



July 28, 2023

CERTIFIED: 7016 2710 0000 3305 6085

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 – 2<sup>nd</sup> Quarter 2023  
Valero Refining - Meraux LLC, Agency Interest # 1238  
2235 Jacob Drive, St. Bernard Parish, Meraux, LA  
Title V Permit Numbers: 2500-00001-V19

Gentlemen,

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

For this reporting period, the following CEMS had excess emissions greater than 1% of the total operating time:

1. SO<sub>2</sub>/O<sub>2</sub> on the #2 SRU Incinerator (EPN 1-93, EQT 0019),
2. SO<sub>2</sub>/O<sub>2</sub> on the #3 SRU Incinerator (EPN 5-00, EQT 0079),
3. H<sub>2</sub>S on the Area 6 Fuel Drum for Hydrocracker & Hydrotreater Charge Heaters (EPN 1-00, EQT 0009).

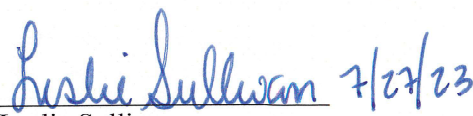
For this reporting period, no CEMS had downtime greater than 5% of the total operating time.

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

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

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

Pollutant: **SO<sub>2</sub>**

Applicable NSPS Subpart: Ja

Reporting period dates: 4/1/23 to 6/30/23

Date submitted: 7/28/23

Company: Valero Refining - Meraux LLC

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

Emission Limitation: SO<sub>2</sub> corrected to 0% O<sub>2</sub> shall not exceed 250 ppm on a 12-hour rolling average

Monitor Manufacturer and Model No.: Ametek 9900 (SO<sub>2</sub> and O<sub>2</sub>)

Date of Latest CMS Certification or Audit: RATA on 5/24/23

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

Total source operating time in reporting period: 2,184 hours

Emissions Data Summary <sup>1</sup>	
1. Duration of excess emissions in reporting period due to:	<i>(hours)</i>
a. Startup/shutdown	65
b. Control equipment problems	0
c. Process problems	28
d. Other known causes	0
e. Unknown causes	0
2. Total duration of excess emission	93
3. Total duration of excess emissions x (100) [Total source operating time] <sup>2</sup>	4.3 %

CMS Performance Summary <sup>1</sup>	
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	8
e. Unknown causes	0
2. Total CMS Downtime	8
3. Total duration of CMS Downtime x (100) [Total source operating time] <sup>2</sup>	0.4 %

<sup>1</sup> For opacity, record all times in minutes. For gases, record all times in hours.

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

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

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

Pollutant: **SO<sub>2</sub>**

Applicable NSPS Subpart: Ja

Reporting period dates: 4/1/23 to 6/30/23

Date submitted: 7/28/23

Company: Valero Refining - Meraux LLC

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

Emission Limitation: SO<sub>2</sub> corrected to 0% O<sub>2</sub> shall not exceed 250 ppm on a 12-hour rolling average

Monitor Manufacturer and Model No.: ABB AO2000 Uras 26 (SO<sub>2</sub>)/ Magnos 206 (O<sub>2</sub>)

Date of Latest CMS Certification or Audit: RATA on 5/22/23

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

Total source operating time in reporting period: 2,184 hours

<b>Emissions Data Summary<sup>1</sup></b>	
1. Duration of excess emissions in reporting period due to:	<i>(hours)</i>
a. Startup/shutdown	29
b. Control equipment problems	0
c. Process problems	10
d. Other known causes	0
e. Unknown causes	0
2. Total duration of excess emission	39
3. Total duration of excess emissions x (100) [Total source operating time] <sup>2</sup>	1.8 %

<b>CMS Performance Summary<sup>1</sup></b>	
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] <sup>2</sup>	0.0 %

<sup>1</sup> For opacity, record all times in minutes. For gases, record all times in hours.

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

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

(per 40 CFR 60.7(d))

Pollutant: H<sub>2</sub>S

Applicable NSPS Subpart: J

Reporting period dates: 4/1/23 to 6/30/23

Date submitted: 7/28/23

Company: Valero Refining - Meraux LLC

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

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

Monitor Manufacturer and Model No.: Ametek 4661

Date of Latest CMS Certification or Audit: RATA on 5/24/23

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

Total source operating time in reporting period: EQT 0010-2,168 hours, EQT 0011-2,179 hours, EQT 0033-2,140 hours, EQT 0058-2,035 hours

<b>Emissions Data Summary<sup>1</sup></b>	
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] <sup>2</sup>	0.0 %

<b>CMS Performance Summary<sup>1</sup></b>	
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	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] <sup>2</sup>	0.0 %

<sup>1</sup> For opacity, record all times in minutes. For gases, record all times in hours.

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

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

(per 40 CFR 60.7(d))

Pollutant: **H<sub>2</sub>S**

Applicable NSPS Subpart: **I**

Reporting period dates: **4/1/23 to 6/30/23**

Date submitted: **7/28/23**

Company: **Valero Refining - Meraux LLC**

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

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

Monitor Manufacturer and Model No.: **Ametek 4661**

Date of Latest CMS Certification or Audit: **RATA on 5/24/23**

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

Total source operating time in reporting period: **EQT 0013-2,071 hours; EQT 0022-2,095 hours; EQT 0024-1,897 hours; EQT 0027-1,880 hours; EQT 0028-1,948 hours; EQT 0029-1,881 hours; EQT 0014-2,184 hours**

<b>Emissions Data Summary<sup>1</sup></b>	
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] <sup>2</sup>	0.0 %

<b>CMS Performance Summary<sup>1</sup></b>		
1. CMS downtime in reporting period due to:	<i>EQT's 0013, 0022, 0014 (hours)</i>	<i>All Other EQT's (hours)</i>
a. Monitor equipment malfunctions	0	0
b. Non-Monitor equipment malfunctions	0	0
c. Quality assurance calibration	1	1
d. Other known causes	0	0
e. Unknown causes	0	0
2. Total CMS Downtime	1	1
3. Total duration of CMS Downtime x (100) [Total source operating time] <sup>2</sup>	0.0 %	0.1 %

<sup>1</sup> For opacity, record all times in minutes. For gases, record all times in hours.

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

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

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

Pollutant: **H<sub>2</sub>S**

Applicable NSPS Subpart: Ja

Reporting period dates: 4/1/23 to 6/30/23

Date submitted: 7/28/23

Company: Valero Refining - Meraux LLC

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

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

Monitor Manufacturer and Model No.: Ametek 4661

Date of Latest CMS Certification or Audit: RATA on 5/24/23

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

Total source operating time in reporting period: EQT 0127-87 hours; EQT 0159-1,936 hours

<b>Emissions Data Summary<sup>1</sup></b>	
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] <sup>2</sup>	0.0 %

<b>CMS Performance Summary<sup>1</sup></b>		
1. CMS downtime in reporting period due to:	<i>EQT 0127 (hours)</i>	<i>EQT 0159 (hours)</i>
a. Monitor equipment malfunctions	0	0
b. Non-Monitor equipment malfunctions	0	0
c. Quality assurance calibration	0	1
d. Other known causes	0	0
e. Unknown causes	0	0
2. Total CMS Downtime	0	1
3. Total duration of CMS Downtime x (100) [Total source operating time] <sup>2</sup>	0.0 %	0.1 %

<sup>1</sup> For opacity, record all times in minutes. For gases, record all times in hours.

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

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

*(per 40 CFR 60.7(d))*

Pollutant: H<sub>2</sub>S

Applicable NSPS Subpart: J

Reporting period dates: 4/1/23 to 6/30/23

Date submitted: 7/28/23

Company: Valero Refining - Meraux LLC

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

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

Monitor Manufacturer and Model No.: Ametek 4661

Date of Latest CMS Certification or Audit: RATA on 5/24/23

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

Total source operating time in reporting period: 0 hours

<b>Emissions Data Summary<sup>1</sup></b>	
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] <sup>2</sup>	0.0 %

<b>CMS Performance Summary<sup>1</sup></b>	
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] <sup>2</sup>	0.0 %

<sup>1</sup> For opacity, record all times in minutes. For gases, record all times in hours.

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

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

*(per 40 CFR 60.7(d))*

Pollutant: H<sub>2</sub>S

Applicable NSPS Subpart: I

Reporting period dates: 4/1/23 to 6/30/23

Date submitted: 7/28/23

Company: Valero Refining - Meraux LLC

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

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

Monitor Manufacturer and Model No.: Ametek 4661

Date of Latest CMS Certification or Audit: RATA on 5/24/23

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

Total source operating time in reporting period: 2,174 hours

Emissions Data Summary <sup>1</sup>	
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	22
d. Other known causes	0
e. Unknown causes	0
2. Total duration of excess emission	22
3. Total duration of excess emissions x (100) [Total source operating time] <sup>2</sup>	1.0 %

CMS Performance Summary <sup>1</sup>	
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] <sup>2</sup>	0.0 %

<sup>1</sup> For opacity, record all times in minutes. For gases, record all times in hours.

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



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

(per 40 CFR 60.7(d))

Pollutant: H<sub>2</sub>S

Applicable NSPS Subpart: I

Reporting period dates: 4/1/23 to 6/30/23

Date submitted: 7/28/23

Company: Valero Refining - Meraux LLC

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

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

Monitor Manufacturer and Model No.: Ametek 4661

Date of Latest CMS Certification or Audit: RATA on 5/24/23

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

Total source operating time in reporting period: EQT 0030-2,184 hours; EQT 0048-0 hours<sup>3</sup>

Emissions Data Summary <sup>1</sup>		
1. Duration of excess emissions in reporting period due to:	<i>EQT 0030 (hours)</i>	<i>EQT 0048 (hours)</i>
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] <sup>2</sup>	0.0 %	0.0 %

CMS Performance Summary <sup>1</sup>		
1. CMS downtime in reporting period due to:	<i>EQT 0030 (hours)</i>	<i>EQT 0048 (hours)</i>
a. Monitor equipment malfunctions	0	0
b. Non-Monitor equipment malfunctions	0	0
c. Quality assurance calibration	2	0
d. Other known causes	0	0
e. Unknown causes	0	0
2. Total CMS Downtime	2	0
3. Total duration of CMS Downtime x (100) [Total source operating time] <sup>2</sup>	0.1 %	0.0 %

<sup>1</sup> For opacity, record all times in minutes. For gases, record all times in hours.

<sup>2</sup> 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.

<sup>3</sup> 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<sub>x</sub>

Applicable NSPS Subpart: Db

Reporting period dates: 4/1/23 to 6/30/23

Date submitted: 7/28/23

Company: Valero Refining - Meraux LLC

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

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

Monitor Manufacturer and Model No.: ABB AO2000 Uras 26 (NO<sub>x</sub>)/ Magnos 28 (O<sub>2</sub>)

Date of Latest CMS Certification or Audit: RATA on 5/22/23

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

Total source operating time in reporting period: 2,184 hours

<b>Emissions Data Summary<sup>1</sup></b>	
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] <sup>2</sup>	0.0 %

<b>CMS Performance Summary<sup>1</sup></b>	
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] <sup>2</sup>	0.0 %

<sup>1</sup> For opacity, record all times in minutes. For gases, record all times in hours.

<sup>2</sup> 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<sub>x</sub>

Applicable NSPS Subpart: Db

Reporting period dates: 4/1/23 to 6/30/23

Date submitted: 7/28/23

Company: Valero Refining - Meraux LLC

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

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

Monitor Manufacturer and Model No.: ABB AO2000 Uras 26 (NO<sub>x</sub>)/ Magnos 28 (O<sub>2</sub>)

Date of Latest CMS Certification or Audit: RATA on 5/22/23

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

Total source operating time in reporting period: 2,177 hours

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

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

<sup>1</sup> For opacity, record all times in minutes. For gases, record all times in hours.

<sup>2</sup> 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<sub>x</sub>

Applicable NSPS Subpart: Db

Reporting period dates: 4/1/23 to 6/30/23

Date submitted: 7/28/23

Company: Valero Refining - Meraux LLC

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

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

Monitor Manufacturer and Model No.: Thermo Environmental 42i (NO<sub>x</sub>)/(O<sub>2</sub>)

Date of Latest CMS Certification or Audit: RATA on 5/24/23

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

Total source operating time in reporting period: 2,168 hours

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

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

<sup>1</sup> For opacity, record all times in minutes. For gases, record all times in hours.

<sup>2</sup> 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<sub>x</sub>

Applicable NSPS Subpart: Ja

Reporting period dates: 4/1/23 to 6/30/23

Date submitted: 7/28/23

Company: Valero Refining - Meraux LLC

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

Emission Limitation: Nitrogen Oxide corrected to 0% O<sub>2</sub> shall not exceed 40 ppm on a 30-day rolling average

Monitor Manufacturer and Model No.: Thermo Environmental 42i (NO<sub>x</sub>)/(O<sub>2</sub>)

Date of Latest CMS Certification or Audit: CGA on 2/2/23

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

Total source operating time in reporting period: 87 hours

Emissions Data Summary <sup>1</sup>	
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] <sup>2</sup>	0.0 %

CMS Performance Summary <sup>1</sup>	
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] <sup>2</sup>	0.0 %

<sup>1</sup> For opacity, record all times in minutes. For gases, record all times in hours.

<sup>2</sup> 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<sub>x</sub>

Applicable NSPS Subpart: Ja

Reporting period dates: 4/1/23 to 6/30/23

Date submitted: 7/28/23

Company: Valero Refining - Meraux LLC

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

Emission Limitation: Nitrogen Oxide corrected to 0% O<sub>2</sub> shall not exceed 40 ppm on a 30-day rolling average

Monitor Manufacturer and Model No.: ABB AO2000 Uras 26 (NO<sub>x</sub>)/ Magnos 206 (O<sub>2</sub>)

Date of Latest CMS Certification or Audit: RATA on 5/23/23

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

Total source operating time in reporting period: 1,874 hours

<b>Emissions Data Summary<sup>1</sup></b>	
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] <sup>2</sup>	0.0 %

<b>CMS Performance Summary<sup>1</sup></b>	
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	1
2. Total CMS Downtime	1
3. Total duration of CMS Downtime x (100) [Total source operating time] <sup>2</sup>	0.1 %

<sup>1</sup> For opacity, record all times in minutes. For gases, record all times in hours.

<sup>2</sup> 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<sub>x</sub>

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

Reporting period dates: 4/1/23 to 6/30/23

Date submitted: 7/28/23

Company: Valero Refining - Meraux LLC

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

Emission Limitation: None

Monitor Manufacturer and Model No.: ABB Limas11 (NO<sub>x</sub>), Magnos27 (O<sub>2</sub>)

Date of Latest CMS Certification or Audit: RATA on 5/23/23

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

Total source operating time in reporting period: 2,095 hours

<b>Emissions Data Summary<sup>1</sup></b>	
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] <sup>2</sup>	0.0 %

<b>CMS Performance Summary<sup>1</sup></b>	
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	4
e. Unknown causes	0
2. Total CMS Downtime	4
3. Total duration of CMS Downtime x (100) [Total source operating time] <sup>2</sup>	0.2 %

<sup>1</sup> For opacity, record all times in minutes. For gases, record all times in hours.

<sup>2</sup> 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<sub>x</sub>

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

Reporting period dates: 4/1/23 to 6/30/23

Date submitted: 7/28/23

Company: Valero Refining - Meraux LLC

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

Emission Limitation: None

Monitor Manufacturer and Model No.: ABB AO2000 Uras 26 (NO<sub>x</sub>)/ Magnos 206 (O<sub>2</sub>)

Date of Latest CMS Certification or Audit: RATA on 5/23/23

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

Total source operating time in reporting period: 2,140 hours

<b>Emissions Data Summary<sup>1</sup></b>	
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] <sup>2</sup>	0.0 %

<b>CMS Performance Summary<sup>1</sup></b>	
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] <sup>2</sup>	0.0 %

<sup>1</sup> For opacity, record all times in minutes. For gases, record all times in hours.

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



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

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

Pollutant: **H<sub>2</sub>S**

Applicable NSPS Subpart: Ja

Reporting period dates: 4/1/23 to 6/30/23

Date submitted: 7/28/23

Company: Valero Refining - Meraux LLC

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

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

Monitor Manufacturer and Model No.: Ametek 5100

Date of Latest CMS Certification or Audit: RATA on 5/22/23

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

Total source operating time in reporting period: 2,184 hours

<b>Emissions Data Summary<sup>1</sup></b>	
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] <sup>2</sup>	0.0 %

<b>CMS Performance Summary<sup>1</sup></b>	
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] <sup>2</sup>	0.0 %

<sup>1</sup> For opacity, record all times in minutes. For gases, record all times in hours.

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

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

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

Pollutant: **H<sub>2</sub>S**

Applicable NSPS Subpart: Ja

Reporting period dates: 4/1/23 to 6/30/23

Date submitted: 7/28/23

Company: Valero Refining - Meraux LLC

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

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

Monitor Manufacturer and Model No.: Ametek 5100

Date of Latest CMS Certification or Audit: RATA on 5/23/23

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

Total source operating time in reporting period: 2,184 hours

Emissions Data Summary <sup>1</sup>	
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] <sup>2</sup>	0.0 %

CMS Performance Summary <sup>1</sup>	
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] <sup>2</sup>	0.0 %

<sup>1</sup> For opacity, record all times in minutes. For gases, record all times in hours.

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

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

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

Pollutant: H<sub>2</sub>S

Applicable NSPS Subpart: Ja

Reporting period dates: 4/1/23 to 6/30/23

Date submitted: 7/28/23

Company: Valero Refining - Meraux LLC

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

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

Monitor Manufacturer and Model No.: Ametek 5100

Date of Latest CMS Certification or Audit: RATA on 5/22/23

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

Total source operating time in reporting period: 2,184 hours

Emissions Data Summary <sup>1</sup>	
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] <sup>2</sup>	0.0 %

CMS Performance Summary <sup>1</sup>	
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] <sup>2</sup>	0.0 %

<sup>1</sup> For opacity, record all times in minutes. For gases, record all times in hours.

<sup>2</sup> 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: Ia (Also Required by Consent Decree: 3:10-cv-00563-bbc, Paragraph 49.a.ii)

Reporting period dates: 4/1/23 to 6/30/23

Date submitted: 7/28/23

Company: Valero Refining - Meraux LLC

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

Emission Limitation: None

Monitor Manufacturer and Model No.: Thermo Scientific SOLA II

Date of Latest CMS Certification or Audit: RATA on 6/29/23

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

Total source operating time in reporting period: 2,184 hours

CMS Performance Summary <sup>1</sup>	
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	6
d. Other known causes	4
e. Unknown causes	0
2. Total CMS Downtime	10
3. Total duration of CMS Downtime x (100) [Total source operating time] <sup>2</sup>	0.5 %

<sup>1</sup> For opacity, record all times in minutes. For gases, record all times in hours.

<sup>2</sup> 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: Ia (Also Required by Consent Decree: 3:10-cv-00563-bbc, Paragraph 49.a.ii)

Reporting period dates: 4/1/23 to 6/30/23

Date submitted: 7/28/23

Company: Valero Refining - Meraux LLC

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

Emission Limitation: None

Monitor Manufacturer and Model No.: Thermo Scientific SOLA II

Date of Latest CMS Certification or Audit: RATA on 6/29/23

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

Total source operating time in reporting period: 2,184 hours

CMS Performance Summary <sup>1</sup>	
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	16
e. Unknown causes	0
2. Total CMS Downtime	17
3. Total duration of CMS Downtime x (100) [Total source operating time] <sup>2</sup>	0.9 %

<sup>1</sup> For opacity, record all times in minutes. For gases, record all times in hours.

<sup>2</sup> 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: Ia (Also Required by Consent Decree: 3:10-cv-00563-bbc, Paragraph 49.a.ii)

Reporting period dates: 4/1/23 to 6/30/23

Date submitted: 7/28/23

Company: Valero Refining - Meraux LLC

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

Emission Limitation: None

Monitor Manufacturer and Model No.: Thermo Scientific SOLA II

Date of Latest CMS Certification or Audit: RATA on 6/29/23

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

Total source operating time in reporting period: 2,184 hours

CMS Performance Summary <sup>1</sup>	
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	4
d. Other known causes	2
e. Unknown causes	0
2. Total CMS Downtime	6
3. Total duration of CMS Downtime x (100) [Total source operating time] <sup>2</sup>	0.3 %

<sup>1</sup> For opacity, record all times in minutes. For gases, record all times in hours.

<sup>2</sup> 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: 4/1/23 to 6/30/23

Date submitted: 7/28/23

Company: Valero Refining - Meraux LLC

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

Emission Limitation: None

Monitor Manufacturer and Model No.: GE Panametrix 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: 2,184 hours

CMS Performance Summary <sup>1</sup>	
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] <sup>2</sup>	0.0 %

<sup>1</sup> For opacity, record all times in minutes. For gases, record all times in hours.

<sup>2</sup> 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: 4/1/23 to 6/30/23

Date submitted: 7/28/23

Company: Valero Refining - Meraux LLC

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

Emission Limitation: None

Monitor Manufacturer and Model No.: GE Panametrix 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: 2,184 hours

CMS Performance Summary <sup>1</sup>	
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] <sup>2</sup>	0.0 %

<sup>1</sup> For opacity, record all times in minutes. For gases, record all times in hours.

<sup>2</sup> 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: 4/1/23 to 6/30/23

Date submitted: 7/28/23

Company: Valero Refining - Meraux LLC

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

Emission Limitation: None

Monitor Manufacturer and Model No.: SICK FLOWSIC100 Flare

Date of Latest CMS Certification or Audit: N/A

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

Total source operating time in reporting period: 2,184 hours

CMS Performance Summary <sup>1</sup>	
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] <sup>2</sup>	0.0 %

<sup>1</sup> For opacity, record all times in minutes. For gases, record all times in hours.

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

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

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

For all CMS covered in this report, no changes were made in the 2nd Quarter 2023 to CMS, process, or controls.

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

Dan Patnoad

Name

A. Patnoad 7/27/23

Signature

Staff Environmental Engineer

Title

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

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

Pollutant: **SO<sub>2</sub>**

Applicable NSPS Subpart: **Ja**

Reporting period dates: **4/1/23 to 6/30/23**

Date submitted: **7/28/23**

Company: **Valero Refining - Meraux LLC**

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

Emission Limitation: **SO<sub>2</sub> corrected to 0% O<sub>2</sub> shall not exceed 250 ppm on a 12-hour rolling average**

Monitor Manufacturer and Model No.: **Ametek 9900 (SO<sub>2</sub> and O<sub>2</sub>)**

Date of Latest CMS Certification or Audit: **RATA on 5/24/23**

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

Total source operating time in reporting period: **2,184 hours**

<b>Ja EXCESS EMISSIONS</b>						
Date	Start	End	Duration (hours)	Max 12-HRA (ppm)	Cause	Corrective Action
4/28/23	14:00		65	866	SO <sub>2</sub> at 0% O <sub>2</sub> greater than 250 ppm, 12-HRA, with combined SO <sub>2</sub> emissions from the #2 and #3 SRU less than 500 lbs/day above allowable due to a partial loss of electrical power that caused a refinery wide upset. The #2 SRU was placed in hot standby with no acid gas feed to the unit and the Tail Gas Treater bypassed. For causes and corrective actions, see the root cause and corrective action analysis dated 4/28/23 in Appendix B of this report.	
5/1/23		07:00				
6/26/23	04:00		28	513	SO <sub>2</sub> at 0% O <sub>2</sub> greater than 250 ppm, 12-HRA, with combined SO <sub>2</sub> emissions from the #2 and #3 SRU greater than 500 lbs/day above allowable due to an electrical fault on the refinery's 13.8 kV electrical system that caused a refinery wide upset. The #3 SRU shutdown automatically and #2 SRU remained online throughout this incident. Valero quickly transferred all acid gas to the #2 SRU and worked to stabilize the refinery and start up the #3 SRU. During this period the #2 SRU experienced excess SO <sub>2</sub> emissions. The investigation of this incident is not yet complete. Valero will report root cause and corrective actions in the 3 <sup>rd</sup> Quarter NSPS Excess Emissions & CEM Performance Report.	
6/27/23		08:00				
TOTAL			93			

<b>Ja CMS PERFORMANCE<sup>1</sup></b>					
Date	Start	End	Duration (hours)	Cause	Corrective Action
4/3/23	13:00	18:00	5	Analyzer offline to clean sample system.	Calibrated and returned to service.
5/10/23	13:00	16:00	3	Analyzer offline to clean sample system and probe.	Calibrated and returned to service.
TOTAL			8		

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

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

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

Pollutant: **SO<sub>2</sub>**

Applicable NSPS Subpart: **Ja**

Reporting period dates: **4/1/23 to 6/30/23**

Date submitted: **7/28/23**

Company: **Valero Refining - Meraux LLC**

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

Emission Limitation: **SO<sub>2</sub> corrected to 0% O<sub>2</sub> shall not exceed 250 ppm on a 12-hour rolling average**

Monitor Manufacturer and Model No.: **ABB AO2000 Uras 26 (SO<sub>2</sub>)/ Magnos 206 (O<sub>2</sub>)**

Date of Latest CMS Certification or Audit: **RATA on 5/22/23**

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

Total source operating time in reporting period: **2,184 hours**

<b>Ja EXCESS EMISSIONS</b>						
Date	Start	End	Duration (hours)	Max 12-HRA (ppm)	Cause	Corrective Action
4/28/23	17:00		10	327	SO <sub>2</sub> at 0% O <sub>2</sub> greater than 250 ppm, 12-HRA, with combined SO <sub>2</sub> emissions from the #2 and #3 SRU less than 500 lbs/day above allowable due to a partial loss of electrical power that caused a refinery wide upset. The #2 SRU was placed in hot standby and Valero quickly transferred all acid gas to the #3 SRU and worked to stabilize the refinery and start up the #2 SRU. During this period the #3 SRU experienced excess SO <sub>2</sub> emissions. For causes and corrective actions, see the root cause and corrective action analysis dated 4/28/23 in Appendix B of this report.	
4/29/23		03:00				
6/26/23	03:00		29	1158	SO <sub>2</sub> at 0% O <sub>2</sub> greater than 250 ppm, 12-HRA, with combined SO <sub>2</sub> emissions from the #2 and #3 SRU greater than 500 lbs/day above allowable due to an electrical fault on the refinery's 13.8 kV electrical system that caused a refinery wide upset. The #3 SRU shutdown automatically with the TGT bypassed. Valero quickly transferred all acid gas to the #2 SRU and worked to stabilize the refinery and start up the #3 SRU. The investigation of this incident is not yet complete. Valero will report root cause and corrective actions in the 3 <sup>rd</sup> Quarter NSPS Excess Emissions & CEM Performance Report.	
6/27/23		08:00				
TOTAL			39			

<b>Ja CMS PERFORMANCE<sup>1</sup></b>						
Date	Start	End	Duration (hours)	Cause	Corrective Action	
None.						
TOTAL			0			

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

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

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

Pollutant: H<sub>2</sub>S

Applicable NSPS Subpart: Ja

Reporting period dates: 4/1/23 to 6/30/23

Date submitted: 7/28/23

Company: Valero Refining - Meraux LLC

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

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

Monitor Manufacturer and Model No.: Ametek 4661

Date of Latest CMS Certification or Audit: RATA on 5/24/23

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

Total source operating time in reporting period: EQT 0127-87 hours; EQT 0159-1,936 hours

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

Ja CMS PERFORMANCE <sup>1</sup> – Both EQT's					
Date	Start	End	Duration (hours)	Cause	Corrective Action
5/24/23	08:00	09:00	1	Relative Accuracy Test Assessment.	N/A
TOTAL			1		

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

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

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

Pollutant: **H<sub>2</sub>S**

Applicable NSPS Subpart: J

Reporting period dates: 4/1/23 to 6/30/23

Date submitted: 7/28/23

Company: Valero Refining - Meraux LLC

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

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

Monitor Manufacturer and Model No.: Ametek 4661

Date of Latest CMS Certification or Audit: RATA on 5/24/23

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

Total source operating time in reporting period: 2,174 hours

EXCESS EMISSIONS						
Date	Start	End	Duration (hours)	Max 3-HRA (ppm)	Cause	Corrective Action
6/26/23	03:00		22	242	H <sub>2</sub> S > 162 ppm, 3-HRA due to an electrical fault on the refinery's 13.8 kV electrical system that caused a refinery wide upset. The #3 SRU shutdown automatically with the TGT bypassed. Valero quickly transferred all acid gas to the #2 SRU and worked to stabilize the refinery and start up the #3 SRU. The investigation of this incident is not yet complete. Valero will report root cause and corrective actions in the 3 <sup>rd</sup> Quarter NSPS Excess Emissions & CEM Performance Report.	
6/27/23		01:00				
TOTAL			22			

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

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

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

Pollutant: NO<sub>x</sub>

Applicable NSPS Subpart: Ja

Reporting period dates: 4/1/23 to 6/30/23

Date submitted: 7/28/23

Company: Valero Refining - Meraux LLC

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

Emission Limitation: Nitrogen Oxide corrected to 0% O<sub>2</sub> shall not exceed 40 ppm on a 30-day rolling average

Monitor Manufacturer and Model No.: Thermo Environmental 42i (NO<sub>x</sub>)/(O<sub>2</sub>)

Date of Latest CMS Certification or Audit: CGA on 2/2/23

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

Total source operating time in reporting period: 87 hours

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

Ja CMS PERFORMANCE <sup>1</sup>					
Date	Start	End	Duration (hours)	Cause	Corrective Action
None.					
TOTAL			0		

<sup>1</sup> 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<sub>x</sub>

Applicable NSPS Subpart: Ja

Reporting period dates: 4/1/23 to 6/30/23

Date submitted: 7/28/23

Company: Valero Refining - Meraux LLC

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

Emission Limitation: Nitrogen Oxide corrected to 0% O<sub>2</sub> shall not exceed 40 ppm on a 30-day rolling average

Monitor Manufacturer and Model No.: ABB Limas11 (NO<sub>x</sub>), Magnos27 (O<sub>2</sub>)

Date of Latest CMS Certification or Audit: RATA on 5/23/23

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

Total source operating time in reporting period: 1,874 hours

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

<b>Ja CMS PERFORMANCE<sup>1</sup></b>					
Date	Start	End	Duration (hours)	Cause	Corrective Action
4/24/23	16:00	17:00	1	NO <sub>x</sub> and O <sub>2</sub> analyzer readings dropped to negative values for approximately 34 minutes and returned to normal with no intervention. Cause unknown.	The automatic daily calibration checks on 4/25 were satisfactory and the problem did not reoccur.
TOTAL			1		

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



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

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

Pollutant: H<sub>2</sub>S

Applicable NSPS Subpart: Ja

Reporting period dates: 4/1/23 to 6/30/23

Date submitted: 7/28/23

Company: Valero Refining - Meraux LLC

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

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

Monitor Manufacturer and Model No.: Ametek 5100

Date of Latest CMS Certification or Audit: RATA on 5/22/23

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

Total source operating time in reporting period: 2,184 hours

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

Ja CMS PERFORMANCE <sup>2</sup>					
Date	Start	End	Duration (hours)	Cause	Corrective Action
None.					
TOTAL			0		

<sup>1</sup>Due to the physical arrangement of the headers supplying the North Flare Stack (EPN 20-72, EQT 0035), two analyzers are required to measure H<sub>2</sub>S 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.

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

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

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

Pollutant: H<sub>2</sub>S

Applicable NSPS Subpart: Ja

Reporting period dates: 4/1/23 to 6/30/23

Date submitted: 7/28/23

Company: Valero Refining - Meraux LLC

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

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

Monitor Manufacturer and Model No.: Ametek 5100

Date of Latest CMS Certification or Audit: RATA on 5/23/23

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

Total source operating time in reporting period: 2,184 hours

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

Ja CMS PERFORMANCE <sup>2</sup>					
Date	Start	End	Duration (hours)	Cause	Corrective Action
None.					
TOTAL			0		

<sup>1</sup>Due to the physical arrangement of the headers supplying the North Flare Stack (EPN 20-72, EQT 0035), two analyzers are required to measure H<sub>2</sub>S 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.

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

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

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

Pollutant: H<sub>2</sub>S

Applicable NSPS Subpart: Ja

Reporting period dates: 4/1/23 to 6/30/23

Date submitted: 7/28/23

Company: Valero Refining - Meraux LLC

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

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

Monitor Manufacturer and Model No.: Ametek 5100

Date of Latest CMS Certification or Audit: RATA on 5/22/23

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

Total source operating time in reporting period: 2,184 hours

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

Ja CMS PERFORMANCE <sup>2</sup>					
Date	Start	End	Duration (hours)	Cause	Corrective Action
None.					
TOTAL			0		

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

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

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

Pollutant: **Total Sulfur**

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

Reporting period dates: 4/1/23 to 6/30/23

Date submitted: 7/28/23

Company: Valero Refining - Meraux LLC

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

Emission Limitation: None

Monitor Manufacturer and Model No.: Thermo Scientific SOLA II

Date of Latest CMS Certification or Audit: RATA on 6/29/23

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

Total source operating time in reporting period: 2,184 hours

<b>Ja CMS PERFORMANCE<sup>2</sup></b>					
Date	Start	End	Duration (hours)	Cause	Corrective Action
4/5/23	19:00	20:00	1	Adjustment for calibration drift.	Calibrated and returned to service.
4/8/23	10:00	12:00	2	Adjustment for calibration drift.	Calibrated and returned to service.
5/6/23	14:00	15:00	1	Analyzer offline to troubleshoot failure of calibration gas to properly flow to analyzer during automatic daily calibration check.	Valero adjusted calibration gas flows and pressures. Calibrated and returned to service.
6/14/23	10:00	14:00	4	After installation of a new calibration gas bottle and calibrating the analyzer, the analyzer malfunctioned and was repeatedly switching ranges. Valero took the analyzer offline to troubleshoot.	Valero adjusted the analyzer and stopped the repeated range switching. Calibrated and returned to service.
6/18/23	15:00	16:00	1	Analyzer offline to replace internal switching valve rotor.	Calibrated and returned to service.
6/29/23	13:00	14:00	1	Relative Accuracy Test Assessment.	N/A
TOTAL			10		

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

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

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

Pollutant: **Total Sulfur**

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

Reporting period dates: 4/1/23 to 6/30/23

Date submitted: 7/28/23

Company: Valero Refining - Meraux LLC

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

Emission Limitation: None

Monitor Manufacturer and Model No.: Thermo Scientific SOLA II

Date of Latest CMS Certification or Audit: RATA on 6/29/23

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

Total source operating time in reporting period: 2,184 hours

<b>Ja CMS PERFORMANCE<sup>2</sup></b>					
Date	Start	End	Duration (hours)	Cause	Corrective Action
4/7/23	13:00	17:00	4	Offline to troubleshoot analyzer periodically losing flow during automatic daily calibration check.	Valero replaced the sample filter, adjusted sample and calibration gas pressures, and increased instrument air pressure to the solenoid valves that control the calibration gas sequence. Calibrated and returned to service.
4/10/23	08:00	17:00	9	Analyzer offline to replace internal 6 port valve.	Calibrated and returned to service.
4/20/23	08:00	11:00	3	Offline to troubleshoot analyzer periodically losing flow during automatic daily calibration check.	Valero again adjusted sample and calibration gas pressures and increased instrument air pressure to the solenoid valves that control the calibration gas sequence. The problem did not reoccur after these adjustments. Calibrated and returned to service.
6/29/23	13:00	14:00	1	Relative Accuracy Test Assessment.	N/A
TOTAL			17		

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

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

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

Pollutant: **Total Sulfur**

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

Reporting period dates: 4/1/23 to 6/30/23

Date submitted: 7/28/23

Company: Valero Refining - Meraux LLC

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

Emission Limitation: None

Monitor Manufacturer and Model No.: Thermo Scientific SOLA II

Date of Latest CMS Certification or Audit: RATA on 6/29/23

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

Total source operating time in reporting period: 2,184 hours

<b>Ja CMS PERFORMANCE<sup>2</sup></b>					
Date	Start	End	Duration (hours)	Cause	Corrective Action
4/5/23	07:00	08:00	1	Analyzer attempted automatic daily calibration check, but no calibration gas flowed to analyzer.	Valero began troubleshooting shortly after the problem was detected,
4/5/23	09:00	10:00	1	Offline to troubleshoot analyzer completely losing flow during automatic daily calibration check.	Valero discovered a section of pinched tubing. Valero replaced this tubing, calibrated the analyzer and returned it to service.
5/27/23	13:00	14:00	1	Adjustment for calibration drift.	Calibrated and returned to service.
5/27/23	15:00	11:00	1	Adjustment for calibration drift.	Calibrated and returned to service.
6/27/23	10:00	11:00	1	Analyzer offline to verify proper operation after and extended period of flaring.	Valero confirmed proper operation, calibrated the analyzer and returned it to service.
6/29/23	13:00	14:00	1	Relative Accuracy Test Assessment.	N/A
TOTAL			6		

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

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

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

Pollutant: **Flow**

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

Reporting period dates: 4/1/23 to 6/30/23

Date submitted: 7/28/23

Company: Valero Refining - Meraux LLC

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

Emission Limitation: None

Monitor Manufacturer and Model No.: GE Panametrics GF 868

Date of Latest CMS Certification or Audit: N/A

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

Total source operating time in reporting period: 2,184 hours

Ja CMS PERFORMANCE <sup>2</sup>					
Date	Start	End	Duration (hours)	Cause	Corrective Action
None.					
TOTAL			0		

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

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

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

Pollutant: **Flow**

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

Reporting period dates: 4/1/23 to 6/30/23

Date submitted: 7/28/23

Company: Valero Refining - Meraux LLC

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

Emission Limitation: None

Monitor Manufacturer and Model No.: GE Panametrics GF 868

Date of Latest CMS Certification or Audit: N/A

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

Total source operating time in reporting period: 2,184 hours

Ja CMS PERFORMANCE <sup>2</sup>					
Date	Start	End	Duration (hours)	Cause	Corrective Action
None.					
TOTAL			0		

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



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

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

Pollutant: **Flow**

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

Reporting period dates: 4/1/23 to 6/30/23

Date submitted: 7/28/23

Company: Valero Refining - Meraux LLC

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

Emission Limitation: None

Monitor Manufacturer and Model No.: SICK FLOWSIC100 Flare

Date of Latest CMS Certification or Audit: N/A

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

Total source operating time in reporting period: 2,184 hours

Ja CMS PERFORMANCE <sup>2</sup>					
Date	Start	End	Duration (hours)	Cause	Corrective Action
None.					
TOTAL			0		

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

# **DATA ASSESSMENT REPORT**

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

Pollutant: SO<sub>2</sub>

Applicable NSPS Subpart: Ja

Reporting period dates: 4/1/23 to 6/30/23

Date submitted: 7/28/23

Company: Valero Refining - Meraux LLC

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

Emission Limitation: SO<sub>2</sub> corrected to 0% O<sub>2</sub> shall not exceed 250 ppm on a 12-hour rolling average

Monitor Manufacturer and Model No.: Ametek 9900 (SO<sub>2</sub> and O<sub>2</sub>)

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

CEM Sampling Location: #2 SRU Incinerator

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

## I. ACCURACY ASSESSMENT RESULTS (RATA):

SO <sub>2</sub> corrected to 0% O <sub>2</sub>	
Date of Audit	5/24/23
Reference Method	EPA Method 6C/ EPA Method 3A
Average RM Value (ppmv)	36.29
Average CEM Value (ppmv)	50.27
Accuracy	6.63 %
Limit	< 10%

## II. CALIBRATION DRIFT ASSESSMENT

### A. Out of Control Periods:

1. Dates: N/A

2. Number of Days N/A

B. Corrective Actions: N/A

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# **DATA ASSESSMENT REPORT**

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

Pollutant: **SO<sub>2</sub>**

Applicable NSPS Subpart: Ja

Reporting period dates: 4/1/23 to 6/30/23

Date submitted: 7/28/23

Company: Valero Refining - Meraux LLC

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

Emission Limitation: SO<sub>2</sub> corrected to 0% O<sub>2</sub> shall not exceed 250 ppm on a 12-hour rolling average

Monitor Manufacturer and Model No.: ABB AO2000 Uras 26 (SO<sub>2</sub>)/ Magnos 206 (O<sub>2</sub>)

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

CEM Sampling Location: #3 SRU Incinerator

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

## **I. ACCURACY ASSESSMENT RESULTS (RATA):**

SO <sub>2</sub> corrected to 0% O <sub>2</sub>	
Date of Audit	5/22/23
Reference Method	EPA Method 6C/ EPA Method 3A
Average RM Value (ppmv)	28.63
Average CEM Value (ppmv)	24.07
Accuracy	2.30 %
Limit	< 10%

## **II. CALIBRATION DRIFT ASSESSMENT**

### **A. Out of Control Periods:**

1. Dates: N/A

2. Number of Days N/A

B. Corrective Actions: N/A

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# **DATA ASSESSMENT REPORT**

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

Pollutant: H<sub>2</sub>S

Applicable NSPS Subpart: J

Reporting period dates: 4/1/23 to 6/30/23

Date submitted: 7/28/23

Company: Valero Refining - Meraux LLC

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

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

Monitor Manufacturer and Model No.: Ametek 4661

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

CEM Sampling Location: Area 1 Fuel Drum

CEM Span Value: Hydrogen Sulfide, 300 ppm

## **I. ACCURACY ASSESSMENT RESULTS (RATA):**

	<u>H<sub>2</sub>S #1</u>	<u>H<sub>2</sub>S #2</u>
Date of Audit	<u>5/24/23</u>	<u>5/24/23</u>
Reference Method	<u>EPA Method 11</u>	<u>EPA Method 11</u>
	<u>(Alternate RATA)</u>	<u>(Alternate RATA)</u>
Average RM Value (ppmv)	<u>74.7</u>	<u>167.0</u>
Average CEM Value (ppmv)	<u>76.3</u>	<u>167.1</u>
Accuracy	<u>2.2 %</u>	<u>0.1 %</u>
Limit	<u>&lt; 15 %</u>	<u>&lt; 15 %</u>

## **II. CALIBRATION DRIFT ASSESSMENT**

### **A. Out of Control Periods:**

1. Dates: N/A

2. Number of Days N/A

B. Corrective Actions: N/A

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# DATA ASSESSMENT REPORT

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

Pollutant: H<sub>2</sub>S

Applicable NSPS Subpart: J and Ja

Reporting period dates: 4/1/23 to 6/30/23

Date submitted: 7/28/23

Company: Valero Refining - Meraux LLC

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

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

Monitor Manufacturer and Model No.: Ametek 4661

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

CEM Sampling Location: Area 2 Fuel Drum

CEM Span Value: Hydrogen Sulfide, 300 ppm

## I. ACCURACY ASSESSMENT RESULTS (RATA):

	<u>H<sub>2</sub>S #1</u>	<u>H<sub>2</sub>S #2</u>
Date of Audit	5/24/23	5/24/23
Reference Method	EPA Method 11 (Alternate RATA)	EPA Method 11 (Alternate RATA)
Average RM Value (ppmv)	74.7	167.0
Average CEM Value (ppmv)	72.5	159.6
Accuracy	2.9%	4.4 %
Limit	< 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

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# **DATA ASSESSMENT REPORT**

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

Pollutant: H<sub>2</sub>S

Applicable NSPS Subpart: I

Reporting period dates: 4/1/23 to 6/30/23

Date submitted: 7/28/23

Company: Valero Refining - Meraux LLC

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

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

Monitor Manufacturer and Model No.: Ametek 4661

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

CEM Sampling Location: Area 4 Fuel Drum

CEM Span Value: Hydrogen Sulfide, 300 ppm

## **I. ACCURACY ASSESSMENT RESULTS (RATA):**

	<u>H<sub>2</sub>S #1</u>	<u>H<sub>2</sub>S #2</u>
Date of Audit	5/24/23	5/24/23
Reference Method	EPA Method 11 (Alternate RATA)	EPA Method 11 (Alternate RATA)
Average RM Value (ppmv)	74.7	167.0
Average CEM Value (ppmv)	72.6	160.8
Accuracy	2.9 %	3.7 %
Limit	< 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

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# **DATA ASSESSMENT REPORT**

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

Pollutant: H<sub>2</sub>S

Applicable NSPS Subpart: J

Reporting period dates: 4/1/23 to 6/30/23

Date submitted: 7/28/23

Company: Valero Refining - Meraux LLC

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

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

Monitor Manufacturer and Model No.: Ametek 4661

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

CEM Sampling Location: Area 6 Fuel Drum

CEM Span Value: Hydrogen Sulfide, 300 ppm

## **I. ACCURACY ASSESSMENT RESULTS (RATA):**

	<u>H<sub>2</sub>S #1</u>	<u>H<sub>2</sub>S #2</u>
Date of Audit	5/24/23	5/24/23
Reference Method	EPA Method 11 (Alternate RATA)	EPA Method 11 (Alternate RATA)
Average RM Value (ppmv)	74.7	167.0
Average CEM Value (ppmv)	73.4	165.1
Accuracy	1.8 %	1.2 %
Limit	< 15 %	< 15 %

## **II. CALIBRATION DRIFT ASSESSMENT**

### **A. Out of Control Periods:**

1. Dates: N/A

2. Number of Days N/A

B. Corrective Actions: N/A

---

# **DATA ASSESSMENT REPORT**

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

Pollutant: H<sub>2</sub>S

Applicable NSPS Subpart: J

Reporting period dates: 4/1/23 to 6/30/23

Date submitted: 7/28/23

Company: Valero Refining - Meraux LLC

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

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

Monitor Manufacturer and Model No.: Ametek 4661

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

CEM Sampling Location: Area 6 Boilers Fuel Drum

CEM Span Value: Hydrogen Sulfide, 300 ppm

## **I. ACCURACY ASSESSMENT RESULTS (RATA):**

	<u>H<sub>2</sub>S #1</u>	<u>H<sub>2</sub>S #2</u>
Date of Audit	5/24/23	5/24/23
Reference Method	EPA Method 11 (Alternate RATA)	EPA Method 11 (Alternate RATA)
Average RM Value (ppmv)	74.7	167.0
Average CEM Value (ppmv)	76.8	167.3
Accuracy	2.8 %	0.2 %
Limit	< 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

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# **DATA ASSESSMENT REPORT**

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

Pollutant: **NO<sub>x</sub>**

Applicable NSPS Subpart: **Db**

Reporting period dates: **4/1/23 to 6/30/23**

Date submitted: **7/28/23**

Company: **Valero Refining - Meraux LLC**

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

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

Monitor Manufacturer and Model No.: **ABB AO2000 Uras 26 (NO<sub>x</sub>)/ Magnos 28 (O<sub>2</sub>)**

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 (RATA):**

NO <sub>x</sub> lb/MMBtu	
Date of Audit	5/22/23
Reference Method	EPA Method 7E / EPA Method 3A
Average RM Value	0.033 lb/MMBtu
Average CEM Value	0.033 lb/MMBtu
Accuracy	0.2 %
Limit	< 10 %

## **II. CALIBRATION DRIFT ASSESSMENT**

### **B. Out of Control Periods:**

3. Dates:     N/A    

4. Number of Days     N/A    

C. Corrective Actions:     N/A    

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# **DATA ASSESSMENT REPORT**

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

Pollutant: **NO<sub>x</sub>**

Applicable NSPS Subpart: **Db**

Reporting period dates: **4/1/23 to 6/30/23**

Date submitted: **7/28/23**

Company: **Valero Refining - Meraux LLC**

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

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

Monitor Manufacturer and Model No.: **ABB AO2000 Uras 26(NO<sub>x</sub>)/ Magnos 28(O<sub>2</sub>)**

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 (RATA):**

NO <sub>x</sub> lb/MMBtu	
Date of Audit	5/22/23
Reference Method	EPA Method 7E / EPA Method 3A
Average RM Value	0.019 lb/MMBtu
Average CEM Value	0.018 lb/MMBtu
Accuracy	0.2 %
Limit	< 10 %

## **II. CALIBRATION DRIFT ASSESSMENT**

### **A. Out of Control Periods:**

1. Dates:     N/A    

2. Number of Days     N/A    

B. Corrective Actions:     N/A    

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# **DATA ASSESSMENT REPORT**

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

Pollutant: **NO<sub>x</sub>**

Applicable NSPS Subpart: **Db**

Reporting period dates: **4/1/23 to 6/30/23**

Date submitted: **7/28/23**

Company: **Valero Refining - Meraux LLC**

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

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

Monitor Manufacturer and Model No.: **Thermo Environmental Model 42i (NO<sub>x</sub>)/(O<sub>2</sub>)**

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 (RATA):**

NO <sub>x</sub> lb/MMBtu	
Date of Audit	5/24/23
Reference Method	EPA Method 7E / EPA Method 3A
Average RM Value	0.034 lb/MMBtu
Average CEM Value	0.030 lb/MMBtu
Accuracy	2.5 %
Limit	< 10 %

## **II. CALIBRATION DRIFT ASSESSMENT**

### **A. Out of Control Periods:**

1. Dates:     N/A    

2. Number of Days     N/A    

B. Corrective Actions:     N/A    

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# **DATA ASSESSMENT REPORT**

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

Pollutant: NO<sub>x</sub>

Applicable NSPS Subpart: Ja

Reporting period dates: 4/1/23 to 6/30/23

Date submitted: 7/28/23

Company: Valero Refining - Meraux LLC

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

Emission Limitation: Nitrogen Oxide corrected to 0% O<sub>2</sub> shall not exceed 40 ppm on a 30-day rolling average

Monitor Manufacturer and Model No.: Thermo Environmental Model 42i (NO<sub>x</sub>)/(O<sub>2</sub>)

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 (RATA):**

The Benzene Recovery Unit Reboiler shutdown on April 4, 2023 at 14:53 and did not operate again in the 2<sup>nd</sup> Quarter 2023.

## **II. CALIBRATION DRIFT ASSESSMENT**

### **A. Out of Control Periods:**

1. Dates: N/A

2. Number of Days N/A

B. Corrective Actions: N/A

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# **DATA ASSESSMENT REPORT**

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

Pollutant: NO<sub>x</sub>

Applicable NSPS Subpart: Ja

Reporting period dates: 4/1/23 to 6/30/23

Date submitted: 7/28/23

Company: Valero Refining - Meraux LLC

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

Emission Limitation: Nitrogen Oxide corrected to 0% O<sub>2</sub> shall not exceed 40 ppm on a 30-day rolling average

Monitor Manufacturer and Model No.: ABB AO2000 Uras 26 (NO<sub>x</sub>)/ Magnos 206 (O<sub>2</sub>)

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 (RATA):**

	NO <sub>x</sub> , ppmvd	O <sub>2</sub> , vol % (dry)
Date of Audit	5/23/23	5/23/23
Reference Method	EPA Method 7E	EPA Method 3A
Average RM Value	19.20 ppmvd	5.30 vol %
Average CEM Value	18.33 ppmvd	5.51 vol %
Accuracy	6.0 %	4.3 %
Limit	< 20 %	< 20 %

## **II. CALIBRATION DRIFT ASSESSMENT**

### **A. Out of Control Periods:**

1. Dates: N/A

2. Number of Days N/A

B. Corrective Actions: N/A

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# **DATA ASSESSMENT REPORT**

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

Pollutant: NO<sub>x</sub>

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

Reporting period dates: 4/1/23 to 6/30/23

Date submitted: 7/28/23

Company: Valero Refining - Meraux LLC

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

Emission Limitation: None

Monitor Manufacturer and Model No.: ABB Limas11 (NO<sub>x</sub>), Magnos27 (O<sub>2</sub>)

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 (RATA):**

	NO <sub>x</sub> , ppmvd	O <sub>2</sub> , vol % (dry)
Date of Audit	5/23/22	5/23/22
Reference Method	EPA Method 7E	EPA Method 3A
Average RM Value	9.37 ppmvd	6.23 vol %
Average CEM Value	10.06 ppmvd	6.53 vol %
Accuracy	8.9 %	5.8 %
Limit	< 20 %	< 20 %

## **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<sub>x</sub>

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

Reporting period dates: 4/1/23 to 6/30/23

Date submitted: 7/28/23

Company: Valero Refining - Meraux LLC

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

Emission Limitation: None

Monitor Manufacturer and Model No.: ABB AO2000 Uras 26 (NO<sub>x</sub>)/ Magnos 206 (O<sub>2</sub>)

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 (RATA):**

	NO <sub>x</sub> , ppmvd	O <sub>2</sub> , vol % (dry)
Date of Audit	5/23/23	5/23/23
Reference Method	EPA Method 7E	EPA Method 3A
Average RM Value	11.72 ppmvd	6.97vol %
Average CEM Value	12.64 ppmvd	6.91 vol %
Accuracy	13.9 %	1.8 %
Limit	< 20 %	< 20 %

## **II. CALIBRATION DRIFT ASSESSMENT**

### **A. Out of Control Periods:**

1. Dates: N/A

2. Number of Days N/A

B. Corrective Actions: N/A

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# **DATA ASSESSMENT REPORT**

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

Pollutant: H<sub>2</sub>S

Applicable NSPS Subpart: Ja

Reporting period dates: 4/1/23 to 6/30/23

Date submitted: 7/28/23

Company: Valero Refining - Meraux LLC

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

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

Monitor Manufacturer and Model No.: Ametek 5100

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

CEM Sampling Location: North Flare Stack, North Flare Header (Y-AT-801)

CEM Span Value: Hydrogen Sulfide, 300 ppm

## **I. ACCURACY ASSESSMENT RESULTS (RATA):**

	<u>H<sub>2</sub>S</u>
Date of Audit	5/22/23
Reference Method	EPA Method 11
Average RM Value	54.8 ppmv
Average CEM Value	53.5 ppmv
Accuracy	2.5 %
Limit	< 10 %

<sup>1</sup> 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

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# **DATA ASSESSMENT REPORT**

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

Pollutant: H<sub>2</sub>S

Applicable NSPS Subpart: Ja

Reporting period dates: 4/1/23 to 6/30/23

Date submitted: 7/28/23

Company: Valero Refining - Meraux LLC

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

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

Monitor Manufacturer and Model No.: Ametek 5100

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

CEM Sampling Location: North Flare Stack, Hydrocracker Flare Header (Y-AT-800)

CEM Span Value: Hydrogen Sulfide, 300 ppm

## **I. ACCURACY ASSESSMENT RESULTS (RATA):**

	<u>H<sub>2</sub>S</u>
Date of Audit	5/23/23
Reference Method	EPA Method 11
Average RM Value	3.5 ppmv
Average CEM Value	13.0 ppmv
Accuracy	6.8 %
Limit	< 10 %

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

## **II. CALIBRATION DRIFT ASSESSMENT**

### **B. Out of Control Periods:**

3. Dates: N/A

4. Number of Days N/A

C. Corrective Actions: N/A

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# **DATA ASSESSMENT REPORT**

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

Pollutant: H<sub>2</sub>S

Applicable NSPS Subpart: Ja

Reporting period dates: 4/1/23 to 6/30/23

Date submitted: 7/28/23

Company: Valero Refining - Meraux LLC

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

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

Monitor Manufacturer and Model No.: Ametek 5100

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

CEM Sampling Location: South Flare Stack (Y-AT-802)

CEM Span Value: Hydrogen Sulfide, 300 ppm

## **I. ACCURACY ASSESSMENT RESULTS (RATA):**

	<u>H<sub>2</sub>S</u>
Date of Audit	5/22/23
Reference Method	EPA Method 11
Average RM Value	20.2 ppmv
Average CEM Value	11.8 ppmv
Accuracy	5.8 %
Limit	< 10 %

<sup>1</sup> 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

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# **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: 4/1/23 to 6/30/23

Date submitted: 7/28/23

Company: Valero Refining - Meraux LLC

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

Emission Limitation: None

Monitor Manufacturer and Model No.: Thermo Scientific SOLA II

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

CEM Sampling Location: North Flare Stack, North Flare Header (Y-AT-303)

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

## **I. ACCURACY ASSESSMENT RESULTS (RATA):**

	<u>H<sub>2</sub>S #1</u>	<u>H<sub>2</sub>S #2</u>
Date of Audit	6/29/23	6/29/23
Reference Method	PS 2	PS 2
	Alternate RATA	Alternate RATA
Average RM Value (ppmv)	1012.0	5559.0
Average CEM Value (ppmv)	975.9	5409.8
Accuracy	3.6 %	2.7 %
Limit	< 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: **Total Sulfur**

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

Reporting period dates: 4/1/23 to 6/30/23

Date submitted: 7/28/23

Company: Valero Refining - Meraux LLC

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

Emission Limitation: None

Monitor Manufacturer and Model No.: Thermo Scientific SOLA II

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

CEM Sampling Location: North Flare Stack, Hydrocracker Flare Header (Y-AT-302)

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

## **I. ACCURACY ASSESSMENT RESULTS (RATA):**

	<u>H<sub>2</sub>S #1</u>	<u>H<sub>2</sub>S #2</u>
Date of Audit	6/29/23	6/29/23
Reference Method	PS 2	PS 2
	Alternate RATA	Alternate RATA
Average RM Value (ppmv)	1012.0	5559.0
Average CEM Value (ppmv)	1044.6	5650.4
Accuracy	3.2 %	1.6 %
Limit	< 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: **Total Sulfur**

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

Reporting period dates: 4/1/23 to 6/30/23

Date submitted: 7/28/23

Company: Valero Refining - Meraux LLC

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

Emission Limitation: None

Monitor Manufacturer and Model No.: Thermo Scientific SOLA II

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

CEM Sampling Location: South Flare Stack (Y-AT-304)

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

## **I. ACCURACY ASSESSMENT RESULTS (RATA):**

	<u>H<sub>2</sub>S #1</u>	<u>H<sub>2</sub>S #2</u>
Date of Audit	6/29/23	6/29/23
Reference Method	PS 2	PS 2
	Alternate RATA	Alternate RATA
Average RM Value (ppmv)	1012.0	5559.0
Average CEM Value (ppmv)	986.2	5387.7
Accuracy	2.6 %	3.1 %
Limit	< 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

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## Appendix A

### Ja Root Cause and Corrective Action Analysis

**Subpart Ja Root Cause / Corrective Action Analysis**Incident Number: **465000***The information contained below satisfies the requirements of the NSPS Subpart Ja 60.108a(c)(6).*

Report: Update  
Refinery: Valero (Meraux)  
Incident Type: Flaring (Flow and SO2)  
Emissions Source(s): North Flare (EPN 20-72, EQT 0035)  
South Flare (EPN 3-77, EQT 0049)

Date of Event: 12/5/22  
Date Analysis Completed: 1/19/23

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

**A description of the Discharge:**

*On December 5, 2022 at approximately 16:34, Valero experienced a loss of 3rd party natural gas supply to the refinery. At the time of the incident, one of the two pipelines supplying natural gas to the refinery was blocked in for repairs and the pressure regulator failed on the line that remained in service. The loss of natural gas pressure caused multiple heaters and the refinery's two main boilers to shutdown, which upset several refinery units. The majority of the flaring occurred when the Hydrocracker unit performed an automatic depressurization to the North Flare.*

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

Date and Time the discharge was first identified 12/5/22 16:58  
Date/Time the discharge had ceased 12/6/22 6:23  
Duration of Discharge (Calculated) 13.4 hrs.

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

**The steps taken to limit the emissions during the discharge:**

*Valero followed its Flare Minimization Plan and Operations Procedures to minimize the volume flared from this discharge. During periods of Nitrogen venting, 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?	<u>No</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>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? No (Yes/No)

*Valero has determined several factors that contributed to this incident, including the maintenance of Valero-owned pressure regulators on the natural gas supply line.*

(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) Evaluate long term set up of natural gas regulator systems supplying the refinery.

2) Create pressure alarm(s) in the DCS to notify operations of malfunctioning regulator.

3) Add pressure gauge visuals to operator rounds for natural gas regulator systems supplying the refinery.

(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) Evaluate long term set up of natural gas regulator systems supplying the refinery.*

*Commencement Date: 1/19/23*

*Completed: 2/14/23*

*Additional Corrective Action created from completion of engineering design and work package.*

*2) Create pressure alarm(s) in the DCS to notify operations of malfunctioning regulator.*

*Completed Date: 1/19/23*

*Completed: 2/17/23*

*3) Add pressure gauge visuals to operator rounds for natural gas regulator systems supplying the refinery.*

*Commencement Date: 1/19/23*

*Completed: 2/28/23*

*4) Complete the engineering design and work package and for the upgrades to the natural gas regulator systems supplying the refinery.*

*Commencement Date: 2/14/23*

*Completed: 6/8/23*

*Additional Corrective Action created for installation.*

*5) Complete installation of the upgrades to the natural gas regulator systems supplying the refinery.*

*Commencement Date: 6/8/23*

*Estimated Completion Date: 12/26/23*



(8.)

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

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

		(60.108a(c)(6)(iii))	(60.108a(c)(6)(iv))	(60.108a(c)(6)(vii))	(60.108a(c)(6)(vii))
First hour of 24-hr Period	Last hour of 24-hr Period	24-hr cumulative volume of flared gas above Baseline	TRS or H2S ppm (24-hr average, flow-weighted)	24-hr cumulative SO2	24-hr cumulative reduced sulfur
		SCF	ppmv	lbs	lbs as H2S
12/4/2022 16:00	12/5/2022 15:00	106,958	20	0.7	0.0
12/4/2022 17:00	12/5/2022 16:00	108,752	53	2.2	0.0
12/4/2022 18:00	12/5/2022 17:00	1,025,710	88	131.1	0.7
12/4/2022 19:00	12/5/2022 18:00	2,904,984	187	876.0	4.7
12/4/2022 20:00	12/5/2022 19:00	3,266,457	517	1361.5	7.3
12/4/2022 21:00	12/5/2022 20:00	4,314,639	705	2150.9	11.6
12/4/2022 22:00	12/5/2022 21:00	4,912,074	966	2778.2	14.9
12/4/2022 23:00	12/5/2022 22:00	5,402,499	1157	3155.9	17.0
12/5/2022 00:00	12/5/2022 23:00	5,991,743	1295	3485.2	18.7
12/5/2022 01:00	12/6/2022 00:00	6,563,675	1410	3750.2	20.2
12/5/2022 02:00	12/6/2022 01:00	6,845,204	1495	3849.1	20.7
12/5/2022 03:00	12/6/2022 02:00	6,924,896	1514	3856.0	20.7
12/5/2022 04:00	12/6/2022 03:00	7,046,974	1533	3866.0	20.8
12/5/2022 05:00	12/6/2022 04:00	7,167,591	1542	3871.3	20.8
12/5/2022 06:00	12/6/2022 05:00	7,254,828	1552	3875.5	20.8
12/5/2022 07:00	12/6/2022 06:00	7,278,260	1560	3876.6	20.8
12/5/2022 08:00	12/6/2022 07:00	7,278,272	1564	3876.8	20.8
12/5/2022 09:00	12/6/2022 08:00	7,278,286	1567	3876.9	20.8
12/5/2022 10:00	12/6/2022 09:00	7,278,272	1571	3877.0	20.8
12/5/2022 11:00	12/6/2022 10:00	7,295,284	1588	3878.8	20.8
12/5/2022 12:00	12/6/2022 11:00	7,306,216	1596	3879.5	20.8
12/5/2022 13:00	12/6/2022 12:00	7,306,211	1599	3879.6	20.8
12/5/2022 14:00	12/6/2022 13:00	7,306,200	1602	3879.7	20.8
12/5/2022 15:00	12/6/2022 14:00	7,306,216	1606	3879.8	20.8
12/5/2022 16:00	12/6/2022 15:00	7,306,221	1609	3880.0	20.8
12/5/2022 17:00	12/6/2022 16:00	7,304,423	1580	3878.7	20.8
12/5/2022 18:00	12/6/2022 17:00	6,387,432	1549	3749.9	20.2
12/5/2022 19:00	12/6/2022 18:00	4,508,164	1453	3005.1	16.1
12/5/2022 20:00	12/6/2022 19:00	4,146,668	1126	2519.7	13.5
12/5/2022 21:00	12/6/2022 20:00	3,098,501	941	1730.4	9.3
12/5/2022 22:00	12/6/2022 21:00	2,501,057	684	1103.2	5.9
12/5/2022 23:00	12/6/2022 22:00	2,010,638	496	725.6	3.9
12/6/2022 00:00	12/6/2022 23:00	1,421,383	361	396.4	2.1
12/6/2022 01:00	12/7/2022 00:00	849,440	250	131.6	0.7
12/6/2022 02:00	12/7/2022 01:00	567,931	168	32.8	0.2
12/6/2022 03:00	12/7/2022 02:00	488,256	152	26.0	0.1

**Subpart Ja Root Cause / Corrective Action Analysis**Incident Number: N/A*The information contained below satisfies the requirements of the NSPS Subpart Ja 60.108a(c)(6).*

Report: Final  
Refinery: Valero (Meraux)  
Incident Type: Flaring (Flow)  
Emissions Source(s): North Flare (EPN 20-72, EQT 0035)

Date of Event: 4/11/23  
Date Analysis Completed: N/A

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

**A description of the Discharge:**

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

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

Date and Time the discharge was first identified 4/11/23 3:10  
Date/Time the discharge had ceased 4/12/23 11:55  
Duration of Discharge (Calculated) 32.8 hrs.

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

**The steps taken to limit the emissions during the discharge:**

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

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

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

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

Did the discharge result from a planned startup or shutdown?	<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? No (Yes/No)

N/A

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

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

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

N/A

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

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

N/A

(8.) The measured or calculated cumulative quantity of gas discharged over the discharge duration. <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
4/10/2023 03:00	4/11/2023 02:00	55	7	0.3	0.0
4/10/2023 04:00	4/11/2023 03:00	48,713	259	2.7	0.0
4/10/2023 05:00	4/11/2023 04:00	86,815	263	4.8	0.0
4/10/2023 06:00	4/11/2023 05:00	111,199	301	6.4	0.0
4/10/2023 07:00	4/11/2023 06:00	132,066	315	7.9	0.0
4/10/2023 08:00	4/11/2023 07:00	154,105	248	9.2	0.0
4/10/2023 09:00	4/11/2023 08:00	175,427	276	10.6	0.1
4/10/2023 10:00	4/11/2023 09:00	196,124	313	12.1	0.1
4/10/2023 11:00	4/11/2023 10:00	216,007	509	14.5	0.1
4/10/2023 12:00	4/11/2023 11:00	242,249	555	17.7	0.1
4/10/2023 13:00	4/11/2023 12:00	285,100	282	20.1	0.1
4/10/2023 14:00	4/11/2023 13:00	328,766	262	22.4	0.1
4/10/2023 15:00	4/11/2023 14:00	417,606	240	26.2	0.1
4/10/2023 16:00	4/11/2023 15:00	559,127	275	33.1	0.2
4/10/2023 17:00	4/11/2023 16:00	761,847	263	42.2	0.2
4/10/2023 18:00	4/11/2023 17:00	988,169	260	52.3	0.3
4/10/2023 19:00	4/11/2023 18:00	1,243,524	249	63.1	0.3
4/10/2023 20:00	4/11/2023 19:00	1,509,446	236	73.8	0.4
4/10/2023 21:00	4/11/2023 20:00	1,776,617	207	83.2	0.4
4/10/2023 22:00	4/11/2023 21:00	2,044,143	200	92.3	0.5
4/10/2023 23:00	4/11/2023 22:00	2,337,140	221	103.3	0.6
4/11/2023 00:00	4/11/2023 23:00	2,668,598	181	113.5	0.6
4/11/2023 01:00	4/12/2023 00:00	3,019,689	187	124.6	0.7
4/11/2023 02:00	4/12/2023 01:00	3,377,150	190	136.1	0.7
4/11/2023 03:00	4/12/2023 02:00	3,735,142	181	147.0	0.8
4/11/2023 04:00	4/12/2023 03:00	4,083,725	186	157.0	0.8
4/11/2023 05:00	4/12/2023 04:00	4,469,000	175	167.4	0.9
4/11/2023 06:00	4/12/2023 05:00	4,861,996	190	179.1	1.0
4/11/2023 07:00	4/12/2023 06:00	5,114,767	253	189.3	1.0
4/11/2023 08:00	4/12/2023 07:00	5,414,614	213	199.6	1.1
4/11/2023 09:00	4/12/2023 08:00	5,739,067	180	208.8	1.1
4/11/2023 10:00	4/12/2023 09:00	6,081,000	171	217.8	1.2
4/11/2023 11:00	4/12/2023 10:00	6,408,972	179	225.9	1.2
4/11/2023 12:00	4/12/2023 11:00	6,416,140	141	223.6	1.2
4/11/2023 13:00	4/12/2023 12:00	6,373,293	38	221.3	1.2
4/11/2023 14:00	4/12/2023 13:00	6,329,617	19	219.0	1.2
4/11/2023 15:00	4/12/2023 14:00	6,240,777	10	215.2	1.2
4/11/2023 16:00	4/12/2023 15:00	6,099,262	8	208.3	1.1
4/11/2023 17:00	4/12/2023 16:00	5,896,551	7	199.2	1.1
4/11/2023 18:00	4/12/2023 17:00	5,670,218	9	189.1	1.0
4/11/2023 19:00	4/12/2023 18:00	5,414,883	10	178.3	1.0
4/11/2023 20:00	4/12/2023 19:00	5,148,961	11	167.6	0.9
4/11/2023 21:00	4/12/2023 20:00	4,881,788	11	158.2	0.9
4/11/2023 22:00	4/12/2023 21:00	4,614,259	12	149.1	0.8
4/11/2023 23:00	4/12/2023 22:00	4,321,262	14	138.1	0.7
4/12/2023 00:00	4/12/2023 23:00	3,989,795	14	128.0	0.7
4/12/2023 01:00	4/13/2023 00:00	3,638,699	13	116.9	0.6
4/12/2023 02:00	4/13/2023 01:00	3,281,238	12	105.4	0.6
4/12/2023 03:00	4/13/2023 02:00	2,923,243	11	94.5	0.5

(8.)

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

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

		(60.108a(c)(6)(iii))	(60.108a(c)(6)(iv))	(60.108a(c)(6)(vii))	(60.108a(c)(6)(vii))
First hour of 24-hr Period	Last hour of 24-hr Period	24-hr cumulative volume of flared gas above Baseline	TRS or H2S ppm (24-hr average, flow-weighted)	24-hr cumulative SO2	24-hr cumulative reduced sulfur
		SCF	ppmv	lbs	lbs as H2S
4/12/2023 04:00	4/13/2023 03:00	2,526,019	12	82.1	0.4
4/12/2023 05:00	4/13/2023 04:00	2,102,649	13	69.7	0.4
4/12/2023 06:00	4/13/2023 05:00	1,685,268	13	56.3	0.3
4/12/2023 07:00	4/13/2023 06:00	1,411,638	13	44.5	0.2
4/12/2023 08:00	4/13/2023 07:00	1,089,752	13	32.9	0.2
4/12/2023 09:00	4/13/2023 08:00	743,986	11	22.4	0.1
4/12/2023 10:00	4/13/2023 09:00	381,352	11	11.9	0.1

**Subpart Ja Root Cause / Corrective Action Analysis**Incident Number: N/A*The information contained below satisfies the requirements of the NSPS Subpart Ja 60.108a(c)(6).*

Report: Final  
Refinery: Valero (Meraux)  
Incident Type: Flaring (Flow)  
Emissions Source(s): North Flare (EPN 20-72, EQT 0035)

Date of Event: 4/17/23  
Date Analysis Completed: N/A

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

**A description of the Discharge:**

*This discharge resulted from the normal startup of the Naphtha Hydrotreater Unit (NHT) and Reformer Unit following the planned replacement of NHT reactor catalyst. The discharge included activities such as purging vessels and compressor starting.*

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

Date and Time the discharge was first identified 4/17/23 4:46  
Date/Time the discharge had ceased 4/17/23 15:25  
Duration of Discharge (Calculated) 10.6 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 purges and Nitrogen volume was required to comply with the maintenance vent provisions of 40 CFR 63.643 as well as additional supplemental natural gas required to comply with the Net Heating Value of the Combustion Zone limit (> 270 Btu/scf) of 40 CFR 63.670, that became effective on January 30, 2019.*

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

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

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

Did the discharge result from a planned startup or shutdown? Yes (Yes/No)  
Was the flare management plan followed? Yes (Yes/No/N/A)  
Is the event exempt from a RC/CCA based on the answers above? Yes (Yes/No)  
- If yes, skip section 5-7.

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

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

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

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

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

Is corrective action required? No (Yes/No)  
N/A

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

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

N/A

<b>(8.)</b>					
<b>The measured or calculated cumulative quantity of gas discharged over the discharge duration.</b>					
<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))
<b>First hour of 24-hr Period</b>	<b>Last hour of 24-hr Period</b>	<b>24-hr cumulative volume of flared gas above Baseline</b>	<b>TRS or H2S ppm (24-hr average, flow-weighted)</b>	<b>24-hr cumulative SO2</b>	<b>24-hr cumulative reduced sulfur</b>
		SCF	ppmv	lbs	lbs as H2S
4/16/2023 04:00	4/17/2023 03:00	173,845	15	6.7	0.0
4/16/2023 05:00	4/17/2023 04:00	167,184	16	6.2	0.0
4/16/2023 06:00	4/17/2023 05:00	85,572	161	3.3	0.0
4/16/2023 07:00	4/17/2023 06:00	126,071	267	5.6	0.0
4/16/2023 08:00	4/17/2023 07:00	227,720	199	9.2	0.0
4/16/2023 09:00	4/17/2023 08:00	341,308	171	12.6	0.1
4/16/2023 10:00	4/17/2023 09:00	452,346	181	16.2	0.1
4/16/2023 11:00	4/17/2023 10:00	591,894	153	19.9	0.1
4/16/2023 12:00	4/17/2023 11:00	692,448	165	22.8	0.1
4/16/2023 13:00	4/17/2023 12:00	802,399	192	26.6	0.1
4/16/2023 14:00	4/17/2023 13:00	921,736	193	30.6	0.2
4/16/2023 15:00	4/17/2023 14:00	943,495	155	31.4	0.2
4/16/2023 16:00	4/17/2023 15:00	943,493	41	31.4	0.2
4/16/2023 17:00	4/17/2023 16:00	943,487	35	31.4	0.2
4/16/2023 18:00	4/17/2023 17:00	940,374	31	31.5	0.2
4/16/2023 19:00	4/17/2023 18:00	940,374	28	31.5	0.2
4/16/2023 20:00	4/17/2023 19:00	918,224	30	30.5	0.2
4/16/2023 21:00	4/17/2023 20:00	918,201	33	30.5	0.2
4/16/2023 22:00	4/17/2023 21:00	918,212	32	30.5	0.2
4/16/2023 23:00	4/17/2023 22:00	918,239	35	30.5	0.2
4/17/2023 00:00	4/17/2023 23:00	914,658	34	30.5	0.2
4/17/2023 01:00	4/18/2023 00:00	914,670	33	30.5	0.2
4/17/2023 02:00	4/18/2023 01:00	914,674	32	30.5	0.2
4/17/2023 03:00	4/18/2023 02:00	914,669	31	30.5	0.2
4/17/2023 04:00	4/18/2023 03:00	914,669	32	30.5	0.2
4/17/2023 05:00	4/18/2023 04:00	905,684	34	30.5	0.2
4/17/2023 06:00	4/18/2023 05:00	866,522	33	29.3	0.2
4/17/2023 07:00	4/18/2023 06:00	817,563	33	26.8	0.1
4/17/2023 08:00	4/18/2023 07:00	715,910	33	23.2	0.1
4/17/2023 09:00	4/18/2023 08:00	602,321	30	19.8	0.1
4/17/2023 10:00	4/18/2023 09:00	491,277	28	16.3	0.1

**Subpart Ja Root Cause / Corrective Action Analysis**Incident Number: **470601***The information contained below satisfies the requirements of the NSPS Subpart Ja 60.108a(c)(6).*

Report: Initial  
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: 4/28/23  
Date Analysis Completed: 6/8/23

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

**A description of the Discharge:**

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

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

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

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

**The steps taken to limit the emissions during the discharge:**

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

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

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

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

Did the discharge result from a planned startup or shutdown? No (Yes/No)  
Was the flare management plan followed? Yes (Yes/No/N/A)  
Is the event exempt from a RC/CCA based on the answers above? No (Yes/No)  
- If yes, skip section 5-7.

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

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

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

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

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

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

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

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

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

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

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

Commencement Date: 6/8/23

Estimated Completion Date: 8/1/23

<b>(8.)</b>					
<b>The measured or calculated cumulative quantity of gas discharged over the discharge duration.</b>					
<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
4/27/2023 11:00	4/28/2023 10:00	118	7	0.2	0.0
4/27/2023 12:00	4/28/2023 11:00	49,723	46	9.4	0.1
4/27/2023 13:00	4/28/2023 12:00	265,454	59	22.0	0.1
4/27/2023 14:00	4/28/2023 13:00	418,614	75	32.1	0.2
4/27/2023 15:00	4/28/2023 14:00	563,565	91	41.8	0.2
4/27/2023 16:00	4/28/2023 15:00	743,946	108	55.0	0.3
4/27/2023 17:00	4/28/2023 16:00	1,019,220	126	75.2	0.4
4/27/2023 18:00	4/28/2023 17:00	1,230,421	137	85.5	0.5
4/27/2023 19:00	4/28/2023 18:00	1,357,602	148	91.5	0.5
4/27/2023 20:00	4/28/2023 19:00	1,460,847	158	95.8	0.5
4/27/2023 21:00	4/28/2023 20:00	1,577,298	164	99.2	0.5
4/27/2023 22:00	4/28/2023 21:00	1,707,488	172	103.9	0.6
4/27/2023 23:00	4/28/2023 22:00	1,768,211	178	105.5	0.6
4/28/2023 00:00	4/28/2023 23:00	1,768,191	181	105.6	0.6
4/28/2023 01:00	4/29/2023 00:00	1,775,990	185	105.9	0.6
4/28/2023 02:00	4/29/2023 01:00	1,776,040	188	106.1	0.6
4/28/2023 03:00	4/29/2023 02:00	1,776,040	191	106.2	0.6
4/28/2023 04:00	4/29/2023 03:00	1,776,040	194	106.2	0.6
4/28/2023 05:00	4/29/2023 04:00	1,776,046	196	106.3	0.6
4/28/2023 06:00	4/29/2023 05:00	1,776,053	199	106.4	0.6
4/28/2023 07:00	4/29/2023 06:00	1,785,980	206	107.0	0.6
4/28/2023 08:00	4/29/2023 07:00	1,785,987	210	107.1	0.6
4/28/2023 09:00	4/29/2023 08:00	1,785,989	213	107.2	0.6
4/28/2023 10:00	4/29/2023 09:00	1,800,400	217	107.6	0.6
4/28/2023 11:00	4/29/2023 10:00	1,813,404	225	108.3	0.6
4/28/2023 12:00	4/29/2023 11:00	1,803,277	197	101.4	0.5
4/28/2023 13:00	4/29/2023 12:00	1,613,873	194	90.3	0.5
4/28/2023 14:00	4/29/2023 13:00	1,460,711	182	80.3	0.4
4/28/2023 15:00	4/29/2023 14:00	1,316,549	171	70.7	0.4
4/28/2023 16:00	4/29/2023 15:00	1,154,275	165	58.8	0.3
4/28/2023 17:00	4/29/2023 16:00	879,000	153	38.9	0.2
4/28/2023 18:00	4/29/2023 17:00	667,818	147	28.7	0.2
4/28/2023 19:00	4/29/2023 18:00	563,691	148	24.3	0.1
4/28/2023 20:00	4/29/2023 19:00	464,910	148	20.5	0.1



**Subpart Ja Root Cause / Corrective Action Analysis**Incident Number: N/A

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

Report: Final  
Refinery: Valero (Meraux)  
Incident Type: Flaring (Flow)  
Emissions Source(s): North Flare (EPN 20-72, EQT 0035)

Date of Event: 5/3/23  
Date Analysis Completed: N/A

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

**A description of the Discharge:**

*This discharge resulted from the normal startup of the Naphtha Hydrotreater Unit (NHT) and Reformer Unit following the unplanned shutdown of these units on 4/28 due to the partial loss of electrical power. This discharge was primarily due to compressor starting procedures.*

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

Date and Time the discharge was first identified 5/3/23 13:57  
Date/Time the discharge had ceased 5/4/23 0:09  
Duration of Discharge (Calculated) 10.2 hrs.

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

**The steps taken to limit the emissions during the discharge:**

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

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

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

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

Did the discharge result from a planned startup or shutdown?	<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? No (Yes/No)  
N/A

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

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

Is corrective action required? No (Yes/No)  
N/A

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

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

N/A

(8.)

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

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

		(60.108a(c)(6)(iii))	(60.108a(c)(6)(iv))	(60.108a(c)(6)(vii))	(60.108a(c)(6)(vii))
First hour of 24-hr Period	Last hour of 24-hr Period	24-hr cumulative volume of flared gas above Baseline	TRS or H2S ppm (24-hr average, flow-weighted)	24-hr cumulative SO2	24-hr cumulative reduced sulfur
		SCF	ppmv	lbs	lbs as H2S
5/2/2023 13:00	5/3/2023 12:00	17,630	64	3.2	0.0
5/2/2023 14:00	5/3/2023 13:00	19,720	117	3.3	0.0
5/2/2023 15:00	5/3/2023 14:00	189,290	199	9.1	0.0
5/2/2023 16:00	5/3/2023 15:00	504,014	85	13.5	0.1
5/2/2023 17:00	5/3/2023 16:00	770,410	57	15.7	0.1
5/2/2023 18:00	5/3/2023 17:00	1,086,535	50	18.2	0.1
5/2/2023 19:00	5/3/2023 18:00	1,414,917	36	20.1	0.1
5/2/2023 20:00	5/3/2023 19:00	1,661,744	39	21.6	0.1
5/2/2023 21:00	5/3/2023 20:00	1,830,052	47	22.9	0.1
5/2/2023 22:00	5/3/2023 21:00	2,006,208	44	24.1	0.1
5/2/2023 23:00	5/3/2023 22:00	2,121,483	56	25.1	0.1
5/3/2023 00:00	5/3/2023 23:00	2,167,477	146	26.3	0.1
5/3/2023 01:00	5/4/2023 00:00	2,175,790	167	26.7	0.1
5/3/2023 02:00	5/4/2023 01:00	2,172,162	94	26.6	0.1
5/3/2023 03:00	5/4/2023 02:00	2,172,162	78	26.6	0.1
5/3/2023 04:00	5/4/2023 03:00	2,172,171	73	26.6	0.1
5/3/2023 05:00	5/4/2023 04:00	2,172,162	73	26.6	0.1
5/3/2023 06:00	5/4/2023 05:00	2,172,159	71	26.6	0.1
5/3/2023 07:00	5/4/2023 06:00	2,172,185	68	26.6	0.1
5/3/2023 08:00	5/4/2023 07:00	2,172,180	68	26.6	0.1
5/3/2023 09:00	5/4/2023 08:00	2,172,171	63	26.6	0.1
5/3/2023 10:00	5/4/2023 09:00	2,169,632	60	26.6	0.1
5/3/2023 11:00	5/4/2023 10:00	2,169,632	59	26.6	0.1
5/3/2023 12:00	5/4/2023 11:00	2,169,622	58	26.6	0.1
5/3/2023 13:00	5/4/2023 12:00	2,166,303	59	26.5	0.1
5/3/2023 14:00	5/4/2023 13:00	2,164,216	58	26.4	0.1
5/3/2023 15:00	5/4/2023 14:00	1,994,646	55	20.6	0.1
5/3/2023 16:00	5/4/2023 15:00	1,679,923	54	16.1	0.1
5/3/2023 17:00	5/4/2023 16:00	1,405,492	55	13.5	0.1
5/3/2023 18:00	5/4/2023 17:00	1,089,359	54	11.0	0.1
5/3/2023 19:00	5/4/2023 18:00	760,977	56	9.0	0.0
5/3/2023 20:00	5/4/2023 19:00	514,160	54	7.4	0.0
5/3/2023 21:00	5/4/2023 20:00	345,851	52	6.2	0.0

**Subpart Ja Root Cause / Corrective Action Analysis**Incident Number: N/A*The information contained below satisfies the requirements of the NSPS Subpart Ja 60.108a(c)(6).*

Report: Final  
Refinery: Valero (Meraux)  
Incident Type: Flaring (Flow)  
Emissions Source(s): North Flare (EPN 20-72, EQT 0035)

Date of Event: 6/13/23  
Date Analysis Completed: N/A

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

**A description of the Discharge:***This discharge was the planned Nitrogen stripping of the Benzene Reduction Unit catalyst in preparation for replacement.*

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

Date and Time the discharge was first identified 6/13/23 17:22  
Date/Time the discharge had ceased 6/15/23 15:54  
Duration of Discharge (Calculated) 46.5 hrs.

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

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

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

**Necessity of RC/CAA: Determine and state whether a RC/CAA is necessary:***Note: If the discharge was a result of a planned startup or shutdown, a RC/CAA analysis is not required if the flare management plan was followed.*

Did the discharge result from a planned startup or shutdown? Yes (Yes/No)  
Was the flare management plan followed? Yes (Yes/No/N/A)  
Is the event exempt from a RC/CCA based on the answers above? Yes (Yes/No)  
- If yes, skip section 5-7.

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

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

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

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

**Corrective Action Analysis: Include a description of the recommended corrective action(s) or an explanation of why corrective action is not**  
Is corrective action required? No (Yes/No)

*N/A*

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

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

*N/A*

(8.) The measured or calculated cumulative quantity of gas discharged over the discharge duration. <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
6/12/2023 17:00	6/13/2023 16:00	4,141	29	2.0	0.0
6/12/2023 18:00	6/13/2023 17:00	58,250	12	2.2	0.0
6/12/2023 19:00	6/13/2023 18:00	225,959	2	2.2	0.0
6/12/2023 20:00	6/13/2023 19:00	401,444	26	3.0	0.0
6/12/2023 21:00	6/13/2023 20:00	561,865	6	2.6	0.0
6/12/2023 22:00	6/13/2023 21:00	575,924	12	2.4	0.0
6/12/2023 23:00	6/13/2023 22:00	723,854	1	2.3	0.0
6/13/2023 00:00	6/13/2023 23:00	885,259	1	2.2	0.0
6/13/2023 01:00	6/14/2023 00:00	1,028,528	1	2.2	0.0
6/13/2023 02:00	6/14/2023 01:00	1,161,760	3	2.1	0.0
6/13/2023 03:00	6/14/2023 02:00	1,314,177	180	6.9	0.0
6/13/2023 04:00	6/14/2023 03:00	1,543,329	14	7.4	0.0
6/13/2023 05:00	6/14/2023 04:00	1,798,249	3	7.4	0.0
6/13/2023 06:00	6/14/2023 05:00	2,056,049	5	7.6	0.0
6/13/2023 07:00	6/14/2023 06:00	2,294,566	4	7.6	0.0
6/13/2023 08:00	6/14/2023 07:00	2,531,172	2	7.7	0.0
6/13/2023 09:00	6/14/2023 08:00	2,767,981	2	7.7	0.0
6/13/2023 10:00	6/14/2023 09:00	3,004,108	2	7.7	0.0
6/13/2023 11:00	6/14/2023 10:00	3,240,950	1	7.7	0.0
6/13/2023 12:00	6/14/2023 11:00	3,480,884	1	7.7	0.0
6/13/2023 13:00	6/14/2023 12:00	3,734,773	3	7.8	0.0
6/13/2023 14:00	6/14/2023 13:00	3,999,258	4	7.9	0.0
6/13/2023 15:00	6/14/2023 14:00	4,260,356	43	9.8	0.1
6/13/2023 16:00	6/14/2023 15:00	4,512,071	12	10.3	0.1
6/13/2023 17:00	6/14/2023 16:00	4,762,975	11	10.7	0.1
6/13/2023 18:00	6/14/2023 17:00	4,959,446	10	11.0	0.1
6/13/2023 19:00	6/14/2023 18:00	5,039,721	8	11.3	0.1
6/13/2023 20:00	6/14/2023 19:00	5,102,710	1	10.6	0.1
6/13/2023 21:00	6/14/2023 20:00	5,170,942	1	10.5	0.1
6/13/2023 22:00	6/14/2023 21:00	5,388,439	1	10.5	0.1
6/13/2023 23:00	6/14/2023 22:00	5,473,498	1	10.5	0.1
6/14/2023 00:00	6/14/2023 23:00	5,546,237	1	10.5	0.1
6/14/2023 01:00	6/15/2023 00:00	5,632,406	1	10.5	0.1
6/14/2023 02:00	6/15/2023 01:00	5,730,624	1	10.5	0.1
6/14/2023 03:00	6/15/2023 02:00	5,805,804	1	5.7	0.0
6/14/2023 04:00	6/15/2023 03:00	5,788,185	1	5.2	0.0
6/14/2023 05:00	6/15/2023 04:00	5,753,180	1	5.1	0.0
6/14/2023 06:00	6/15/2023 05:00	5,705,594	12	5.4	0.0
6/14/2023 07:00	6/15/2023 06:00	5,677,170	9	5.5	0.0
6/14/2023 08:00	6/15/2023 07:00	5,662,522	2	5.5	0.0
6/14/2023 09:00	6/15/2023 08:00	5,648,913	1	5.5	0.0
6/14/2023 10:00	6/15/2023 09:00	5,636,300	1	5.5	0.0
6/14/2023 11:00	6/15/2023 10:00	5,622,310	1	5.4	0.0
6/14/2023 12:00	6/15/2023 11:00	5,606,434	1	5.4	0.0
6/14/2023 13:00	6/15/2023 12:00	5,585,395	10	5.7	0.0
6/14/2023 14:00	6/15/2023 13:00	5,554,164	9	5.9	0.0
6/14/2023 15:00	6/15/2023 14:00	5,401,307	10	4.1	0.0
6/14/2023 16:00	6/15/2023 15:00	5,149,577	20	3.6	0.0
6/14/2023 17:00	6/15/2023 16:00	4,898,672	23	3.2	0.0

<b>(8.)</b>					
<b>The measured or calculated cumulative quantity of gas discharged over the discharge duration.</b>					
<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))
<b>First hour of 24-hr Period</b>	<b>Last hour of 24-hr Period</b>	<b>24-hr cumulative volume of flared gas above Baseline</b>	<b>TRS or H2S ppm (24-hr average, flow-weighted)</b>	<b>24-hr cumulative SO2</b>	<b>24-hr cumulative reduced sulfur</b>
		SCF	ppmv	lbs	lbs as H2S
6/14/2023 18:00	6/15/2023 17:00	4,648,090	27	2.8	0.0
6/14/2023 19:00	6/15/2023 18:00	4,400,119	25	2.5	0.0
6/14/2023 20:00	6/15/2023 19:00	4,161,638	23	2.5	0.0
6/14/2023 21:00	6/15/2023 20:00	3,929,021	23	2.5	0.0
6/14/2023 22:00	6/15/2023 21:00	3,697,460	25	2.5	0.0
6/14/2023 23:00	6/15/2023 22:00	3,464,442	28	2.5	0.0
6/15/2023 00:00	6/15/2023 23:00	3,230,298	32	2.5	0.0
6/15/2023 01:00	6/16/2023 00:00	3,000,861	31	2.5	0.0
6/15/2023 02:00	6/16/2023 01:00	2,769,408	30	2.4	0.0
6/15/2023 03:00	6/16/2023 02:00	2,541,805	29	2.4	0.0
6/15/2023 04:00	6/16/2023 03:00	2,330,270	29	2.4	0.0
6/15/2023 05:00	6/16/2023 04:00	2,110,354	29	2.4	0.0
6/15/2023 06:00	6/16/2023 05:00	1,900,160	27	2.0	0.0
6/15/2023 07:00	6/16/2023 06:00	1,690,050	26	1.8	0.0
6/15/2023 08:00	6/16/2023 07:00	1,468,088	26	1.7	0.0
6/15/2023 09:00	6/16/2023 08:00	1,244,868	26	1.7	0.0
6/15/2023 10:00	6/16/2023 09:00	1,021,333	26	1.7	0.0
6/15/2023 11:00	6/16/2023 10:00	798,487	23	1.7	0.0
6/15/2023 12:00	6/16/2023 11:00	574,432	24	1.7	0.0
6/15/2023 13:00	6/16/2023 12:00	341,574	22	1.4	0.0

**Subpart Ja Root Cause / Corrective Action Analysis**Incident Number: **472571***The information contained below satisfies the requirements of the NSPS Subpart Ja 60.108a(c)(6).*

Report: Initial  
Refinery: Valero (Meraux)  
Incident Type: Flaring (Flow)  
Emissions Source(s): North Flare (EPN 20-72, EQT 0035)

Date of Event: 6/18/23  
Date Analysis Completed: In Progress

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

**A description of the Discharge:**

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

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

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

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

**The steps taken to limit the emissions during the discharge:**

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

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

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

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

Did the discharge result from a planned startup or shutdown?	<u>No</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>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? No (Yes/No)

*The Root Cause and Corrective Action Analysis for this incident remains in progress as of the date of this report. Valero will submit the results of this analysis in the 3rd Quarter NSPS Excess Emissions & CEM Performance Report.*

(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)

*The Root Cause and Corrective Action Analysis for this incident remains in progress as of the date of this report. Valero will submit the results of this analysis in the 3rd Quarter NSPS Excess Emissions & CEM Performance Report.*

(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.**

*The Root Cause and Corrective Action Analysis for this incident remains in progress as of the date of this report. Valero will submit the results of this analysis in the 3rd Quarter NSPS Excess Emissions & CEM Performance Report.*

<b>(8.)</b>					
<b>The measured or calculated cumulative quantity of gas discharged over the discharge duration.</b>					
<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))
<b>First hour of 24-hr Period</b>	<b>Last hour of 24-hr Period</b>	<b>24-hr cumulative volume of flared gas above Baseline</b>	<b>TRS or H2S ppm (24-hr average, flow-weighted)</b>	<b>24-hr cumulative SO2</b>	<b>24-hr cumulative reduced sulfur</b>
		SCF	ppmv	lbs	lbs as H2S
6/17/2023 00:00	6/17/2023 23:00	118	23	0.8	0.0
6/17/2023 01:00	6/18/2023 00:00	561,899	86	145.0	0.8
6/17/2023 02:00	6/18/2023 01:00	690,197	172	192.1	1.0
6/17/2023 03:00	6/18/2023 02:00	690,188	175	192.3	1.0
6/17/2023 04:00	6/18/2023 03:00	690,160	177	192.3	1.0
6/17/2023 05:00	6/18/2023 04:00	690,159	178	192.4	1.0
6/17/2023 06:00	6/18/2023 05:00	690,159	180	192.4	1.0
6/17/2023 07:00	6/18/2023 06:00	690,159	181	192.5	1.0
6/17/2023 08:00	6/18/2023 07:00	690,162	183	192.5	1.0
6/17/2023 09:00	6/18/2023 08:00	690,185	184	192.6	1.0
6/17/2023 10:00	6/18/2023 09:00	690,166	185	192.6	1.0
6/17/2023 11:00	6/18/2023 10:00	690,166	187	192.7	1.0
6/17/2023 12:00	6/18/2023 11:00	690,172	188	192.7	1.0
6/17/2023 13:00	6/18/2023 12:00	690,172	189	192.8	1.0
6/17/2023 14:00	6/18/2023 13:00	690,195	190	192.8	1.0
6/17/2023 15:00	6/18/2023 14:00	690,195	191	192.8	1.0
6/17/2023 16:00	6/18/2023 15:00	690,212	192	192.9	1.0
6/17/2023 17:00	6/18/2023 16:00	690,227	194	192.9	1.0
6/17/2023 18:00	6/18/2023 17:00	690,233	195	193.0	1.0
6/17/2023 19:00	6/18/2023 18:00	690,223	196	193.0	1.0
6/17/2023 20:00	6/18/2023 19:00	690,223	197	193.0	1.0
6/17/2023 21:00	6/18/2023 20:00	690,223	198	193.1	1.0
6/17/2023 22:00	6/18/2023 21:00	690,230	199	193.1	1.0
6/17/2023 23:00	6/18/2023 22:00	690,237	200	193.1	1.0
6/18/2023 00:00	6/18/2023 23:00	690,225	201	193.2	1.0
6/18/2023 01:00	6/19/2023 00:00	128,418	139	49.0	0.3

**Subpart Ja Root Cause / Corrective Action Analysis**Incident Number: N/A*The information contained below satisfies the requirements of the NSPS Subpart Ja 60.108a(c)(6).*

Report: Final  
Refinery: Valero (Meraux)  
Incident Type: Flaring (Flow)  
Emissions Source(s): North Flare (EPN 20-72, EQT 0035)

Date of Event: 6/22/23  
Date Analysis Completed: N/A

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

**A description of the Discharge:**

*This discharge resulted from the elective shutdown of the Reformer Unit Net Gas Compressor due to elevated vibrations indicated on it's vibration monitoring system. Valero reduced unit charge rates and adjusted refinery operations to minimize and eventually stop the flaring that resulted from this shutdown and is conducting repairs of the Net Gas Compressor.*

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

Date and Time the discharge was first identified 6/22/23 11:20  
Date/Time the discharge had ceased 6/22/23 17:01  
Duration of Discharge (Calculated) 5.7 hrs.

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

**The steps taken to limit the emissions during the discharge:**

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

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

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

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

Did the discharge result from a planned startup or shutdown? Yes (Yes/No)  
Was the flare management plan followed? Yes (Yes/No/N/A)  
Is the event exempt from a RC/CCA based on the answers above? Yes (Yes/No)  
- If yes, skip section 5-7.

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

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

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

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

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

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

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

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

*N/A*



<b>(8.)</b>					
<b>The measured or calculated cumulative quantity of gas discharged over the discharge duration.</b>					
<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
6/21/2023 11:00	6/22/2023 10:00	120	38	1.4	0.0
6/21/2023 12:00	6/22/2023 11:00	204,842	2835	101.2	0.5
6/21/2023 13:00	6/22/2023 12:00	646,633	1630	222.2	1.2
6/21/2023 14:00	6/22/2023 13:00	876,764	2897	336.3	1.8
6/21/2023 15:00	6/22/2023 14:00	1,119,034	2711	448.4	2.4
6/21/2023 16:00	6/22/2023 15:00	1,354,101	2741	558.6	3.0
6/21/2023 17:00	6/22/2023 16:00	1,467,345	3893	636.9	3.4
6/21/2023 18:00	6/22/2023 17:00	1,468,515	135	637.1	3.4
6/21/2023 19:00	6/22/2023 18:00	1,468,508	110	637.2	3.4
6/21/2023 20:00	6/22/2023 19:00	1,468,505	106	637.3	3.4
6/21/2023 21:00	6/22/2023 20:00	1,468,524	89	637.4	3.4
6/21/2023 22:00	6/22/2023 21:00	1,468,560	79	637.5	3.4
6/21/2023 23:00	6/22/2023 22:00	1,468,583	81	637.5	3.4
6/22/2023 00:00	6/22/2023 23:00	1,468,615	90	637.6	3.4
6/22/2023 01:00	6/23/2023 00:00	1,468,654	92	637.7	3.4
6/22/2023 02:00	6/23/2023 01:00	1,468,701	90	637.7	3.4
6/22/2023 03:00	6/23/2023 02:00	1,468,773	80	637.8	3.4
6/22/2023 04:00	6/23/2023 03:00	1,468,834	73	637.8	3.4
6/22/2023 05:00	6/23/2023 04:00	1,468,887	85	637.9	3.4
6/22/2023 06:00	6/23/2023 05:00	1,468,941	86	638.0	3.4
6/22/2023 07:00	6/23/2023 06:00	1,469,057	79	638.0	3.4
6/22/2023 08:00	6/23/2023 07:00	1,469,132	76	638.1	3.4
6/22/2023 09:00	6/23/2023 08:00	1,469,181	76	638.1	3.4
6/22/2023 10:00	6/23/2023 09:00	1,469,258	73	638.2	3.4
6/22/2023 11:00	6/23/2023 10:00	1,469,292	75	638.2	3.4
6/22/2023 12:00	6/23/2023 11:00	1,264,625	77	538.6	2.9
6/22/2023 13:00	6/23/2023 12:00	822,877	75	417.6	2.2
6/22/2023 14:00	6/23/2023 13:00	592,775	74	303.6	1.6

## Subpart Ja Root Cause / Corrective Action Analysis

Incident Number: 472879

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

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

Date of Event: 6/26/23  
Date Analysis Completed: In Progress

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

**A description of the Discharge:**

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

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

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

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

**The steps taken to limit the emissions during the discharge:**

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

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

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

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

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

- If yes, skip section 5-7.

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

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

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

The Root Cause and Corrective Action Analysis for this incident remains in progress as of the date of this report. Valero will submit the results of this analysis in the 3rd Quarter NSPS Excess Emissions & CEM Performance Report.

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

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

Is corrective action required? Yes (Yes/No)

The Root Cause and Corrective Action Analysis for this incident remains in progress as of the date of this report. Valero will submit the results of this analysis in the 3rd Quarter NSPS Excess Emissions & CEM Performance Report.

(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.**

The Root Cause and Corrective Action Analysis for this incident remains in progress as of the date of this report. Valero will submit the results of this analysis in the 3rd Quarter NSPS Excess Emissions & CEM Performance Report.

**(8.) North and South Flares****The measured or calculated cumulative quantity of gas discharged over the discharge duration.***Note: Measured sulfur concentrations are shown as flow-weighted averages if multiple measurement devices were used.*

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

**(9.) #2 and #3 SRU****The measured or calculated cumulative quantity of gas discharged over the discharge duration.***Note: Measured sulfur concentrations are shown as flow-weighted averages if multiple measurement devices were used.*

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

<sup>1</sup> SRU SO2 CEMS are spanned to 500 ppm. For emissions calculations, Valero assumes 2 times the span, 1000 ppm, for CEMS readings >= 500 ppm.<sup>2</sup> Tail Gas Treater bypass emissions are calculated using a mass balance method, not using the flow and concentration values listed here.