 pound/MMBtu on a 30-day rolling average

Monitor Manufacturer and Model No.: Thermo Environmental 42i (NO_x)/(O_2)

Date of Latest CMS Certification or Audit: CGA on 9/25/23

Process Unit(s) Description: Boiler TB-01 (EPN 1-06, EQT 0010)

Total source operating time in reporting period: 2,075 hours

Emissions Data Summary[1]	
1. Duration of excess emissions in reporting period due to:	*(hours)*
a. Startup/shutdown	0
b. Control equipment problems	0
c. Process problems	0
d. Other known causes	0
e. Unknown causes	0
2. Total duration of excess emission	0
3. Total duration of excess emissions x (100) [Total source operating time][2]	0.0 %

CMS Performance Summary[1]	
1. CMS downtime in reporting period due to:	*(hours)*
a. Monitor equipment malfunctions	16
b. Non-Monitor equipment malfunctions	0
c. Quality assurance calibration	0
d. Other known causes	0
e. Unknown causes	0
2. Total CMS Downtime	16
3. Total duration of CMS Downtime x (100) [Total source operating time][2]	0.8 %

[1] For opacity, record all times in minutes. For gases, record all times in hours.

[2] For the reporting period: If the total duration of excess emissions is 1 percent or greater of the total operating time or the total CMS downtime is 5 percent or greater of the total operating time, both the summary report form and the excess emission report described in §60.7(c) shall be submitted.

SUMMARY REPORT - GASEOUS AND OPACITY EXCESS EMISSIONS AND MONITORING SYSTEMS PERFORMANCE

(per 40 CFR 60.7(d) and 60.108a(d))

Pollutant: NO_x

Applicable NSPS Subpart: Ja

Reporting period dates: 7/1/23 to 9/30/23

Date submitted: 10/30/23

Company: Valero Refining - Meraux LLC

Address: 2500 East St. Bernard Highway, Meraux, LA 70075

Emission Limitation: Nitrogen Oxide corrected to 0% O_2 shall not exceed 40 ppm on a 30-day rolling average

Monitor Manufacturer and Model No.: Thermo Environmental 42i (NOx)/(O_2)

Date of Latest CMS Certification or Audit: CGA on 7/25/23

Process Unit(s) Description: Benzene Recovery Unit Reboiler (EPN 1-09, EQT 0127)

Total source operating time in reporting period: 1,919 hours

Emissions Data Summary[1]	
1. Duration of excess emissions in reporting period due to:	*(hours)*
a. Startup/shutdown	0
b. Control equipment problems	0
c. Process problems	0
d. Other known causes	0
e. Unknown causes	0
2. Total duration of excess emission	0
3. Total duration of excess emissions x (100) [Total source operating time][2]	0.0 %

CMS Performance Summary[1]	
1. CMS downtime in reporting period due to:	*(hours)*
a. Monitor equipment malfunctions	2
b. Non-Monitor equipment malfunctions	0
c. Quality assurance calibration	62
d. Other known causes	0
e. Unknown causes	0
2. Total CMS Downtime	64
3. Total duration of CMS Downtime x (100) [Total source operating time][2]	3.3 %

[1] For opacity, record all times in minutes. For gases, record all times in hours.

[2] For the reporting period: If the total duration of excess emissions is 1 percent or greater of the total operating time or the total CMS downtime is 5 percent or greater of the total operating time, both the summary report form and the excess emission report described in §60.7(c) shall be submitted.

SUMMARY REPORT - GASEOUS AND OPACITY EXCESS EMISSIONS AND MONITORING SYSTEMS PERFORMANCE

(per 40 CFR 60.7(d) and 60.108a(d))

Pollutant: **NO_x**

Applicable NSPS Subpart: Ja

Reporting period dates: 7/1/23 to 9/30/23

Date submitted: 10/30/23

Company: Valero Refining - Meraux LLC

Address: 2500 East St. Bernard Highway, Meraux, LA 70075

Emission Limitation: Nitrogen Oxide corrected to 0% O_2 shall not exceed 40 ppm on a 30-day rolling average

Monitor Manufacturer and Model No.: ABB AO2000 Uras 26 (NO_x)/ Magnos 206 (O_2)

Date of Latest CMS Certification or Audit: CGA on 8/22/23

Process Unit(s) Description: NHT Charge Heater (EPN 1-17, EQT 0159)

Total source operating time in reporting period: 2,038 hours

Emissions Data Summary[1]	
1. Duration of excess emissions in reporting period due to:	*(hours)*
a. Startup/shutdown	0
b. Control equipment problems	0
c. Process problems	0
d. Other known causes	0
e. Unknown causes	0
2. Total duration of excess emission	0
3. Total duration of excess emissions x (100) [Total source operating time][2]	0.0 %

CMS Performance Summary[1]	
1. CMS downtime in reporting period due to:	*(hours)*
a. Monitor equipment malfunctions	0
b. Non-Monitor equipment malfunctions	0
c. Quality assurance calibration	2
d. Other known causes	0
e. Unknown causes	0
2. Total CMS Downtime	2
3. Total duration of CMS Downtime x (100) [Total source operating time][2]	0.1 %

[1] For opacity, record all times in minutes. For gases, record all times in hours.

[2] For the reporting period: If the total duration of excess emissions is 1 percent or greater of the total operating time or the total CMS downtime is 5 percent or greater of the total operating time, both the summary report form and the excess emission report described in §60.7(c) shall be submitted.

SUMMARY REPORT - GASEOUS AND OPACITY EXCESS EMISSIONS AND MONITORING SYSTEMS PERFORMANCE

(per 40 CFR 60.7(d) and 60.108a(d))

Pollutant: **NO_x**

Applicable NSPS Subpart: N/A (Required by Consent Decree: 3:10-cv-00563-bbc, Paragraph 36.a)

Reporting period dates: 7/1/23 to 9/30/23

Date submitted: 10/30/23

Company: Valero Refining - Meraux LLC

Address: 2500 East St. Bernard Highway, Meraux, LA 70075

Emission Limitation: None

Monitor Manufacturer and Model No.: ABB Limas11 (NO_x), Magnos27 (O_2)

Date of Latest CMS Certification or Audit: CGA on 8/17/23

Process Unit(s) Description: No.1 Crude Heater (EPN 12-72A, EQT 0022)

Total source operating time in reporting period: 2,207 hours

Emissions Data Summary[1]	
1. Duration of excess emissions in reporting period due to:	*(hours)*
a. Startup/shutdown	0
b. Control equipment problems	0
c. Process problems	0
d. Other known causes	0
e. Unknown causes	0
2. Total duration of excess emission	0
3. Total duration of excess emissions x (100) [Total source operating time][2]	0.0 %

CMS Performance Summary[1]	
1. CMS downtime in reporting period due to:	*(hours)*
a. Monitor equipment malfunctions	0
b. Non-Monitor equipment malfunctions	0
c. Quality assurance calibration	1
d. Other known causes	0
e. Unknown causes	0
2. Total CMS Downtime	1
3. Total duration of CMS Downtime x (100) [Total source operating time][2]	0.0 %

[1] For opacity, record all times in minutes. For gases, record all times in hours.

[2] For the reporting period: If the total duration of excess emissions is 1 percent or greater of the total operating time or the total CMS downtime is 5 percent or greater of the total operating time, both the summary report form and the excess emission report described in §60.7(c) shall be submitted.

SUMMARY REPORT - GASEOUS AND OPACITY EXCESS EMISSIONS AND MONITORING SYSTEMS PERFORMANCE

(per 40 CFR 60.7(d) and 60.108a(d))

Pollutant: NO_x

Applicable NSPS Subpart: N/A (Required by Consent Decree: 3:10-cv-00563-bbc, Paragraph 36.a)

Reporting period dates: 7/1/23 to 9/30/23

Date submitted: 10/30/23

Company: Valero Refining - Meraux LLC

Address: 2500 East St. Bernard Highway, Meraux, LA 70075

Emission Limitation: None

Monitor Manufacturer and Model No.: ABB AO2000 Uras 26 (NO_x)/ Magnos 206 (O_2)

Date of Latest CMS Certification or Audit: CGA on 8/22/23

Process Unit(s) Description: MDH Product and Fractionator Heaters (EPN 2-92, EQT 0033)

Total source operating time in reporting period: 2,208 hours

Emissions Data Summary[1]	
1. Duration of excess emissions in reporting period due to:	*(hours)*
a. Startup/shutdown	0
b. Control equipment problems	0
c. Process problems	0
d. Other known causes	0
e. Unknown causes	0
2. Total duration of excess emission	0
3. Total duration of excess emissions x (100) [Total source operating time][2]	0.0 %

CMS Performance Summary[1]	
1. CMS downtime in reporting period due to:	*(hours)*
a. Monitor equipment malfunctions	0
b. Non-Monitor equipment malfunctions	0
c. Quality assurance calibration	1
d. Other known causes	1
e. Unknown causes	0
2. Total CMS Downtime	2
3. Total duration of CMS Downtime x (100) [Total source operating time][2]	0.1 %

[1] For opacity, record all times in minutes. For gases, record all times in hours.

[2] For the reporting period: If the total duration of excess emissions is 1 percent or greater of the total operating time or the total CMS downtime is 5 percent or greater of the total operating time, both the summary report form and the excess emission report described in §60.7(c) shall be submitted.

SUMMARY REPORT - GASEOUS AND OPACITY EXCESS EMISSIONS AND MONITORING SYSTEMS PERFORMANCE

(per 40 CFR 60.7(d) and 60.108a(d))

Pollutant: **H_2S**

Applicable NSPS Subpart: Ja

Reporting period dates: 7/1/23 to 9/30/23

Date submitted: 10/30/23

Company: Valero Refining - Meraux LLC

Address: 2500 East St. Bernard Highway, Meraux, LA 70075

Emission Limitation: Hydrogen Sulfide shall not exceed 162 ppm on a 3-hour rolling average

Monitor Manufacturer and Model No.: Ametek 5100

Date of Latest CMS Certification or Audit: CGA on 8/23/23

Process Unit(s) Description: North Flare Stack (EPN 20-72, EQT 0035), North Flare Header

Total source operating time in reporting period: 2,208 hours

Emissions Data Summary[1]	
1. Duration of excess emissions in reporting period due to:	*(hours)*
a. Startup/shutdown	0
b. Control equipment problems	0
c. Process problems	0
d. Other known causes	0
e. Unknown causes	0
2. Total duration of excess emission	0
3. Total duration of excess emissions x (100) [Total source operating time][2]	0.0 %

CMS Performance Summary[1]	
1. CMS downtime in reporting period due to:	*(hours)*
a. Monitor equipment malfunctions	0
b. Non-Monitor equipment malfunctions	0
c. Quality assurance calibration	2
d. Other known causes	0
e. Unknown causes	0
2. Total CMS Downtime	2
3. Total duration of CMS Downtime x (100) [Total source operating time][2]	0.1 %

[1] For opacity, record all times in minutes. For gases, record all times in hours.

[2] For the reporting period: If the total duration of excess emissions is 1 percent or greater of the total operating time or the total CMS downtime is 5 percent or greater of the total operating time, both the summary report form and the excess emission report described in §60.7(c) shall be submitted.

SUMMARY REPORT - GASEOUS AND OPACITY EXCESS EMISSIONS AND MONITORING SYSTEMS PERFORMANCE

(per 40 CFR 60.7(d) and 60.108a(d))

Pollutant: **H_2S**

Applicable NSPS Subpart: Ja

Reporting period dates: 7/1/23 to 9/30/23

Date submitted: 10/30/23

Company: Valero Refining - Meraux LLC

Address: 2500 East St. Bernard Highway, Meraux, LA 70075

Emission Limitation: Hydrogen Sulfide shall not exceed 162 ppm on a 3-hour rolling average

Monitor Manufacturer and Model No.: Ametek 5100

Date of Latest CMS Certification or Audit: CGA on 8/22/23

Process Unit(s) Description: North Flare Stack (EPN 20-72, EQT 0035), Hydrocracker Flare Header

Total source operating time in reporting period: 2,208 hours

Emissions Data Summary[1]	
1. Duration of excess emissions in reporting period due to:	*(hours)*
a. Startup/shutdown	0
b. Control equipment problems	0
c. Process problems	0
d. Other known causes	0
e. Unknown causes	0
2. Total duration of excess emission	0
3. Total duration of excess emissions x (100) [Total source operating time][2]	0.0 %

CMS Performance Summary[1]	
1. CMS downtime in reporting period due to:	*(hours)*
a. Monitor equipment malfunctions	0
b. Non-Monitor equipment malfunctions	0
c. Quality assurance calibration	0
d. Other known causes	0
e. Unknown causes	0
2. Total CMS Downtime	0
3. Total duration of CMS Downtime x (100) [Total source operating time][2]	0.0 %

[1] For opacity, record all times in minutes. For gases, record all times in hours.

[2] For the reporting period: If the total duration of excess emissions is 1 percent or greater of the total operating time or the total CMS downtime is 5 percent or greater of the total operating time, both the summary report form and the excess emission report described in §60.7(c) shall be submitted.

SUMMARY REPORT - GASEOUS AND OPACITY EXCESS EMISSIONS AND MONITORING SYSTEMS PERFORMANCE

(per 40 CFR 60.7(d) and 60.108a(d))

Pollutant: **H_2S**

Applicable NSPS Subpart: Ja

Reporting period dates: 7/1/23 to 9/30/23

Date submitted: 10/30/23

Company: Valero Refining - Meraux LLC

Address: 2500 East St. Bernard Highway, Meraux, LA 70075

Emission Limitation: Hydrogen Sulfide shall not exceed 162 ppm on a 3-hour rolling average

Monitor Manufacturer and Model No.: Ametek 5100

Date of Latest CMS Certification or Audit: CGA on 8/17/23

Process Unit(s) Description: South Flare Stack (EPN 3-77, EQT 0049)

Total source operating time in reporting period: 2,208 hours

Emissions Data Summary[1]	
1. Duration of excess emissions in reporting period due to:	*(hours)*
a. Startup/shutdown	0
b. Control equipment problems	0
c. Process problems	0
d. Other known causes	0
e. Unknown causes	0
2. Total duration of excess emission	0
3. Total duration of excess emissions x (100) [Total source operating time][2]	0.0 %

CMS Performance Summary[1]	
1. CMS downtime in reporting period due to:	*(hours)*
a. Monitor equipment malfunctions	0
b. Non-Monitor equipment malfunctions	0
c. Quality assurance calibration	0
d. Other known causes	0
e. Unknown causes	0
2. Total CMS Downtime	0
3. Total duration of CMS Downtime x (100) [Total source operating time][2]	0.0 %

[1] For opacity, record all times in minutes. For gases, record all times in hours.

[2] For the reporting period: If the total duration of excess emissions is 1 percent or greater of the total operating time or the total CMS downtime is 5 percent or greater of the total operating time, both the summary report form and the excess emission report described in §60.7(c) shall be submitted.

SUMMARY REPORT - GASEOUS AND OPACITY EXCESS EMISSIONS AND MONITORING SYSTEMS PERFORMANCE

(per 40 CFR 60.7(d) and 60.108a(d))

Pollutant: **Total Sulfur**

Applicable NSPS Subpart: Ja (Also Required by Consent Decree: 3:10-cv-00563-bbc, Paragraph 49.a.ii)

Reporting period dates: 7/1/23 to 9/30/23

Date submitted: 10/30/23

Company: Valero Refining - Meraux LLC

Address: 2500 East St. Bernard Highway, Meraux, LA 70075

Emission Limitation: None

Monitor Manufacturer and Model No.: Thermo Scientific SOLA II

Date of Latest CMS Certification or Audit: CGA on 9/12/23

Process Unit(s) Description: North Flare Stack (EPN 20-72, EQT 0035), North Flare Header

Total source operating time in reporting period: 2,208 hours

CMS Performance Summary[1]	
1. CMS downtime in reporting period due to:	*(hours)*
a. Monitor equipment malfunctions	7
b. Non-Monitor equipment malfunctions	0
c. Quality assurance calibration	3
d. Other known causes	59
e. Unknown causes	0
2. Total CMS Downtime	69
3. Total duration of CMS Downtime x (100) [Total source operating time][2]	3.1 %

[1] For opacity, record all times in minutes. For gases, record all times in hours.

[2] For the reporting period: If the total duration of excess emissions is 1 percent or greater of the total operating time or the total CMS downtime is 5 percent or greater of the total operating time, both the summary report form and the excess emission report described in §60.7(c) shall be submitted.

SUMMARY REPORT - GASEOUS AND OPACITY EXCESS EMISSIONS AND MONITORING SYSTEMS PERFORMANCE

(per 40 CFR 60.7(d) and 60.108a(d))

Pollutant: **Total Sulfur**

Applicable NSPS Subpart: Ja (Also Required by Consent Decree: 3:10-cv-00563-bbc, Paragraph 49.a.ii)

Reporting period dates: 7/1/23 to 9/30/23

Date submitted: 10/30/23

Company: Valero Refining - Meraux LLC

Address: 2500 East St. Bernard Highway, Meraux, LA 70075

Emission Limitation: None

Monitor Manufacturer and Model No.: Thermo Scientific SOLA II

Date of Latest CMS Certification or Audit: CGA on 9/12/23

Process Unit(s) Description: North Flare Stack (EPN 20-72, EQT 0035), Hydrocracker Flare Header

Total source operating time in reporting period: 2,208 hours

CMS Performance Summary[1]	
1. CMS downtime in reporting period due to:	*(hours)*
a. Monitor equipment malfunctions	0
b. Non-Monitor equipment malfunctions	0
c. Quality assurance calibration	0
d. Other known causes	14
e. Unknown causes	0
2. Total CMS Downtime	14
3. Total duration of CMS Downtime x (100) [Total source operating time][2]	0.6 %

[1] For opacity, record all times in minutes. For gases, record all times in hours.

[2] For the reporting period: If the total duration of excess emissions is 1 percent or greater of the total operating time or the total CMS downtime is 5 percent or greater of the total operating time, both the summary report form and the excess emission report described in §60.7(c) shall be submitted.

SUMMARY REPORT - GASEOUS AND OPACITY EXCESS EMISSIONS AND MONITORING SYSTEMS PERFORMANCE

(per 40 CFR 60.7(d) and 60.108a(d))

Pollutant: **Total Sulfur**

Applicable NSPS Subpart: Ja (Also Required by Consent Decree: 3:10-cv-00563-bbc, Paragraph 49.a.ii)

Reporting period dates: 7/1/23 to 9/30/23

Date submitted: 10/30/23

Company: Valero Refining - Meraux LLC

Address: 2500 East St. Bernard Highway, Meraux, LA 70075

Emission Limitation: None

Monitor Manufacturer and Model No.: Thermo Scientific SOLA II

Date of Latest CMS Certification or Audit: CGA on 9/12/23

Process Unit(s) Description: South Flare Stack (EPN 3-77, EQT 0049)

Total source operating time in reporting period: 2,208 hours

CMS Performance Summary[1]	
1. CMS downtime in reporting period due to:	*(hours)*
a. Monitor equipment malfunctions	17
b. Non-Monitor equipment malfunctions	0
c. Quality assurance calibration	2
d. Other known causes	14
e. Unknown causes	0
2. Total CMS Downtime	33
3. Total duration of CMS Downtime x (100) [Total source operating time][2]	1.5 %

[1] For opacity, record all times in minutes. For gases, record all times in hours.

[2] For the reporting period: If the total duration of excess emissions is 1 percent or greater of the total operating time or the total CMS downtime is 5 percent or greater of the total operating time, both the summary report form and the excess emission report described in §60.7(c) shall be submitted.

SUMMARY REPORT - GASEOUS AND OPACITY EXCESS EMISSIONS AND MONITORING SYSTEMS PERFORMANCE

(per 40 CFR 60.7(d) and 60.108a(d))

Pollutant: **Flow**

Applicable NSPS Subpart: Ja (Also Required by Consent Decree: 3:10-cv-00563-bbc, Paragraph 49.a.ii)

Reporting period dates: 7/1/23 to 9/30/23

Date submitted: 10/30/23

Company: Valero Refining - Meraux LLC

Address: 2500 East St. Bernard Highway, Meraux, LA 70075

Emission Limitation: None

Monitor Manufacturer and Model No.: GE Panametrics GF 868

Date of Latest CMS Certification or Audit: N/A

Process Unit(s) Description: North Flare Stack (EPN 20-72, EQT 0035), North Flare Header

Total source operating time in reporting period: 2,208 hours

CMS Performance Summary[1]	
1. CMS downtime in reporting period due to:	*(hours)*
a. Monitor equipment malfunctions	0
b. Non-Monitor equipment malfunctions	0
c. Quality assurance calibration	0
d. Other known causes	0
e. Unknown causes	0
2. Total CMS Downtime	0
3. Total duration of CMS Downtime x (100) [Total source operating time][2]	0.0 %

[1] For opacity, record all times in minutes. For gases, record all times in hours.

[2] For the reporting period: If the total duration of excess emissions is 1 percent or greater of the total operating time or the total CMS downtime is 5 percent or greater of the total operating time, both the summary report form and the excess emission report described in §60.7(c) shall be submitted.

SUMMARY REPORT - GASEOUS AND OPACITY EXCESS EMISSIONS AND MONITORING SYSTEMS PERFORMANCE

(per 40 CFR 60.7(d) and 60.108a(d))

Pollutant: **Flow**

Applicable NSPS Subpart: Ja (Also Required by Consent Decree: 3:10-cv-00563-bbc, Paragraph 49.a.ii)

Reporting period dates: 7/1/23 to 9/30/23

Date submitted: 10/30/23

Company: Valero Refining - Meraux LLC

Address: 2500 East St. Bernard Highway, Meraux, LA 70075

Emission Limitation: None

Monitor Manufacturer and Model No.: GE Panametrics GF 868

Date of Latest CMS Certification or Audit: N/A

Process Unit(s) Description: North Flare Stack (EPN 20-72, EQT 0035), Hydrocracker Flare Header

Total source operating time in reporting period: 2,208 hours

CMS Performance Summary[1]	
1. CMS downtime in reporting period due to:	*(hours)*
a. Monitor equipment malfunctions	0
b. Non-Monitor equipment malfunctions	0
c. Quality assurance calibration	0
d. Other known causes	0
e. Unknown causes	0
2. Total CMS Downtime	0
3. Total duration of CMS Downtime x (100) [Total source operating time][2]	0.0 %

[1] For opacity, record all times in minutes. For gases, record all times in hours.

[2] For the reporting period: If the total duration of excess emissions is 1 percent or greater of the total operating time or the total CMS downtime is 5 percent or greater of the total operating time, both the summary report form and the excess emission report described in §60.7(c) shall be submitted.

SUMMARY REPORT - GASEOUS AND OPACITY EXCESS EMISSIONS AND MONITORING SYSTEMS PERFORMANCE

(per 40 CFR 60.7(d) and 60.108a(d))

Pollutant: **Flow**

Applicable NSPS Subpart: Ja (Also Required by Consent Decree: 3:10-cv-00563-bbc, Paragraph 49.a.ii)

Reporting period dates: 7/1/23 to 9/30/23

Date submitted: 10/30/23

Company: Valero Refining - Meraux LLC

Address: 2500 East St. Bernard Highway, Meraux, LA 70075

Emission Limitation: None

Monitor Manufacturer and Model No.: SICK FLOWSIC100 Flare

Date of Latest CMS Certification or Audit: N/A

Process Unit(s) Description: South Flare Stack (EPN 3-77, EQT 0049)

Total source operating time in reporting period: 2,208 hours

CMS Performance Summary[1]	
1. CMS downtime in reporting period due to:	*(hours)*
a. Monitor equipment malfunctions	0
b. Non-Monitor equipment malfunctions	0
c. Quality assurance calibration	0
d. Other known causes	0
e. Unknown causes	0
2. Total CMS Downtime	0
3. Total duration of CMS Downtime x (100) [Total source operating time][2]	0.0 %

[1] For opacity, record all times in minutes. For gases, record all times in hours.

[2] For the reporting period: If the total duration of excess emissions is 1 percent or greater of the total operating time or the total CMS downtime is 5 percent or greater of the total operating time, both the summary report form and the excess emission report described in §60.7(c) shall be submitted.

SUMMARY REPORT - GASEOUS AND OPACITY EXCESS EMISSIONS AND MONITORING SYSTEMS PERFORMANCE

(per 40 CFR 60.7(d) and 60.108a(d))

For all CMS covered in this report, no changes were made in the 3rd Quarter 2023 to CMS, process, or controls.

I certify that the information contained in this report is true, accurate, and complete.

Dan Patnoad

Name

Signature

Staff Environmental Engineer

Title

GASEOUS AND OPACITY EXCESS EMISSIONS AND MONITORING SYSTEMS PERFORMANCE

(per 40 CFR 60.7(c) and 60.108a(d))

Pollutant: **SO_2**

Applicable NSPS Subpart: Ja

Reporting period dates: 7/1/23 to 9/30/23

Date submitted: 10/30/23

Company: Valero Refining - Meraux LLC

Address: 2500 East St. Bernard Highway, Meraux, LA 70075

Emission Limitation: SO_2 corrected to 0% O_2 shall not exceed 250 ppm on a 12-hour rolling average

Monitor Manufacturer and Model No.: Ametek 9900 (SO_2 and O_2)

Date of Latest CMS Certification or Audit: CGA on 9/25/23

Process Unit(s) Description: #2 SRU Incinerator (EPN 1-93, EQT 0019)

Total source operating time in reporting period: 2,208 hours

Ja EXCESS EMISSIONS						
Date	Start	End	Duration (hours)	Max 12-HRA (ppm)	Cause	Corrective Action
None						
TOTAL			0			

Ja CMS PERFORMANCE[1]					
Date	Start	End	Duration (hours)	Cause	Corrective Action
None					
TOTAL			0		

[1]In accordance with 40 CFR 60.108a(d)(6), changes made in operation of the emission control system during the period of data unavailability which could affect the ability of the system to meet the applicable emission limit have been compared with operation of the control system and affected facility before and following the period of data unavailability to ensure that any changes made in operation of the emission control system during the period of data unavailability did not affect the ability of the system to meet the applicable emission limit.

GASEOUS AND OPACITY EXCESS EMISSIONS AND MONITORING SYSTEMS PERFORMANCE

(per 40 CFR 60.7(c) and 60.108a(d))

Pollutant: **SO_2**

Applicable NSPS Subpart: Ja

Reporting period dates: 7/1/23 to 9/30/23

Date submitted: 10/30/23

Company: Valero Refining - Meraux LLC

Address: 2500 East St. Bernard Highway, Meraux, LA 70075

Emission Limitation: SO_2 corrected to 0% O_2 shall not exceed 250 ppm on a 12-hour rolling average

Monitor Manufacturer and Model No.: ABB AO2000 Uras 26 (SO_2)/ Magnos 206 (O_2)

Date of Latest CMS Certification or Audit: CGA on 8/17/23

Process Unit(s) Description: #3 SRU Incinerator (EPN 5-00, EQT 0079)

Total source operating time in reporting period: 2,208 hours

Ja EXCESS EMISSIONS						
Date	Start	End	Duration (hours)	Max 12-HRA (ppm)	Cause	Corrective Action
None						
TOTAL			0			

Ja CMS PERFORMANCE[1]					
Date	Start	End	Duration (hours)	Cause	Corrective Action
7/10/23	09:00	10:00	1	Sample system blown down to improve sample flow.	N/A
8/12/23	07:00		28	Out of Control. SO_2 span measurement greater than 4 times the Appendix B limit below the reference gas value due to reduced flow caused by accumulation in the sample probe filter.	Valero recalibrated the analyzer and returned it to service.
8/13/23		11:00			
8/29/23	10:00	11:00	1	Adjusted for calibration drift.	N/A
9/27/23	09:00	10:00	1	Adjusted for calibration drift.	N/A
9/28/23	09:00	10:00	1	Adjusted for calibration drift.	N/A
9/28/23	09:00	15:00	6	Offline to clean sample probe, replace sample filters, and rebuild sample pump.	Calibrated and returned to service.
9/30/23	11:00	12:00	1	Adjusted for calibration drift.	N/A
TOTAL			39		

[1]In accordance with 40 CFR 60.108a(d)(6), changes made in operation of the emission control system during the period of data unavailability which could affect the ability of the system to meet the applicable emission limit have been compared with operation of the control system and affected facility before and following the period of data unavailability to ensure that any changes made in operation of the emission control system during the period of data unavailability did not affect the ability of the system to meet the applicable emission limit.

GASEOUS AND OPACITY EXCESS EMISSIONS AND MONITORING SYSTEMS PERFORMANCE

(per 40 CFR 60.7(c) and 60.108a(d))

Pollutant: **H_2S**

Applicable NSPS Subpart: Ja

Reporting period dates: 7/1/23 to 9/30/23

Date submitted: 10/30/23

Company: Valero Refining - Meraux LLC

Address: 2500 East St. Bernard Highway, Meraux, LA 70075

Emission Limitation: Hydrogen Sulfide shall not exceed 162 ppm on a 3-hour rolling average and 60 ppm on a 365-day rolling average

Monitor Manufacturer and Model No.: Ametek 4661

Date of Latest CMS Certification or Audit: CGA on 9/25/23

Process Unit(s) Description: Area 2 Fuel Drum for: Benzene Recovery Unit Reboiler (EPN 1-09, EQT 0127); NHT Charge Heater (EPN 1-17, EQT 0159)

Total source operating time in reporting period: EQT 0127-1,919 hours; EQT 0159-2,069 hours

Ja EXCESS EMISSIONS – Both EQT's						
Date	Start	End	Duration (hours)	Max 3-HRA (ppm)	Cause	Corrective Action
None						
TOTAL			0			

Ja CMS PERFORMANCE[1] – Both EQT's					
Date	Start	End	Duration (hours)	Cause	Corrective Action
None					
TOTAL			0		

[1]In accordance with 40 CFR 60.108a(d)(6), changes made in operation of the emission control system during the period of data unavailability which could affect the ability of the system to meet the applicable emission limit have been compared with operation of the control system and affected facility before and following the period of data unavailability to ensure that any changes made in operation of the emission control system during the period of data unavailability did not affect the ability of the system to meet the applicable emission limit.

GASEOUS AND OPACITY EXCESS EMISSIONS AND MONITORING SYSTEMS PERFORMANCE

(per 40 CFR 60.7(c) and 60.108a(d))

Pollutant: **NO_x**

Applicable NSPS Subpart: Ja

Reporting period dates: 7/1/23 to 9/30/23

Date submitted: 10/30/23

Company: Valero Refining - Meraux LLC

Address: 2500 East St. Bernard Highway, Meraux, LA 70075

Emission Limitation: Nitrogen Oxide corrected to 0% O_2 shall not exceed 40 ppm on a 30-day rolling average

Monitor Manufacturer and Model No.: Thermo Environmental 42i (NO_x)/(O_2)

Date of Latest CMS Certification or Audit: CGA on 7/25/23

Process Unit(s) Description: Benzene Recovery Unit Reboiler (EPN 1-09, EQT 0127)

Total source operating time in reporting period: 1,919 hours

Ja EXCESS EMISSIONS						
Date	Start	End	Duration (hours)	Max 30-DRA (ppm)	Cause	Corrective Action
None						
TOTAL			0			

Ja CMS PERFORMANCE[1]					
Date	Start	End	Duration (hours)	Cause	Corrective Action
7/21/23	11:00	12:00	1	Adjusted for calibration drift.	N/A
7/25/23	09:00	11:00	2	NOx and O_2 Cylinder Gas Audit.	N/A
7/26/23	13:00	14:00	1	Adjusted for calibration drift.	N/A
8/10/23	22:00	23:00	1	Adjusted for calibration drift.	N/A
8/14/23	09:00		29	Out of Control. O_2 zero measurement greater than 4 times the Appendix B above the reference gas value.	Valero replaced the O_2 measurement cell, calibrated the analyzer, and returned it to service.
8/15/23		14:00			
8/16/23	10:00	12:00	2	Offline to troubleshoot excessive drift of the O_2 analyzer.	Valero manually calibrated the O_2 analyzer and returned it to service.

Continued on next page.

GASEOUS AND OPACITY EXCESS EMISSIONS AND MONITORING SYSTEMS PERFORMANCE

(per 40 CFR 60.7(c) and 60.108a(d))

Pollutant: **NO_x**

Applicable NSPS Subpart: Ja

Reporting period dates: 7/1/23 to 9/30/23

Date submitted: 10/30/23

Company: Valero Refining - Meraux LLC

Address: 2500 East St. Bernard Highway, Meraux, LA 70075

Emission Limitation: Nitrogen Oxide corrected to 0% O_2 shall not exceed 40 ppm on a 30-day rolling average

Monitor Manufacturer and Model No.: Thermo Environmental 42i (NO_x)/(O_2)

Date of Latest CMS Certification or Audit: CGA on 7/25/23

Process Unit(s) Description: Benzene Recovery Unit Reboiler (EPN 1-09, EQT 0127)

Total source operating time in reporting period: 1,919 hours

Ja CMS PERFORMANCE cont.[1]					
Date	Start	End	Duration (hours)	Cause	Corrective Action
8/19/23	09:00		26	Out of Control. O_2 zero measurement greater than 4 times the Appendix B above the reference gas value.	Valero manually calibrated the O_2 analyzer and returned it to service.
8/20/23		11:00			
8/24/23	13:00	15:00	2	Offline to troubleshoot periodic drifts of both the NOx and O2 analyzer measurements. Valero discovered a bad O-ring on the sample probe that was intermittently causing air to leak into the sample system. This is also the likely cause of the two previous Out of Control Periods.	Valero replaced the O-ring, calibrated both analyzers, and returned them to service.
TOTAL			64		

[1] In accordance with 40 CFR 60.108a(d)(6), changes made in operation of the emission control system during the period of data unavailability which could affect the ability of the system to meet the applicable emission limit have been compared with operation of the control system and affected facility before and following the period of data unavailability to ensure that any changes made in operation of the emission control system during the period of data unavailability did not affect the ability of the system to meet the applicable emission limit.

GASEOUS AND OPACITY EXCESS EMISSIONS AND MONITORING SYSTEMS PERFORMANCE

(per 40 CFR 60.7(c) and 60.108a(d))

Pollutant: **NO_x**

Applicable NSPS Subpart: Ja

Reporting period dates: 7/1/23 to 9/30/23

Date submitted: 10/30/23

Company: Valero Refining - Meraux LLC

Address: 2500 East St. Bernard Highway, Meraux, LA 70075

Emission Limitation: Nitrogen Oxide corrected to 0% O_2 shall not exceed 40 ppm on a 30-day rolling average

Monitor Manufacturer and Model No.: ABB Limas11 (NO_x), Magnos27 (O_2)

Date of Latest CMS Certification or Audit: CGA on 8/22/23

Process Unit(s) Description: NHT Charge Heater (EPN 1-17, EQT 0159)

Total source operating time in reporting period: 2,038 hours

Ja EXCESS EMISSIONS						
Date	Start	End	Duration (hours)	Max 30-DRA (ppm)	Cause	Corrective Action
None						
TOTAL			0			

Ja CMS PERFORMANCE[1]					
Date	Start	End	Duration (hours)	Cause	Corrective Action
7/1/23	19:00	20:00	1	Adjusted for calibration drift.	N/A
8/22/23	08:00	09:00	1	NOx and O_2 Cylinder Gas Audit.	N/A
TOTAL			2		

[1] In accordance with 40 CFR 60.108a(d)(6), changes made in operation of the emission control system during the period of data unavailability which could affect the ability of the system to meet the applicable emission limit have been compared with operation of the control system and affected facility before and following the period of data unavailability to ensure that any changes made in operation of the emission control system during the period of data unavailability did not affect the ability of the system to meet the applicable emission limit.

GASEOUS AND OPACITY EXCESS EMISSIONS AND MONITORING SYSTEMS PERFORMANCE

(per 40 CFR 60.7(c) and 60.108a(d))

Pollutant: **H_2S**

Applicable NSPS Subpart: Ja

Reporting period dates: 7/1/23 to 9/30/23

Date submitted: 10/30/23

Company: Valero Refining - Meraux LLC

Address: 2500 East St. Bernard Highway, Meraux, LA 70075

Emission Limitation: Hydrogen Sulfide shall not exceed 162 ppm on a 3-hour rolling average

Monitor Manufacturer and Model No.: Ametek 5100

Date of Latest CMS Certification or Audit: CGA on 8/23/23

Process Unit(s) Description: North Flare Stack (EPN 20-72, EQT 0035), North Flare Header

Total source operating time in reporting period: 2,208 hours

Ja EXCESS EMISSIONS[1]						
Date	Start	End	Duration (hours)	Max 3-HRA (ppm)	Cause	Corrective Action
None						
TOTAL			0			

Ja CMS PERFORMANCE[2]					
Date	Start	End	Duration (hours)	Cause	Corrective Action
8/23/23	08:00	10:00	2	Cylinder Gas Audit.	N/A
TOTAL			2		

[1]Due to the physical arrangement of the headers supplying the North Flare Stack (EPN 20-72, EQT 0035), two analyzers are required to measure H_2S concentration of the gas combusted in the North Flare. Conservatively, excess emission on either of these analyzers will be considered excess emissions at the North Flare. However, the CEMS performance will be tracked separately.

[2]In accordance with 40 CFR 60.108a(d)(6), changes made in operation of the emission control system during the period of data unavailability which could affect the ability of the system to meet the applicable emission limit have been compared with operation of the control system and affected facility before and following the period of data unavailability to ensure that any changes made in operation of the emission control system during the period of data unavailability did not affect the ability of the system to meet the applicable emission limit.

GASEOUS AND OPACITY EXCESS EMISSIONS AND MONITORING SYSTEMS PERFORMANCE

(per 40 CFR 60.7(c) and 60.108a(d))

Pollutant: **H_2S**

Applicable NSPS Subpart: Ja

Reporting period dates: 7/1/23 to 9/30/23

Date submitted: 10/30/23

Company: Valero Refining - Meraux LLC

Address: 2500 East St. Bernard Highway, Meraux, LA 70075

Emission Limitation: Hydrogen Sulfide shall not exceed 162 ppm on a 3-hour rolling average

Monitor Manufacturer and Model No.: Ametek 5100

Date of Latest CMS Certification or Audit: CGA on 8/22/23

Process Unit(s) Description: North Flare Stack (EPN 20-72, EQT 0035), Hydrocracker Flare Header

Total source operating time in reporting period: 2,208 hours

Ja EXCESS EMISSIONS[1]						
Date	Start	End	Duration (hours)	Max 3-HRA (ppm)	Cause	Corrective Action
None						
TOTAL			0			

Ja CMS PERFORMANCE[2]					
Date	Start	End	Duration (hours)	Cause	Corrective Action
None					
TOTAL			0		

[1]Due to the physical arrangement of the headers supplying the North Flare Stack (EPN 20-72, EQT 0035), two analyzers are required to measure H_2S concentration of the gas combusted in the North Flare. Conservatively, excess emission on either of these analyzers will be considered excess emissions at the North Flare. However, the CEMS performance will be tracked separately.

[2] In accordance with 40 CFR 60.108a(d)(6), changes made in operation of the emission control system during the period of data unavailability which could affect the ability of the system to meet the applicable emission limit have been compared with operation of the control system and affected facility before and following the period of data unavailability to ensure that any changes made in operation of the emission control system during the period of data unavailability did not affect the ability of the system to meet the applicable emission limit.

GASEOUS AND OPACITY EXCESS EMISSIONS AND MONITORING SYSTEMS PERFORMANCE

(per 40 CFR 60.7(c) and 60.108a(d))

Pollutant: H_2S

Applicable NSPS Subpart: Ja

Reporting period dates: 7/1/23 to 9/30/23

Date submitted: 10/30/23

Company: Valero Refining - Meraux LLC

Address: 2500 East St. Bernard Highway, Meraux, LA 70075

Emission Limitation: Hydrogen Sulfide shall not exceed 162 ppm on a 3-hour rolling average

Monitor Manufacturer and Model No.: Ametek 5100

Date of Latest CMS Certification or Audit: CGA on 8/17/23

Process Unit(s) Description: South Flare Stack (EPN 3-77, EQT 0049)

Total source operating time in reporting period: 2,208 hours

Ja EXCESS EMISSIONS						
Date	Start	End	Duration (hours)	Max 3-HRA (ppm)	Cause	Corrective Action
None						
TOTAL			0			

Ja CMS PERFORMANCE[1]					
Date	Start	End	Duration (hours)	Cause	Corrective Action
None					
TOTAL			0		

[1] In accordance with 40 CFR 60.108a(d)(6), changes made in operation of the emission control system during the period of data unavailability which could affect the ability of the system to meet the applicable emission limit have been compared with operation of the control system and affected facility before and following the period of data unavailability to ensure that any changes made in operation of the emission control system during the period of data unavailability did not affect the ability of the system to meet the applicable emission limit.

GASEOUS AND OPACITY EXCESS EMISSIONS AND MONITORING SYSTEMS PERFORMANCE

(per 40 CFR 60.7(c) and 60.108a(d))

Pollutant: **Total Sulfur**

Applicable NSPS Subpart: Ja (Required by Consent Decree: 3:10-cv-00563-bbc, Paragraph 49.a.ii)

Reporting period dates: 7/1/23 to 9/30/23

Date submitted: 10/30/23

Company: Valero Refining - Meraux LLC

Address: 2500 East St. Bernard Highway, Meraux, LA 70075

Emission Limitation: None

Monitor Manufacturer and Model No.: Thermo Scientific SOLA II

Date of Latest CMS Certification or Audit: CGA on 9/12/23

Process Unit(s) Description: North Flare Stack (EPN 20-72, EQT 0035), North Flare Header

Total source operating time in reporting period: 2,208 hours

Ja CMS PERFORMANCE[1]					
Date	Start	End	Duration (hours)	Cause	Corrective Action
7/26/23	08:00		55	Offline for annual preventative maintenance and verification performed by manufacturer. After this preventative maintenance was complete, the analyzer would not operate properly. The manufacturer recommended replacing the entire optical measurement bench. While waiting for delivery, Valero continued to troubleshoot and discovered a valve rotor was installed incorrectly.	Valero correctly installed the valve rotor, calibrated the analyzer, and returned it to operation.
7/28/23		15:00			
8/1/23	08:00	09:00	1	Adjusted for calibration drift.	N/A
8/7/23	13:00	20:00	7	Offline to troubleshoot low flow to the optical measurement bench.	Valero replaced the rotors for 2 switching valves, replaced valve couplings that appeared worn, reset the stroke on the 10-port injection valve actuator, and replaced tubing. The analyzer was calibrated and returned to service.
9/1/23	09:00	12:00	3	After Valero replaced the combustion air 6-pack, a leak developed that prevented the analyzer from receiving adequate combustion air and prevented it from operating properly.	Valero repaired the leak and restored combustion air flow to the analyzer. The analyzer was calibrated and returned to service.

Continued on next page.

GASEOUS AND OPACITY EXCESS EMISSIONS AND MONITORING SYSTEMS PERFORMANCE

(per 40 CFR 60.7(c) and 60.108a(d))

Pollutant: **Total Sulfur**

Applicable NSPS Subpart: Ja (Required by Consent Decree: 3:10-cv-00563-bbc, Paragraph 49.a.ii)

Reporting period dates: 7/1/23 to 9/30/23

Date submitted: 10/30/23

Company: Valero Refining - Meraux LLC

Address: 2500 East St. Bernard Highway, Meraux, LA 70075

Emission Limitation: None

Monitor Manufacturer and Model No.: Thermo Scientific SOLA II

Date of Latest CMS Certification or Audit: CGA on 9/12/23

Process Unit(s) Description: North Flare Stack (EPN 20-72, EQT 0035), North Flare Header

Total source operating time in reporting period: 2,208 hours

Ja CMS PERFORMANCE cont.[1]					
Date	Start	End	Duration (hours)	Cause	Corrective Action
9/8/23	10:00	11:00	1	Adjusted for calibration drift.	N/A
9/12/23	09:00	10:00	1	Cylinder Gas Audit.	N/A
9/13/23	09:00	10:00	1	Offline to rebuild sample pump.	Calibrated and returned to service.
TOTAL			69		

[1] In accordance with 40 CFR 60.108a(d)(6), changes made in operation of the emission control system during the period of data unavailability which could affect the ability of the system to meet the applicable emission limit have been compared with operation of the control system and affected facility before and following the period of data unavailability to ensure that any changes made in operation of the emission control system during the period of data unavailability did not affect the ability of the system to meet the applicable emission limit.

GASEOUS AND OPACITY EXCESS EMISSIONS AND MONITORING SYSTEMS PERFORMANCE

(per 40 CFR 60.7(c) and 60.108a(d))

Pollutant: **Total Sulfur**

Applicable NSPS Subpart: Ja (Also Required by Consent Decree: 3:10-cv-00563-bbc, Paragraph 49.a.ii)

Reporting period dates: 7/1/23 to 9/30/23

Date submitted: 10/30/23

Company: Valero Refining - Meraux LLC

Address: 2500 East St. Bernard Highway, Meraux, LA 70075

Emission Limitation: None

Monitor Manufacturer and Model No.: Thermo Scientific SOLA II

Date of Latest CMS Certification or Audit: CGA on 9/12/23

Process Unit(s) Description: North Flare Stack (EPN 20-72, EQT 0035), Hydrocracker Flare Header

Total source operating time in reporting period: 2,208 hours

Ja CMS PERFORMANCE[1]					
Date	Start	End	Duration (hours)	Cause	Corrective Action
7/26/23	09:00	19:00	10	Offline for annual preventative maintenance and verification performed by manufacturer.	Calibrated and returned to service.
9/1/23	09:00	12:00	3	After Valero replaced the combustion air 6-pack, a leak developed that prevented the analyzer from receiving adequate combustion air and prevented it from operating properly.	Valero repaired the leak and restored combustion air flow to the analyzer. The analyzer was calibrated and returned to service.
9/13/23	08:00	09:00	1	Offline to rebuild sample pump.	Calibrated and returned to service.
TOTAL			14		

[1] In accordance with 40 CFR 60.108a(d)(6), changes made in operation of the emission control system during the period of data unavailability which could affect the ability of the system to meet the applicable emission limit have been compared with operation of the control system and affected facility before and following the period of data unavailability to ensure that any changes made in operation of the emission control system during the period of data unavailability did not affect the ability of the system to meet the applicable emission limit.

GASEOUS AND OPACITY EXCESS EMISSIONS AND MONITORING SYSTEMS PERFORMANCE

(per 40 CFR 60.7(c) and 60.108a(d))

Pollutant: **Total Sulfur**

Applicable NSPS Subpart: Ja (Also Required by Consent Decree: 3:10-cv-00563-bbc, Paragraph 49.a.ii)

Reporting period dates: 7/1/23 to 9/30/23

Date submitted: 10/30/23

Company: Valero Refining - Meraux LLC

Address: 2500 East St. Bernard Highway, Meraux, LA 70075

Emission Limitation: None

Monitor Manufacturer and Model No.: Thermo Scientific SOLA II

Date of Latest CMS Certification or Audit: CGA on 9/12/23

Process Unit(s) Description: South Flare Stack (EPN 3-77, EQT 0049)

Total source operating time in reporting period: 2,208 hours

Ja CMS PERFORMANCE[2]					
Date	Start	End	Duration (hours)	Cause	Corrective Action
7/26/23	09:00	19:00	10	Offline for annual preventative maintenance and verification performed by manufacturer.	Calibrated and returned to service.
8/8/23	08:00	11:00	3	Offline to troubleshoot low flow to the optical measurement bench. Valero found partially blocked tubing that was restricting flow.	Valero replaced the tubing, calibrated the analyzer, and returned it to service.
8/29/23	09:00	10:00	1	Adjustment for calibration drift.	Calibrated and returned to service.
9/1/23	09:00	12:00	3	After Valero replaced the combustion air 6-pack, a leak developed that prevented the analyzer from receiving adequate combustion air and prevented it from operating properly.	Valero repaired the leak and restored combustion air flow to the analyzer. The analyzer was calibrated and returned to service.
9/13/23	09:00	10:00	1	Offline to rebuild sample pump.	Calibrated and returned to service.
9/14/23	20:00		14	Sample pump failed	Valero replaced the sample pump and motor assembly. The analyzer was calibrated and returned to service.
9/15/23		10:00			
9/18/23	13:00	14:00	1	Adjustment for calibration drift.	Calibrated and returned to service.
TOTAL			33		

[1] In accordance with 40 CFR 60.108a(d)(6), changes made in operation of the emission control system during the period of data unavailability which could affect the ability of the system to meet the applicable emission limit have been compared with operation of the control system and affected facility before and following the period of data unavailability to ensure that any changes made in operation of the emission control system during the period of data unavailability did not affect the ability of the system to meet the applicable emission limit.

GASEOUS AND OPACITY EXCESS EMISSIONS AND MONITORING SYSTEMS PERFORMANCE

(per 40 CFR 60.7(c) and 60.108a(d))

Pollutant: **Flow**

Applicable NSPS Subpart: Ja (Also Required by Consent Decree: 3:10-cv-00563-bbc, Paragraph 49.a.ii)

Reporting period dates: 7/1/23 to 9/30/23

Date submitted: 10/30/23

Company: Valero Refining - Meraux LLC

Address: 2500 East St. Bernard Highway, Meraux, LA 70075

Emission Limitation: None

Monitor Manufacturer and Model No.: GE Panametrics GF 868

Date of Latest CMS Certification or Audit: N/A

Process Unit(s) Description: North Flare Stack (EPN 20-72, EQT 0035), North Flare Header

Total source operating time in reporting period: 2,208 hours

Ja CMS PERFORMANCE[2]					
Date	Start	End	Duration (hours)	Cause	Corrective Action
None.					
TOTAL			0		

[1] In accordance with 40 CFR 60.108a(d)(6), changes made in operation of the emission control system during the period of data unavailability which could affect the ability of the system to meet the applicable emission limit have been compared with operation of the control system and affected facility before and following the period of data unavailability to ensure that any changes made in operation of the emission control system during the period of data unavailability did not affect the ability of the system to meet the applicable emission limit.

GASEOUS AND OPACITY EXCESS EMISSIONS AND MONITORING SYSTEMS PERFORMANCE

(per 40 CFR 60.7(c) and 60.108a(d))

Pollutant: **Flow**

Applicable NSPS Subpart: Ja (Also Required by Consent Decree: 3:10-cv-00563-bbc, Paragraph 49.a.ii)

Reporting period dates: 7/1/23 to 9/30/23

Date submitted: 10/30/23

Company: Valero Refining - Meraux LLC

Address: 2500 East St. Bernard Highway, Meraux, LA 70075

Emission Limitation: None

Monitor Manufacturer and Model No.: GE Panametrics GF 868

Date of Latest CMS Certification or Audit: N/A

Process Unit(s) Description: North Flare Stack (EPN 20-72, EQT 0035), Hydrocracker Flare Header

Total source operating time in reporting period: 2,208 hours

Ja CMS PERFORMANCE[2]					
Date	Start	End	Duration (hours)	Cause	Corrective Action
None.					
TOTAL			0		

[1] In accordance with 40 CFR 60.108a(d)(6), changes made in operation of the emission control system during the period of data unavailability which could affect the ability of the system to meet the applicable emission limit have been compared with operation of the control system and affected facility before and following the period of data unavailability to ensure that any changes made in operation of the emission control system during the period of data unavailability did not affect the ability of the system to meet the applicable emission limit.

GASEOUS AND OPACITY EXCESS EMISSIONS AND MONITORING SYSTEMS PERFORMANCE

(per 40 CFR 60.7(c) and 60.108a(d))

Pollutant: **Flow**

Applicable NSPS Subpart: Ja (Also Required by Consent Decree: 3:10-cv-00563-bbc, Paragraph 49.a.ii)

Reporting period dates: 7/1/23 to 9/30/23

Date submitted: 10/30/23

Company: Valero Refining - Meraux LLC

Address: 2500 East St. Bernard Highway, Meraux, LA 70075

Emission Limitation: None

Monitor Manufacturer and Model No.: SICK FLOWSIC100 Flare

Date of Latest CMS Certification or Audit: N/A

Process Unit(s) Description: South Flare Stack (EPN 3-77, EQT 0049)

Total source operating time in reporting period: 2,208 hours

Ja CMS PERFORMANCE[2]					
Date	Start	End	Duration (hours)	Cause	Corrective Action
None.					
TOTAL			0		

[1] In accordance with 40 CFR 60.108a(d)(6), changes made in operation of the emission control system during the period of data unavailability which could affect the ability of the system to meet the applicable emission limit have been compared with operation of the control system and affected facility before and following the period of data unavailability to ensure that any changes made in operation of the emission control system during the period of data unavailability did not affect the ability of the system to meet the applicable emission limit.

DATA ASSESSMENT REPORT

(per 40 CFR 60, Appendix F, Section 7)

Pollutant: **SO_2**

Applicable NSPS Subpart: Ja

Reporting period dates: 7/1/23 to 9/30/23

Date submitted: 10/30/23

Company: Valero Refining - Meraux LLC

Address: 2500 East St. Bernard Highway, Meraux, LA 70075

Emission Limitation: SO_2 corrected to 0% O_2 shall not exceed 250 ppm on a 12-hour rolling average

Monitor Manufacturer and Model No.: Ametek 9900 (SO_2 and O_2)

Source unit: #2 SRU Incinerator (EPN 1-93, EQT 0019)

CEM Sampling Location: #2 SRU Incinerator

CEM Span Value: Sulfur Dioxide 500 ppm; Oxygen 25%

I. ACCURACY ASSESSMENT RESULTS (CGA):

	SO_2 #1 (low scale)	SO_2 #2 (high scale)	O_2 #1 (low scale)	O_2 #2 (high scale)
Date of Audit	9/25/23	9/25/23	9/25/23	9/25/23
Audit Gas Cylinder No.	SG9150051BAL	CC94008	CC483689	SG9152263BAL
Date of Audit Gas Cert.	5/27/16	5/27/16	5/23/16	5/23/16
Type of Certification	EPA Protocol 1	EPA Protocol 1	EPA Protocol 1	EPA Protocol 1
Certified Audit Value	124.9 ppmv	275.3 ppmv	5.99 vol %	10.05 vol %
CEM Response Value	125.2 ppmv	275.3 ppmv	5.74 vol %	9.98 vol %
Accuracy	0.2%	0.0%	4.2%	0.7%
Standard	<15%	<15%	<15%	<15%

II. CALIBRATION DRIFT ASSESSMENT

A. Out of Control Periods:

1. Dates: N/A

2. Number of Days N/A

B. Corrective Actions: N/A

DATA ASSESSMENT REPORT

(per 40 CFR 60, Appendix F, Section 7)

Pollutant: **SO_2**

Applicable NSPS Subpart: Ja

Reporting period dates: 7/1/23 to 9/30/23

Date submitted: 10/30/23

Company: Valero Refining - Meraux LLC

Address: 2500 East St. Bernard Highway, Meraux, LA 70075

Emission Limitation: SO_2 corrected to 0% O_2 shall not exceed 250 ppm on a 12-hour rolling average

Monitor Manufacturer and Model No.: ABB AO2000 Uras 26 (SO_2)/ Magnos 206 (O_2)

Source unit: #3 SRU Incinerator (EPN 5-00, EQT 0079)

CEM Sampling Location: #3 SRU Incinerator

CEM Span Value: Sulfur Dioxide 500 ppm; Oxygen 25%

I. ACCURACY ASSESSMENT RESULTS (CGA):

	SO_2 #1 (low scale)	SO_2 #2 (high scale)	O_2 #1 (low scale)	O_2 #2 (high scale)
Date of Audit	8/17/23	8/17/23	8/17/23	8/17/23
Audit Gas Cylinder No.	XC022957B	CC94008	CC483694	EB0063979
Date of Audit Gas Cert.	5/27/16	5/27/16	5/23/16	5/23/16
Type of Certification	EPA Protocol 1	EPA Protocol 1	EPA Protocol 1	EPA Protocol 1
Certified Audit Value	125.3 ppmv	275.3 ppmv	5.99 vol %	9.98 vol %
CEM Response Value	134.7 ppmv	262.1 ppmv	5.43 vol %	10.18 vol %
Accuracy	7.5%	4.8%	9.3%	2.0%
Standard	<15%	<15%	<15%	<15%

II. CALIBRATION DRIFT ASSESSMENT

A. Out of Control Periods:

1. Dates: 8/12/23, 07:00 – 8/13/23, 11:00

2. Number of Days 1.2 days (28 hours)

B. Corrective Actions: For corrective actions see Gaseous and Opacity Excess Emissions and Monitoring Systems Performance sheet for the #3 SRU Incinerator found on page 27 of this report.

DATA ASSESSMENT REPORT

(per 40 CFR 60, Appendix F, Section 7)

Pollutant: **H_2S**

Applicable NSPS Subpart: J

Reporting period dates: 7/1/23 to 9/30/23

Date submitted: 10/30/23

Company: Valero Refining - Meraux LLC

Address: 2500 East St. Bernard Highway, Meraux, LA 70075

Emission Limitation: Hydrogen Sulfide shall not exceed 162 ppm on a 3-hour rolling average

Monitor Manufacturer and Model No.: Ametek 4661

Source Unit: Boiler TB-01 (EPN 1-06, EQT 0010); Boiler B-7 (EPN 1-07, EQT 0011); MDH Product and Fractionator Heaters (EPN 2-92, EQT 0033); DHT Charge Heater (EPN 5-73, EQT 0058)

CEM Sampling Location: Area 1 Fuel Drum

CEM Span Value: Hydrogen Sulfide, 300 ppm

I. ACCURACY ASSESSMENT RESULTS (CGA):

	H_2S #1 (low scale)	H_2S #2 (high scale)
Date of Audit	9/25/23	9/25/23
Audit Gas Cylinder No.	LL158284	EY0001806
Date of Audit Gas Cert.	8/18/22	9/2/22
Type of Certification	EPA Protocol 1	EPA Protocol 1
Certified Audit Value (ppmv)	75.0	167.8
CEM Response Value (ppmv)	68.3	150.3
Accuracy	8.9%	10.4%
Standard	<15%	<15%

II. CALIBRATION DRIFT ASSESSMENT

A. Out of Control Periods:

1. Dates: N/A

2. Number of Days N/A

B. Corrective Actions: N/A

DATA ASSESSMENT REPORT

(per 40 CFR 60, Appendix F, Section 7)

Pollutant: **H_2S**

Applicable NSPS Subpart: J and Ja

Reporting period dates: 7/1/23 to 9/30/23

Date submitted: 10/30/23

Company: Valero Refining - Meraux LLC

Address: 2500 East St. Bernard Highway, Meraux, LA 70075

Emission Limitation: Hydrogen Sulfide shall not exceed 162 ppm on a 3-hour rolling average (J and Ja) and 60 ppm on a 365-day rolling average (Ja only)

Monitor Manufacturer and Model No.: Ametek 4661

Source Unit: No.1 Crude Heater (EPN 12-72A, EQT 022); ROSE Heater (EPN 1-80, EQT 0014); Vacuum Heater (EPN 1-76, EQT 0013); Platformer Charge Heater (EPN 17-72 a,b,c, EQT 0028); Platformer Debut Reboiler (EPN 19-72, EQT 0029); NHT Charge Heater (EPN 14-72, EQT 0023); NHT Debut Reboiler (EPA 15-72, EQT 0024); NHT Depent Reboiler (EPA 16-72, EQT 0027); Benzene Recovery Unit Reboiler (EPN 1-09, EQT 0127); NHT Charge Heater (EPN 1-17, EQT 0159)

CEM Sampling Location: Area 2 Fuel Drum

CEM Span Value: Hydrogen Sulfide, 300 ppm

I. ACCURACY ASSESSMENT RESULTS (CGA):

	H_2S #1 (low scale)	H_2S #2 (high scale)
Date of Audit	9/25/23	9/25/23
Audit Gas Cylinder No.	BLM-003489	EY0001848
Date of Audit Gas Cert.	8/18/22	9/2/22
Type of Certification	EPA Protocol 1	EPA Protocol 1
Certified Audit Value (ppmv)	74.5	165.4
CEM Response Value (ppmv)	77.4	167.5
Accuracy	3.9%	1.3%
Standard	<15%	<15%

II. CALIBRATION DRIFT ASSESSMENT

A. Out of Control Periods:

1. Dates: N/A

2. Number of Days N/A

B. Corrective Actions: N/A

DATA ASSESSMENT REPORT

(per 40 CFR 60, Appendix F, Section 7)

Pollutant: **H_2S**

Applicable NSPS Subpart: J

Reporting period dates: 7/1/23 to 9/30/23

Date submitted: 10/30/23

Company: Valero Refining - Meraux LLC

Address: 2500 East St. Bernard Highway, Meraux, LA 70075

Emission Limitation: Hydrogen Sulfide shall not exceed 162 ppm on a 3-hour rolling average

Monitor Manufacturer and Model No.: Ametek 4661

Process Unit(s) Description: Merox Disulfide Separator to Platformer Charge Heater

CEM Sampling Location: Area 4 Fuel Drum

CEM Span Value: Hydrogen Sulfide, 300 ppm

I. ACCURACY ASSESSMENT RESULTS (CGA):

	H_2S #1 (low scale)	H_2S #2 (high scale)
Date of Audit	9/25/23	9/25/23
Audit Gas Cylinder No.	LL74335	Ll41209
Date of Audit Gas Cert.	8/18/22	9/2/22
Type of Certification	EPA Protocol 1	EPA Protocol 1
Certified Audit Value (ppmv)	74.9	164.2
CEM Response Value (ppmv)	75.3	166.0
Accuracy	0.5%	1.1%
Standard	<15%	<15%

II. CALIBRATION DRIFT ASSESSMENT

A. Out of Control Periods:

1. Dates: N/A

2. Number of Days N/A

B. Corrective Actions: N/A

DATA ASSESSMENT REPORT

(per 40 CFR 60, Appendix F, Section 7)

Pollutant: **H_2S**

Applicable NSPS Subpart: J

Reporting period dates: 7/1/23 to 9/30/23

Date submitted: 10/30/23

Company: Valero Refining - Meraux LLC

Address: 2500 East St. Bernard Highway, Meraux, LA 70075

Emission Limitation: Hydrogen Sulfide shall not exceed 162 ppm on a 3-hour rolling average

Monitor Manufacturer and Model No.: Ametek 4661

Process Unit(s) Description: Hydrocracker & Hydrotreater Charge Heaters (EPN 1-00, EQT 0009)

CEM Sampling Location: Area 6 Fuel Drum

CEM Span Value: Hydrogen Sulfide, 300 ppm

I. ACCURACY ASSESSMENT RESULTS (CGA):

	H_2S #1 (low scale)	H_2S #2 (high scale)
Date of Audit	9/25/23	9/25/23
Audit Gas Cylinder No.	LL49233	BLM002816
Date of Audit Gas Cert.	1/3/23	1/3/23
Type of Certification	EPA Protocol 1	EPA Protocol 1
Certified Audit Value (ppmv)	75.2	159.8
CEM Response Value (ppmv)	73.1	162.7
Accuracy	2.8%	1.8%
Standard	<15%	<15%

II. CALIBRATION DRIFT ASSESSMENT

A. Out of Control Periods:

1. Dates: N/A

2. Number of Days N/A

B. Corrective Actions: N/A

DATA ASSESSMENT REPORT

(per 40 CFR 60, Appendix F, Section 7)

Pollutant: **H_2S**

Applicable NSPS Subpart: J

Reporting period dates: 7/1/23 to 9/30/23

Date submitted: 10/30/23

Company: Valero Refining - Meraux LLC

Address: 2500 East St. Bernard Highway, Meraux, LA 70075

Emission Limitation: Hydrogen Sulfide shall not exceed 162 ppm on a 3-hour rolling average

Monitor Manufacturer and Model No.: Ametek 4661

Process Unit(s) Description: Boilers B-5 (EPN 2-00, EQT 0030) and B-6 (EPN 3-00, EQT 0048)

CEM Sampling Location: Area 6 Boilers Fuel Drum

CEM Span Value: Hydrogen Sulfide, 300 ppm

I. ACCURACY ASSESSMENT RESULTS (CGA):

	H_2S #1 (low scale)	H_2S #2 (high scale)
Date of Audit	9/25/23	9/25/23
Audit Gas Cylinder No.	LL49233	BLM002816
Date of Audit Gas Cert.	1/3/23	1/3/23
Type of Certification	EPA Protocol 1	EPA Protocol 1
Certified Audit Value (ppmv)	75.2	159.8
CEM Response Value (ppmv)	77.9	163.7
Accuracy	3.6%	2.4%
Standard	<15%	<15%

II. CALIBRATION DRIFT ASSESSMENT

A. Out of Control Periods:

1. Dates: N/A

2. Number of Days N/A

B. Corrective Actions: N/A

DATA ASSESSMENT REPORT

(per 40 CFR 60, Appendix F, Section 7)

Pollutant: **NO_x**

Applicable NSPS Subpart: Db

Reporting period dates: 7/1/23 to 9/30/23

Date submitted: 10/30/23

Company: Valero Refining - Meraux LLC

Address: 2500 East St. Bernard Highway, Meraux, LA 70075

Emission Limitation: Nitrogen Oxide shall not exceed 0.1 pound/MMBtu on a 30-day rolling average

Monitor Manufacturer and Model No.: ABB AO2000 Uras 26 (NO_x)/ Magnos 28 (O_2)

Process Unit(s) Description: Boiler B-5 (EPN 2-00, EQT 0030)

CEM Sampling Location: Boiler B-5

CEM Span Value: Nitrogen Oxide 100 ppm, Oxygen 25 %

I. ACCURACY ASSESSMENT RESULTS (CGA):

	NO_x #1 (low scale)	NO_x #2 (high scale)	O_2 #1 (low scale)	O_2 #2 (high scale)
Date of Audit	8/17/23	8/17/23	8/17/23	8/17/23
Audit Gas Cylinder No.	LL23428	LL64747	CC483685	BLM004951
Date of Audit Gas Cert.	3/21/22	5/3/16	5/23/16	4/22/19
Type of Certification	EPA Protocol 1	EPA Protocol 1	EPA Protocol 1	EPA Protocol 1
Certified Audit Value	25.0 ppmv	54.5 ppmv	6.00 vol %	10.04 vol %
CEM Response Value	24.4 ppmv	53.3 ppmv	6.03 vol %	10.04 vol %
Accuracy	2.4%	2.2%	0.5%	0.0%
Standard	<15%	<15%	<15%	<15%

II. CALIBRATION DRIFT ASSESSMENT

B. Out of Control Periods:

3. Dates: N/A

4. Number of Days N/A

C. Corrective Actions: N/A

DATA ASSESSMENT REPORT

(per 40 CFR 60, Appendix F, Section 7)

Pollutant: **NO_x**

Applicable NSPS Subpart: Db

Reporting period dates: 7/1/23 to 9/30/23

Date submitted: 10/30/23

Company: Valero Refining - Meraux LLC

Address: 2500 East St. Bernard Highway, Meraux, LA 70075

Emission Limitation: Nitrogen Oxide shall not exceed 0.1 pound/MMBtu on a 30-day rolling average

Monitor Manufacturer and Model No.: ABB AO2000 Uras 26(NO_x)/ Magnos 28(O_2)

Process Unit(s) Description: Boiler B-6 (EPN 3-00, EQT 0048)

CEM Sampling Location: Boiler B-6

CEM Span Value: Nitrogen Oxide 100 ppm, Oxygen 25 %

I. ACCURACY ASSESSMENT RESULTS (CGA):

	NO_x #1 (low scale)	NO_x #2 (high scale)	O_2 #1 (low scale)	O_2 #2 (high scale)
Date of Audit	8/17/23	8/17/23	8/17/23	8/17/23
Audit Gas Cylinder No.	LL23428	LL64747	CC483685	BLM004951
Date of Audit Gas Cert.	3/21/22	5/3/16	5/23/16	4/22/19
Type of Certification	EPA Protocol 1	EPA Protocol 1	EPA Protocol 1	EPA Protocol 1
Certified Audit Value	25.0 ppmv	54.5 ppmv	6.00 vol %	10.04 vol %
CEM Response Value	24.3 ppmv	52.9 ppmv	6.03 vol %	10.04 vol %
Accuracy	2.8%	2.9%	0.5%	0.0%
Standard	<15%	<15%	<15%	<15%

II. CALIBRATION DRIFT ASSESSMENT

A. Out of Control Periods:

1. Dates: N/A

2. Number of Days N/A

B. Corrective Actions: N/A

DATA ASSESSMENT REPORT

(per 40 CFR 60, Appendix F, Section 7)

Pollutant: **NO_x**

Applicable NSPS Subpart: Db

Reporting period dates: 7/1/23 to 9/30/23

Date submitted: 10/30/23

Company: Valero Refining - Meraux LLC

Address: 2500 East St. Bernard Highway, Meraux, LA 70075

Emission Limitation: Nitrogen Oxide shall not exceed 0.1 pound/MMBtu on a 30-day rolling average

Monitor Manufacturer and Model No.: Thermo Environmental Model 42i (NO_x)/(O_2)

Process Unit(s) Description: Boiler TB-01 (EPN 1-06, EQT 0010)

CEM Sampling Location: Boiler TB-01

CEM Span Value: Nitrogen Oxide 500 ppm, Oxygen 25 %

I. ACCURACY ASSESSMENT RESULTS (CGA):

	NO_x #1 (low scale)	NO_x #2 (high scale)	O_2 #1 (low scale)	O_2 #2 (high scale)
Date of Audit	9/25/23	9/25/23	9/25/23	9/25/23
Audit Gas Cylinder No.	SG9167966BAL	CC89303	LL269	LL168197
Date of Audit Gas Cert.	5/31/16	5/31/16	4/25/16	4/25/16
Type of Certification	EPA Protocol 1	EPA Protocol 1	EPA Protocol 1	EPA Protocol 1
Certified Audit Value	126.9 ppmv	270.5 ppmv	6.03 vol %	10.10 vol %
CEM Response Value	122.2 ppmv	260.7 ppmv	5.50 vol %	9.37 vol %
Accuracy	3.7%	3.6%	8.8%	7.2%
Standard	<15%	<15%	<15%	<15%

II. CALIBRATION DRIFT ASSESSMENT

A. Out of Control Periods:

1. Dates: N/A

2. Number of Days N/A

B. Corrective Actions: N/A

DATA ASSESSMENT REPORT

(per 40 CFR 60, Appendix F, Section 7)

Pollutant: **NO_x**

Applicable NSPS Subpart: Ja

Reporting period dates: 7/1/23 to 9/30/23

Date submitted: 10/30/23

Company: Valero Refining - Meraux LLC

Address: 2500 East St. Bernard Highway, Meraux, LA 70075

Emission Limitation: Nitrogen Oxide corrected to 0% O_2 shall not exceed 40 ppm on a 30-day rolling average

Monitor Manufacturer and Model No.: Thermo Environmental Model 42i (NO_x)/(O_2)

Process Unit(s) Description: Benzene Recovery Unit Reboiler (EPN 1-09, EQT 0127)

CEM Sampling Location: Benzene Recovery Unit Reboiler

CEM Span Value: Nitrogen Oxide 100 ppm, Oxygen 25 %

I. ACCURACY ASSESSMENT RESULTS (CGA):

	NO_x #1 (low scale)	NO_x #2 (high scale)	O_2 #1 (low scale)	O_2 #2 (high scale)
Date of Audit	7/25/23	7/25/23	7/25/23	7/25/23
Audit Gas Cylinder No.	LL111161	CC307733	CC483658	CC87078
Date of Audit Gas Cert.	3/21/22	6/2/16	5/23/16	5/23/16
Type of Certification	EPA Protocol 1	EPA Protocol 1	EPA Protocol 1	EPA Protocol 1
Certified Audit Value	24.7 ppmv	55.8 ppmv	5.96 vol %	9.94 vol %
CEM Response Value	24.2 ppmv	53.0 ppmv	5.90 vol %	9.83 vol %
Accuracy	2.0%	5.0%	1.0%	1.1%
Standard	<15%	<15%	<15%	<15%

II. CALIBRATION DRIFT ASSESSMENT

A. Out of Control Periods:

1. Dates: N/A

2. Number of Days N/A

B. Corrective Actions: For corrective actions see Gaseous and Opacity Excess Emissions and Monitoring Systems Performance sheet for the Benzene Recovery Unit Reboiler found on pages 29-30 of this report.

DATA ASSESSMENT REPORT

(per 40 CFR 60, Appendix F, Section 7)

Pollutant: **NO_x**

Applicable NSPS Subpart: Ja

Reporting period dates: 7/1/23 to 9/30/23

Date submitted: 10/30/23

Company: Valero Refining - Meraux LLC

Address: 2500 East St. Bernard Highway, Meraux, LA 70075

Emission Limitation: Nitrogen Oxide corrected to 0% O_2 shall not exceed 40 ppm on a 30-day rolling average

Monitor Manufacturer and Model No.: ABB AO2000 Uras 26 (NO_x)/ Magnos 206 (O_2)

Process Unit(s) Description: NHT Charge Heater (EPN 1-17, EQT 0159)

CEM Sampling Location: NHT Charge Heater

CEM Span Value: Nitrogen Oxide 100 ppm, Oxygen 25 %

I. ACCURACY ASSESSMENT RESULTS (CGA):

CGA	NO_x #1 (low scale)	NO_x #2 (high scale)	O_2 #1 (low scale)	O_2 #2 (high scale)
Date of Audit	8/22/23	8/22/23	8/22/23	8/22/23
Audit Gas Cylinder No.	LL13923	CC416948	CC483649	CC148318
Date of Audit Gas Cert.	9/7/22	6/2/16	5/23/16	5/23/16
Type of Certification	EPA Protocol 1	EPA Protocol 1	EPA Protocol 1	EPA Protocol 1
Certified Audit Value	25.7 ppmv	55.5 ppmv	6.00 vol %	9.99 vol %
CEM Response Value	24.3 ppmv	53.0 ppmv	6.82 vol %	10.60 vol %
Accuracy	5.3%	4.6%	13.7%	6.1%
Standard	<15%	<15%	<15%	<15%

II. CALIBRATION DRIFT ASSESSMENT

A. Out of Control Periods:

1. Dates: N/A

2. Number of Days N/A

B. Corrective Actions: N/A

DATA ASSESSMENT REPORT

(per 40 CFR 60, Appendix F, Section 7)

Pollutant: **NO_x**

Applicable NSPS Subpart: N/A (Required by Consent Decree: 3:10-cv-00563-bbc, Paragraph 36.a)

Reporting period dates: 7/1/23 to 9/30/23

Date submitted: 10/30/23

Company: Valero Refining - Meraux LLC

Address: 2500 East St. Bernard Highway, Meraux, LA 70075

Emission Limitation: None

Monitor Manufacturer and Model No.: ABB Limas11 (NO_x), Magnos27 (O_2)

Process Unit(s) Description: No.1 Crude Heater (EPN 12-72A, EQT 0022)

CEM Sampling Location: No.1 Crude Heater

CEM Span Value: Nitrogen Oxide 100 ppm, Oxygen 25 %

I. ACCURACY ASSESSMENT RESULTS (CGA):

CGA	NO_x #1 (low scale)	NO_x #2 (high scale)	O_2 #1 (low scale)	O_2 #2 (high scale)
Date of Audit	8/17/23	8/17/23	8/17/23	8/17/23
Audit Gas Cylinder No.	LL13923	CC319153	CC483638	CC222165
Date of Audit Gas Cert.	9/7/22	6/2/16	5/23/16	5/23/16
Type of Certification	EPA Protocol 1	EPA Protocol 1	EPA Protocol 1	EPA Protocol 1
Certified Audit Value	25.7 ppmv	55.4 ppmv	5.99 vol %	9.96 vol %
CEM Response Value	26.9 ppmv	58.9 ppmv	6.07 vol %	10.04 vol %
Accuracy	4.7%	6.3%	1.2%	0.8%
Standard	<15%	<15%	<15%	<15%

II. CALIBRATION DRIFT ASSESSMENT

A. Out of Control Periods:

1. Dates: N/A

2. Number of Days N/A

B. Corrective Actions: N/A

DATA ASSESSMENT REPORT

(per 40 CFR 60, Appendix F, Section 7)

Pollutant: **NO_x**

Applicable NSPS Subpart: N/A (Required by Consent Decree: 3:10-cv-00563-bbc, Paragraph 36.a)

Reporting period dates: 7/1/23 to 9/30/23

Date submitted: 10/30/23

Company: Valero Refining - Meraux LLC

Address: 2500 East St. Bernard Highway, Meraux, LA 70075

Emission Limitation: None

Monitor Manufacturer and Model No.: ABB AO2000 Uras 26 (NO_x)/ Magnos 206 (O_2)

Process Unit(s) Description: MDH Product and Fractionator Heaters (EPN 2-92, EQT 0033)

CEM Sampling Location: MDH Product and Fractionator Heaters

CEM Span Value: Nitrogen Oxide 100 ppm, Oxygen 25 %

I. ACCURACY ASSESSMENT RESULTS (CGA):

CGA	NO_x #1 (low scale)	NO_x #2 (high scale)	O_2 #1 (low scale)	O_2 #2 (high scale)
Date of Audit	8/22/23	8/22/23	8/22/23	8/22/23
Audit Gas Cylinder No.	BLM004490	LL64381	LL100497	LL67009
Date of Audit Gas Cert.	9/7/22	5/6/19	4/22/19	4/22/19
Type of Certification	EPA Protocol 1	EPA Protocol 1	EPA Protocol 1	EPA Protocol 1
Certified Audit Value	25.5 ppmv	55.2 ppmv	6.02 vol %	10.03 vol %
CEM Response Value	26.1 ppmv	53.7 ppmv	6.03 vol %	9.64 vol %
Accuracy	2.3%	2.7%	0.1%	3.9%
Standard	<15%	<15%	<15%	<15%

II. CALIBRATION DRIFT ASSESSMENT

A. Out of Control Periods:

1. Dates: N/A

2. Number of Days N/A

B. Corrective Actions: N/A

DATA ASSESSMENT REPORT

(per 40 CFR 60, Appendix F, Section 7)

Pollutant: **H_2S**

Applicable NSPS Subpart: Ja

Reporting period dates: 7/1/23 to 9/30/23

Date submitted: 10/30/23

Company: Valero Refining - Meraux LLC

Address: 2500 East St. Bernard Highway, Meraux, LA 70075

Emission Limitation: Hydrogen Sulfide shall not exceed 162 ppm on a 3-hour rolling average

Monitor Manufacturer and Model No.: Ametek 5100

Process Unit(s) Description: North Flare Stack (EPN 20-72, EQT 0035), North Flare Header

CEM Sampling Location: North Flare Stack, North Flare Header

CEM Span Value: Hydrogen Sulfide, 300 ppm

I. ACCURACY ASSESSMENT RESULTS (CGA):

	H_2S #1 (low scale)	H_2S #2 (high scale)
Date of Audit	8/23/23	8/23/23
Audit Gas Cylinder No.	CC233507	ALM014455
Date of Audit Gas Cert.	8/17/22	8/16/22
Type of Certification	Certified Gas[1]	Certified Gas[1]
Certified Audit Value	71.2 ppmv	153.2 ppmv
CEM Response Value	72.0 ppmv	159.3 ppmv
Accuracy	1.1%	4.0%
Standard	<15%	<15%

[1] Methane balanced audit gas required by this analyzer cannot be certified using EPA Protocol 1.

II. CALIBRATION DRIFT ASSESSMENT

A. Out of Control Periods:

1. Dates: N/A

2. Number of Days N/A

B. Corrective Actions: N/A

DATA ASSESSMENT REPORT

(per 40 CFR 60, Appendix F, Section 7)

Pollutant: **H_2S**

Applicable NSPS Subpart: Ja

Reporting period dates: 7/1/23 to 9/30/23

Date submitted: 10/30/23

Company: Valero Refining - Meraux LLC

Address: 2500 East St. Bernard Highway, Meraux, LA 70075

Emission Limitation: Hydrogen Sulfide shall not exceed 162 ppm on a 3-hour rolling average

Monitor Manufacturer and Model No.: Ametek 5100

Process Unit(s) Description: North Flare Stack (EPN 20-72, EQT 0035), Hydrocracker Flare Header

CEM Sampling Location: North Flare Stack, Hydrocracker Flare Header

CEM Span Value: Hydrogen Sulfide, 300 ppm

I. ACCURACY ASSESSMENT RESULTS (CGA):

	H_2S #1 (low scale)	H_2S #2 (high scale)
Date of Audit	8/22/23	8/22/23
Audit Gas Cylinder No.	CC233507	ALM014455
Date of Audit Gas Cert.	8/17/22	8/16/22
Type of Certification	Certified Gas[1]	Certified Gas[1]
Certified Audit Value	71.2 ppmv	153.2 ppmv
CEM Response Value	79.3 ppmv	163.7 ppmv
Accuracy	11.4%	6.9%
Standard	<15%	<15%

[1] Methane balanced audit gas required by this analyzer cannot be certified using EPA Protocol 1.

II. CALIBRATION DRIFT ASSESSMENT

B. Out of Control Periods:

3. Dates: N/A

4. Number of Days N/A

C. Corrective Actions: N/A

DATA ASSESSMENT REPORT

(per 40 CFR 60, Appendix F, Section 7)

Pollutant: **H_2S**

Applicable NSPS Subpart: Ja

Reporting period dates: 7/1/23 to 9/30/23

Date submitted: 10/30/23

Company: Valero Refining - Meraux LLC

Address: 2500 East St. Bernard Highway, Meraux, LA 70075

Emission Limitation: Hydrogen Sulfide shall not exceed 162 ppm on a 3-hour rolling average

Monitor Manufacturer and Model No.: Ametek 5100

Process Unit(s) Description: South Flare Stack (EPN 3-77, EQT 0049)

CEM Sampling Location: South Flare Stack

CEM Span Value: Hydrogen Sulfide, 300 ppm

I. ACCURACY ASSESSMENT RESULTS (CGA):

	H_2S #1 (low scale)	H_2S #2 (high scale)
Date of Audit	8/17/23	8/17/23
Audit Gas Cylinder No.	CC233507	ALM014455
Date of Audit Gas Cert.	8/17/22	8/16/22
Type of Certification	Certified Gas[1]	Certified Gas[1]
Certified Audit Value	71.2 ppmv	153.2 ppmv
CEM Response Value	71.0 ppmv	155.3 ppmv
Accuracy	0.3%	1.4%
Standard	<15%	<15%

[1] Methane balanced audit gas required by this analyzer cannot be certified using EPA Protocol 1.

II. CALIBRATION DRIFT ASSESSMENT

A. Out of Control Periods:

1. Dates: N/A

2. Number of Days N/A

B. Corrective Actions: N/A

DATA ASSESSMENT REPORT

(per 40 CFR 60, Appendix F, Section 7)

Pollutant: **Total Sulfur**

Applicable NSPS Subpart: Ja (Required by Consent Decree: 3:10-cv-00563-bbc, Paragraph 49.a.ii)

Reporting period dates: 7/1/23 to 9/30/23

Date submitted: 10/30/23

Company: Valero Refining - Meraux LLC

Address: 2500 East St. Bernard Highway, Meraux, LA 70075

Emission Limitation: None

Monitor Manufacturer and Model No.: Thermo Scientific SOLA II

Process Unit(s) Description: North Flare Stack (EPN 20-72, EQT 0035), North Flare Header

CEM Sampling Location: North Flare Stack, North Flare Header

CEM Span Value: Total Sulfur, Dual Range: 0-10,000 ppm, 10,000-1,000,000 ppm

I. ACCURACY ASSESSMENT RESULTS (CGA):

	H_2S #1 (low scale)	H_2S #2 (high scale)
Date of Audit	9/12/23	9/12/23
Audit Gas Cylinder No.	CC753252	SG9133262BAL
Date of Audit Gas Cert.	5/3/23	11/5/20
Type of Certification	EPA Protocol 1	Certified Gas[1]
Certified Audit Value (ppmv)	1012.0 ppmv	5559.0 ppmv
CEM Response Value (ppmv)	1019.7 ppmv	5615.3 ppmv
Accuracy	0.8%	1.0%
Standard	<15%	<15%

[1]EPA Protocol 1 certified gases are not available for H_2S concentrations greater than 1000 ppm.

II. CALIBRATION DRIFT ASSESSMENT

A. Out of Control Periods:

1. Dates: N/A

2. Number of Days N/A

B. Corrective Actions: N/A

DATA ASSESSMENT REPORT

(per 40 CFR 60, Appendix F, Section 7)

Pollutant: **Total Sulfur**

Applicable NSPS Subpart: Ja (Required by Consent Decree: 3:10-cv-00563-bbc, Paragraph 49.a.ii)

Reporting period dates: 7/1/23 to 9/30/23

Date submitted: 10/30/23

Company: Valero Refining - Meraux LLC

Address: 2500 East St. Bernard Highway, Meraux, LA 70075

Emission Limitation: None

Monitor Manufacturer and Model No.: Thermo Scientific SOLA II

Process Unit(s) Description: North Flare Stack (EPN 20-72, EQT 0035), Hydrocracker Flare Header

CEM Sampling Location: North Flare Stack, Hydrocracker Flare Header

CEM Span Value: Total Sulfur, Dual Range: 0-10,000 ppm, 10,000-1,000,000 ppm

I. ACCURACY ASSESSMENT RESULTS (CGA):

	H_2S #1 (low scale)	H_2S #2 (high scale)
Date of Audit	9/12/23	9/12/23
Audit Gas Cylinder No.	CC753252	SG9133262BAL
Date of Audit Gas Cert.	5/3/23	11/5/20
Type of Certification	EPA Protocol 1	Certified Gas[1]
Certified Audit Value (ppmv)	1012.0 ppmv	5559.0 ppmv
CEM Response Value (ppmv)	1022.3 ppmv	5675.3 ppmv
Accuracy	1.0%	2.1%
Standard	<15%	<15%

[1] EPA Protocol 1 certified gases are not available for H_2S concentrations greater than 1000 ppm.

II. CALIBRATION DRIFT ASSESSMENT

A. Out of Control Periods:

1. Dates: N/A

2. Number of Days N/A

B. Corrective Actions: N/A

DATA ASSESSMENT REPORT

(per 40 CFR 60, Appendix F, Section 7)

Pollutant: **Total Sulfur**

Applicable NSPS Subpart: Ja (Required by Consent Decree: 3:10-cv-00563-bbc, Paragraph 49.a.ii)

Reporting period dates: 7/1/23 to 9/30/23

Date submitted: 10/30/23

Company: Valero Refining - Meraux LLC

Address: 2500 East St. Bernard Highway, Meraux, LA 70075

Emission Limitation: None

Monitor Manufacturer and Model No.: Thermo Scientific SOLA II

Process Unit(s) Description: South Flare Stack (EPN 3-77, EQT 0049)

CEM Sampling Location: South Flare Stack

CEM Span Value: Total Sulfur, Dual Range: 0-10,000 ppm, 10,000-1,000,000 ppm

I. ACCURACY ASSESSMENT RESULTS (CGA):

	H_2S #1 (low scale)	H_2S #2 (high scale)
Date of Audit	9/12/23	9/12/23
Audit Gas Cylinder No.	CC753252	SG9133262BAL
Date of Audit Gas Cert.	5/3/23	11/5/20
Type of Certification	EPA Protocol 1	Certified Gas[1]
Certified Audit Value (ppmv)	1012.0 ppmv	5559.0 ppmv
CEM Response Value (ppmv)	1001.7 ppmv	5607.0 ppmv
Accuracy	1.0%	0.9%
Standard	<15%	<15%

[1] EPA Protocol 1 certified gases are not available for H_2S concentrations greater than 1000 ppm.

II. CALIBRATION DRIFT ASSESSMENT

A. Out of Control Periods:

1. Dates: N/A

2. Number of Days N/A

B. Corrective Actions: N/A

Appendix A

Ja Root Cause and Corrective Action Analysis

Subpart Ja Root Cause / Corrective Action Analysis

Incident Number: 465635

The information contained below satisfies the requirements of the NSPS Subpart Ja 60.108a(c)(6).

Report:	**Final**		
Refinery:	**Valero (Meraux)**		
Incident Type:	**Flaring (Flow)**	Date of Event:	**12/23/22**
Emissions Source(s):	**North Flare (EPN 20-72, EQT 0035)**	Date Analysis Completed:	**2/2/23**

(1.) (60.108a(c)(6)(i))

A description of the Discharge:

On December 23, 2022 at approximately 03:52, Valero experienced intermittent flaring from the Pressure Swing Absorption (PSA) hydrogen recovery unit to the North Flare. Valero operations and maintenance personnel investigated and determined that the issue was caused by a control valve positioner that was not operating properly. Once this valve was identified, the affected bed of the PSA unit was taken offline for repair.

(2.) (60.108a(c)(6)(ii)) and (60.108a(c)(6)(ix))

Date and Time the discharge was first identified	**12/23/22 3:52**
Date/Time the discharge had ceased	**12/23/22 10:25**
Duration of Discharge (Calculated)	**6.6** hrs.

(3.) (60.108a(c)(6)(viii))

The steps taken to limit the emissions during the discharge:

Valero followed its Flare Minimization Plan and Operations Procedures to minimize the volume flared from this discharge.

(4.) (60.108a(c)(6)(xi))

Necessity of RC/CAA: Determine and state whether a RC/CAA is necessary:

Note: If the discharge was a result of a planned startup or shutdown, a RC/CAA analysis is not required if the flare management plan was followed.

Did the discharge result from a planned startup or shutdown?	**No**	(Yes/No)
Was the flare management plan followed?	**Yes**	(Yes/No/N/A)
Is the event exempt from a RC/CCA based on the answers above?	**No**	(Yes/No)

- If yes, skip section 5-7.

(5.) (60.108a(c)(6)(ix))

Root Cause Analysis: Describe in detail the Root Cause(s) of the Incident, to the extent determinable:

Did this discharge result from root causes identified in a previous analysis? **No** (Yes/No)

Valero determined the root cause of this flaring to be a failed valve positioner on a control valve in the PSA unit. Additionally, Valero determined that this particular make and model of positioner has historically had a higher failure rate compared to another make and model used in similar service within the PSA unit.

(6.) (60.108a(c)(6)(ix))

Corrective Action Analysis: Include a description of the recommended corrective action(s) or an explanation of why corrective action is not

Is corrective action required? **Yes** (Yes/No)

1) Replace the higher failure rate positioners in warehouse stock with the lower failure rate positioners to phase out these positioners.

2) Evaluate the preventative maintenance frequency and scope for instrument air filters, regulators, valves, and instrumentation.

(7.) (60.108a(c)(6)(x))

Corrective Action Schedule: Include corrective actions already completed within the first 45 days following the discharge. For those not completed, provide a schedule for implementation, including proposed commencement and completion dates.

1) Replace the higher failure rate positioners in warehouse stock with the lower failure rate positioners to phase out these positioners.
Commencement Date: 2/2/23
Completed Date: 9/12/23

2) Evaluate the preventative maintenance frequency and scope for instrument air filters, regulators, valves, and instrumentation.
Commencement Date: 2/2/23
Completed Date: 2/28/23

(8.)

The measured or calculated cumulative quantity of gas discharged over the discharge duration.

Note: Measured sulfur concentrations are shown as flow-weighted averages if multiple measurement devices were used.

		(60.108a(c)(6)(iii))	(60.108a(c)(6)(iv))	(60.108a(c)(6)(vii))	(60.108a(c)(6)(vii))
First hour of 24-hr Period	**Last hour of 24-hr Period**	**24-hr cumulative volume of flared gas above Baseline**	**TRS or H2S ppm (24-hr average, flow-weighted)**	**24-hr cumulative SO2**	**24-hr cumulative reduced sulfur**
		SCF	ppmv	lbs	lbs as H2S
12/22/2022 03:00	12/23/2022 02:00	114,788	80	3.0	0.0
12/22/2022 04:00	12/23/2022 03:00	119,818	83	3.3	0.0
12/22/2022 05:00	12/23/2022 04:00	122,260	86	3.5	0.0
12/22/2022 06:00	12/23/2022 05:00	158,412	94	5.5	0.0
12/22/2022 07:00	12/23/2022 06:00	287,934	100	10.3	0.1
12/22/2022 08:00	12/23/2022 07:00	603,600	111	29.3	0.2
12/22/2022 09:00	12/23/2022 08:00	927,793	152	87.6	0.5
12/22/2022 10:00	12/23/2022 09:00	1,119,862	177	109.9	0.6
12/22/2022 11:00	12/23/2022 10:00	1,144,792	180	110.6	0.6
12/22/2022 12:00	12/23/2022 11:00	1,144,875	180	110.6	0.6
12/22/2022 13:00	12/23/2022 12:00	1,144,954	178	110.5	0.6
12/22/2022 14:00	12/23/2022 13:00	1,145,043	175	110.4	0.6
12/22/2022 15:00	12/23/2022 14:00	1,145,111	173	110.4	0.6
12/22/2022 16:00	12/23/2022 15:00	1,145,173	170	110.3	0.6
12/22/2022 17:00	12/23/2022 16:00	1,145,224	168	110.2	0.6
12/22/2022 18:00	12/23/2022 17:00	1,145,259	166	110.1	0.6
12/22/2022 19:00	12/23/2022 18:00	1,145,330	163	110.0	0.6
12/22/2022 20:00	12/23/2022 19:00	1,144,957	160	109.9	0.6
12/22/2022 21:00	12/23/2022 20:00	1,142,040	158	109.8	0.6
12/22/2022 22:00	12/23/2022 21:00	1,142,077	155	109.7	0.6
12/22/2022 23:00	12/23/2022 22:00	1,142,120	152	109.6	0.6
12/23/2022 00:00	12/23/2022 23:00	1,142,177	150	109.5	0.6
12/23/2022 01:00	12/24/2022 00:00	1,142,198	147	109.4	0.6
12/23/2022 02:00	12/24/2022 01:00	1,142,236	145	109.3	0.6
12/23/2022 03:00	12/24/2022 02:00	1,138,672	139	109.0	0.6
12/23/2022 04:00	12/24/2022 03:00	1,133,688	132	108.6	0.6
12/23/2022 05:00	12/24/2022 04:00	1,131,306	126	108.3	0.6
12/23/2022 06:00	12/24/2022 05:00	1,095,217	114	106.2	0.6
12/23/2022 07:00	12/24/2022 06:00	965,772	105	101.2	0.5
12/23/2022 08:00	12/24/2022 07:00	650,206	91	82.1	0.4
12/23/2022 09:00	12/24/2022 08:00	326,076	47	23.7	0.1

Subpart Ja Root Cause / Corrective Action Analysis

Incident Number: 470601

The information contained below satisfies the requirements of the NSPS Subpart Ja 60.108a(c)(6).

Report:	**Final**		
Refinery:	**Valero (Meraux)**		
Incident Type:	**Flaring (Flow)**	Date of Event:	**4/28/23**
Emissions Source(s):	**North Flare (EPN 20-72, EQT 0035)**	Date Analysis Completed:	**6/8/23**
	South Flare (EPN 3-77, EQT 0049)		

(1.) (60.108a(c)(6)(i))

A description of the Discharge:

On April 28, 2023 at approximately 11:12, Valero experienced a partial loss of electrical power during planned maintenance to replace a fuse on equipment powering the Flare Gas Recovery (FGR) Unit. While reinstalling the Control Power Transformer (CPT) drawer after the fuse was replaced a fault occurred that caused a voltage drop which tripped several circuit breakers. The running FGR compressor automatically shut down, multiple refinery units were upset, and the #2 Sulfur Recovery Unit (SRU) was shutdown. Valero quickly initiated its sulfur shedding procedures and transferred the remaining acid gas feed to the #3 SRU, which had remained operating through the power loss. The combined SO2 emissions from the #2 SRU and #3 SRU did not exceed 500 lbs above allowed in a 24 hour period; however; flaring from this event did exceed 500,000 scf above baseline in a 24 hour period.

(2.) (60.108a(c)(6)(ii)) and (60.108a(c)(6)(ix))

Date and Time the discharge was first identified	**4/28/23 11:12**
Date/Time the discharge had ceased	**4/28/23 20:43**
Duration of Discharge (Calculated)	**9.5** hrs.

(3.) (60.108a(c)(6)(viii))

The steps taken to limit the emissions during the discharge:

Valero followed its Flare Minimization Plan and Operations Procedures to minimize the volume flared from this discharge.

(4.) (60.108a(c)(6)(xi))

Necessity of RC/CAA: Determine and state whether a RC/CAA is necessary:

Note: If the discharge was a result of a planned startup or shutdown, a RC/CAA analysis is not required if the flare management plan was followed.

Did the discharge result from a planned startup or shutdown?	**No**	(Yes/No)
Was the flare management plan followed?	**Yes**	(Yes/No/N/A)
Is the event exempt from a RC/CCA based on the answers above?	**No**	(Yes/No)

- **If yes, skip section 5-7.**

(5.) (60.108a(c)(6)(ix))

Root Cause Analysis: Describe in detail the Root Cause(s) of the Incident, to the extent determinable:

Did this discharge result from root causes identified in a previous analysis? **No** (Yes/No)

Valero determined the root cause of this event to be the failure of the Kirk Key interlock on the CPT drawer.

(6.) (60.108a(c)(6)(ix))

Corrective Action Analysis: Include a description of the recommended corrective action(s) or an explanation of why corrective action is not

Is corrective action required? **Yes** (Yes/No)

1) Repair the Kirk Key interlock on the CPT Drawer.

(7.) (60.108a(c)(6)(x))

Corrective Action Schedule: Include corrective actions already completed within the first 45 days following the discharge. For those not completed, provide a schedule for implementation, including proposed commencement and completion dates.

1) Repair the Kirk Key interlock on the CPT Drawer.

Commencement Date: 6/8/23

Completed: 7/31/23

(8.)

The measured or calculated cumulative quantity of gas discharged over the discharge duration.

Note: Measured sulfur concentrations are shown as flow-weighted averages if multiple measurement devices were used.

		(60.108a(c)(6)(iii))	(60.108a(c)(6)(iv))	(60.108a(c)(6)(vii))	(60.108a(c)(6)(vii))
First hour of 24-hr Period	**Last hour of 24-hr Period**	**24-hr cumulative volume of flared gas above Baseline**	**TRS or H2S ppm (24-hr average, flow-weighted)**	**24-hr cumulative SO2**	**24-hr cumulative reduced sulfur**
		SCF	ppmv	lbs	lbs as H2S
4/27/2023 11:00	4/28/2023 10:00	118	7	0.2	0.0
4/27/2023 12:00	4/28/2023 11:00	49,723	46	9.4	0.1
4/27/2023 13:00	4/28/2023 12:00	265,454	59	22.0	0.1
4/27/2023 14:00	4/28/2023 13:00	418,614	75	32.1	0.2
4/27/2023 15:00	4/28/2023 14:00	563,565	91	41.8	0.2
4/27/2023 16:00	4/28/2023 15:00	743,946	108	55.0	0.3
4/27/2023 17:00	4/28/2023 16:00	1,019,220	126	75.2	0.4
4/27/2023 18:00	4/28/2023 17:00	1,230,421	137	85.5	0.5
4/27/2023 19:00	4/28/2023 18:00	1,357,602	148	91.5	0.5
4/27/2023 20:00	4/28/2023 19:00	1,460,847	158	95.8	0.5
4/27/2023 21:00	4/28/2023 20:00	1,577,298	164	99.2	0.5
4/27/2023 22:00	4/28/2023 21:00	1,707,488	172	103.9	0.6
4/27/2023 23:00	4/28/2023 22:00	1,768,211	178	105.5	0.6
4/28/2023 00:00	4/28/2023 23:00	1,768,191	181	105.6	0.6
4/28/2023 01:00	4/29/2023 00:00	1,775,990	185	105.9	0.6
4/28/2023 02:00	4/29/2023 01:00	1,776,040	188	106.1	0.6
4/28/2023 03:00	4/29/2023 02:00	1,776,040	191	106.2	0.6
4/28/2023 04:00	4/29/2023 03:00	1,776,040	194	106.2	0.6
4/28/2023 05:00	4/29/2023 04:00	1,776,046	196	106.3	0.6
4/28/2023 06:00	4/29/2023 05:00	1,776,053	199	106.4	0.6
4/28/2023 07:00	4/29/2023 06:00	1,785,980	206	107.0	0.6
4/28/2023 08:00	4/29/2023 07:00	1,785,987	210	107.1	0.6
4/28/2023 09:00	4/29/2023 08:00	1,785,989	213	107.2	0.6
4/28/2023 10:00	4/29/2023 09:00	1,800,400	217	107.6	0.6
4/28/2023 11:00	4/29/2023 10:00	1,813,404	225	108.3	0.6
4/28/2023 12:00	4/29/2023 11:00	1,803,277	197	101.4	0.5
4/28/2023 13:00	4/29/2023 12:00	1,613,873	194	90.3	0.5
4/28/2023 14:00	4/29/2023 13:00	1,460,711	182	80.3	0.4
4/28/2023 15:00	4/29/2023 14:00	1,316,549	171	70.7	0.4
4/28/2023 16:00	4/29/2023 15:00	1,154,275	165	58.8	0.3
4/28/2023 17:00	4/29/2023 16:00	879,000	153	38.9	0.2
4/28/2023 18:00	4/29/2023 17:00	667,818	147	28.7	0.2
4/28/2023 19:00	4/29/2023 18:00	563,691	148	24.3	0.1
4/28/2023 20:00	4/29/2023 19:00	464,910	148	20.5	0.1

Subpart Ja Root Cause / Corrective Action Analysis

Incident Number: 472571

The information contained below satisfies the requirements of the NSPS Subpart Ja 60.108a(c)(6).

Report:	**Update**		
Refinery:	**Valero (Meraux)**		
Incident Type:	**Flaring (Flow)**	Date of Event:	**6/18/23**
Emissions Source(s):	**North Flare (EPN 20-72, EQT 0035)**	Date Analysis Completed:	**7/27/23**

(1.) (60.108a(c)(6)(i))

A description of the Discharge:

On June 18, 2023 at approximately 00:26, Valero experienced the automatic shutdown of the Pressure Swing Absorption (PSA) hydrogen recovery unit which caused the feed to be rerouted to the North Flare. Valero operations and maintenance personnel investigated and determined that the issue was caused by a malfunctioning control valve. Once this valve was identified, the affected bed was taken offline and the PSA was restarted.

(2.) (60.108a(c)(6)(ii)) and (60.108a(c)(6)(ix))

Date and Time the discharge was first identified	**6/18/23 0:26**
Date/Time the discharge had ceased	**6/18/23 1:35**
Duration of Discharge (Calculated)	**1.1** hrs.

(3.) (60.108a(c)(6)(viii))

The steps taken to limit the emissions during the discharge:

Valero followed its Flare Minimization Plan and Operations Procedures to minimize the volume flared from this discharge.

(4.) (60.108a(c)(6)(xi))

Necessity of RC/CAA: Determine and state whether a RC/CAA is necessary:

Note: If the discharge was a result of a planned startup or shutdown, a RC/CAA analysis is not required if the flare management plan was followed.

Did the discharge result from a planned startup or shutdown?	**No**	(Yes/No)
Was the flare management plan followed?	**Yes**	(Yes/No/N/A)
Is the event exempt from a RC/CCA based on the answers above?	**No**	(Yes/No)

- If yes, skip section 5-7.

(5.) (60.108a(c)(6)(ix))

Root Cause Analysis: Describe in detail the Root Cause(s) of the Incident, to the extent determinable:

Did this discharge result from root causes identified in a previous analysis? **No** (Yes/No)

Valero determined that the Root Cause of this discharge to be that preventative maintenance on the control valves on the PSA unit was not being performed at the required frequency recommended by the manufacturer based on cycle counts. Valero was performing preventative maintenance on a unit shut down frequency that was allowing some valves to accumulate cycle counts that were beyond what the manufacturer recommended.

(6.) (60.108a(c)(6)(ix))

Corrective Action Analysis: Include a description of the recommended corrective action(s) or an explanation of why corrective action is not

Is corrective action required? **Yes** (Yes/No)

1) Create a system in the refinery's DCS to track PSA control valve cycle counts.

2) Quantify existing PSA control valve cycle counts using historical data to identify any valves that are at risk of failure. Create schedule to address any at risk valve identified.

3) Establish a new preventative maintenance plan for each PSA control valve based on cycle counts.

(7.) (60.108a(c)(6)(x))

Corrective Action Schedule: Include corrective actions already completed within the first 45 days following the discharge. For those not completed, provide a schedule for implementation, including proposed commencement and completion dates.

1) Create a system in the refinery's DCS to track PSA control valve cycle counts.
Commencement Date: 7/27/23
Estimated Completion Date: 12/19/23

2) Quantify existing PSA control valve cycle counts using historical data to identify any valves that are at risk of failure. Create schedule to address any at risk valve identified.
Commencement Date: 7/27/23
Estimated Completion Date: 11/14/23

3) Establish a new preventative maintenance plan for each PSA control valve based on cycle counts.
Commencement Date: 7/27/23
Estimated Completion Date: 11/14/23

(8.)

The measured or calculated cumulative quantity of gas discharged over the discharge duration.

Note: Measured sulfur concentrations are shown as flow-weighted averages if multiple measurement devices were used.

		(60.108a(c)(6)(iii))	(60.108a(c)(6)(iv))	(60.108a(c)(6)(vii))	(60.108a(c)(6)(vii))
First hour of 24-hr Period	**Last hour of 24-hr Period**	**24-hr cumulative volume of flared gas above Baseline**	**TRS or H2S ppm (24-hr average, flow-weighted)**	**24-hr cumulative SO2**	**24-hr cumulative reduced sulfur**
		SCF	ppmv	lbs	lbs as H2S
6/17/2023 00:00	6/17/2023 23:00	118	23	0.8	0.0
6/17/2023 01:00	6/18/2023 00:00	561,899	86	145.0	0.8
6/17/2023 02:00	6/18/2023 01:00	690,197	172	192.1	1.0
6/17/2023 03:00	6/18/2023 02:00	690,188	175	192.3	1.0
6/17/2023 04:00	6/18/2023 03:00	690,160	177	192.3	1.0
6/17/2023 05:00	6/18/2023 04:00	690,159	178	192.4	1.0
6/17/2023 06:00	6/18/2023 05:00	690,159	180	192.4	1.0
6/17/2023 07:00	6/18/2023 06:00	690,159	181	192.5	1.0
6/17/2023 08:00	6/18/2023 07:00	690,162	183	192.5	1.0
6/17/2023 09:00	6/18/2023 08:00	690,185	184	192.6	1.0
6/17/2023 10:00	6/18/2023 09:00	690,166	185	192.6	1.0
6/17/2023 11:00	6/18/2023 10:00	690,166	187	192.7	1.0
6/17/2023 12:00	6/18/2023 11:00	690,172	188	192.7	1.0
6/17/2023 13:00	6/18/2023 12:00	690,172	189	192.8	1.0
6/17/2023 14:00	6/18/2023 13:00	690,195	190	192.8	1.0
6/17/2023 15:00	6/18/2023 14:00	690,195	191	192.8	1.0
6/17/2023 16:00	6/18/2023 15:00	690,212	192	192.9	1.0
6/17/2023 17:00	6/18/2023 16:00	690,227	194	192.9	1.0
6/17/2023 18:00	6/18/2023 17:00	690,233	195	193.0	1.0
6/17/2023 19:00	6/18/2023 18:00	690,223	196	193.0	1.0
6/17/2023 20:00	6/18/2023 19:00	690,223	197	193.0	1.0
6/17/2023 21:00	6/18/2023 20:00	690,223	198	193.1	1.0
6/17/2023 22:00	6/18/2023 21:00	690,230	199	193.1	1.0
6/17/2023 23:00	6/18/2023 22:00	690,237	200	193.1	1.0
6/18/2023 00:00	6/18/2023 23:00	690,225	201	193.2	1.0
6/18/2023 01:00	6/19/2023 00:00	128,418	139	49.0	0.3

Subpart Ja Root Cause / Corrective Action Analysis

Incident Number: 472879

The information contained below satisfies the requirements of the NSPS Subpart Ja 60.108a(c)(6).

Report:	Update
Refinery:	Valero (Meraux)
Incident Type:	Flaring (Flow and SO2)
	SRU (SO2)
Emissions Source(s):	North Flare (EPN 20-72, EQT 0035)
	South Flare (EPN 3-77, EQT 0049)
	#2 SRU Incinerator (EPN 1-93, EQT 0019)
	#3 SRU Incinerator (EPN 5-00, EQT 0079)

Date of Event: 6/26/23

Date Analysis Completed: 8/10/23

(1.) (60.108a(c)(6)(i))

A description of the Discharge:

On June 26, 2023, at approximately 00:00, Valero experienced an electrical fault on it's 13.8 KV electrical distribution system which resulted in the loss of several pieces of equipment powered by this system. Multiple refinery units were upset and the #3 Sulfur Recovery Unit (SRU) automatically shutdown. Valero quickly initiated its sulfur shedding procedures and transferred the remaining acid gas feed to the #2 SRU, which had remained operating through the power loss. The combined SO2 emissions from the #2 SRU and #3 SRU exceeded 500 lbs above allowed in a 24 hour period. Additionally, flaring from this event also exceeded 500 lbs SO2 and 500,000 scf above baseline in a 24 hour period.

(2.) (60.108a(c)(6)(ii)) and (60.108a(c)(6)(ix))

	North and South Flare	#2 SRU	#3 SRU	
Date/Time discharge was first identified	6/26/23 0:10	6/26/23 0:00	6/26/23 0:00	
Date/Time discharge had ceased	6/27/23 6:32	6/27/23 0:08	6/26/23 21:37	
Duration of Discharge (Calculated)	30.4	24.1	21.6	hrs

(3.) (60.108a(c)(6)(viii))

The steps taken to limit the emissions during the discharge:

Valero followed its Operations Procedures to the maximum extent possible to minimize the SO2 emissions of this discharge

(4.) (60.108a(c)(6)(xi))

Necessity of RC/CAA: Determine and state whether a RC/CAA is necessary:

Note: If the discharge was a result of a planned startup or shutdown, a RC/CAA analysis is not required if the flare management plan was followed.

Did the discharge result from a planned startup or shutdown?	No	(Yes/No)
Was the flare management plan followed?	Yes	(Yes/No/N/A)
Is the event exempt from a RC/CCA based on the answers above?	No	(Yes/No)

- **If yes, skip section 5-7.**

(5.) (60.108a(c)(6)(ix))

Root Cause Analysis: Describe in detail the Root Cause(s) of the Incident, to the extent determinable:

Did this discharge result from root causes identified in a previous analysis? No (Yes/No)

Valero determined that the root cause of the fault on the 13.8 KV electrical distribution system was the failure of a capacitor in the termination box to the motor for one of the Makeup Gas Compressors in the Hydrocracker unit. Valero determined that this capacitor failed due to excessive age and moisture intrusion into the termination box. Additionally, Valero determined that Sour Water Acid Gas was flared from the #2 Sour Water Stripper after the automatic shutdown of the #3 SRU. This contributed to the overall amount of SO2 flared.

(6.) (60.108a(c)(6)(ix))

Corrective Action Analysis: Include a description of the recommended corrective action(s) or an explanation of why corrective action is not necessary.

Is corrective action required? Yes (Yes/No)

1) Replace the termination box and components for the other Makeup Gas Compressor in the Hydrocracker unit.

2) Review existing medium voltage motors and develop plan to replace components.

3) Update medium voltage motor preventative maintenance recondition scope to capture replacement of arrestors and capacitors.

4) Create repair plans for each identified motor and develop an implementation schedule.

5) After reviewing how other Valero sites mitigate sending acid gas to the flare, determine what additional mitigation(s) to implement (blinds, blocking in, car seals, control scheme narrative changes/over ride).

(7.) (60.108a(c)(6)(x))

Corrective Action Schedule: Include corrective actions already completed within the first 45 days following the discharge. For those not completed, provide a schedule for implementation, including proposed commencement and completion dates.

1) Replace the termination box and components for the other Makeup Gas Compressor in the Hydrocracker unit.
Commencement Date: 8/10/23
Estimated Completion Date: 5/7/24

2) Review existing medium voltage motors and develop plan to replace components.
Commencement Date: 8/10/23
Estimated Completion Date: 11/28/23

3) Create repair plans for each identified motor and develop an implementation schedule.
Commencement Date: 8/10/23
Estimated Completion Date: 12/26/23

4) Update medium voltage motor preventative maintenance recondition scope to capture replacement of arrestors and capacitors.
Commencement Date: 8/10/23
Estimated Completion Date: 11/14/23

5) After reviewing how other Valero sites mitigate sending acid gas to the flare, determine what additional mitigation(s) to implement (blinds, blocking in, car seals, control scheme narrative changes/over ride).
Commencement Date: 8/10/23
Estimated Completion Date: 12/12/23

(8.) North and South Flares

The measured or calculated cumulative quantity of gas discharged over the discharge duration.

Note: Measured sulfur concentrations are shown as flow-weighted averages if multiple measurement devices were used.

		(60.108a(c)(6)(iii))	(60.108a(c)(6)(iv))	(60.108a(c)(6)(vii))	(60.108a(c)(6)(vii))
First hour of 24-hr Period	Last hour of 24-hr Period	24-hr cumulative volume of flared gas above Baseline	TRS or H2S ppm (24-hr average, flow-weighted)	24-hr cumulative SO2	24-hr cumulative reduced sulfur
		SCF	ppmv	lbs	lbs as H2S
6/25/2023 00:00	6/25/2023 23:00	205	38	1.4	0.0
6/25/2023 01:00	6/26/2023 00:00	70,561	409	118.3	0.6
6/25/2023 02:00	6/26/2023 01:00	142,261	1327	412.0	2.2
6/25/2023 03:00	6/26/2023 02:00	207,537	3524	1058.6	5.7
6/25/2023 04:00	6/26/2023 03:00	351,588	5245	2101.1	11.3
6/25/2023 05:00	6/26/2023 04:00	497,710	6416	2820.5	15.2
6/25/2023 06:00	6/26/2023 05:00	642,958	6611	2940.8	15.8
6/25/2023 07:00	6/26/2023 06:00	791,798	6764	3037.0	16.3
6/25/2023 08:00	6/26/2023 07:00	941,583	6938	3147.7	16.9
6/25/2023 09:00	6/26/2023 08:00	1,086,756	7105	3250.2	17.5
6/25/2023 10:00	6/26/2023 09:00	1,244,296	7249	3346.5	18.0
6/25/2023 11:00	6/26/2023 10:00	1,386,140	7361	3414.1	18.3
6/25/2023 12:00	6/26/2023 11:00	1,526,263	7436	3458.9	18.6
6/25/2023 13:00	6/26/2023 12:00	1,664,523	7486	3489.0	18.7
6/25/2023 14:00	6/26/2023 13:00	1,853,711	7548	3538.6	19.0
6/25/2023 15:00	6/26/2023 14:00	1,991,691	7666	3608.2	19.4
6/25/2023 16:00	6/26/2023 15:00	2,126,106	7730	3645.0	19.6
6/25/2023 17:00	6/26/2023 16:00	2,272,130	7766	3667.9	19.7
6/25/2023 18:00	6/26/2023 17:00	2,423,750	7802	3691.7	19.8
6/25/2023 19:00	6/26/2023 18:00	2,580,006	7835	3714.5	20.0
6/25/2023 20:00	6/26/2023 19:00	2,729,543	7863	3733.1	20.1
6/25/2023 21:00	6/26/2023 20:00	2,876,858	7891	3751.2	20.2
6/25/2023 22:00	6/26/2023 21:00	3,019,264	7923	3771.2	20.3
6/25/2023 23:00	6/26/2023 22:00	3,161,571	7952	3789.4	20.4
6/26/2023 00:00	6/26/2023 23:00	3,302,717	7994	3814.8	20.5
6/26/2023 01:00	6/27/2023 00:00	3,372,970	7656	3718.5	20.0
6/26/2023 02:00	6/27/2023 01:00	3,447,409	6764	3441.6	18.5
6/26/2023 03:00	6/27/2023 02:00	3,531,867	4588	2809.4	15.1
6/26/2023 04:00	6/27/2023 03:00	3,531,549	2884	1778.0	9.6
6/26/2023 05:00	6/27/2023 04:00	3,539,944	1735	1073.7	5.8
6/26/2023 06:00	6/27/2023 05:00	3,545,475	1568	972.5	5.2
6/26/2023 07:00	6/27/2023 06:00	3,478,003	1440	885.5	4.8
6/26/2023 08:00	6/27/2023 07:00	3,328,244	1272	775.1	4.2
6/26/2023 09:00	6/27/2023 08:00	3,183,061	1114	672.9	3.6
6/26/2023 10:00	6/27/2023 09:00	3,025,526	976	576.8	3.1
6/26/2023 11:00	6/27/2023 10:00	2,883,682	872	509.5	2.7
6/26/2023 12:00	6/27/2023 11:00	2,743,559	805	465.0	2.5
6/26/2023 13:00	6/27/2023 12:00	2,605,299	763	435.2	2.3
6/26/2023 14:00	6/27/2023 13:00	2,416,096	708	385.8	2.1
6/26/2023 15:00	6/27/2023 14:00	2,278,741	597	316.5	1.7
6/26/2023 16:00	6/27/2023 15:00	2,147,959	540	280.1	1.5
6/26/2023 17:00	6/27/2023 16:00	2,001,934	512	257.4	1.4
6/26/2023 18:00	6/27/2023 17:00	1,850,309	483	233.8	1.3
6/26/2023 19:00	6/27/2023 18:00	1,694,030	458	211.4	1.1
6/26/2023 20:00	6/27/2023 19:00	1,544,455	437	193.0	1.0
6/26/2023 21:00	6/27/2023 20:00	1,397,090	417	175.2	0.9
6/26/2023 22:00	6/27/2023 21:00	1,254,684	392	155.4	0.8
6/26/2023 23:00	6/27/2023 22:00	1,112,374	371	137.6	0.7
6/27/2023 00:00	6/27/2023 23:00	971,228	337	112.4	0.6
6/27/2023 01:00	6/28/2023 00:00	830,614	311	92.0	0.5
6/27/2023 02:00	6/28/2023 01:00	684,469	292	75.5	0.4
6/27/2023 03:00	6/28/2023 02:00	534,723	278	61.3	0.3
6/27/2023 04:00	6/28/2023 03:00	391,005	269	50.5	0.3

(9.) #2 and #3 SRU

The measured or calculated cumulative quantity of gas discharged over the discharge duration.

Note: Measured sulfur concentrations are shown as flow-weighted averages if multiple measurement devices were used.

		(60.108a(c)(6)(iii))	(60.108a(c)(6)(vi))	(60.108a(c)(6)(vii))	(60.108a(c)(6)(vii))
First hour of 24-hr Period	**Last hour of 24-hr Period**	**24-hr cumulative volume**	**SO2 ppm (24-hr average, flow-weighted)[1]**	**24-hr cumulative SO2 above allowable[2]**	**24-hr cumulative reduced sulfur above allowable**
		SCF	ppmv	lbs	lbs as H2S
6/25/2023 00:00	6/25/2023 23:00	674,090	42	0.0	0.0
6/25/2023 01:00	6/26/2023 00:00	729,755	66	56.7	0.0
6/25/2023 02:00	6/26/2023 01:00	359,018	125	123.2	0.1
6/25/2023 03:00	6/26/2023 02:00	359,049	188	201.9	0.2
6/25/2023 04:00	6/26/2023 03:00	374,008	253	276.6	0.3
6/25/2023 05:00	6/26/2023 04:00	394,266	319	360.7	0.5
6/25/2023 06:00	6/26/2023 05:00	354,400	372	434.5	0.6
6/25/2023 07:00	6/26/2023 06:00	333,402	428	507.7	0.7
6/25/2023 08:00	6/26/2023 07:00	344,897	482	587.6	0.8
6/25/2023 09:00	6/26/2023 08:00	344,523	525	639.9	0.8
6/25/2023 10:00	6/26/2023 09:00	452,987	627	707.8	0.8
6/25/2023 11:00	6/26/2023 10:00	379,085	622	781.8	0.9
6/25/2023 12:00	6/26/2023 11:00	385,517	683	848.7	1.0
6/25/2023 13:00	6/26/2023 12:00	367,045	711	902.7	1.0
6/25/2023 14:00	6/26/2023 13:00	370,475	751	957.6	1.0
6/25/2023 15:00	6/26/2023 14:00	395,641	832	1011.0	1.0
6/25/2023 16:00	6/26/2023 15:00	402,246	846	1035.9	1.0
6/25/2023 17:00	6/26/2023 16:00	381,860	834	1076.3	1.0
6/25/2023 18:00	6/26/2023 17:00	377,920	877	1140.8	1.1
6/25/2023 19:00	6/26/2023 18:00	398,696	961	1218.9	1.2
6/25/2023 20:00	6/26/2023 19:00	443,182	1097	1301.5	1.3
6/25/2023 21:00	6/26/2023 20:00	451,155	1171	1385.4	1.4
6/25/2023 22:00	6/26/2023 21:00	501,422	1229	1431.5	1.6
6/25/2023 23:00	6/26/2023 22:00	480,465	1258	1467.2	1.8
6/26/2023 00:00	6/26/2023 23:00	404,089	1362	1482.8	1.9
6/26/2023 01:00	6/27/2023 00:00	374,603	1407	1426.1	1.9
6/26/2023 02:00	6/27/2023 01:00	378,133	1408	1359.7	1.8
6/26/2023 03:00	6/27/2023 02:00	409,700	1373	1282.5	1.6
6/26/2023 04:00	6/27/2023 03:00	364,759	1272	1207.8	1.5
6/26/2023 05:00	6/27/2023 04:00	352,582	1197	1123.8	1.4
6/26/2023 06:00	6/27/2023 05:00	342,841	1124	1050.0	1.3
6/26/2023 07:00	6/27/2023 06:00	342,725	1073	976.8	1.2
6/26/2023 08:00	6/27/2023 07:00	346,633	1018	896.9	1.0
6/26/2023 09:00	6/27/2023 08:00	361,379	955	844.5	1.0
6/26/2023 10:00	6/27/2023 09:00	378,357	909	776.7	1.0
6/26/2023 11:00	6/27/2023 10:00	429,037	848	702.7	0.9
6/26/2023 12:00	6/27/2023 11:00	455,200	779	635.7	0.9
6/26/2023 13:00	6/27/2023 12:00	464,267	700	581.7	0.9
6/26/2023 14:00	6/27/2023 13:00	469,944	619	526.9	0.9
6/26/2023 15:00	6/27/2023 14:00	498,081	552	473.4	0.9

[1] SRU SO2 CEMS are spanned to 500 ppm. For emissions calculations, Valero assumes 2 times the span, 1000 ppm, for CEMS readings >= 500 ppm.

[2] Tail Gas Treater bypass emissions are calculated using a mass balance method, not using the flow and concentration values listed here.

Subpart Ja Root Cause / Corrective Action Analysis

Incident Number: N/A

The information contained below satisfies the requirements of the NSPS Subpart Ja 60.108a(c)(6).

Report:	**Final**		
Refinery:	**Valero (Meraux)**		
Incident Type:	**Flaring (Flow)**	Date of Event:	**7/8/23**
Emissions Source(s):	**North Flare (EPN 20-72, EQT 0035)**	Date Analysis Completed:	**N/A**

(1.) (60.108a(c)(6)(i))

A description of the Discharge:

This discharge resulted from the new catalyst activation procedure for the Benzene Recovery Unit (BRU) prior to unit start up.

(2.) (60.108a(c)(6)(ii)) and (60.108a(c)(6)(ix))

Date and Time the discharge was first identified	**7/8/23 22:10**
Date/Time the discharge had ceased	**7/11/23 0:50**
Duration of Discharge (Calculated)	**50.7** hrs.

(3.) (60.108a(c)(6)(viii))

The steps taken to limit the emissions during the discharge:

Valero followed its Flare Minimization Plan and Operations Procedures to minimize the volume of this discharge. Additional purges and Nitrogen volume was required to comply with the maintenance vent provisions of 40 CFR 63.643 as well as additional supplemental natural gas required to comply with the Net Heating Value of the Combustion Zone limit (> 270 Btu/scf) of 40 CFR 63.670, that became effective on January 30, 2019.

(4.) (60.108a(c)(6)(xi))

Necessity of RC/CAA: Determine and state whether a RC/CAA is necessary:

Note: If the discharge was a result of a planned startup or shutdown, a RC/CAA analysis is not required if the flare management plan was followed.

Did the discharge result from a planned startup or shutdown?	**Yes**	(Yes/No)
Was the flare management plan followed?	**Yes**	(Yes/No/N/A)
Is the event exempt from a RC/CCA based on the answers above?	**Yes**	(Yes/No)

- **If yes, skip section 5-7.**

(5.) (60.108a(c)(6)(ix))

Root Cause Analysis: Describe in detail the Root Cause(s) of the Incident, to the extent determinable:

Did this discharge result from root causes identified in a previous analysis? **No** (Yes/No)

N/A

(6.) (60.108a(c)(6)(ix))

Corrective Action Analysis: Include a description of the recommended corrective action(s) or an explanation of why corrective action is not

Is corrective action required? **No** (Yes/No)

N/A

(7.) (60.108a(c)(6)(x))

Corrective Action Schedule: Include corrective actions already completed within the first 45 days following the discharge. For those not completed, provide a schedule for implementation, including proposed commencement and completion dates.

N/A

(8.)

The measured or calculated cumulative quantity of gas discharged over the discharge duration.

Note: Measured sulfur concentrations are shown as flow-weighted averages if multiple measurement devices were used.

		(60.108a(c)(6)(iii))	(60.108a(c)(6)(iv))	(60.108a(c)(6)(vii))	(60.108a(c)(6)(vii))
First hour of 24-hr Period	**Last hour of 24-hr Period**	**24-hr cumulative volume of flared gas above Baseline**	**TRS or H2S ppm (24-hr average, flow-weighted)**	**24-hr cumulative SO2**	**24-hr cumulative reduced sulfur**
		SCF	ppmv	lbs	lbs as H2S
7/7/2023 22:00	7/8/2023 21:00	2,259	162	5.9	0.0
7/7/2023 23:00	7/8/2023 22:00	104,013	109	7.6	0.0
7/8/2023 00:00	7/8/2023 23:00	332,392	42	9.0	0.0
7/8/2023 01:00	7/9/2023 00:00	560,908	21	9.5	0.1
7/8/2023 02:00	7/9/2023 01:00	791,807	10	9.6	0.1
7/8/2023 03:00	7/9/2023 02:00	986,387	8	9.7	0.1
7/8/2023 04:00	7/9/2023 03:00	1,109,928	10	9.6	0.1
7/8/2023 05:00	7/9/2023 04:00	1,217,990	11	9.6	0.1
7/8/2023 06:00	7/9/2023 05:00	1,325,568	27	9.8	0.1
7/8/2023 07:00	7/9/2023 06:00	1,431,002	19	9.9	0.1
7/8/2023 08:00	7/9/2023 07:00	1,534,808	14	9.9	0.1
7/8/2023 09:00	7/9/2023 08:00	1,648,933	12	9.9	0.1
7/8/2023 10:00	7/9/2023 09:00	1,792,103	10	9.9	0.1
7/8/2023 11:00	7/9/2023 10:00	1,985,752	10	10.0	0.1
7/8/2023 12:00	7/9/2023 11:00	2,210,809	10	10.2	0.1
7/8/2023 13:00	7/9/2023 12:00	2,444,887	10	10.3	0.1
7/8/2023 14:00	7/9/2023 13:00	2,682,179	9	10.5	0.1
7/8/2023 15:00	7/9/2023 14:00	2,903,057	6	10.5	0.1
7/8/2023 16:00	7/9/2023 15:00	3,173,111	4	10.4	0.1
7/8/2023 17:00	7/9/2023 16:00	3,441,816	4	10.4	0.1
7/8/2023 18:00	7/9/2023 17:00	3,696,036	4	10.3	0.1
7/8/2023 19:00	7/9/2023 18:00	3,926,195	11	10.6	0.1
7/8/2023 20:00	7/9/2023 19:00	4,151,891	6	10.6	0.1
7/8/2023 21:00	7/9/2023 20:00	4,379,265	4	10.5	0.1
7/8/2023 22:00	7/9/2023 21:00	4,608,927	4	10.4	0.1
7/8/2023 23:00	7/9/2023 22:00	4,743,857	4	8.6	0.0
7/9/2023 00:00	7/9/2023 23:00	4,752,863	4	7.1	0.0
7/9/2023 01:00	7/10/2023 00:00	4,762,189	4	6.5	0.0
7/9/2023 02:00	7/10/2023 01:00	4,755,931	4	6.2	0.0
7/9/2023 03:00	7/10/2023 02:00	4,773,654	13	6.4	0.0
7/9/2023 04:00	7/10/2023 03:00	4,883,440	9	6.6	0.0
7/9/2023 05:00	7/10/2023 04:00	5,007,014	7	6.6	0.0
7/9/2023 06:00	7/10/2023 05:00	5,086,662	30	7.1	0.0
7/9/2023 07:00	7/10/2023 06:00	5,179,169	19	7.4	0.0
7/9/2023 08:00	7/10/2023 07:00	5,272,606	10	7.4	0.0
7/9/2023 09:00	7/10/2023 08:00	5,354,982	8	7.5	0.0
7/9/2023 10:00	7/10/2023 09:00	5,411,141	8	7.5	0.0
7/9/2023 11:00	7/10/2023 10:00	5,412,033	7	7.4	0.0
7/9/2023 12:00	7/10/2023 11:00	5,384,614	7	7.2	0.0
7/9/2023 13:00	7/10/2023 12:00	5,349,259	7	7.1	0.0
7/9/2023 14:00	7/10/2023 13:00	5,311,486	6	7.0	0.0
7/9/2023 15:00	7/10/2023 14:00	5,290,218	7	7.0	0.0
7/9/2023 16:00	7/10/2023 15:00	5,219,933	7	7.0	0.0
7/9/2023 17:00	7/10/2023 16:00	5,147,348	7	7.1	0.0
7/9/2023 18:00	7/10/2023 17:00	5,089,305	6	7.1	0.0
7/9/2023 19:00	7/10/2023 18:00	5,057,116	12	7.1	0.0
7/9/2023 20:00	7/10/2023 19:00	5,027,823	8	7.1	0.0
7/9/2023 21:00	7/10/2023 20:00	5,034,403	6	7.2	0.0
7/9/2023 22:00	7/10/2023 21:00	5,023,749	6	7.3	0.0

(8.)

The measured or calculated cumulative quantity of gas discharged over the discharge duration.

Note: Measured sulfur concentrations are shown as flow-weighted averages if multiple measurement devices were used.

		(60.108a(c)(6)(iii))	(60.108a(c)(6)(iv))	(60.108a(c)(6)(vii))	(60.108a(c)(6)(vii))
First hour of 24-hr Period	**Last hour of 24-hr Period**	**24-hr cumulative volume of flared gas above Baseline**	**TRS or H2S ppm (24-hr average, flow-weighted)**	**24-hr cumulative SO2**	**24-hr cumulative reduced sulfur**
		SCF	ppmv	lbs	lbs as H2S
7/9/2023 23:00	7/10/2023 22:00	4,965,342	7	7.3	0.0
7/10/2023 00:00	7/10/2023 23:00	4,965,146	6	7.4	0.0
7/10/2023 01:00	7/11/2023 00:00	4,923,762	7	7.5	0.0
7/10/2023 02:00	7/11/2023 01:00	4,699,131	111	7.5	0.0
7/10/2023 03:00	7/11/2023 02:00	4,486,820	111	7.2	0.0
7/10/2023 04:00	7/11/2023 03:00	4,253,494	111	7.0	0.0
7/10/2023 05:00	7/11/2023 04:00	4,021,857	110	6.9	0.0
7/10/2023 06:00	7/11/2023 05:00	3,834,635	111	6.1	0.0
7/10/2023 07:00	7/11/2023 06:00	3,636,701	109	5.6	0.0
7/10/2023 08:00	7/11/2023 07:00	3,439,458	110	5.4	0.0
7/10/2023 09:00	7/11/2023 08:00	3,242,956	106	5.3	0.0
7/10/2023 10:00	7/11/2023 09:00	3,043,631	96	5.2	0.0
7/10/2023 11:00	7/11/2023 10:00	2,846,903	98	5.1	0.0
7/10/2023 12:00	7/11/2023 11:00	2,649,269	96	5.0	0.0
7/10/2023 13:00	7/11/2023 12:00	2,450,551	83	4.9	0.0
7/10/2023 14:00	7/11/2023 13:00	2,251,036	84	4.8	0.0
7/10/2023 15:00	7/11/2023 14:00	2,051,426	73	4.6	0.0
7/10/2023 16:00	7/11/2023 15:00	1,851,656	33	4.4	0.0
7/10/2023 17:00	7/11/2023 16:00	1,655,535	34	4.2	0.0
7/10/2023 18:00	7/11/2023 17:00	1,459,361	37	4.1	0.0
7/10/2023 19:00	7/11/2023 18:00	1,261,392	37	3.7	0.0
7/10/2023 20:00	7/11/2023 19:00	1,064,989	38	3.5	0.0
7/10/2023 21:00	7/11/2023 20:00	831,032	41	3.3	0.0
7/10/2023 22:00	7/11/2023 21:00	612,038	46	3.2	0.0
7/10/2023 23:00	7/11/2023 22:00	433,773	50	3.0	0.0

Subpart Ja Root Cause / Corrective Action Analysis

Incident Number: N/A

The information contained below satisfies the requirements of the NSPS Subpart Ja 60.108a(c)(6).

Report:	**Final**		
Refinery:	**Valero (Meraux)**		
Incident Type:	**Flaring (Flow)**	Date of Event:	**9/11/23**
Emissions Source(s):	**North Flare (EPN 20-72, EQT 0035)**	Date Analysis Completed:	**N/A**

(1.) (60.108a(c)(6)(i))

A description of the Discharge:

This discharge resulted from the normal shutdown of the Naphtha Hydrotreater Unit (NHT) and Reformer Unit for the planned replacement of NHT reactor catalyst. The discharge included activities such as reactor cooldown, depressurization, and Nitrogen purging.

(2.) (60.108a(c)(6)(ii)) and (60.108a(c)(6)(ix))

Date and Time the discharge was first identified	**9/11/23 8:31**
Date/Time the discharge had ceased	**9/13/23 20:13**
Duration of Discharge (Calculated)	**59.7** hrs.

(3.) (60.108a(c)(6)(viii))

The steps taken to limit the emissions during the discharge:

Valero followed its Flare Minimization Plan and Operations Procedures to minimize the volume of this discharge. Additional purges and Nitrogen volume was required to comply with the maintenance vent provisions of 40 CFR 63.643 as well as additional supplemental natural gas required to comply with the Net Heating Value of the Combustion Zone limit (> 270 Btu/scf) of 40 CFR 63.670, that became effective on January 30, 2019.

(4.) (60.108a(c)(6)(xi))

Necessity of RC/CAA: Determine and state whether a RC/CAA is necessary:

Note: If the discharge was a result of a planned startup or shutdown, a RC/CAA analysis is not required if the flare management plan was followed.

Did the discharge result from a planned startup or shutdown?	**Yes**	(Yes/No)
Was the flare management plan followed?	**Yes**	(Yes/No/N/A)
Is the event exempt from a RC/CCA based on the answers above?	**Yes**	(Yes/No)

- **If yes, skip section 5-7.**

(5.) (60.108a(c)(6)(ix))

Root Cause Analysis: Describe in detail the Root Cause(s) of the Incident, to the extent determinable:

Did this discharge result from root causes identified in a previous analysis? **No** (Yes/No)

N/A

(6.) (60.108a(c)(6)(ix))

Corrective Action Analysis: Include a description of the recommended corrective action(s) or an explanation of why corrective action is not

Is corrective action required? **No** (Yes/No)

N/A

(7.) (60.108a(c)(6)(x))

Corrective Action Schedule: Include corrective actions already completed within the first 45 days following the discharge. For those not completed, provide a schedule for Implementation, including proposed commencement and completion dates.

N/A

(8.)

The measured or calculated cumulative quantity of gas discharged over the discharge duration.

Note: Measured sulfur concentrations are shown as flow-weighted averages if multiple measurement devices were used.

		(60.108a(c)(6)(iii))	(60.108a(c)(6)(iv))	(60.108a(c)(6)(vii))	(60.108a(c)(6)(vii))
First hour of 24-hr Period	**Last hour of 24-hr Period**	**24-hr cumulative volume of flared gas above Baseline**	**TRS or H2S ppm (24-hr average, flow-weighted)**	**24-hr cumulative SO2**	**24-hr cumulative reduced sulfur**
		SCF	ppmv	lbs	lbs as H2S
9/10/2023 08:00	9/11/2023 07:00	59	28	0.9	0.0
9/10/2023 09:00	9/11/2023 08:00	12,498	609	3.0	0.0
9/10/2023 10:00	9/11/2023 09:00	49,975	1057	11.1	0.1
9/10/2023 11:00	9/11/2023 10:00	99,414	711	17.9	0.1
9/10/2023 12:00	9/11/2023 11:00	251,708	211	23.5	0.1
9/10/2023 13:00	9/11/2023 12:00	473,681	134	28.5	0.2
9/10/2023 14:00	9/11/2023 13:00	693,768	134	33.6	0.2
9/10/2023 15:00	9/11/2023 14:00	964,594	132	39.6	0.2
9/10/2023 16:00	9/11/2023 15:00	1,235,922	143	46.2	0.2
9/10/2023 17:00	9/11/2023 16:00	1,502,580	176	54.1	0.3
9/10/2023 18:00	9/11/2023 17:00	1,768,267	178	62.2	0.3
9/10/2023 19:00	9/11/2023 18:00	2,034,375	187	70.6	0.4
9/10/2023 20:00	9/11/2023 19:00	2,304,475	150	77.5	0.4
9/10/2023 21:00	9/11/2023 20:00	2,570,470	124	83.1	0.4
9/10/2023 22:00	9/11/2023 21:00	2,830,446	111	87.9	0.5
9/10/2023 23:00	9/11/2023 22:00	3,107,256	99	92.6	0.5
9/11/2023 00:00	9/11/2023 23:00	3,402,976	88	97.0	0.5
9/11/2023 01:00	9/12/2023 00:00	3,692,055	82	101.0	0.5
9/11/2023 02:00	9/12/2023 01:00	3,986,283	81	105.0	0.6
9/11/2023 03:00	9/12/2023 02:00	4,283,242	82	109.1	0.6
9/11/2023 04:00	9/12/2023 03:00	4,410,745	177	113.0	0.6
9/11/2023 05:00	9/12/2023 04:00	4,505,882	345	118.9	0.6
9/11/2023 06:00	9/12/2023 05:00	4,598,073	397	125.5	0.7
9/11/2023 07:00	9/12/2023 06:00	4,666,347	423	130.8	0.7
9/11/2023 08:00	9/12/2023 07:00	4,732,898	602	138.3	0.7
9/11/2023 09:00	9/12/2023 08:00	4,768,472	389	139.8	0.8
9/11/2023 10:00	9/12/2023 09:00	4,757,712	319	133.6	0.7
9/11/2023 11:00	9/12/2023 10:00	4,733,469	638	130.3	0.7
9/11/2023 12:00	9/12/2023 11:00	4,606,268	587	128.0	0.7
9/11/2023 13:00	9/12/2023 12:00	4,410,798	315	124.7	0.7
9/11/2023 14:00	9/12/2023 13:00	4,225,336	955	126.6	0.7
9/11/2023 15:00	9/12/2023 14:00	4,019,484	389	125.2	0.7
9/11/2023 16:00	9/12/2023 15:00	3,842,119	339	124.4	0.7
9/11/2023 17:00	9/12/2023 16:00	3,678,439	368	123.2	0.7
9/11/2023 18:00	9/12/2023 17:00	3,514,463	386	122.1	0.7
9/11/2023 19:00	9/12/2023 18:00	3,351,181	423	121.5	0.7
9/11/2023 20:00	9/12/2023 19:00	3,163,678	389	120.5	0.6
9/11/2023 21:00	9/12/2023 20:00	2,954,417	434	119.5	0.6
9/11/2023 22:00	9/12/2023 21:00	2,750,695	372	118.6	0.6
9/11/2023 23:00	9/12/2023 22:00	2,529,878	345	117.7	0.6
9/12/2023 00:00	9/12/2023 23:00	2,305,667	305	117.3	0.6
9/12/2023 01:00	9/13/2023 00:00	2,121,990	199	117.0	0.6
9/12/2023 02:00	9/13/2023 01:00	1,932,825	223	117.2	0.6
9/12/2023 03:00	9/13/2023 02:00	1,739,672	307	118.7	0.6
9/12/2023 04:00	9/13/2023 03:00	1,717,156	371	121.7	0.7
9/12/2023 05:00	9/13/2023 04:00	1,723,624	363	122.4	0.7
9/12/2023 06:00	9/13/2023 05:00	1,734,646	383	122.9	0.7
9/12/2023 07:00	9/13/2023 06:00	1,773,316	401	125.1	0.7
9/12/2023 08:00	9/13/2023 07:00	1,814,816	258	122.6	0.7

(8.)

The measured or calculated cumulative quantity of gas discharged over the discharge duration.

Note: Measured sulfur concentrations are shown as flow-weighted averages if multiple measurement devices were used.

		(60.108a(c)(6)(iii))	(60.108a(c)(6)(iv))	(60.108a(c)(6)(vii))	(60.108a(c)(6)(vii))
First hour of 24-hr Period	**Last hour of 24-hr Period**	**24-hr cumulative volume of flared gas above Baseline**	**TRS or H2S ppm (24-hr average, flow-weighted)**	**24-hr cumulative SO2**	**24-hr cumulative reduced sulfur**
		SCF	ppmv	lbs	lbs as H2S
9/12/2023 09:00	9/13/2023 08:00	1,877,351	232	123.5	0.7
9/12/2023 10:00	9/13/2023 09:00	1,918,461	257	124.9	0.7
9/12/2023 11:00	9/13/2023 10:00	1,917,123	595	124.5	0.7
9/12/2023 12:00	9/13/2023 11:00	1,917,683	345	123.2	0.7
9/12/2023 13:00	9/13/2023 12:00	1,948,911	545	127.4	0.7
9/12/2023 14:00	9/13/2023 13:00	2,019,388	273	125.6	0.7
9/12/2023 15:00	9/13/2023 14:00	2,066,908	344	127.8	0.7
9/12/2023 16:00	9/13/2023 15:00	2,086,478	382	129.7	0.7
9/12/2023 17:00	9/13/2023 16:00	2,091,678	381	130.3	0.7
9/12/2023 18:00	9/13/2023 17:00	2,097,098	349	129.9	0.7
9/12/2023 19:00	9/13/2023 18:00	2,099,193	315	128.0	0.7
9/12/2023 20:00	9/13/2023 19:00	2,119,739	240	126.6	0.7
9/12/2023 21:00	9/13/2023 20:00	2,075,662	84	122.2	0.7
9/12/2023 22:00	9/13/2023 21:00	2,019,410	32	118.2	0.6
9/12/2023 23:00	9/13/2023 22:00	1,963,416	31	114.6	0.6
9/13/2023 00:00	9/13/2023 23:00	1,891,902	28	110.6	0.6
9/13/2023 01:00	9/14/2023 00:00	1,786,503	27	106.9	0.6
9/13/2023 02:00	9/14/2023 01:00	1,681,445	24	102.7	0.6
9/13/2023 03:00	9/14/2023 02:00	1,577,640	21	97.0	0.5
9/13/2023 04:00	9/14/2023 03:00	1,472,642	19	90.1	0.5
9/13/2023 05:00	9/14/2023 04:00	1,371,046	17	83.5	0.4
9/13/2023 06:00	9/14/2023 05:00	1,267,830	17	76.4	0.4
9/13/2023 07:00	9/14/2023 06:00	1,160,896	18	68.8	0.4
9/13/2023 08:00	9/14/2023 07:00	1,052,853	19	63.8	0.3
9/13/2023 09:00	9/14/2023 08:00	942,305	21	59.3	0.3
9/13/2023 10:00	9/14/2023 09:00	874,478	25	56.1	0.3
9/13/2023 11:00	9/14/2023 10:00	850,616	26	52.9	0.3
9/13/2023 12:00	9/14/2023 11:00	824,963	24	50.9	0.3
9/13/2023 13:00	9/14/2023 12:00	767,236	18	45.0	0.2
9/13/2023 14:00	9/14/2023 13:00	662,134	18	39.9	0.2
9/13/2023 15:00	9/14/2023 14:00	549,643	18	33.0	0.2
9/13/2023 16:00	9/14/2023 15:00	436,111	19	25.3	0.1