



April 30, 2024

CERTIFIED: 7016 2710 0000 3305 6719

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 – 1st Quarter 2024
Valero Refining - Meraux LLC, Agency Interest # 1238
2235 Jacob Drive, St. Bernard Parish, Meraux, LA
Title V Permit Numbers: 2500-00001-V19

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 First Quarter 2024.


For this reporting period, the SO₂/O₂ CEMS on the #2 SRU Incinerator (EPN 1-93, EQT 0019) 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
Vice President and General Manager
Meraux Refinery

Enclosures

cc: Ms. Dionne Magness, I,DFQ 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: **SO₂**

Applicable NSPS Subpart: Ja

Reporting period dates: From 1/1/24 to 3/31/24

Date submitted: 4/30/24

Company: Valero Refining - Meraux LLC

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

Emission Limitation: SO₂ corrected to 0% O₂ shall not exceed 250 ppm on a 12-hour rolling average

Monitor Manufacturer and Model No.: Ametek 9900(SO₂ and O₂)

Date of Latest CMS Certification or Audit: CGA on 3/9/24

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

Total source operating time in reporting period: 2,051 hours

Emissions Data Summary¹	
1. Duration of excess emissions in reporting period due to:	<i>(hours)</i>
a. Startup/shutdown	314
b. Control equipment problems	0
c. Process problems	7
d. Other known causes	0
e. Unknown causes	0
2. Total duration of excess emission	321
3. Total duration of excess emissions x (100) [Total source operating time] ²	15.7 %

CMS Performance Summary¹	
1. CMS downtime in reporting period due to:	<i>(hours)</i>
a. Monitor equipment malfunctions	0
b. Non-Monitor equipment malfunctions	0
c. Quality assurance calibration	2
d. Other known causes	49
e. Unknown causes	0
2. Total CMS Downtime	51
3. Total duration of CMS Downtime x (100) [Total source operating time] ²	2.5 %

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: **SO₂**

Applicable NSPS Subpart: Ja

Reporting period dates: From 1/1/24 to 3/31/24

Date submitted: 4/30/24

Company: Valero Refining - Meraux LLC

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

Emission Limitation: SO₂ corrected to 0% O₂ shall not exceed 250 ppm on a 12-hour rolling average.

Monitor Manufacturer and Model No.: ABB AO2000 Uras 26(SO₂)/ Magnos 206 (O₂)

Date of Latest CMS Certification or Audit: CGA on 2/1/24

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

Total source operating time in reporting period: 2,183 hours

Emissions Data Summary¹	
1. Duration of excess emissions in reporting period due to:	<i>(hours)</i>
a. Startup/shutdown	11
b. Control equipment problems	0
c. Process problems	0
d. Other known causes	0
e. Unknown causes	0
2. Total duration of excess emission	11
3. Total duration of excess emissions x (100) [Total source operating time] ²	0.5 %

CMS Performance Summary¹	
1. CMS downtime in reporting period due to:	<i>(hours)</i>
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: **H₂S**

Applicable NSPS Subpart: J

Reporting period dates: From 1/1/24 to 3/31/24

Date submitted: 4/30/24

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 3/8/24

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 0010-2,183 hours, EQT 0011-2,174 hours, EQT 0033-2,183 hours, EQT 0058-2,175 hours

Emissions Data Summary¹	
1. Duration of excess emissions in reporting period due to:	<i>All EQT's (hours)</i>
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 Summary¹	
1. CMS downtime in reporting period due to:	<i>All EQT's (hours)</i>
a. Monitor equipment malfunctions	2
b. Non-Monitor equipment malfunctions	0
c. Quality assurance calibration	0
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. (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: **H₂S**

Applicable NSPS Subpart: J

Reporting period dates: From 1/1/24 to 3/31/24

Date submitted: 4/30/24

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 3/9/24

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 0013-2,183 hours; EQT 0022-2,182 hours; EQT 0024-2,058 hours; EQT 0027-2,039 hours; EQT 0028-2,081 hours; EQT 0029-2,043 hours; EQT 0014-2,183 hours

Emissions Data Summary¹	
1. Duration of excess emissions in reporting period due to:	<i>All EQT's (hours)</i>
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 Summary¹	
1. CMS downtime in reporting period due to:	<i>All EQT's (hours)</i>
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: **H₂S**

Applicable NSPS Subpart: Ja

Reporting period dates: From 1/1/24 to 3/31/24

Date submitted: 4/30/24

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 3/9/24

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 0127-2,009 hours; EQT 0159-2,079 hours

Emissions Data Summary¹	
1. Duration of excess emissions in reporting period due to:	<i>All EQT's (hours)</i>
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 Summary¹	
1. CMS downtime in reporting period due to:	<i>All EQT's (hours)</i>
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: **H₂S**

Applicable NSPS Subpart: J

Reporting period dates: From 1/1/24 to 3/31/24

Date submitted: 4/30/24

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 3/9/24

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 Summary¹	
1. Duration of excess emissions in reporting period due to:	<i>(hours)</i>
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 Summary¹	
1. CMS downtime in reporting period due to:	<i>(hours)</i>
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: **H₂S**

Applicable NSPS Subpart: J

Reporting period dates: From 1/1/24 to 3/31/24

Date submitted: 4/30/24

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 3/9/24

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: 2,183 hours

Emissions Data Summary¹	
1. Duration of excess emissions in reporting period due to:	<i>(hours)</i>
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 Summary¹	
1. CMS downtime in reporting period due to:	<i>(hours)</i>
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: **H₂S**

Applicable NSPS Subpart: J

Reporting period dates: From 1/1/24 to 3/31/24

Date submitted: 4/30/24

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 3/9/24

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 0030-2,183 hours; EQT 0048-0 hours³

Emissions Data Summary¹		
	<i>EQT 0030 (hours)</i>	<i>EQT 0048 (hours)</i>
1. Duration of excess emissions in reporting period due to:		
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 Summary¹		
	<i>EQT 0030 (hours)</i>	<i>EQT 0048 (hours)</i>
1. CMS downtime in reporting period due to:		
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: From 1/1/24 to 3/31/24

Date submitted: 4/30/24

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 (O₂)

Date of Latest CMS Certification or Audit: CGA on 2/1/24

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

Total source operating time in reporting period: 2,183 hours

Emissions Data Summary¹	
1. Duration of excess emissions in reporting period due to:	<i>(hours)</i>
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 Summary¹	
1. CMS downtime in reporting period due to:	<i>(hours)</i>
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: From 1/1/24 to 3/31/24

Date submitted: 4/30/24

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(NOx)/ Magnos 28 (O₂)

Date of Latest CMS Certification or Audit: CGA on 2/1/24

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

Total source operating time in reporting period: 2,163 hours

Emissions Data Summary¹	
1. Duration of excess emissions in reporting period due to:	<i>(hours)</i>
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 Summary¹	
1. CMS downtime in reporting period due to:	<i>(hours)</i>
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: From 1/1/24 to 3/31/24

Date submitted: 4/30/24

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)/(O₂)

Date of Latest CMS Certification or Audit: CGA on 3/8/24

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

Total source operating time in reporting period: 2,183 hours

Emissions Data Summary¹	
1. Duration of excess emissions in reporting period due to:	<i>(hours)</i>
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 Summary¹	
1. CMS downtime in reporting period due to:	<i>(hours)</i>
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: **NO_x**

Applicable NSPS Subpart: Ja

Reporting period dates: From 1/1/24 to 3/31/24

Date submitted: 4/30/24

Company: Valero Refining - Meraux LLC

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

Emission Limitation: Nitrogen Oxide corrected to 0% O₂ shall not exceed 40 ppm on a 30-day rolling average

Monitor Manufacturer and Model No.: Thermo Environmental 42i (NO_x)/(O₂)

Date of Latest CMS Certification or Audit: CGA on 1/22/24

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

Total source operating time in reporting period: 2,009 hours

Emissions Data Summary¹	
1. Duration of excess emissions in reporting period due to:	<i>(hours)</i>
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 Summary¹	
1. CMS downtime in reporting period due to:	<i>(hours)</i>
a. Monitor equipment malfunctions	0
b. Non-Monitor equipment malfunctions	0
c. Quality assurance calibration	7
d. Other known causes	0
e. Unknown causes	0
2. Total CMS Downtime	7
3. Total duration of CMS Downtime x (100) [Total source operating time] ²	0.3 %

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: From 1/1/24 to 3/31/24

Date submitted: 4/30/24

Company: Valero Refining - Meraux LLC

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

Emission Limitation: Nitrogen Oxide corrected to 0% O₂ shall not exceed 40 ppm on a 30-day rolling average

Monitor Manufacturer and Model No.: ABB AO2000 Uras 26(NO_x)/ Magnox 206 (O₂)

Date of Latest CMS Certification or Audit: CGA on 2/6/24

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

Total source operating time in reporting period: 2,033 hours

Emissions Data Summary¹	
1. Duration of excess emissions in reporting period due to:	<i>(hours)</i>
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 Summary¹	
1. CMS downtime in reporting period due to:	<i>(hours)</i>
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: From 1/1/24 to 3/31/24

Date submitted: 4/30/24

Company: Valero Refining - Meraux LLC

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

Emission Limitation: Used to determine mass emissions, no concentration-based limit.

Monitor Manufacturer and Model No.: ABB Limas11(NO_x), Magnos27 (O₂)

Date of Latest CMS Certification or Audit: CGA on 2/1/24

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

Total source operating time in reporting period: 2,182 hours

Emissions Data Summary¹	
1. Duration of excess emissions in reporting period due to:	<i>(hours)</i>
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 Summary¹	
1. CMS downtime in reporting period due to:	<i>(hours)</i>
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: From 1/1/24 to 3/31/24

Date submitted: 4/30/24

Company: Valero Refining - Meraux LLC

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

Emission Limitation: Used to determine mass emissions, no concentration-based limit.

Monitor Manufacturer and Model No.: ABB AO2000 Uras 26(NO_x)/ Magnox 206 (O₂)

Date of Latest CMS Certification or Audit: CGA on 2/6/24

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

Total source operating time in reporting period: 2,183 hours

Emissions Data Summary¹	
1. Duration of excess emissions in reporting period due to:	<i>(hours)</i>
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 Summary¹	
1. CMS downtime in reporting period due to:	<i>(hours)</i>
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: **H₂S**

Applicable NSPS Subpart: Ja

Reporting period dates: From 1/1/24 to 3/31/24

Date submitted: 4/30/24

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 2/8/24

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

Total source operating time in reporting period: 2,183 hours

Emissions Data Summary¹	
1. Duration of excess emissions in reporting period due to:	<i>(hours)</i>
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 Summary¹	
1. CMS downtime in reporting period due to:	<i>(hours)</i>
a. Monitor equipment malfunctions	8
b. Non-Monitor equipment malfunctions	0
c. Quality assurance calibration	26
d. Other known causes	0
e. Unknown causes	0
2. Total CMS Downtime	34
3. Total duration of CMS Downtime x (100) [Total source operating time] ²	1.6 %

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: **H₂S**

Applicable NSPS Subpart: Ja

Reporting period dates: From 1/1/24 to 3/31/24

Date submitted: 4/30/24

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 2/6/24

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

Total source operating time in reporting period: 2,183 hours

Emissions Data Summary¹	
1. Duration of excess emissions in reporting period due to:	<i>(hours)</i>
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 Summary¹	
1. CMS downtime in reporting period due to:	<i>(hours)</i>
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: **H₂S**

Applicable NSPS Subpart: Ja

Reporting period dates: From 1/1/24 to 3/31/24

Date submitted: 4/30/24

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 2/1/24

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

Total source operating time in reporting period: 2,183 hours

Emissions Data Summary¹	
1. Duration of excess emissions in reporting period due to:	<i>(hours)</i>
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 Summary¹	
1. CMS downtime in reporting period due to:	<i>(hours)</i>
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: From 1/1/24 to 3/31/24

Date submitted: 4/30/24

Company: Valero Refining - Meraux LLC

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

Emission Limitation: Used to determine mass emissions, no concentration-based limit.

Monitor Manufacturer and Model No.: Thermo Scientific SOLA II

Date of Latest CMS Certification or Audit: CGA on 2/27/24

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

Total source operating time in reporting period: 2,183 hours

CMS Performance Summary¹	
1. CMS downtime in reporting period due to:	<i>(hours)</i>
a. Monitor equipment malfunctions	11
b. Non-Monitor equipment malfunctions	0
c. Quality assurance calibration	2
d. Other known causes	0
e. Unknown causes	0
2. Total CMS Downtime	13
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: From 1/1/24 to 3/31/24

Date submitted: 4/30/24

Company: Valero Refining - Meraux LLC

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

Emission Limitation: Used to determine mass emissions, no concentration based limit.

Monitor Manufacturer and Model No.: Thermo Scientific SOLA II

Date of Latest CMS Certification or Audit: CGA on 2/27/24

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

Total source operating time in reporting period: 2,183 hours

CMS Performance Summary¹	
1. CMS downtime in reporting period due to:	<i>(hours)</i>
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: **Total Sulfur**

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

Reporting period dates: From 1/1/24 to 3/31/24

Date submitted: 4/30/24

Company: Valero Refining - Meraux LLC

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

Emission Limitation: Used to determine mass emissions, no concentration based limit.

Monitor Manufacturer and Model No.: Thermo Scientific SOLA II

Date of Latest CMS Certification or Audit: CGA on 2/27/24

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

Total source operating time in reporting period: 2,183 hours

CMS Performance Summary¹	
1. CMS downtime in reporting period due to:	<i>(hours)</i>
a. Monitor equipment malfunctions	60
b. Non-Monitor equipment malfunctions	0
c. Quality assurance calibration	22
d. Other known causes	3
e. Unknown causes	0
2. Total CMS Downtime	85
3. Total duration of CMS Downtime x (100) [Total source operating time] ²	3.9 %

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: From 1/1/24 to 3/31/24

Date submitted: 4/30/24

Company: Valero Refining - Meraux LLC

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

Emission Limitation: Used to determine flare emissions.

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: 2,183 hours

CMS Performance Summary¹	
1. CMS downtime in reporting period due to:	<i>(hours)</i>
a. Monitor equipment malfunctions	0
b. Non-Monitor equipment malfunctions	0
c. Quality assurance calibration	0
d. Other known causes	0
e. Unknown causes	11
2. Total CMS Downtime	11
3. Total duration of CMS Downtime x (100) [Total source operating time] ²	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.

**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: From 1/1/24 to 3/31/24

Date submitted: 4/30/24

Company: Valero Refining - Meraux LLC

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

Emission Limitation: Used to determine flare emissions.

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: 2,183 hours

CMS Performance Summary¹	
1. CMS downtime in reporting period due to:	<i>(hours)</i>
a. Monitor equipment malfunctions	0
b. Non-Monitor equipment malfunctions	0
c. Quality assurance calibration	0
d. Other known causes	0
e. Unknown causes	11
2. Total CMS Downtime	11
3. Total duration of CMS Downtime x (100) [Total source operating time] ²	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.

**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: From 1/1/24 to 3/31/24

Date submitted: 4/30/24

Company: Valero Refining - Meraux LLC

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

Emission Limitation: Used to determine flare emissions.

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: 2,183 hours

CMS Performance Summary¹	
1. CMS downtime in reporting period due to:	<i>(hours)</i>
a. Monitor equipment malfunctions	0
b. Non-Monitor equipment malfunctions	0
c. Quality assurance calibration	0
d. Other known causes	0
e. Unknown causes	11
2. Total CMS Downtime	11
3. Total duration of CMS Downtime x (100) [Total source operating time] ²	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.


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

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

For all other CMS covered in this report, no changes were made in the 1st Quarter 2024 to CMS, process, or controls.

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

Jan Patnoal
Name

 4/25/24
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: **SO₂**

Applicable NSPS Subpart: Ja

Reporting period dates: From 1/1/24 to 3/31/24

Date submitted: 4/30/24

Company: Valero Refining - Meraux LLC

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

Emission Limitation: SO₂ corrected to 0% O₂ shall not exceed 250 ppm on a 12-hour rolling average

Monitor Manufacturer and Model No.: Ametek 9900(SO₂ and O₂)

Date of Latest CMS Certification or Audit: CGA on 3/9/24

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

Total source operating time in reporting period: 2,051 hours

Ja EXCESS EMISSIONS						
Date	Start	End	Duration (hours)	Max 12-HRA (ppm)	Cause	Corrective Action
1/16/24	20:00		7	308	SO ₂ at 0% O ₂ greater than 250 ppm, 12-HRA, with combined SO ₂ emissions from the #2 and #3 SRU less than 500 lbs/day above allowable due to two events that occurred several hours apart: 1) the automatic shutdown of the #3 SRU during a period of abnormally low ambient temperatures, which upset multiple units in the refinery, and the subsequent transfer of all remaining acid gas to the #2 SRU and, 2) unstable acid gas flow rates during the later restart of the #3 SRU caused the automatic shutdown of the #2 TGT burner.	1) Valero worked to stabilize the refinery and reduce the amount of acid gas sent to the #2 SRU while preparing to restart the #3 SRU. 2) Valero quickly relit the #2 TGT burner and normalized the unit.
1/17/24		03:00				
1/19/24		20:00	57	893	SO ₂ at 0% O ₂ greater than 250 ppm, 12-HRA, with combined SO ₂ emissions from the #2 and #3 SRU greater than 500 lbs/day above allowable due to the shutdown of the #2 SRU due to a leak discovered on a Main Burner manway. The unit was shutdown and purged to the incinerator in order to repair the leak.	Valero completed the shutdown of the #2 SRU and repaired the leak on the Main Burner manway.
1/22/24		05:00				
1/26/24	19:00		41	828	SO ₂ at 0% O ₂ greater than 250 ppm, 12-HRA, with combined SO ₂ emissions from the #2 and #3 SRU less than 500 lbs/day during start up with the #2 TGT bypassed after repairing a leak on a Main Burner manway.	Valero completed the startup of the #2 SRU.
1/28/24		12:00				
Continued on Next Page						

**GASEOUS AND OPACITY EXCESS EMISSIONS AND
MONITORING SYSTEMS PERFORMANCE**

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

Pollutant: **SO₂**

Applicable NSPS Subpart: Ja

Reporting period dates: From 1/1/24 to 3/31/24

Date submitted: 4/30/24

Company: Valero Refining - Meraux LLC

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

Emission Limitation: SO₂ corrected to 0% O₂ shall not exceed 250 ppm on a 12-hour rolling average

Monitor Manufacturer and Model No.: Ametek 9900(SO₂ and O₂)

Date of Latest CMS Certification or Audit: CGA on 3/9/24

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

Total source operating time in reporting period: 2,051 hours

Ja EXCESS EMISSIONS						
Date	Start	End	Duration (hours)	Max 12-HRA (ppm)	Cause	Corrective Action
2/24/24	02:00		216	883	SO ₂ at 0% O ₂ greater than 250 ppm, 12-HRA, with combined SO ₂ emissions from the #2 and #3 SRU greater than 500 lbs/day above allowable during the shutdown and subsequent startup of the #2 TGT to replace the Quench Tower packing due to fouling that occurred during the freezing upset on 1/16/24. The #2 SRU Main Burner and Incinerator remained lit and in hot standby with no acid gas in the unit while the #2 TGT was bypassed and shut down.	Valero completed replacing the packing in the #2 TGT Quench Tower and completed the startup of the #2 SRU.
3/4/24		02:00				
TOTAL			321			

Ja CMS PERFORMANCE¹						
Date	Start	End	Duration (hours)	Cause	Corrective Action	
2/6/24	10:00	12:00	2	Offline to replace SO ₂ lamp.	Calibrated and returned to service.	
3/9/24	13:00		49	On 3/9/24, Valero performed a Cylinder Gas Audit on the SO ₂ and O ₂ analyzers. When the sample flow was returned to the analyzer the SO ₂ reading began trending downward and read negative while the O ₂ continued to read normally. On 3/10 and 3/11, both SO ₂ and O ₂ performed satisfactory daily calibration checks.	The exact cause of this behavior remains unknown. The condition appeared to resolve itself during while cycling solenoid valves during troubleshooting.	
3/11/24		14:00				
TOTAL			51			

¹In 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: **SO₂**

Applicable NSPS Subpart: Ja

Reporting period dates: From 1/1/24 to 3/31/24

Date submitted: 4/30/24

Company: Valero Refining - Meraux LLC

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

Emission Limitation: SO₂ corrected to 0% O₂ shall not exceed 250 ppm on a 12-hour rolling average.

Monitor Manufacturer and Model No.: ABB AO2000 Uras 26(SO₂)/ Magnos 206 (O₂)

Date of Latest CMS Certification or Audit: CGA on 2/1/24

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

Total source operating time in reporting period: 2,159 hours

Ja EXCESS EMISSIONS						
Date	Start	End	Duration (hours)	Max 12-HRA (ppm)	Cause	Corrective Action
1/16/24	15:00		11	370	SO ₂ at 0% O ₂ greater than 250 ppm, 12-HRA, with combined SO ₂ emissions from the #2 and #3 SRU less than 500 lbs/day above allowable during unit start up with the #3 TGT bypassed following the automatic shutdown of the #3 SRU on low main burner combustion air flow during a period of abnormally low ambient temperatures. Valero could not determine the exact cause of the low air flow, other than that it was freeze related.	Valero completed the start up of the #3 SRU. Valero also identified and documented all the operational challenges experienced during the freezing conditions and updated our winterization procedures.
1/17/24		02:00				
TOTAL			11			

Ja CMS PERFORMANCE¹						
Date	Start	End	Duration (hours)	Cause	Corrective Action	
2/1/24	10:00	11:00	1	SO ₂ and O ₂ Cylinder Gas Audit.	N/A	
TOTAL			1			

¹In 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: **H₂S**

Applicable NSPS Subpart: Ja

Reporting period dates: From 1/1/24 to 3/31/24

Date submitted: 4/30/24

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 3/9/24

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 0127-2,009 hours; EQT 0159-2,079 hours

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

Ja CMS PERFORMANCE¹ – Both EQT’s						
Date	Start	End	Duration (hours)	Cause	Corrective Action	
None.						
TOTAL			0			

¹In 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: From 1/1/24 to 3/31/24

Date submitted: 4/30/24

Company: Valero Refining - Meraux LLC

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

Emission Limitation: Nitrogen Oxide corrected to 0% O₂ shall not exceed 40 ppm on a 30-day rolling average

Monitor Manufacturer and Model No.: Thermo Environmental 42i (NO_x)/(O₂)

Date of Latest CMS Certification or Audit: CGA on 1/22/24

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

Total source operating time in reporting period: 2,009 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	
1/22/24	08:00	9:00	1	NOx and O ₂ Cylinder Gas Audit.	N/A	
2/16/24	09:00	11:00	2	Adjustment for calibration drift.	Calibrated and returned to service.	
2/22/24	10:00	11:00	1	Adjustment for calibration drift.	Calibrated and returned to service.	
2/23/24	08:00	09:00	1	Adjustment for calibration drift.	Calibrated and returned to service.	
2/26/24	09:00	10:00	1	Adjustment for calibration drift.	Calibrated and returned to service.	
2/26/24	11:00	12:00	1	Adjustment for calibration drift.	Calibrated and returned to service.	
TOTAL			7			

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: From 1/1/24 to 3/31/24

Date submitted: 4/30/24

Company: Valero Refining - Meraux LLC

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

Emission Limitation: Nitrogen Oxide corrected to 0% O₂ shall not exceed 40 ppm on a 30-day rolling average

Monitor Manufacturer and Model No.: ABB Limas11(NOx), Magnos27 (O₂)

Date of Latest CMS Certification or Audit: CGA on 2/6/24

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

Total source operating time in reporting period: 2,033 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	
2/6/24	07:00	08:00	1	NOx and O ₂ Cylinder Gas Audit.	N/A	
TOTAL			1			

¹In 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: **H₂S**

Applicable NSPS Subpart: Ja

Reporting period dates: From 1/1/24 to 3/31/24

Date submitted: 4/30/24

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 2/8/24

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

Total source operating time in reporting period: 2,183 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	
1/12/24	10:00	18:00	8	Analyzer offline to troubleshoot erratic readings during the automatic daily calibration check.	Valero replaced the measurement cell but discovered that the new cell was bad. Valero then reinstalled the old cell. While this was being done the technician noticed that the fiber optic connections to the cell may not have been aligned properly. These were adjusted for better alignment and the analyzer was calibrated and returned to service.	
2/9/24	10:00		26	Out of control. Automatic daily calibration check exhibited a large drift on both the zero and span from the previous day's calibration check due to incorrect pressure in the measurement cell.	Valero adjusted the regulators controlling pressure and calibrated the analyzer.	
2/10/24		12:00				
TOTAL			34			

¹Due to the physical arrangement of the headers supplying the North Flare Stack (EPN 20-72, EQT 0035), two analyzers are required to measure H₂S 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.

²In 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: **H₂S**

Applicable NSPS Subpart: Ja

Reporting period dates: From 1/1/24 to 3/31/24

Date submitted: 4/30/24

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 2/6/24

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

Total source operating time in reporting period: 2,183 hours

Ja EXCESS EMISSIONS¹						
Date	Start	End	Duration (hours)	Max 3-HRA (ppm)	Cause	Corrective Action
None.						
TOTAL			0			

Ja CMS PERFORMANCE²						
Date	Start	End	Duration (hours)	Cause	Corrective Action	
None.						
TOTAL			0			

¹Due to the physical arrangement of the headers supplying the North Flare Stack (EPN 20-72, EQT 0035), two analyzers are required to measure H₂S 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.

²In 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: **H₂S**

Applicable NSPS Subpart: Ja

Reporting period dates: From 1/1/24 to 3/31/24

Date submitted: 4/30/24

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 2/1/24

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

Total source operating time in reporting period: 2,183 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			

¹In 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: From 1/1/24 to 3/31/24

Date submitted: 4/30/24

Company: Valero Refining - Meraux LLC

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

Emission Limitation: Used to determine mass emissions, no concentration-based limit.

Monitor Manufacturer and Model No.: Thermo Scientific SOLA II

Date of Latest CMS Certification or Audit: CGA on 2/27/24

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

Total source operating time in reporting period: 2,183 hours

<u>Ja CMS PERFORMANCE¹</u>					
Date	Start	End	Duration (hours)	Cause	Corrective Action
2/27/24	10:00	11:00	1	Cylinder Gas Audit.	N/A
3/4/24	11:00	22:00	11	Offline to perform maintenance on sample system due to declining sample flow/pressure.	Valero replaced the sample pump, filter, valve rotors, and blew out tubing to remove pluggage. The analyzer was calibrated and returned to service.
3/11/24	10:00	11:00	1	Adjustment for calibration drift.	Calibrated and returned to service.
TOTAL			13		

¹In 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: From 1/1/24 to 3/31/24

Date submitted: 4/30/24

Company: Valero Refining - Meraux LLC

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

Emission Limitation: Used to determine mass emissions, no concentration-based limit.

Monitor Manufacturer and Model No.: Thermo Scientific SOLA II

Date of Latest CMS Certification or Audit: CGA on 2/27/24

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

Total source operating time in reporting period: 2,183 hours

Ja CMS PERFORMANCE ¹					
Date	Start	End	Duration (hours)	Cause	Corrective Action
3/11/24	13:00	14:00	1	Adjustment for calibration drift.	Calibrated and returned to service.
TOTAL			1		

¹In 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: From 1/1/24 to 3/31/24

Date submitted: 4/30/24

Company: Valero Refining - Meraux LLC

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

Emission Limitation: Used to determine mass emissions, no concentration-based limit.

Monitor Manufacturer and Model No.: Thermo Scientific SOLA II

Date of Latest CMS Certification or Audit: CGA on 2/27/24

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

Total source operating time in reporting period: 2,159 hours

Ja CMS PERFORMANCE¹					
Date	Start	End	Duration (hours)	Cause	Corrective Action
3/7/24	14:00	17:00	3	Offline to replace sample pump.	Calibrated and returned to service.
3/11/24	13:00	14:00	1	Adjustment for calibration drift.	N/A
3/17/24	21:00		18	Differential pressure across analyzer out of specification and causing analyzer to read excessively high. Likely due to pluggage in the sample return line.	Valero blew out the sample and return line, restored normal flow to the analyzer, and set the correct differential pressure across the analyzer. Calibrated and returned to service.
3/18/24		15:00			
3/18/24	15:00		20	Out of control due to excessive span drift.	Valero again blew out the sample and return line and adjusted the sample flow and differential pressure across the analyzer. Calibrated and returned to service.
3/19/24		11:00			
3/19/24	13:00	14:00	1	Follow up calibration check.	N/A
Continued on Next Page.					

¹In 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: From 1/1/24 to 3/31/24

Date submitted: 4/30/24

Company: Valero Refining - Meraux LLC

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

Emission Limitation: Used to determine mass emissions, no concentration-based limit.

Monitor Manufacturer and Model No.: Thermo Scientific SOLA II

Date of Latest CMS Certification or Audit: CGA on 2/27/24

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

Total source operating time in reporting period: 2,183 hours

Ja CMS PERFORMANCE ¹					
Date	Start	End	Duration (hours)	Cause	Corrective Action
3/21/24	18:00		16	Analyzer lost sample flow due to pluggage from liquids in the sample lines.	Valero blew out the sample and return line, restored normal flow to the analyzer, and set the correct differential pressure across the analyzer. Calibrated and returned to service.
3/22/24		10:00			
3/24/24	21:00		17		
3/25/24		14:00			
3/28/24	06:00	09:00	3		
3/31/24	18:00		6		
4/1/24		00:00			
TOTAL			85		

¹In 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: From 1/1/24 to 3/31/24

Date submitted: 4/30/24

Company: Valero Refining - Meraux LLC

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

Emission Limitation: Used to determine flare emissions.

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: 2,183 hours

Ja CMS PERFORMANCE ¹					
Date	Start	End	Duration (hours)	Cause	Corrective Action
1/16/24	04:00	15:00	11	Period of unreliable flow indication during abnormally low ambient temperatures. Pressure instruments used by the flowmeter dropped to abnormally low values and the flow meter indicated zero flow when obvious flaring was occurring.	Ambient temperatures rose and the flow meters began to indicate as expected. Exact cause for the malfunction of the meter is unknown.
TOTAL			11		

¹In 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: From 1/1/24 to 3/31/24

Date submitted: 4/30/24

Company: Valero Refining - Meraux LLC

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

Emission Limitation: Used to determine flare emissions.

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: 2,183 hours

Ja CMS PERFORMANCE ²					
Date	Start	End	Duration (hours)	Cause	Corrective Action
1/16/24	04:00	15:00	11	Period of unreliable flow indication during abnormally low ambient temperatures. Pressure instruments used by the flowmeter dropped to abnormally low values and the flow meter indicated zero flow when obvious flaring was occurring.	Ambient temperatures rose and the flow meters began to indicate as expected. Exact cause for the malfunction of the meter is unknown.
TOTAL			11		

¹In 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: From 1/1/24 to 3/31/24

Date submitted: 4/30/24

Company: Valero Refining - Meraux LLC

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

Emission Limitation: Used to determine flare emissions.

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: 2,183 hours

Ja CMS PERFORMANCE ²					
Date	Start	End	Duration (hours)	Cause	Corrective Action
1/16/24	04:00	15:00	11	Period of unreliable flow indication during abnormally low ambient temperatures. Pressure instruments used by the flowmeter dropped to abnormally low values and the flow meter indicated abnormally high flow rates when flaring not was occurring.	Ambient temperatures rose and the flow meters began to indicate as expected. Exact cause for the malfunction of the meter is unknown.
TOTAL			11		

¹In 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: **SO₂**

Applicable NSPS Subpart: Ja

Reporting period dates: From 1/1/24 to 3/31/24

Date submitted: 4/30/24

Company: Valero Refining - Meraux LLC

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

Emission Limitation: SO₂ corrected to 0% O₂ shall not exceed 250 ppm on a 12-hour rolling average.

Monitor Manufacturer and Model No.: Ametek 9900(SO₂ and O₂)

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

CEM Sampling Location: #2 SRU Incinerator (#1-93)

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

I. ACCURACY ASSESSMENT RESULTS (CGA):

	SO ₂ #1 <u>(low scale)</u>	SO ₂ #2 <u>(high scale)</u>	O ₂ #1 <u>(low scale)</u>	O ₂ #2 <u>(high scale)</u>
Date of Audit	3/9/24	3/9/24	3/9/24	3/9/24
Audit Gas Cylinder No.	SG9150051BAL	CC50964	CC483689	SG9152263BAL
Date of Audit Gas Cert.	5/27/16	4/7/24	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	277.1 ppmv	5.99 vol %	10.05 vol %
CEM Response Value	112.2 ppmv	261.5 ppmv	6.14 vol %	10.18 vol %
Accuracy	10.2%	5.6%	2.5%	1.3%
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: **SO₂**

Applicable NSPS Subpart: Ja

Reporting period dates: From 1/1/24 to 3/31/24

Date submitted: 4/30/24

Company: Valero Refining - Meraux LLC

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

Emission Limitation: SO₂ corrected to 0% O₂ shall not exceed 250 ppm on a 12-hour rolling average.

Monitor Manufacturer and Model No.: ABB AO2000 Uras 26(SO₂)/ Magos 206 (O₂)

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

CEM Sampling Location: #3 SRU Incinerator (#5-00)

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

I. ACCURACY ASSESSMENT RESULTS (CGA):

	SO ₂ #1 <u>(low scale)</u>	SO ₂ #2 <u>(high scale)</u>	O ₂ #1 <u>(low scale)</u>	O ₂ #2 <u>(high scale)</u>
Date of Audit	2/1/24	2/1/24	2/1/24	2/1/24
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	124.8 ppmv	267.4 ppmv	5.90 vol %	10.00 vol %
Accuracy	0.4%	2.9%	1.5%	0.2%
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: **H₂S**

Applicable NSPS Subpart: J

Reporting period dates: From 1/1/24 to 3/31/24

Date submitted: 4/30/24

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: 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)

CEM Sampling Location: Area 1 Fuel Drum

CEM Span Value: Hydrogen Sulfide, 300 ppm

I. ACCURACY ASSESSMENT RESULTS (CGA):

	H ₂ S #1 <u>(low scale)</u>	H ₂ S #2 <u>(high scale)</u>
Date of Audit	3/8/24	3/8/24
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)	69.7	162.7
Accuracy	7.0%	3.0%
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: **H₂S**

Applicable NSPS Subpart: J and Ja

Reporting period dates: From 1/1/24 to 3/31/24

Date submitted: 4/30/24

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: Area 2 Fuel Drum for: 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 ₂ S #1 <u>(low scale)</u>	H ₂ S #2 <u>(high scale)</u>
Date of Audit	3/9/24	3/9/24
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)	76.6	165.8
Accuracy	2.8%	0.2%
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: **H₂S**

Applicable NSPS Subpart: J

Reporting period dates: From 1/1/24 to 3/31/24

Date submitted: 4/30/24

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: Area 4 Fuel Drum for 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 ₂ S #1 <u>(low scale)</u>	H ₂ S #2 <u>(high scale)</u>
Date of Audit	3/9/24	3/9/24
Audit Gas Cylinder No.	LL74335	L141209
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)	72.3	160.3
Accuracy	3.5%	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: **H₂S**

Applicable NSPS Subpart: J

Reporting period dates: From 1/1/24 to 3/31/24

Date submitted: 4/30/24

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: Area 6 Fuel Drum for 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 ₂ S #1 <u>(low scale)</u>	H ₂ S #2 <u>(high scale)</u>
Date of Audit	3/9/24	3/9/24
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	157.0
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: **H₂S**

Applicable NSPS Subpart: J

Reporting period dates: From 1/1/24 to 3/31/24

Date submitted: 4/30/24

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: Area 6 Fuel Drum for Boilers B-5 (EPN 2-00, EQT 0030) and B-6 (EPN 3-00, EQT 0048)

CEM Sampling Location: Area 6 Fuel Drum

CEM Span Value: Hydrogen Sulfide, 300 ppm

I. ACCURACY ASSESSMENT RESULTS (CGA):

	H ₂ S #1 <u>(low scale)</u>	H ₂ S #2 <u>(high scale)</u>
Date of Audit	3/9/24	3/9/24
Audit Gas Cylinder No.	CC122417	CC151402
Date of Audit Gas Cert.	8/1/22	8/1/22
Type of Certification	EPA Protocol 1	EPA Protocol 1
Certified Audit Value (ppmv)	74.6	175.4
CEM Response Value (ppmv)	72.2	165.7
Accuracy	3.2%	5.5%
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: From 1/1/24 to 3/31/24

Date submitted: 4/30/24

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 (O₂)

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 <u>(low scale)</u>	NO _x #2 <u>(high scale)</u>	O ₂ #1 <u>(low scale)</u>	O ₂ #2 <u>(high scale)</u>
Date of Audit	2/1/24	2/1/24	2/1/24	2/1/24
Audit Gas Cylinder No.	LL23428	LL67372	CC483685	BLM004951
Date of Audit Gas Cert.	3/21/22	9/5/23	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	55.8 ppmv	6.00 vol %	10.04 vol %
CEM Response Value	25.6 ppmv	56.6 ppmv	6.09 vol %	10.06 vol %
Accuracy	2.4%	1.4%	1.5%	0.2%
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: Db

Reporting period dates: From 1/1/24 to 3/31/24

Date submitted: 4/30/24

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 (O₂)

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 <u>(low scale)</u>	NO _x #2 <u>(high scale)</u>	O ₂ #1 <u>(low scale)</u>	O ₂ #2 <u>(high scale)</u>
Date of Audit	2/1/24	2/1/24	2/1/24	2/1/24
Audit Gas Cylinder No.	LL23428	LL67372	CC483685	BLM004951
Date of Audit Gas Cert.	3/21/22	9/5/23	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	55.8 ppmv	6.00 vol %	10.04 vol %
CEM Response Value	24.2 ppmv	54.7 ppmv	6.03 vol %	10.03 vol %
Accuracy	3.2%	2.0%	0.5%	0.1%
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: Db

Reporting period dates: From 1/1/24 to 3/31/24

Date submitted: 4/30/24

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)/(O₂)

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 <u>(low scale)</u>	NO _x #2 <u>(high scale)</u>	O ₂ #1 <u>(low scale)</u>	O ₂ #2 <u>(high scale)</u>
Date of Audit	3/8/24	3/8/24	3/8/24	3/8/24
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	132.5 ppmv	271.3 ppmv	5.60 vol %	9.23 vol %
Accuracy	4.4%	0.3%	7.1%	8.6%
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: From 1/1/24 to 3/31/24

Date submitted: 4/30/24

Company: Valero Refining - Meraux LLC

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

Emission Limitation: Nitrogen Oxide corrected to 0% O₂ shall not exceed 40 ppm on a 30-day rolling average

Monitor Manufacturer and Model No.: Thermo Environmental Model 42i (NO_x)/(O₂)

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 <u>(low scale)</u>	NO _x #2 <u>(high scale)</u>	O ₂ #1 <u>(low scale)</u>	O ₂ #2 <u>(high scale)</u>
Date of Audit	1/22/24	1/22/24	1/22/24	1/22/24
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	23.8 ppmv	51.9 ppmv	5.43 vol %	9.27 vol %
Accuracy	3.6%	7.0%	8.9%	6.7%
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: **NO_x**

Applicable NSPS Subpart: Ja

Reporting period dates: From 1/1/24 to 3/31/24

Date submitted: 4/30/24

Company: Valero Refining - Meraux LLC

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

Emission Limitation: Nitrogen Oxide corrected to 0% O₂ shall not exceed 40 ppm on a 30-day rolling average

Monitor Manufacturer and Model No.: ABB AO2000 Uras 26(NO_x)/ Magnos 206 (O₂)

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):

<u>CGA</u>	<u>NO_x #1</u> <u>(low scale)</u>	<u>NO_x #2</u> <u>(high scale)</u>	<u>O₂ #1</u> <u>(low scale)</u>	<u>O₂ #2</u> <u>(high scale)</u>
Date of Audit	2/6/24	2/6/24	2/6/24	2/6/24
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	25.2 ppmv	52.0 ppmv	6.30 vol %	10.27 vol %
Accuracy	1.9%	6.3%	5.0%	2.8%
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: From 1/1/24 to 3/31/24

Date submitted: 4/30/24

Company: Valero Refining - Meraux LLC

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

Emission Limitation: Used to determine mass emissions, no concentration-based limit.

Monitor Manufacturer and Model No.: ABB Limas11 (NO_x), Magnos27 (O₂)

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):

<u>CGA</u>	<u>NO_x #1 (low scale)</u>	<u>NO_x #2 (high scale)</u>	<u>O₂ #1 (low scale)</u>	<u>O₂ #2 (high scale)</u>
Date of Audit	2/1/24	2/1/24	2/1/24	2/1/24
Audit Gas Cylinder No.	LL172550	CC319153	CC483638	CC222165
Date of Audit Gas Cert.	9/28/23	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	25.0 ppmv	55.4 ppmv	5.99 vol %	9.96 vol %
CEM Response Value	26.1 ppmv	58.3 ppmv	6.01 vol %	10.01 vol %
Accuracy	4.5%	5.2%	0.4%	0.5%
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: From 1/1/24 to 3/31/24

Date submitted: 4/30/24

Company: Valero Refining - Meraux LLC

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

Emission Limitation: Used to determine mass emissions, no concentration-based limit.

Monitor Manufacturer and Model No.: ABB AO2000 Uras 26(NO_x)/ Magnos 206 (O₂)

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):

<u>CGA</u>	<u>NO_x #1 (low scale)</u>	<u>NO_x #2 (high scale)</u>	<u>O₂ #1 (low scale)</u>	<u>O₂ #2 (high scale)</u>
Date of Audit	2/6/24	2/6/24	2/6/24	2/6/24
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	23.4 ppmv	50.5 ppmv	6.10 vol %	10.00 vol %
Accuracy	8.3%	8.5%	1.3%	0.3%
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: **H₂S**

Applicable NSPS Subpart: Ja

Reporting period dates: From 1/1/24 to 3/31/24

Date submitted: 4/30/24

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 (Y-AT-801)

CEM Span Value: Hydrogen Sulfide, 300 ppm

I. ACCURACY ASSESSMENT RESULTS (CGA):

	H ₂ S #1 <u>(low scale)</u>	H ₂ S #2 <u>(high scale)</u>
Date of Audit	2/8/24	2/8/24
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	164.3 ppmv
Accuracy	1.1%	7.2%
Standard	<15%	<15%

¹ Valero unable to obtain EPA Protocol 1 certified gases for the Methane balanced audit gas required by this analyzer.

II. CALIBRATION DRIFT ASSESSMENT

A. Out of Control Periods:

1. Dates: 2/9/24 10:00 – 2/10/24 12:00

2. Number of Days 1.1 (26 hours)

B. Corrective Actions: For corrective actions see Gaseous and Opacity Excess Emissions and Monitoring Systems Performance sheet for the North Flare Stack, North Flare Header H₂S Analyzer found on page 32 of this report.

DATA ASSESSMENT REPORT

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

Pollutant: **H₂S**

Applicable NSPS Subpart: Ja

Reporting period dates: From 1/1/24 to 3/31/24

Date submitted: 4/30/24

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 (Y-AT-800)

CEM Span Value: Hydrogen Sulfide, 300 ppm

I. ACCURACY ASSESSMENT RESULTS (CGA):

	H ₂ S #1 <u>(low scale)</u>	H ₂ S #2 <u>(high scale)</u>
Date of Audit	2/6/24	2/6/24
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	66.3 ppmv	144.3 ppmv
Accuracy	6.9%	5.8%
Standard	<15%	<15%

¹ Valero unable to obtain EPA Protocol 1 certified gases for the Methane balanced audit gas required by this analyzer.

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: **H₂S**

Applicable NSPS Subpart: Ja

Reporting period dates: From 1/1/24 to 3/31/24

Date submitted: 4/30/24

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 (Y-AT-802)

CEM Span Value: Hydrogen Sulfide, 300 ppm

I. ACCURACY ASSESSMENT RESULTS (CGA):

	H ₂ S #1 <u>(low scale)</u>	H ₂ S #2 <u>(high scale)</u>
Date of Audit	2/1/24	2/1/24
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	65.3 ppmv	147.7 ppmv
Accuracy	8.3%	3.6%
Standard	<15%	<15%

¹ Valero unable to obtain EPA Protocol 1 certified gases for the Methane balanced audit gas required by this analyzer.

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: From 1/1/24 to 3/31/24

Date submitted: 4/30/24

Company: Valero Refining - Meraux LLC

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

Emission Limitation: Used to determine mass emissions, no concentration-based limit.

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 (Y-AT-303)

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

I. ACCURACY ASSESSMENT RESULTS (CGA):

	H ₂ S #1 <u>(low scale)</u>	H ₂ S #2 <u>(high scale)</u>
Date of Audit	2/27/24	2/27/24
Audit Gas Cylinder No.	CC753252	CC211986
Date of Audit Gas Cert.	5/3/23	12/20/23
Type of Certification	EPA Protocol 1	Certified Gas ¹
Certified Audit Value (ppmv)	1012.0 ppmv	5504.0 ppmv
CEM Response Value (ppmv)	1056.7 ppmv	5213.0 ppmv
Accuracy	4.4%	5.3%
Standard	<15%	<15%

¹ Valero unable to obtain EPA Protocol 1 certified gases 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: From 1/1/24 to 3/31/24

Date submitted: 4/30/24

Company: Valero Refining - Meraux LLC

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

Emission Limitation: Used to determine mass emissions, no concentration-based limit.

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 (Y-AT-302)

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

I. ACCURACY ASSESSMENT RESULTS (CGA):

	H ₂ S #1 <u>(low scale)</u>	H ₂ S #2 <u>(high scale)</u>
Date of Audit	2/27/24	2/27/24
Audit Gas Cylinder No.	CC753252	CC211986
Date of Audit Gas Cert.	5/3/23	12/20/23
Type of Certification	EPA Protocol 1	Certified Gas ¹
Certified Audit Value (ppmv)	1012.0 ppmv	5504.0 ppmv
CEM Response Value (ppmv)	1049.7 ppmv	5525.7 ppmv
Accuracy	3.7%	0.4%
Standard	<15%	<15%

¹ Valero unable to obtain EPA Protocol 1 certified gases 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: From 1/1/24 to 3/31/24

Date submitted: 4/30/24

Company: Valero Refining - Meraux LLC

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

Emission Limitation: Used to determine mass emissions, no concentration-based limit.

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 (Y-AT-304)

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

I. ACCURACY ASSESSMENT RESULTS (CGA):

	H ₂ S #1 <u>(low scale)</u>	H ₂ S #2 <u>(high scale)</u>
Date of Audit	<u>2/27/24</u>	<u>2/27/24</u>
Audit Gas Cylinder No.	<u>CC753252</u>	<u>CC211986</u>
Date of Audit Gas Cert.	<u>5/3/23</u>	<u>12/20/23</u>
Type of Certification	<u>EPA Protocol 1</u>	<u>Certified Gas¹</u>
Certified Audit Value	<u>1012.0 ppmv</u>	<u>5504.0 ppmv</u>
CEM Response Value	<u>1129.7 ppmv</u>	<u>5830.7 ppmv</u>
Accuracy	<u>11.6%</u>	<u>5.9%</u>
Standard	<u><15%</u>	<u><15%</u>

¹ Valero unable to obtain EPA Protocol 1 certified gases greater than 1000 ppm.

II. CALIBRATION DRIFT ASSESSMENT

A. Out of Control Periods:

1. Dates: 3/18/24 15:00 – 3/19/24 11:00

2. Number of Days 0.8 (23 hours)

B. Corrective Actions: For corrective actions see Gaseous and Opacity Excess Emissions and Monitoring Systems Performance sheet for the North Flare Stack, North Flare Header H2S Analyzer found on pages 37-38 of this report.

Appendix A

Ja Root Cause and Corrective Action Analysis

Subpart Ja Root Cause / Corrective Action AnalysisIncident Number: 480523/480509*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)
 Emissions Source(s): North Flare (EPN 20-72, EQT 0035)
 South Flare (EPN 3-77, EQT 0049)

 Date of Event: 1/16/24
 Date Analysis Completed: 2/23/24

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

A description of the Discharge:

This discharge occurred during a period of freezing conditions over the course of two days. Multiple refinery units were upset, but the main contributors to the flared volume was the automatic shutdown of the Pressure Swing Absorption (PSA) unit on 1/16/24 at approximately 08:04 and the lifting of the Crude unit Stabilizer Pressure Safety Valve on 1/17/24 at approximately 06:10. Unfortunately, the freezing conditions also caused the main flare flow meters to malfunction from approximately 04:00-15:00 on 1/16/24 and not measure the flow during the PSA shutdown. Valero believes that flaring from this event did exceed 500,000 scf above baseline in a 24 hour period on 1/16/24 as well as on 1/17/24; however, the data presented here only includes data from when the flowmeters were operational. The SO₂ contribution from the PSA was negligible as the PSA feed does not contain H₂S, and this was confirmed by Total Sulfur analyzers which remained operational during the period the flowmeters were malfunctioning.

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

 Date and Time the discharge was first identified 1/16/24 8:04
 Date/Time the discharge had ceased 1/17/24 13:39
 Duration of Discharge (Calculated) 29.6 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 of this discharge. Additional supplemental natural gas was 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? 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 multiple operational challenges created by the freezing conditions, specific to the flared volume was the automatic shutdown of the PSA unit caused by freezing in the instrument air system and the overpressuring of the Crude unit Stabilizer due to the build up of non-condensable gases in the overhead.

(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) Document all the operational challenges experienced during the freezing conditions and update the refinery's winterization procedures to address these conditions.

(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) Document all the operational challenges experienced during the freezing conditions and update the refinery's winterization procedures to address these conditions.
 Commencement Date: 2/23/24
 Completed: 3/26/24

(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
1/15/2024 08:00	1/16/2024 07:00	28,092	9224	83.5	0.4
1/15/2024 09:00	1/16/2024 08:00	54,140	5706	116.5	0.6
1/15/2024 10:00	1/16/2024 09:00	90,664	4462	150.1	0.8
1/15/2024 11:00	1/16/2024 10:00	109,570	2227	160.3	0.9
1/15/2024 12:00	1/16/2024 11:00	119,369	2355	167.6	0.9
1/15/2024 13:00	1/16/2024 12:00	119,386	2285	171.0	0.9
1/15/2024 14:00	1/16/2024 13:00	119,447	2444	174.7	0.9
1/15/2024 15:00	1/16/2024 14:00	110,642	2073	161.8	0.9
1/15/2024 16:00	1/16/2024 15:00	97,735	510	155.1	0.8
1/15/2024 17:00	1/16/2024 16:00	94,991	252	154.5	0.8
1/15/2024 18:00	1/16/2024 17:00	95,081	152	154.5	0.8
1/15/2024 19:00	1/16/2024 18:00	95,175	78	154.5	0.8
1/15/2024 20:00	1/16/2024 19:00	95,245	52	154.5	0.8
1/15/2024 21:00	1/16/2024 20:00	95,283	47	154.6	0.8
1/15/2024 22:00	1/16/2024 21:00	95,345	53	154.6	0.8
1/15/2024 23:00	1/16/2024 22:00	95,480	50	154.7	0.8
1/16/2024 00:00	1/16/2024 23:00	95,552	46	154.6	0.8
1/16/2024 01:00	1/17/2024 00:00	101,152	56	154.6	0.8
1/16/2024 02:00	1/17/2024 01:00	125,507	36	154.7	0.8
1/16/2024 03:00	1/17/2024 02:00	149,581	31	154.8	0.8
1/16/2024 04:00	1/17/2024 03:00	175,388	26	154.8	0.8
1/16/2024 05:00	1/17/2024 04:00	199,589	23	138.8	0.7
1/16/2024 06:00	1/17/2024 05:00	225,425	8	124.3	0.7
1/16/2024 07:00	1/17/2024 06:00	331,608	2179	152.7	0.8
1/16/2024 08:00	1/17/2024 07:00	515,262	2383	214.4	1.2
1/16/2024 09:00	1/17/2024 08:00	657,662	2199	245.7	1.3
1/16/2024 10:00	1/17/2024 09:00	802,898	2647	295.3	1.6
1/16/2024 11:00	1/17/2024 10:00	882,718	3499	347.2	1.9
1/16/2024 12:00	1/17/2024 11:00	989,190	1384	368.4	2.0
1/16/2024 13:00	1/17/2024 12:00	1,108,516	2733	422.8	2.3
1/16/2024 14:00	1/17/2024 13:00	1,162,268	2173	441.7	2.4
1/16/2024 15:00	1/17/2024 14:00	1,164,124	271	439.0	2.4
1/16/2024 16:00	1/17/2024 15:00	1,166,335	1011	440.3	2.4
1/16/2024 17:00	1/17/2024 16:00	1,178,447	3268	451.4	2.4
1/16/2024 18:00	1/17/2024 17:00	1,178,418	130	451.4	2.4
1/16/2024 19:00	1/17/2024 18:00	1,178,387	129	451.4	2.4
1/16/2024 20:00	1/17/2024 19:00	1,178,397	133	451.6	2.4
1/16/2024 21:00	1/17/2024 20:00	1,178,392	134	451.7	2.4
1/16/2024 22:00	1/17/2024 21:00	1,178,378	137	451.8	2.4
1/16/2024 23:00	1/17/2024 22:00	1,178,255	138	452.0	2.4
1/17/2024 00:00	1/17/2024 23:00	1,178,140	123	452.1	2.4
1/17/2024 01:00	1/18/2024 00:00	1,172,484	107	452.1	2.4

(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
1/17/2024 02:00	1/18/2024 01:00	1,148,063	92	452.0	2.4
1/17/2024 03:00	1/18/2024 02:00	1,123,900	79	452.0	2.4
1/17/2024 04:00	1/18/2024 03:00	1,097,974	71	451.9	2.4
1/17/2024 05:00	1/18/2024 04:00	1,073,740	63	451.9	2.4
1/17/2024 06:00	1/18/2024 05:00	1,047,902	60	452.0	2.4
1/17/2024 07:00	1/18/2024 06:00	941,698	61	410.6	2.2
1/17/2024 08:00	1/18/2024 07:00	758,025	60	335.1	1.8
1/17/2024 09:00	1/18/2024 08:00	589,569	71	270.9	1.5
1/17/2024 10:00	1/18/2024 09:00	407,813	88	187.8	1.0

Subpart Ja Root Cause / Corrective Action Analysis		Incident Number: 480727
<i>The information contained below satisfies the requirements of the NSPS Subpart Ja 60.108a(c)(6).</i>		
Report: <u>Final</u>		
Refinery: <u>Valero (Meraux)</u>		
Incident Type: <u>SRU (SO2)</u>	Date of Event: <u>1/19/24</u>	
Emissions Source(s): <u>#2 SRU Incinerator (EPN 1-93, EQT 0019)</u> <u>#3 SRU Incinerator (EPN 5-00, EQT 0079)</u>	Date Analysis Completed: <u>2/29/24</u>	
(1.) (60.108a(c)(6)(i))		
A description of the Discharge: On January 19, 2024, at approximately 14:20, Valero experienced an alarm from an area H ₂ S monitor in the #2 SRU. While investigating the alarm, Valero discovered a leak from a manway on the #2 SRU Main Burner. While making preparations to shutdown the #2 SRU, the leaking gas ignited. Valero immediately tripped the #2 SRU and then purged the unit to the incinerator to repair the leak. The combined SO ₂ emissions from the #2 SRU and #3 SRU exceeded 500 lbs above allowed in a 24 hour period.		
(2.) (60.108a(c)(6)(ii)) and (60.108a(c)(6)(ix))		
	#2 SRU	#3 SRU
Date/Time discharge was first identified	<u>1/19/24 14:36</u>	<u>1/19/24 14:36</u>
Date/Time discharge had ceased	<u>1/21/24 20:00</u>	<u>1/21/24 20:00</u>
Duration of Discharge (Calculated)	<u>53.4</u>	<u>53.4</u> 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 SO ₂ emissions of this discharge as well as minimize emissions from the manway leak.		
(4.) (60.108a(c)(6)(xi))		
Necessity of RC/CAA: Determine and state whether a RC/CAA is necessary: <i>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.</i>		
Did the discharge result from a planned startup or shutdown?	<u>No</u>	(Yes/No)
Was the flare management plan followed?	<u>N/A</u>	(Yes/No/N/A)
Is the event exempt from a RC/CCA based on the answers above?	<u>No</u>	(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? <u>No</u> (Yes/No) Valero determined that the root cause of the manway leak to be a hot spot on the manway nozzle caused by a piece of missing refractory. The piece was missing due to inadequate quality control/quality assurance (QA/QC) during the last unit turnaround in 2023, when work was done on the internals of the main burner. Valero repaired the refractory and leak prior to restarting the #2 SRU.		
(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? <u>Yes</u> (Yes/No)		
1) Update closure forms to include hold points for inspections to verify refractory installation.		
2) Require a refractory QA/QC technician to follow large turnaround refractory jobs.		
3) Update infrared inspection procedure to include scans of the main burner post startup.		
(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) Update closure forms to include hold points for inspections to verify refractory installation. Completed: 2/29/24		
2) Require a refractory QA/QC technician to follow large turnaround refractory jobs. Completed: 2/29/24		
3) Update infrared inspection procedure to include scans of the main burner post startup. Completed: 3/26/24		

(8.) #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
1/18/2024 14:00	1/19/2024 13:00	694,777	50	0.0	0.0
1/18/2024 15:00	1/19/2024 14:00	766,564	48	3.4	0.0
1/18/2024 16:00	1/19/2024 15:00	817,736	46	7.9	0.0
1/18/2024 17:00	1/19/2024 16:00	804,190	47	9.1	0.0
1/18/2024 18:00	1/19/2024 17:00	797,198	48	9.6	0.1
1/18/2024 19:00	1/19/2024 18:00	838,815	47	9.8	0.1
1/18/2024 20:00	1/19/2024 19:00	840,527	50	18.1	0.1
1/18/2024 21:00	1/19/2024 20:00	842,807	58	46.7	0.3
1/18/2024 22:00	1/19/2024 21:00	838,763	67	70.4	0.4
1/18/2024 23:00	1/19/2024 22:00	890,365	101	102.1	0.5
1/19/2024 00:00	1/19/2024 23:00	911,654	106	129.8	0.7
1/19/2024 01:00	1/20/2024 00:00	898,816	117	163.7	0.9
1/19/2024 02:00	1/20/2024 01:00	892,936	129	197.6	1.1
1/19/2024 03:00	1/20/2024 02:00	886,371	141	232.7	1.3
1/19/2024 04:00	1/20/2024 03:00	893,753	152	266.9	1.4
1/19/2024 05:00	1/20/2024 04:00	883,519	164	300.2	1.6
1/19/2024 06:00	1/20/2024 05:00	879,155	176	332.8	1.8
1/19/2024 07:00	1/20/2024 06:00	874,816	187	364.8	2.0
1/19/2024 08:00	1/20/2024 07:00	877,821	196	393.8	2.1
1/19/2024 09:00	1/20/2024 08:00	884,669	206	427.3	2.3
1/19/2024 10:00	1/20/2024 09:00	889,090	221	463.0	2.5
1/19/2024 11:00	1/20/2024 10:00	903,328	233	496.4	2.7
1/19/2024 12:00	1/20/2024 11:00	915,743	241	525.6	2.8
1/19/2024 13:00	1/20/2024 12:00	937,442	247	558.5	3.0
1/19/2024 14:00	1/20/2024 13:00	935,517	247	558.5	3.0
1/19/2024 15:00	1/20/2024 14:00	929,755	245	555.1	3.0
1/19/2024 16:00	1/20/2024 15:00	935,251	240	550.6	3.0
1/19/2024 17:00	1/20/2024 16:00	924,147	240	549.4	3.0
1/19/2024 18:00	1/20/2024 17:00	906,990	243	548.9	2.9
1/19/2024 19:00	1/20/2024 18:00	902,984	243	548.7	2.9
1/19/2024 20:00	1/20/2024 19:00	902,063	236	540.4	2.9
1/19/2024 21:00	1/20/2024 20:00	907,476	218	511.8	2.7
1/19/2024 22:00	1/20/2024 21:00	904,644	205	488.1	2.6

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:	<u>Final</u>		
Refinery:	<u>Valero (Meraux)</u>	Date of Event:	<u>2/23/24</u>
Incident Type:	<u>SRU (SO2)</u>	Date Analysis Completed:	<u>N/A</u>
Emissions Source(s):	<u>#2 SRU Incinerator (EPN 1-93, EQT 0019)</u> <u>#3 SRU Incinerator (EPN 5-00, EQT 0079)</u>		

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

A description of the Discharge:
 This discharge resulted from the partial shutdown of the #2 Sulfur Recovery Unit to replace the packing in the #2 Tail Gas Treater (TGT) Quench Tower. The #2 TGT was completely shutdown while the #2 SRU Main Burner and Incinerator remained in hot standby with no acid gas feed. The Quench Tower had become fouled to the point that it was hindering operation of the #2 SRU and Valero elected to shutdown the unit. This fouling occurred during the freezing conditions on January 16-17, 2024. Please refer to the report dated 1/16/24 for causes and corrective actions for the freezing conditions.

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

	#2 SRU	#3 SRU
Date/Time discharge was first identified	<u>2/23/24 11:51</u>	<u>2/23/24 11:51</u>
Date/Time discharge had ceased	<u>2/28/24 5:00</u>	<u>2/28/24 5:00</u>
Duration of Discharge (Calculated)	<u>113.2</u>	<u>113.2</u> 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? Yes (Yes/No)

Was the flare management plan followed? N/A (Yes/No/N/A)

Is the event exempt from a RC/CAA 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 necessary.
 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.) #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			
			SCF	ppmv	24-hr cumulative SO2 above allowable ²	24-hr cumulative reduced sulfur above allowable
			lbs	lbs as H2S		
2/22/2024 11:00	2/23/2024 10:00	877,592	64	18.6	0.0	
2/22/2024 12:00	2/23/2024 11:00	890,668	64	18.6	0.0	
2/22/2024 13:00	2/23/2024 12:00	899,328	64	18.6	0.0	
2/22/2024 14:00	2/23/2024 13:00	892,731	64	18.6	0.0	
2/22/2024 15:00	2/23/2024 14:00	895,043	58	0.0	0.0	
2/22/2024 16:00	2/23/2024 15:00	893,819	57	0.0	0.0	
2/22/2024 17:00	2/23/2024 16:00	881,954	57	0.0	0.0	
2/22/2024 18:00	2/23/2024 17:00	878,494	57	0.0	0.0	

(8.) #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 cumulative SO2	24-hr cumulative reduced
			(24-hr average, flow-weighted) ¹	above allowable ²	sulfur above allowable
		SCF	ppmv	lbs	lbs as H2S
2/22/2024 19:00	2/23/2024 18:00	874,720	57	0.0	0.0
2/22/2024 20:00	2/23/2024 19:00	869,574	57	0.0	0.0
2/22/2024 21:00	2/23/2024 20:00	872,675	56	0.0	0.0
2/22/2024 22:00	2/23/2024 21:00	867,659	56	0.0	0.0
2/22/2024 23:00	2/23/2024 22:00	864,840	57	0.0	0.0
2/23/2024 00:00	2/23/2024 23:00	860,615	58	5.3	0.0
2/23/2024 01:00	2/24/2024 00:00	853,783	74	52.6	0.3
2/23/2024 02:00	2/24/2024 01:00	836,600	88	97.8	0.5
2/23/2024 03:00	2/24/2024 02:00	814,135	104	142.5	0.8
2/23/2024 04:00	2/24/2024 03:00	770,260	123	186.2	1.0
2/23/2024 05:00	2/24/2024 04:00	746,083	141	229.3	1.2
2/23/2024 06:00	2/24/2024 05:00	769,584	154	272.4	1.5
2/23/2024 07:00	2/24/2024 06:00	771,961	168	316.0	1.7
2/23/2024 08:00	2/24/2024 07:00	775,008	184	360.2	1.9
2/23/2024 09:00	2/24/2024 08:00	789,033	198	405.2	2.2
2/23/2024 10:00	2/24/2024 09:00	798,010	212	449.7	2.4
2/23/2024 11:00	2/24/2024 10:00	804,898	225	494.1	2.7
2/23/2024 12:00	2/24/2024 11:00	811,922	238	538.8	2.9
2/23/2024 13:00	2/24/2024 12:00	812,141	254	583.2	3.1
2/23/2024 14:00	2/24/2024 13:00	801,910	271	627.5	3.4
2/23/2024 15:00	2/24/2024 14:00	802,711	286	672.8	3.6
2/23/2024 16:00	2/24/2024 15:00	807,480	300	717.7	3.9
2/23/2024 17:00	2/24/2024 16:00	809,331	313	763.2	4.1
2/23/2024 18:00	2/24/2024 17:00	800,235	329	807.7	4.3
2/23/2024 19:00	2/24/2024 18:00	803,167	344	851.6	4.6
2/23/2024 20:00	2/24/2024 19:00	791,001	366	895.5	4.8
2/23/2024 21:00	2/24/2024 20:00	789,625	382	939.2	5.0
2/23/2024 22:00	2/24/2024 21:00	788,608	399	982.9	5.3
2/23/2024 23:00	2/24/2024 22:00	786,513	416	1026.6	5.5
2/24/2024 00:00	2/24/2024 23:00	787,482	429	1065.9	5.7
2/24/2024 01:00	2/25/2024 00:00	796,819	423	1063.2	5.7
2/24/2024 02:00	2/25/2024 01:00	793,710	426	1062.1	5.7
2/24/2024 03:00	2/25/2024 02:00	790,201	429	1061.1	5.7
2/24/2024 04:00	2/25/2024 03:00	772,285	438	1061.5	5.7
2/24/2024 05:00	2/25/2024 04:00	747,859	450	1063.3	5.7
2/24/2024 06:00	2/25/2024 05:00	744,074	455	1066.0	5.7
2/24/2024 07:00	2/25/2024 06:00	742,932	454	1067.9	5.7
2/24/2024 08:00	2/25/2024 07:00	754,515	449	1068.8	5.7
2/24/2024 09:00	2/25/2024 08:00	786,343	433	1068.7	5.7
2/24/2024 10:00	2/25/2024 09:00	791,928	431	1068.4	5.7
2/24/2024 11:00	2/25/2024 10:00	806,148	422	1067.9	5.7
2/24/2024 12:00	2/25/2024 11:00	795,565	426	1067.4	5.7
2/24/2024 13:00	2/25/2024 12:00	795,006	427	1068.2	5.7
2/24/2024 14:00	2/25/2024 13:00	799,530	408	1023.9	5.5
2/24/2024 15:00	2/25/2024 14:00	802,039	407	1024.3	5.5
2/24/2024 16:00	2/25/2024 15:00	806,525	407	1023.4	5.5
2/24/2024 17:00	2/25/2024 16:00	796,494	407	1020.2	5.5
2/24/2024 18:00	2/25/2024 17:00	802,199	406	1017.6	5.5
2/24/2024 19:00	2/25/2024 18:00	786,156	412	1016.8	5.5
2/24/2024 20:00	2/25/2024 19:00	792,410	410	1017.3	5.5
2/24/2024 21:00	2/25/2024 20:00	794,015	410	1018.1	5.5
2/24/2024 22:00	2/25/2024 21:00	792,404	410	1017.4	5.5
2/24/2024 23:00	2/25/2024 22:00	792,795	410	1017.4	5.5
2/25/2024 00:00	2/25/2024 23:00	797,142	409	1015.0	5.5
2/25/2024 01:00	2/26/2024 00:00	793,809	409	1015.7	5.5
2/25/2024 02:00	2/26/2024 01:00	799,971	406	1015.4	5.5
2/25/2024 03:00	2/26/2024 02:00	795,664	408	1016.4	5.5

(8.) #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 cumulative SO2	24-hr cumulative reduced
			(24-hr average, flow-weighted) ¹	above allowable ²	sulfur above allowable
		SCF	ppmv	lbs	lbs as H2S
2/25/2024 04:00	2/26/2024 03:00	802,363	404	1015.1	5.5
2/25/2024 05:00	2/26/2024 04:00	803,432	403	1013.3	5.4
2/25/2024 06:00	2/26/2024 05:00	802,430	403	1010.7	5.4
2/25/2024 07:00	2/26/2024 06:00	806,772	400	1008.6	5.4
2/25/2024 08:00	2/26/2024 07:00	816,424	396	1006.9	5.4
2/25/2024 09:00	2/26/2024 08:00	824,083	391	1005.2	5.4
2/25/2024 10:00	2/26/2024 09:00	835,946	384	1003.8	5.4
2/25/2024 11:00	2/26/2024 10:00	836,375	385	1003.2	5.4
2/25/2024 12:00	2/26/2024 11:00	835,042	384	1001.9	5.4
2/25/2024 13:00	2/26/2024 12:00	833,115	386	999.8	5.4
2/25/2024 14:00	2/26/2024 13:00	836,133	399	1042.6	5.6
2/25/2024 15:00	2/26/2024 14:00	829,450	400	1039.7	5.6
2/25/2024 16:00	2/26/2024 15:00	834,174	399	1038.8	5.6
2/25/2024 17:00	2/26/2024 16:00	832,727	400	1039.9	5.6
2/25/2024 18:00	2/26/2024 17:00	830,357	400	1040.8	5.6
2/25/2024 19:00	2/26/2024 18:00	831,322	399	1040.5	5.6
2/25/2024 20:00	2/26/2024 19:00	835,464	399	1038.2	5.6
2/25/2024 21:00	2/26/2024 20:00	838,741	397	1036.4	5.6
2/25/2024 22:00	2/26/2024 21:00	838,957	396	1035.5	5.6
2/25/2024 23:00	2/26/2024 22:00	842,930	396	1033.5	5.6
2/26/2024 00:00	2/26/2024 23:00	838,030	397	1032.8	5.5
2/26/2024 01:00	2/27/2024 00:00	830,316	399	1029.0	5.5
2/26/2024 02:00	2/27/2024 01:00	826,107	399	1026.5	5.5
2/26/2024 03:00	2/27/2024 02:00	829,075	397	1022.3	5.5
2/26/2024 04:00	2/27/2024 03:00	833,807	394	1020.2	5.5
2/26/2024 05:00	2/27/2024 04:00	833,076	393	1017.5	5.5
2/26/2024 06:00	2/27/2024 05:00	831,687	392	1014.4	5.5
2/26/2024 07:00	2/27/2024 06:00	832,381	393	1010.4	5.4
2/26/2024 08:00	2/27/2024 07:00	832,844	393	1005.9	5.4
2/26/2024 09:00	2/27/2024 08:00	837,208	390	1001.8	5.4
2/26/2024 10:00	2/27/2024 09:00	838,636	388	997.7	5.4
2/26/2024 11:00	2/27/2024 10:00	839,586	384	991.8	5.3
2/26/2024 12:00	2/27/2024 11:00	847,661	380	985.4	5.3
2/26/2024 13:00	2/27/2024 12:00	847,791	380	977.8	5.3
2/26/2024 14:00	2/27/2024 13:00	847,416	377	967.9	5.2
2/26/2024 15:00	2/27/2024 14:00	846,863	371	957.9	5.1
2/26/2024 16:00	2/27/2024 15:00	846,327	368	947.0	5.1
2/26/2024 17:00	2/27/2024 16:00	847,938	360	934.9	5.0
2/26/2024 18:00	2/27/2024 17:00	843,365	358	922.4	5.0
2/26/2024 19:00	2/27/2024 18:00	836,313	356	910.6	4.9
2/26/2024 20:00	2/27/2024 19:00	830,479	358	900.5	4.8
2/26/2024 21:00	2/27/2024 20:00	827,122	355	888.1	4.8
2/26/2024 22:00	2/27/2024 21:00	824,420	352	875.1	4.7
2/26/2024 23:00	2/27/2024 22:00	822,503	347	860.6	4.6
2/27/2024 00:00	2/27/2024 23:00	819,931	343	844.4	4.5
2/27/2024 01:00	2/28/2024 00:00	817,910	340	827.5	4.4
2/27/2024 02:00	2/28/2024 01:00	820,602	333	809.9	4.4
2/27/2024 03:00	2/28/2024 02:00	829,670	327	792.2	4.3
2/27/2024 04:00	2/28/2024 03:00	839,318	319	773.7	4.2
2/27/2024 05:00	2/28/2024 04:00	842,831	313	755.7	4.1
2/27/2024 06:00	2/28/2024 05:00	844,022	307	737.5	4.0
2/27/2024 07:00	2/28/2024 06:00	845,037	303	720.1	3.9
2/27/2024 08:00	2/28/2024 07:00	847,275	297	704.1	3.8
2/27/2024 09:00	2/28/2024 08:00	855,018	289	687.0	3.7
2/27/2024 10:00	2/28/2024 09:00	860,172	283	667.6	3.6
2/27/2024 11:00	2/28/2024 10:00	851,484	279	649.6	3.5
2/27/2024 12:00	2/28/2024 11:00	851,094	274	632.1	3.4

(8.) #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
2/27/2024 13:00	2/28/2024 12:00	847,916	271	614.9	3.3
2/27/2024 14:00	2/28/2024 13:00	847,487	264	601.0	3.2
2/27/2024 15:00	2/28/2024 14:00	843,841	260	587.6	3.2
2/27/2024 16:00	2/28/2024 15:00	840,997	257	574.3	3.1
2/27/2024 17:00	2/28/2024 16:00	834,991	254	560.9	3.0
2/27/2024 18:00	2/28/2024 17:00	826,913	252	547.4	2.9
2/27/2024 19:00	2/28/2024 18:00	816,216	251	532.3	2.9
2/27/2024 20:00	2/28/2024 19:00	812,904	247	515.3	2.8
2/27/2024 21:00	2/28/2024 20:00	806,771	243	499.0	2.7

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: <u>N/A</u>
<i>The information contained below satisfies the requirements of the NSPS Subpart Ja 60.108a(c)(6).</i>		
Report: <u>Final</u>		
Refinery: <u>Valero (Meraux)</u>		
Incident Type: <u>Flaring (Flow)</u>	Date of Event: <u>3/24/24</u>	
Emissions Source(s): <u>North Flare (EPN 20-72, EQT 0035)</u>	Date Analysis Completed: <u>N/A</u>	
(1.) (60.108a(c)(6)(i))		
A description of the Discharge: <i>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.</i>		
(2.) (60.108a(c)(6)(ii)) and (60.108a(c)(6)(ix))		
Date and Time the discharge was first identified <u>3/24/24 23:47</u>		
Date/Time the discharge had ceased <u>3/26/24 15:39</u>		
Duration of Discharge (Calculated) <u>39.9</u> hrs.		
(3.) (60.108a(c)(6)(viii))		
The steps taken to limit the emissions during the discharge: <i>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.</i>		
(4.) (60.108a(c)(6)(xi))		
Necessity of RC/CAA: Determine and state whether a RC/CAA is necessary: <i>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.</i>		
Did the discharge result from a planned startup or shutdown?	<u>Yes</u>	(Yes/No)
Was the flare management plan followed?	<u>Yes</u>	(Yes/No/N/A)
Is the event exempt from a RC/CCA based on the answers above?	<u>Yes</u>	(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?	<u>No</u>	(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?	<u>No</u>	(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.					
<i>Note: Measured sulfur concentrations are shown as flow-weighted averages if multiple measurement devices were used.</i>					
		(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
3/23/2024 23:00	3/24/2024 22:00	18,604	1029	3.2	0.0
3/24/2024 00:00	3/24/2024 23:00	48,658	594	7.0	0.0
3/24/2024 01:00	3/25/2024 00:00	104,477	1728	25.5	0.1
3/24/2024 02:00	3/25/2024 01:00	144,872	1815	40.2	0.2
3/24/2024 03:00	3/25/2024 02:00	185,499	2136	57.7	0.3
3/24/2024 04:00	3/25/2024 03:00	220,258	2126	73.1	0.4
3/24/2024 05:00	3/25/2024 04:00	236,980	1893	81.1	0.4
3/24/2024 06:00	3/25/2024 05:00	253,141	3379	95.2	0.5
3/24/2024 07:00	3/25/2024 06:00	269,045	3812	110.9	0.6
3/24/2024 08:00	3/25/2024 07:00	284,820	4437	129.1	0.7
3/24/2024 09:00	3/25/2024 08:00	307,299	3554	150.8	0.8
3/24/2024 10:00	3/25/2024 09:00	347,535	2648	172.3	0.9
3/24/2024 11:00	3/25/2024 10:00	440,020	1150	191.5	1.0
3/24/2024 12:00	3/25/2024 11:00	568,565	872	211.3	1.1
3/24/2024 13:00	3/25/2024 12:00	740,200	658	230.8	1.2
3/24/2024 14:00	3/25/2024 13:00	887,011	731	249.6	1.3
3/24/2024 15:00	3/25/2024 14:00	1,069,940	583	268.0	1.4
3/24/2024 16:00	3/25/2024 15:00	1,291,501	511	287.5	1.5
3/24/2024 17:00	3/25/2024 16:00	1,528,743	475	306.7	1.6
3/24/2024 18:00	3/25/2024 17:00	1,761,905	489	326.2	1.8
3/24/2024 19:00	3/25/2024 18:00	1,993,788	477	345.2	1.9
3/24/2024 20:00	3/25/2024 19:00	2,213,854	503	364.5	2.0
3/24/2024 21:00	3/25/2024 20:00	2,309,766	1043	382.6	2.1
3/24/2024 22:00	3/25/2024 21:00	2,403,538	1170	402.4	2.2
3/24/2024 23:00	3/25/2024 22:00	2,489,251	1138	418.7	2.3
3/25/2024 00:00	3/25/2024 23:00	2,552,565	1043	432.5	2.3
3/25/2024 01:00	3/26/2024 00:00	2,589,388	843	428.2	2.3
3/25/2024 02:00	3/26/2024 01:00	2,641,418	1045	430.8	2.3
3/25/2024 03:00	3/26/2024 02:00	2,693,135	1033	430.6	2.3
3/25/2024 04:00	3/26/2024 03:00	2,750,430	1031	432.4	2.3
3/25/2024 05:00	3/26/2024 04:00	2,824,729	1166	443.6	2.4
3/25/2024 06:00	3/26/2024 05:00	2,889,427	1189	447.1	2.4
3/25/2024 07:00	3/26/2024 06:00	2,939,526	1582	451.0	2.4
3/25/2024 08:00	3/26/2024 07:00	2,980,855	1992	454.5	2.4
3/25/2024 09:00	3/26/2024 08:00	2,999,283	2322	454.0	2.4
3/25/2024 10:00	3/26/2024 09:00	2,980,794	3039	447.9	2.4
3/25/2024 11:00	3/26/2024 10:00	2,910,980	3769	448.4	2.4
3/25/2024 12:00	3/26/2024 11:00	2,806,956	3956	450.4	2.4
3/25/2024 13:00	3/26/2024 12:00	2,660,224	3826	452.2	2.4
3/25/2024 14:00	3/26/2024 13:00	2,537,698	4280	456.9	2.5
3/25/2024 15:00	3/26/2024 14:00	2,378,885	4080	460.8	2.5
3/25/2024 16:00	3/26/2024 15:00	2,172,800	2099	449.8	2.4
3/25/2024 17:00	3/26/2024 16:00	1,935,547	103	430.7	2.3
3/25/2024 18:00	3/26/2024 17:00	1,702,375	103	411.3	2.2
3/25/2024 19:00	3/26/2024 18:00	1,470,494	89	392.5	2.1
3/25/2024 20:00	3/26/2024 19:00	1,245,943	69	373.3	2.0
3/25/2024 21:00	3/26/2024 20:00	1,149,762	36	355.2	1.9
3/25/2024 22:00	3/26/2024 21:00	1,055,985	23	335.5	1.8
3/25/2024 23:00	3/26/2024 22:00	962,432	14	316.3	1.7
3/26/2024 00:00	3/26/2024 23:00	869,052	7	298.7	1.6

(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
3/26/2024 01:00	3/27/2024 00:00	776,409	8	284.6	1.5
3/26/2024 02:00	3/27/2024 01:00	683,966	10	267.1	1.4
3/26/2024 03:00	3/27/2024 02:00	591,622	10	249.9	1.3
3/26/2024 04:00	3/27/2024 03:00	499,548	9	232.7	1.3