

October 30, 2015

CERTIFIED: 7011 2970 0002 0808 2463

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

Re:

NSPS Excess Emissions & CEM Performance Report – 3rd Quarter 2015

Valero Refining - Meraux LLC, Agency Interest # 1238 2500 East St. Bernard Hwy., St. Bernard Parish, Meraux, LA

Title V Permit Numbers: 2500-00001-V11

Gentlemen,

Valero Refining, Meraux LLC hereby submits this Excess Emissions and Monitoring Systems Reports, per LAC 33:III, Chapter 30, 40 CFR 60.7(c), 40 CFR 60.108a(d) and 40 CFR 63.1575 for the Third Quarter 2015.

For this reporting period, no CEMS had excess emissions greater than or equal to 1 percent of the total operating time and no CEMS had downtime greater than or equal to 5 % of the total operating time. Also enclosed are the Data Assessment Reports for the appropriate CEMs.

Should you have any questions regarding this submission, please contact Mr. Justin Stubbe 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,

ack E. Merriii

Vice President & General Manager Valero Refining – Meraux LLC

Enclosures

cc: Mr. Mike Algero, LDEQ SE Regional Office, New Orleans, LA

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

Pollutant: SO₂

Applicable NSPS Subpart: __Ja__

Reporting period dates: From 7/1/15 to 9/30/15

Date submitted: 10/30/15

Company: Valero Refining - Meraux LLC

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

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

Monitor Manufacturer and Model No.: <u>Brimstone SGX-231(SO₂)/Rosemount Oxymitter 4000(O₂)</u>

Date of Latest CMS Certification or Audit: CGA on 9/21/15 (SO₂), 9/22/15 (O₂)

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

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

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

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

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

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

Pollutant: SO₂

Applicable NSPS Subpart: __Ja_

Reporting period dates: From _7/1/15_to_9/30/15_

Date submitted: 10/30/15

Company: Valero Refining - Meraux LLC

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

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

Monitor Manufacturer and Model No.: <u>Brimstone 991-CEM-X(SO₂)/ Rosemount Oxymitter 4000(O₂)</u>

Date of Latest CMS Certification or Audit: CGA on 9/21/15 (SO₂), 9/22/15 (O₂)

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

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

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

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

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

(per 40 CFR 60.7(d))

Pollutant: H₂S

Applicable NSPS Subpart: __J_

Reporting period dates: From 7/1/15 to 9/30/15

Date submitted: 10/30/15

Company: Valero Refining - Meraux LLC

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

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

Monitor Manufacturer and Model No.: Ametek, #4661

Date of Latest CMS Certification or Audit: CGA on 7/22/15

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)

Total source operating time in reporting period: EQT 0010-1,117 hours, EQT 0011-1,987 hours, EQT 0033-2,208 hours

| Emissions Data Summary ¹ , | | | |
|--|---------------------|---------------------|---------------------|
| 1. Duration of excess emissions in reporting period due to: | EQT 0010 (hours) | EQT 0011 (hours) | EQT 0033 (hours) |
| a. Startup/shutdown | 0 | 0 | 0 |
| b. Control equipment problems | 0 | 0 | 0 |
| c. Process problems | 0 | 0 | 0 |
| d. Other known causes | 0 | 0 | 0 |
| e. Unknown causes | 0 | 0 | 0 |
| 2. Total duration of excess emission | 0 | 0 | 0 |
| 3. Total duration of excess emissions x (100) [Total source operating time] ² | 0.0 % | 0.0 % | 0.0 % |

| CMS Performance Summary ¹ | | | |
|--|---------------------|---------------------|---------------------|
| 1. CMS downtime in reporting period due to: | EQT 0010 (hours) | EQT 0011 (hours) | EQT 0033 (hours) |
| a. Monitor equipment malfunctions | 0 | 0 | 0 |
| b. Non-Monitor equipment malfunctions | 0 | 0 | 0 |
| c. Quality assurance calibration | 3 | 5 | 5 |
| d. Other known causes | 0 | 0 | 0 |
| e. Unknown causes | 0 | 0 | 0 |
| 2. Total CMS Downtime | 3 | 5 | 5 |
| 3. Total duration of CMS Downtime x (100) [Total source operating time] ² | 0.3 % | 0.2 % | 0.3 % |

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

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

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

| Pollutant: | H_2S |
|------------|--------|
|------------|--------|

Applicable NSPS Subpart: __J__

Reporting period dates: From 7/1/15 to 9/30/15

Date submitted: 10/30/15

Company: Valero Refining - Meraux LLC

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

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

Monitor Manufacturer and Model No.: Ametek 4661

Date of Latest CMS Certification or Audit: CGA on 7/24/15

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 Charge Heater (EPN 14-72, EQT 0023); 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); DHT Charge Heater (EPN 5-73, EQT 0058); ROSE Heater (EPN 1-80, EQT 0014)

Total source operating time in reporting period: <u>EQT 0013-2,208 hours</u>; <u>EQT 0022-2,208 hours</u>; <u>EQT 0023-2,205 hours</u>; <u>EQT 0024-2,208 hours</u>; <u>EQT 0027-2,205 hours</u>; <u>EQT 0028-2,203</u>; <u>EQT 0029-2,183 hours</u>; <u>EQT 0058 – 2,208 hours</u>; <u>EQT 0014 - 2,208 hours</u>

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

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

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

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

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

Pollutant: H₂S

Applicable NSPS Subpart: __Ja__

Reporting period dates: From _7/1/15_to_9/30/15

Date submitted: 10/30/15

Company: Valero Refining - Meraux LLC

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

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

Monitor Manufacturer and Model No.: Ametek 4661

Date of Latest CMS Certification or Audit: CGA on 7/24/15

Process Unit(s) Description: Area 2 Fuel Drum for Benzene Recovery Unit Reboiler (EPN 1-09, EQT 0127)

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

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

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

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

(per 40 CFR 60.7(d))

Pollutant: H₂S

Applicable NSPS Subpart: __J__

Reporting period dates: From 7/1/15 to 9/30/15

Date submitted: 10/30/15

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: <u>CGA on 7/21/15</u>

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

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

| CMS Performance Summary ¹ | |
|--|---------|
| 1. CMS downtime in reporting period due to: | (hours) |
| a. Monitor equipment malfunctions | 0 |
| b. Non-Monitor equipment malfunctions | 0 |
| c. Quality assurance calibration | 1 |
| d. Other known causes | 3 |
| e. Unknown causes | 0 |
| 2. Total CMS Downtime | 4 |
| 3. Total duration of CMS Downtime x (100) [Total source operating time] ² | 0.2 % |

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

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

(per 40 CFR 60.7(d))

Applicable NSPS Subpart: __ J

Reporting period dates: From 7/1/15 to 9/30/15

Date submitted: 10/30/15

Company: Valero Refining - Meraux LLC

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

Emission Limitation: <u>Hydrogen Sulfide shall not exceed 162 ppm on a 3-hour rolling average.</u>

Monitor Manufacturer and Model No.: Ametek 4661

Date of Latest CMS Certification or Audit: CGA on 7/24/15

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

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

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

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

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

(per 40 CFR 60.7(d))

Pollutant: H₂S

Applicable NSPS Subpart: __J_

Reporting period dates: From _7/1/15_to_9/30/15

Date submitted: 10/30/15

Company: Valero Refining - Meraux LLC

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

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

Monitor Manufacturer and Model No.: Ametek 4661

Date of Latest CMS Certification or Audit: CGA on 7/23/15

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: <u>EQT 0030-2,208 hours; EQT 0048-1,950 hours</u>

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

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

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

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

(per 40 CFR 60.7(d))

Pollutant: NO_x

Applicable NSPS Subpart: ____Db__

Reporting period dates: From 7/1/15 to 9/30/15

Date submitted: 10/30/15

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 Limas 11 (NOx), Magnos 27 (O₂)

Date of Latest CMS Certification or Audit: CGA on 7/24/15 (NOx), 7/22/15 (O₂)

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

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

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

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

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

(per 40 CFR 60.7(d))

Pollutant: NO_x

Applicable NSPS Subpart: ___Db__

Reporting period dates: From _7/1/15_to_9/30/15_

Date submitted: 10/30/15

Company: Valero Refining - Meraux LLC

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

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

Monitor Manufacturer and Model No.: ABB Limas 11 (NOx), Magnos 27 (O₂)

Date of Latest CMS Certification or Audit: CGA on 7/24/15 (NOx), 7/22/15 (O₂)

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

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

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

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

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

(per 40 CFR 60.7(d))

Pollutant: NO_x

Applicable NSPS Subpart: __Db__

Reporting period dates: From 7/1/15 to 9/30/15

Date submitted: 10/30/15

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 (NOx)/(O₂)

Date of Latest CMS Certification or Audit: CGA on 9/30/15 (NOx), 7/22/15 (O₂)

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

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

| CMS Performance Summary ¹ | |
|--|---------|
| 1. CMS downtime in reporting period due to: | (hours) |
| a. Monitor equipment malfunctions | 0 |
| b. Non-Monitor equipment malfunctions | 0 |
| c. Quality assurance calibration | 1 |
| d. Other known causes | 2 |
| e. Unknown causes | 0 |
| 2. Total CMS Downtime | 3 |
| 3. Total duration of CMS Downtime x (100) [Total source operating time] ² | 0.3 % |

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

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

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

Pollutant: NO_x

Applicable NSPS Subpart: __Ja__

Reporting period dates: From 7/1/15 to 9/30/15

Date submitted: 10/30/15

Company: Valero Refining - Meraux LLC

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

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

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

Date of Latest CMS Certification or Audit: CGA on 8/6/15 (NOx), 8/5/15 (O₂)

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

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

| CMS Performance Summary ¹ | | | | |
|--|---------|--|--|--|
| 1. CMS downtime in reporting period due to: | (hours) | | | |
| a. Monitor equipment malfunctions | 0 | | | |
| b. Non-Monitor equipment malfunctions | . 0 | | | |
| c. Quality assurance calibration | 39 | | | |
| d. Other known causes | 1 | | | |
| e. Unknown causes | 0 | | | |
| 2. Total CMS Downtime | 40 | | | |
| 3. Total duration of CMS Downtime x (100) [Total source operating time] ² | 1.9 % | | | |

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

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

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

Pollutant: NO_x

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

Reporting period dates: From 7/1/15 to 9/30/15

Date submitted: 10/30/15

Company: Valero Refining - Meraux LLC

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

Emission Limitation: None

Monitor Manufacturer and Model No.: ABB Limas 11 (NOx), Magnos 27 (O₂)

Date of Latest CMS Certification or Audit: CGA on 9/30/15 (NOx), 9/30/15 (O₂)

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

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

| CMS Performance Summary ¹ | |
|--|---------|
| 1. CMS downtime in reporting period due to: | (hours) |
| a. Monitor equipment malfunctions | 0 |
| b. Non-Monitor equipment malfunctions | 0 |
| c. Quality assurance calibration | 2 |
| d. Other known causes | 82 |
| e. Unknown causes | 0 |
| 2. Total CMS Downtime | 84 |
| 3. Total duration of CMS Downtime x (100) [Total source operating time] ² | 3.8% |

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

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

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

Pollutant: Total Sulfur

Applicable NSPS Subpart: __Ja¹_ (Required by Consent Decree: 3:10-cv-00563-bbc, Paragraph 49.a.ii)

Reporting period dates: From 7/1/15 to 9/30/15

Date submitted: 10/30/15

Company: Valero Refining - Meraux LLC

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

Emission Limitation: None

Monitor Manufacturer and Model No.: Thermo Scientific SOLA II

Date of Latest CMS Certification or Audit: CGA on 8/4/15

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

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

| Emissions Data Summary ² , | |
|--|---------|
| 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] ³ | 0.0 % |

| CMS Performance Summary ² | | | | | |
|--|---------|--|--|--|--|
| 1. CMS downtime in reporting period due to: | (hours) | | | | |
| a. Monitor equipment malfunctions | 0 | | | | |
| b. Non-Monitor equipment malfunctions | 0 | | | | |
| c. Quality assurance calibration | 24 | | | | |
| d. Other known causes | 37 | | | | |
| e. Unknown causes | 0 | | | | |
| 2. Total CMS Downtime | 61 | | | | |
| 3. Total duration of CMS Downtime x (100) [Total source operating time] ³ | 2.8% | | | | |

¹ According to 40 CFR 60.107a(e), existing monitoring systems capable of complying with Subpart Ja must comply with the monitoring requirements of Subpart Ja.

² For opacity, record all times in minutes. For gases, record all times in hours.

³ 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.

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

Pollutant: Total Sulfur

Applicable NSPS Subpart: __Ja¹ (Required by Consent Decree: 3:10-cv-00563-bbc, Paragraph 49.a.ii)

Reporting period dates: From 7/1/15 to 9/30/15

Date submitted: 10/30/15

Company: Valero Refining - Meraux LLC

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

Emission Limitation: None

Monitor Manufacturer and Model No.: Thermo Scientific SOLA II

Date of Latest CMS Certification or Audit: CGA on 8/4/15

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

| Emissions Data Summary ² | l. | |
|--|----|--------|
| 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] ³ | | 0.0 % |

| CMS Performance Summary ² | |
|--|---------|
| 1. CMS downtime in reporting period due to: | (hours) |
| a. Monitor equipment malfunctions | 0 |
| b. Non-Monitor equipment malfunctions | 0 |
| c. Quality assurance calibration | 4 |
| d. Other known causes | 37 |
| e. Unknown causes | 0 |
| 2. Total CMS Downtime | 41 |
| 3. Total duration of CMS Downtime x (100) [Total source operating time] ³ | 1.9 % |

¹ According to 40 CFR 60.107a(e), existing monitoring systems capable of complying with Subpart Ja must comply with the monitoring requirements of Subpart Ja.

² For opacity, record all times in minutes. For gases, record all times in hours.

³ 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.

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

Pollutant: Total Sulfur

Applicable NSPS Subpart: <u>Ja¹</u> (Required by Consent Decree: 3:10-cv-00563-bbc, Paragraph 49.a.ii)

Reporting period dates: From 7/1/15 to 9/30/15

Date submitted: 10/30/15

Company: Valero Refining - Meraux LLC

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

Emission Limitation: None_

Monitor Manufacturer and Model No.: Thermo Scientific SOLA II

Date of Latest CMS Certification or Audit: CGA on 8/4/15

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

| Emissions Data Summary ² | |
|--|---------|
| 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] ³ | 0.0 % |

| CMS Performance Summary ² | | | | |
|--|---------|--|--|--|
| 1. CMS downtime in reporting period due to: | (hours) | | | |
| a. Monitor equipment malfunctions | 0 | | | |
| b. Non-Monitor equipment malfunctions | 0 | | | |
| c. Quality assurance calibration | 7 | | | |
| d. Other known causes | 37 | | | |
| e. Unknown causes | 0 | | | |
| 2. Total CMS Downtime | 22 | | | |
| 3. Total duration of CMS Downtime x (100) [Total source operating time] ³ | 2.0 % | | | |

¹ According to 40 CFR 60.107a(e), existing monitoring systems capable of complying with Subpart Ja must comply with the monitoring requirements of Subpart Ja.

² For opacity, record all times in minutes. For gases, record all times in hours.

³ 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.

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

Pollutant: SO₂

Applicable NSPS Subpart: __Ja__

Reporting period dates: From 7/1/15 to 9/30/15

Date submitted: 10/30/15

Company: Valero Refining - Meraux LLC

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

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

Monitor Manufacturer and Model No.: <u>Brimstone SGX-231(SO₂)/Rosemount Oxymitter 4000(O₂)</u>

Date of Latest CMS Certification or Audit: CGA on 9/21/15 (SO₂), 9/22/15 (O₂)

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

| X 0115 | | | | | EXCESS EMISSIONS | |
|---------------|-------|-----|---------------------|-------------------------|------------------|----------------------|
| Date | Start | End | Duration (hours) | Max 12- HRA (ppm) | Cause | Corrective Action |
| None | | | | | | · |
| TOTAL | | | 0 | | | |

| | | | 100 | CMS PERFORMANCE ¹ | |
|---------|-------|-------|---------------------|-------------------------------------|----------------------|
| Date | Start | End | Duration (hours) | Cause | Corrective Action |
| 9/16/15 | 13:15 | 14:15 | 1 | Adjusted for calibration drift. | N/A |
| 9/21/15 | 13:30 | 14:30 | 1 . | SO ₂ Cylinder Gas Audit. | N/A |
| 9/22/15 | 07:39 | 08:39 | 1 | O ₂ Cylinder Gas Audit. | N/A |
| TOTAL | | | 3 | | |

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

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

Pollutant: SO₂

Applicable NSPS Subpart: __Ja_

Reporting period dates: From 7/1/15 to 9/30/15

Date submitted: 10/30/15

Company: Valero Refining - Meraux LLC

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

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

Monitor Manufacturer and Model No.: <u>Brimstone 991-CEM-X(SO₂)/ Rosemount Oxymitter 4000(O₂)</u>

Date of Latest CMS Certification or Audit: CGA on 9/21/15 (SO₂), 9/22/15 (O₂)

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

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

| | | | | CMS PERFORMANCE ¹ | |
|---------|-------|-------|------------------|-------------------------------------|----------------------|
| Date | Start | End | Duration (hours) | Cause | Corrective Action |
| 9/21/15 | 12:53 | 13:53 | 1 | SO ₂ Cylinder Gas Audit. | N/A |
| 9/22/15 | 09:17 | 10:17 | 1 | O ₂ Cylinder Gas Audit. | N/A |
| TOTAL | | | 2 | | |

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

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

Pollutant: H₂S

Applicable NSPS Subpart: __Ja__

Reporting period dates: From 7/1/15 to 9/30/15

Date submitted: 10/30/15

Company: Valero Refining - Meraux LLC

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

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

average

Monitor Manufacturer and Model No.: Ametek 4661

Date of Latest CMS Certification or Audit: CGA on 7/22/15

Process Unit(s) Description: Area 2 Fuel Drum for Benzene Recovery Unit Reboiler (EPN 1-09, EQT 0127)

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

| | | | | Ja CMS PERFORMANCE ¹ | |
|---------|-------|-------|------------------|---------------------------------|----------------------|
| Date | Start | End | Duration (hours) | Cause | Corrective Action |
| 7/13/15 | 08:22 | 09:22 | 1 | Adjusted for calibration drift. | N/A |
| 7/24/15 | 13:00 | 14:00 | 1 | Cylinder Gas Audit. | N/A |
| TOTAL | | | 0 | | |

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.

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

Pollutant: NO_x

Applicable NSPS Subpart: __Ja

Reporting period dates: From 7/1/15 to 9/30/15

Date submitted: 10/30/15

Company: Valero Refining - Meraux LLC

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

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

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

Date of Latest CMS Certification or Audit: CGA on 7/24/15

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

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

| | | | | Ja CMS PERFORMANCE ¹ | |
|---------|-------|-------|------------------|---|--|
| Date | Start | End | Duration (hours) | Cause | Corrective Action |
| 8/5/15 | 12:26 | 13:26 | 1 | O ₂ Cylinder Gas Audit. | N/A |
| 8/6/15 | 12:57 | 13:57 | 1 | NOx Cylinder Gas Audit. | N/A |
| 8/14/15 | 13:00 | 14:00 | 1 | Adjusted for calibration drift. | N/A |
| 8/15/15 | 06:45 | | 2.5 | Out of Control. O ₂ Calibration drift > 4 | See Data Assessment Report for Benzene |
| 8/16/15 | | 17:45 | 35 | times the allowable limit on 8/16/15. | recovery Unit Reboiler. (Page 37) |
| 8/17/15 | 06:08 | 07:12 | 1 | Calibration gas switching system malfunctioned during daily automatic calibration check sequence and did not correctly check the O ₂ CEMS. Based on the trends, it appears that the hourly air purge was not correctly stopped prior to the automatic daily calibration check. | Valero inspected and exercised the system but could not replicate the condition. |
| 8/17/15 | 08:19 | 09:19 | 1 | Manual calibration check. | N/A |
| TOTAL | | | 40 | | |

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

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

Pollutant: Total Sulfur

Applicable NSPS Subpart: <u>Ja¹</u> (Required by Consent Decree: 3:10-cv-00563-bbc, Paragraph 49.a.ii)

Reporting period dates: From 7/1/15 to 9/30/15

Date submitted: 10/30/15

Company: Valero Refining - Meraux LLC

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

Emission Limitation: None

Monitor Manufacturer and Model No.: Thermo Scientific SOLA II

Date of Latest CMS Certification or Audit: CGA on 8/4/15

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

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

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

Pollutant: Total Sulfur

Applicable NSPS Subpart: __Ja¹ (Required by Consent Decree: 3:10-cv-00563-bbc, Paragraph 49.a.ii)

Reporting period dates: From 7/1/15 to 9/30/15

Date submitted: 10/30/15

Company: Valero Refining - Meraux LLC

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

Emission Limitation: None

Monitor Manufacturer and Model No.: Thermo Scientific SOLA II

Date of Latest CMS Certification or Audit: CGA on 8/4/15

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

| | | | | Ja CMS PERFORMANCE ² | | |
|---------|-------|-------|------------------|---|--|--|
| Date | Start | End | Duration (hours) | Cause | Corrective Action | |
| 7/19/15 | 14:50 | | 17 | Data not retained due to a tripped breaker in the flare CEMS electrical | Valero restored power by replacing the | |
| 7/20/15 | | 07:50 | 17 | building. | breaker. | |
| 8/3/15 | 19:18 | 20:18 | 1 | Adjusted for calibration drift. | N/A | |
| 8/4/15 | 10:02 | 12:02 | 2 | Cylinder Gas Audit. | N/A | |
| 8/4/15 | 13:26 | 14:26 | 1 | Cyllider Gas Audit. | N/A | |
| 8/28/15 | 16:49 | 22:49 | 6 | Periodic fault on the data path from the | Valero restored the data path to operation, | |
| 8/29/15 | 16:20 | 19:20 | 3 | CEMS to the Refinery DCS. CEMS remained online, but no data during | but was unable to determine the cause of the fault. | |
| 8/29/15 | 19:30 | 20:30 | 1 | these periods was recorded. | | |
| 9/3/15 | 09:26 | 19:26 | 10 | Local PLC locked up and did not pass data to the DCS. | Valero rebooted the PLC and returned it to operation. Valero replaced a loose ethernet cable that was the likely cause of the recent data interruptions. | |
| 9/6/15 | 13:12 | | 10 | Valero took the CEMS offline to adjust | The CEMS returned to sample after | |
| 9/7/15 | | 07:15 | 18 | for calibration drift, but did not correctly return it to sample mode. | completion of the automatic daily calibration sequence the next day. | |
| 9/7/15 | 09:30 | 10:30 | 1 | Adjusted for calibration drift. | N/A | |
| 9/21/15 | 08:03 | 09:02 | 1 | Adjusted for calibration drift. | N/A | |
| TOTAL | | | 61 | | | |

According to 40 CFR 60.107a(e), existing monitoring systems capable of complying with Subpart Ja must comply with the monitoring requirements of Subpart Ja.

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

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

Pollutant: Total Sulfur

Applicable NSPS Subpart: <u>Ja¹</u> (Required by Consent Decree: 3:10-cv-00563-bbc, Paragraph 49.a.ii)

Reporting period dates: From 7/1/15 to 9/30/15

Date submitted: <u>10/30/15</u>

Company: Valero Refining - Meraux LLC

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

Emission Limitation: None

Monitor Manufacturer and Model No.: Thermo Scientific SOLA II

Date of Latest CMS Certification or Audit: CGA on 8/4/15

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

| 1,64 | | | | J | a EXCESS EMISSIONS | |
|-------|-------|-----|---------------------|-------------------------|--------------------|----------------------|
| Date | Start | End | Duration (hours) | Max 12- HRA (ppm) | Cause | Corrective Action |
| None | | | | | | |
| TOTAL | | | 0 | | | |

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

Pollutant: Total Sulfur

Applicable NSPS Subpart: __Ja¹_(Required by Consent Decree: 3:10-cv-00563-bbc, Paragraph 49.a.ii)

Reporting period dates: From 7/1/15 to 9/30/15

Date submitted: 10/30/15

Company: Valero Refining - Meraux LLC

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

Emission Limitation: None

Monitor Manufacturer and Model No.: Thermo Scientific SOLA II

Date of Latest CMS Certification or Audit: CGA on 8/4/15

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

| 10.61 | | | | | | |
|---------|-------|-------|------------------|---|--|--|
| Date | Start | End | Duration (hours) | Cause | Corrective Action | |
| 7/19/15 | 14:50 | | 17 | Data not retained due to a tripped breaker in the flare CEMS electrical | Valero restored power by replacing the | |
| 7/20/15 | | 07:50 | 17 | building. | breaker. | |
| 8/3/15 | 19:18 | 20:18 | 1 | Adjusted for calibration drift. | N/A | |
| 8/4/15 | 10:02 | 12:02 | 2 | Culindan Coo Audit | DT/A | |
| 8/4/15 | 13:26 | 14:26 | 1 | Cylinder Gas Audit. | N/A | |
| 8/28/15 | 16:49 | 22:49 | 6 | Periodic fault on the data path from the | Valero restored the data path to operation, | |
| 8/29/15 | 16:20 | 19:20 | 3 | CEMS to the Refinery DCS. CEMS remained online, but no data during | but was unable to determine the cause of | |
| 8/29/15 | 19:30 | 20:30 | 1 | these periods was recorded. | the fault. | |
| 9/3/15 | 09:26 | 19:26 | 10 | Local PLC locked up and did not pass data to the DCS. | Valero rebooted the PLC and returned it to operation. Valero replaced a loose ethernet cable that was the likely cause of the recent data interruptions. | |
| TOTAL | | | 41 | | | |

¹ According to 40 CFR 60.107a(e), existing monitoring systems capable of complying with Subpart Ja must comply with the monitoring requirements of Subpart Ja.

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

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

Pollutant: Total Sulfur

Applicable NSPS Subpart: <u>Ja¹</u> (Required by Consent Decree: 3:10-cv-00563-bbc, Paragraph 49.a.ii)

Reporting period dates: From 7/1/15 to 9/30/15

Date submitted: <u>10/30/15</u>

Company: Valero Refining - Meraux LLC

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

Emission Limitation: None

Monitor Manufacturer and Model No.: Thermo Scientific SOLA II

Date of Latest CMS Certification or Audit: CGA on 8/4/15

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

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

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

Pollutant: Total Sulfur

Applicable NSPS Subpart: __Ja¹ (Required by Consent Decree: 3:10-cv-00563-bbc, Paragraph 49.a.ii)

Reporting period dates: From 7/1/15 to 9/30/15

Date submitted: 10/30/15

Company: Valero Refining - Meraux LLC

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

Emission Limitation: None

Monitor Manufacturer and Model No.: Thermo Scientific SOLA II

Date of Latest CMS Certification or Audit: CGA on 8/4/15

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

| | 46.7 | | | | |
|---------|-------|-------|------------------|---|--|
| Date | Start | End | Duration (hours) | Cause | Corrective Action |
| 7/19/15 | 14:50 | | 17 | Data not retained due to a tripped breaker in the flare CEMS electrical | Valero restored power by replacing the |
| 7/20/15 | | 07:50 | 17 | building. | breaker. |
| 8/2/15 | 10:36 | 12:36 | 2 | Adjusted for calibration drift. | N/A |
| 8/3/15 | 19:18 | 20:18 | 1 | Adjusted for calibration drift. | N/A |
| 8/4/15 | 10:02 | 12:02 | 2 | Calindan Cas Audit | N/A |
| 8/4/15 | 13:26 | 14:26 | 1 | Cylinder Gas Audit. | |
| 8/28/15 | 16:49 | 22:49 | 6 | Periodic fault on the data path from the | Valero restored the data path to operation, |
| 8/29/15 | 16:20 | 19:20 | 3 | CEMS to the Refinery DCS. CEMS remained online, but no data during | but was unable to determine the cause of |
| 8/29/15 | 19:30 | 20:30 | 1 | these periods was recorded. | the fault. |
| 9/3/15 | 09:26 | 19:26 | 10 | Local PLC locked up and did not pass data to the DCS. | Valero rebooted the PLC and returned it to operation. Valero replaced a loose ethernet cable that was the likely cause of the recent data interruptions. |
| 9/20/15 | 17:58 | 18:57 | 1 | Adjusted for calibration drift. | N/A |
| TOTAL | | | 44 | | |

According to 40 CFR 60.107a(e), existing monitoring systems capable of complying with Subpart Ja must comply with the monitoring requirements of Subpart Ja.

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

<u>DATA ASSESSMENT REPORT</u> (per 40 CFR 60, Appendix F, Section 7)

Pollutant: SO₂

Applicable NSPS Subpart: __Ja_

Reporting period dates: From _7/1/15_to_9/30/15_

Date submitted: 10/30/15

Company: Valero Refining - Meraux LLC

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

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

Monitor Manufacturer and Model No.: Brimstone SGX-231(SO₂)/Rosemount Oxymitter 4000(O₂)

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

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

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

I. ACCURACY ASSESSMENT RESULTS (CGA):

| | SO ₂ #1 | SO ₂ #2 | O ₂ #1 | O ₂ #2 |
|-------------------------|--------------------|--------------------|-------------------|-------------------|
| | (low scale) | (high scale) | (low scale) | (high scale) |
| Date of Audit | 9/21/15 | 9/21/15 | 9/22/15 | 9/22/15 |
| Audit Gas Cylinder No. | LL41929 | LL170749 | LL53418 | LL167062 |
| Date of Audit Gas Cert. | 11/11/14 | 2/10/14 | 1/28/14 | 1/28/14 |
| Type of Certification | EPA Protocol 1 | EPA Protocol 1 | EPA Protocol 1 | EPA Protocol 1 |
| Certified Audit Value | 125.7 ppmv | 275.8 ppmv | 6.00 vol % | 10.00 vol % |
| CEM Response Value | 119.0 ppmv | 262.0 ppmv | 6.33 vol % | 10.20 vol % |
| Accuracy | 5.3% | 5.0% | 5.5% | 2.0% |
| Standard | <15% | <15% | <15% | <15% |

II. CALIBRATION DRIFT ASSESSMENT

| ٨ | 0.4 | of. | Contro | 1 Da | |
|----|------|-------|--------|-------------------------|--------|
| Α. | Син- | ·OT ! | Contro | $^{ m NI}$ P ϵ | rioas: |

B.

| 1. Dates: | N/A |
|---------------------|------|
| 2. Number of Days _ | N/A_ |
| Corrective Actions: | N/A |

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

| Pollutant: SO ₂ | | | | | |
|---|--|--|--|--|--|
| Applicable NSPS Subpart:Ja_ | ž. | | | | |
| Reporting period dates: From 7/1/15 to 9 | /30/15 | | | | |
| Date submitted: 10/30/15 | | | | | |
| Company: Valero Refining - Meraux LLC | _ | | | | |
| Address: 2500 East St. Bernard Highway, | Meraux, LA 70075 | | | | |
| Emission Limitation: SO ₂ corrected to 0% | O ₂ shall not exceed | 250 ppm on a 12-h | our rolling average. | <u>.</u> | |
| Monitor Manufacturer and Model No.: _B | rimstone 991-CEM- | X (SO ₂), Rosemour | nt Oxymitter 4000 (| <u>(O2)</u> | |
| Source unit: #3 SRU Incinerator (EPN 5- | 00, EQT 0079) | | | | |
| CEM Sampling Location: #3 SRU Incine | rator (#5-00) | | | | |
| CEM Span Value: Sulfur Dioxide 500 pp | m; Oxygen 25% | | | | |
| I. ACCURACY ASSESSMENT RESUL | TS (CGA): | | | | |
| Date of Audit Audit Gas Cylinder No. Date of Audit Gas Cert. Type of Certification Certified Audit Value CEM Response Value Accuracy Standard | SO ₂ #1 (low scale) 9/21/15 LL41929 11/11/14 EPA Protocol 1 125.7 ppmv 136.3 ppmv 8.4% <15% | SO ₂ #2 (high scale) 9/21/15 LL170749 2/10/14 EPA Protocol 1 275.8 ppmv 280.3 ppmv 1.6% <15% | O ₂ #1 (low scale) 9/22/15 LL53418 1/28/14 EPA Protocol 1 6.00 vol % 6.27 vol % 4.5% <15% | O ₂ #2 (high scale) 9/22/15 LL167062 1/28/14 EPA Protocol 1 10.00 vol % 10.57 vol % 5.7% <15% | |
| II. CALIBRATION DRIFT ASSESSMEN | ΙΤ | | | | |
| A. Out-of Control Periods: | | | | | |
| 1. Dates: <u>N/A</u> | | | | | |
| 2. Number of Days N/A | | | | | |
| B. Corrective Actions: N/A | | | | | |

DATA ASSESSMENT REPORT (per 40 CFR 60, Appendix F, Section 7)

| Pollutant: H ₂ S | | | | |
|--------------------------------------|---|--|---|--|
| Applicable NSPS Subpart:J_ | | . 4 | | |
| Reporting period dates: From _7/ | <u>/1/15_to_9/30/15_</u> | | | |
| Date submitted: <u>10/30/15</u> | | | | |
| Company: Valero Refining - Me | raux LLC | | | |
| Address: 2500 East St. Bernard | Highway, Meraux, LA 70075 | | | |
| Emission Limitation: <u>Hydrogen</u> | Sulfide shall not exceed 162 pp | om on a 3-hour roll | ing average. | |
| Monitor Manufacturer and Mode | l No.: <u>Ametek 4661</u> | | | |
| Source Unit: Area 1 Fuel Drum | for Boiler TB-01 (EPN 1-06, EC | QT 0010) | | |
| CEM Sampling Location: Area | 1 Fuel Drum | | | |
| CEM Span Value: Hydrogen Su | lfide, 300 ppm | | | |
| I. ACCURACY ASSESSMEN | VT RESULTS (CGA): | | | |
| | Date of Audit Audit Gas Cylinder No. Date of Audit Gas Cert. Type of Certification Certified Audit Value (ppmv) CEM Response Value (ppmv) Accuracy Standard | H ₂ S #1 (low scale) 7/22/15 LL37408 3/5/15 EPA Protocol 1 75.7 77.7 2.6% <15% | H ₂ S #2 (high scale) 7/22/15 LL167094 2/10/14 EPA Protocol 1 166.6 167.7 0.7% <15% | |
| II. CALIBRATION DRIFT ASS | SESSMENT | | | |
| A. Out-of Control Period | ods: | | | |
| 1. Dates: | N/A | | | |
| 2. Number of Day | s <u>N/A</u> | | | |
| B. Corrective Actions: | N/A | | | |
| | | | | |

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

| Pollutant: H | $_{2}S$ | | | | |
|--|--|--|--|--|--|
| Applicable N | Applicable NSPS Subpart: J and Ja (Benzene Recovery Unit Reboiler Subject to Ja) | | | | |
| Reporting per | riod dates: From _7 | 7/1/15 to 9/30/15 | | | |
| Date submitte | ed: 10/30/15 | | | | |
| Company: V | alero Refining - M | eraux LLC | | | |
| Address: 250 | 00 East St. Bernard | Highway, Meraux, LA 70075 | | | |
| Emission Lin | nitation: <u>Hydrog</u> | en Sulfide shall not exceed 162 | ppm on a 3-hour i | olling average(J and | Ja) and 60 ppm on a 365 day |
| rolling averag | ge (Ja only) | | | | |
| Monitor Man | ufacturer and Mode | el No.: Ametek 4661 | | | |
| (EPN 12-72A (EPN 17-72 : NHT Debut F | , EQT 022); ROS a,b,c , EQT 0028); Reboiler (EPA 15-7 | n for: MDH Product and Fraction E Heater (EPN 1-80, EQT 0014); Platformer Debut Reboiler (EPN 2, EQT 0024); NHT Depent Reb e Recovery Unit Reboiler (EPN 1 | Vacuum Heater (N 19-72, EQT 0029 oiler (EPA 16-72, | EPN 1-76, EQT 0013 D); NHT Charge Heate |); Platformer Charge Heater or (EPN 14-72, EQT 0023); |
| CEM Samplin | ng Location: Are | a 2 Fuel Drum | | | |
| CEM Span V | alue: <u>Hydrogen S</u> | ulfide, 300 ppm | | | |
| I. ACCURA | ACY ASSESSMEN | NT RESULTS (CGA): | | | |
| | · · · · · · · · · · · · · · · · · · · | Date of Audit Audit Gas Cylinder No. Date of Audit Gas Cert. Type of Certification Certified Audit Value (ppmv) CEM Response Value (ppmv) Accuracy Standard | H ₂ S #1 (low scale) 7/24/15 LL37408 3/5/15 EPA Protocol 1 75.7 72.0 4.9% <15% | H ₂ S #2 (high scale) 7/24/15 LL167094 2/10/14 EPA Protocol 1 166.6 161.8 2.9% <15% | |
| II. CALIBR | ATION DRIFT AS | SSESSMENT | | | |
| Α. (| Out-of Control Per | iods: | | | |
| | 1. Dates: | N/A | | | |
| 2 | 2. Number of Day | ys <u>N/A</u> | | | |
| В. (| Corrective Actions: | N/A | | | |
| - | | | | | |

DATA ASSESSMENT REPORT (per 40 CFR 60, Appendix F, Section 7)

| Pollutant: H ₂ S | | | | |
|-----------------------------------|---|--|---|---|
| Applicable NSPS Subpart: | <u>J</u> | | | |
| Reporting period dates: From | 7/1/15 to 9/30/15 | | | |
| Date submitted: 10/30/15 | | | • | |
| Company: Valero Refining - 1 | Meraux LLC | | ÷ | |
| Address: 2500 East St. Berna | ard Highway, Meraux, LA 70075 | - | | |
| Emission Limitation: <u>Hydro</u> | gen Sulfide shall not exceed 162 pp | om on a 3-hour rol | ling average. | |
| Monitor Manufacturer and Mo | del No.: Ametek 4661 | | | |
| Process Unit(s) Description: | Area 4 Fuel Drum for Merox Disul | fide Separator to F | Platformer Charge Heater | - |
| CEM Sampling Location: Are | a 4 Fuel Drum | | | |
| CEM Span Value: <u>Hydrogen</u> | Sulfide, 300 ppm | | | |
| I. ACCURACY ASSESSMI | ENT RESULTS (CGA): | | | |
| | Date of Audit Audit Gas Cylinder No. Date of Audit Gas Cert. Type of Certification Certified Audit Value (ppmv) CEM Response Value (ppmv) Accuracy Standard | H ₂ S #1 (low scale) 7/21/15 LL167084 3/5/15 EPA Protocol 1 77.2 75.7 1.9% <15% | H ₂ S #2 (high scale) 7/21/15 LL167094 2/10/14 EPA Protocol 1 166.6 168.0 0.8% <15% | |
| II. CALIBRATION DRIFT A | ASSESSMENT | | | |
| A. Out-of Control Pe | eriods: | | | |
| 1. Dates: | N/A | | ŧ | |
| 2. Number of D | Pays N/A | , | | |
| B. Corrective Action | ns:N/A | | | |
| | | | | |

DATA ASSESSMENT REPORT (per 40 CFR 60, Appendix F, Section 7)

| Pollutant: H ₂ S | | | |
|-------------------------------------|---|---|--|
| Applicable NSPS Subpart:J | _ | | |
| Reporting period dates: From | 7/1/15 to 9/30/15 | | |
| Date submitted: 10/30/15 | | | |
| Company: Valero Refining - M | eraux LLC | · | |
| Address: 2500 East St. Bernard | d Highway, Meraux, LA 70075 | | |
| Emission Limitation: <u>Hydroge</u> | n Sulfide shall not exceed 162 pp | om on a 3-hour rol | ling average. |
| Monitor Manufacturer and Mod | el No.: Ametek 4661 | | |
| Process Unit(s) Description: A | rea 6 Fuel Drum for Hydrocracke | er & Hydrotreater | Charge Heaters (EPN 1-00, EQT 0009) |
| CEM Sampling Location: Area | | • | |
| CEM Span Value: <u>Hydrogen S</u> | ulfide, 300 ppm | | |
| | · · · · · · · · · · · · · · · · · · · | | |
| I. ACCURACY ASSESSMEN | NT RESULTS (CGA): | | |
| | Date of Audit Audit Gas Cylinder No. Date of Audit Gas Cert. Type of Certification Certified Audit Value (ppmv) CEM Response Value (ppmv) Accuracy Standard | H ₂ S #1 (low scale) 7/24/15 LL37408 3/5/15 EPA Protocol 1 75.7 71.3 5.9% <15% | H ₂ S #2 (high scale) 7/24/15 LL167094 2/10/14 EPA Protocol 1 166.6 159.3 4.4% <15% |
| II. CALIBRATION DRIFT AS | SSESSMENT | | |
| A. Out-of Control Per | iods: | | |
| 1. Dates: | N/A | | |
| 2. Number of Da | ys <u>N/A</u> | | |
| B. Corrective Actions | :N/A | | · |

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

| Pollutant: H ₂ S | | | |
|-------------------------------------|---|---|--|
| Applicable NSPS Subpart:J | · - | | |
| Reporting period dates: From _ | 7/1/15 to 9/30/15 | | |
| Date submitted: 10/30/15 | | | |
| Company: Valero Refining - M | eraux LLC | | |
| Address: 2500 East St. Bernard | Highway, Meraux, LA 70075 | | |
| Emission Limitation: <u>Hydroge</u> | en Sulfide shall not exceed 162 pp | pm on a 3-hour rol | ling average. |
| Monitor Manufacturer and Mod | el No.: Ametek 4661 | | |
| Process Unit(s) Description: A | rea 6 Fuel Drum for Boilers B-5 | (EPN 2-00, EQT 0 | 030) and B-6 (EPN 3-00, EQT 0048) |
| CEM Sampling Location: Area | 6 Fuel Drum | | |
| CEM Span Value: Hydrogen S | ulfide, 300 ppm | | |
| | | | |
| I. ACCURACY ASSESSME | NT RESULTS (CGA): | | |
| | Date of Audit Audit Gas Cylinder No. Date of Audit Gas Cert. Type of Certification Certified Audit Value (ppmv) CEM Response Value (ppmv) Accuracy Standard | H ₂ S #1 (low scale) 7/23/15 LL37408 3/5/15 EPA Protocol 1 75.7 70.4 7.1% <15% | H ₂ S #2 (high scale) 7/23/15 LL167094 2/10/14 EPA Protocol 1 166.6 162.5 2.5% <15% |
| II. CALIBRATION DRIFT AS | SSESSMENT | | |
| A. Out-of Control Per | iods: | • | |
| 1. Dates: | N/A | | |
| 2. Number of Da | ys <u>N/A</u> | | |
| B. Corrective Actions | : N/A | | |

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

| Pollutant: | NO_x |
|------------|--------|
|------------|--------|

Applicable NSPS Subpart: __Db__

Reporting period dates: From _7/1/15_to_9/30/15_

Date submitted: 10/30/15

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 Limas11(NOx), Magnos27 (O₂)

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

CEM Sampling Location: Boiler B-5

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

I. ACCURACY ASSESSMENT RESULTS (CGA):

| | NOx #1 | NOx #2 | O ₂ #1 | O ₂ #2 |
|-------------------------|----------------|----------------|-------------------|-------------------|
| | (low scale) | (high scale) | (low scale) | (high scale) |
| Date of Audit | 7/24/15 | 7/24/15 | 7/22/15 | 7/22/15 |
| Audit Gas Cylinder No. | LL165998 | LL167083 | LL42566 | LL42613 |
| Date of Audit Gas Cert. | 2/4/15 | 2/14/14 | 1/28/13 | 1/30/13 |
| Type of Certification | EPA Protocol 1 | EPA Protocol 1 | EPA Protocol 1 | EPA Protocol 1 |
| Certified Audit Value | 24.7 ppmv | 55.1 ppmv | 5.95 vol % | 10.04 vol % |
| CEM Response Value | 26.0 ppmv | 55.5 ppmv | 6.00 vol % | 10.00 vol % |
| Accuracy | 5.3% | 0.7% | 0.8% | 0.4% |
| Standard | <15% | <15% | <15% | <15% |

II. CALIBRATION DRIFT ASSESSMENT

A. Out-of Control Periods:

| 1. | Dates: | <u>N/A</u> | | |
|----|----------------|------------|--|--|
| 2. | Number of Days | N/A | | |

B. Corrective Actions: N/A

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

Applicable NSPS Subpart: ___Db__

Reporting period dates: From 7/1/15 to 9/30/15

Date submitted: 10/30/15

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 Limas 11 (NOx), Magnos 27 (O₂)

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

CEM Sampling Location: Boiler B-6

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

I. ACCURACY ASSESSMENT RESULTS (CGA):

| | NOx #1 | NOx #2 | O ₂ #1 | O ₂ #2 |
|-------------------------|----------------|----------------|-------------------|-------------------|
| | (low scale) | (high scale) | (low scale) | (high scale) |
| Date of Audit | 7/24/15 | 7/24/15 | 7/22/15 | 7/22/15 |
| Audit Gas Cylinder No. | LL165998 | LL167083 | LL42566 | LL42613 |
| Date of Audit Gas Cert. | 2/4/15 | 2/14/14 | 1/28/13 | 1/30/13 |
| Type of Certification | EPA Protocol 1 | EPA Protocol 1 | EPA Protocol 1 | EPA Protocol 1 |
| Certified Audit Value | 24.7 ppmv | 55.1 ppmv | 5.95 vol % | 10.04 vol % |
| CEM Response Value | 26.0 ppmv | 55.2 ppmv | 5.90 vol % | 9.97 vol % |
| Accuracy | 5.3% | 0.2% | 0.8% | 0.7% |
| Standard | <15% | <15% | <15% | <15% |

II. CALIBRATION DRIFT ASSESSMENT

| A. | Out-of | Control | Periods: |
|----|--------|---------|----------|
| | | | |

| 1. | Dates: | N/A |
|----|--------|-----|
| | | |

2. Number of Days N/A

B. Corrective Actions: N/A

DATA ASSESSMENT REPORT (per 40 CFR 60, Appendix F, Section 7)

| Pollutant: NO _x | | | | |
|--|---------------------|-------------------|-----------------------|--|
| Applicable NSPS Subpart:Db | | | | |
| Reporting period dates: From 7/1/15 to 9/3 | 0/15 | | | |
| Date submitted: 10/30/15 | 4 | | | |
| Company: Valero Refining - Meraux LLC | | | | |
| Address: 2500 East St. Bernard Highway, M. | eraux, LA 70075 | | 7 | |
| Emission Limitation: <u>Nitrogen Oxide shall</u> | not exceed 0.1 pour | nd/MMBtu on a 30- | day rolling average | ' <u>. </u> |
| Monitor Manufacturer and Model No.: Ther. | mo Environmental | Model 42i (NOx)/(| <u>O₂)</u> | |
| Process Unit(s) Description: Boiler TB-01 (I | EPN 1-06, EQT 001 | 10) | | |
| CEM Sampling Location: Boiler TB-01 | | | | |
| CEM Span Value: Nitrogen Oxide 500 ppm, | Oxygen 25 % | | | |
| | | | | |
| I. ACCURACY ASSESSMENT RESULTS | S (CGA): | | | |
| | NOx #1 | NOx #2 | O ₂ #1 | O ₂ #2 |
| | (low scale) | (high scale) | (low scale) | (high scale) |
| Date of Audit | 9/30/15 | 9/30/15 | 7/22/15 | 7/22/15 |
| Audit Gas Cylinder No. | LL170763 | LL35027 | LL42566 | LL42613 |
| Date of Audit Gas Cert. | 2/7/14 | 2/11/14 | 1/28/13 | 1/30/13 |
| Type of Certification | EPA Protocol 1 | EPA Protocol 1 | EPA Protocol 1 | EPA Protocol 1 |
| Certified Audit Value | 139.4 ppmv | 277.0 ppmv | 5.95 vol % | 10.04 vol % |
| CEM Response Value | 134.0 ppmv | 279.7 ppmv | 6.47 vol % | 10.67 vol % |
| Accuracy | 3.9% | 1.0% | 8.7% | 6.3% |
| Standard | <15% | <15% | <15% | <15% |

II. CALIBRATION DRIFT ASSESSMENT

| A. | Out-of Control Periods: |
|----|-------------------------|
| | 1. Dates: <u>N/A</u> |
| | 2. Number of Days N/A |
| B. | Corrective Actions: N/A |

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

| Pollutan | ıt: | N | D. |
|----------|-----|---|----|
|----------|-----|---|----|

Applicable NSPS Subpart: __Ja

Reporting period dates: From 7/1/15 to 9/30/15

Date submitted: 10/30/15

Company: Valero Refining - Meraux LLC

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

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

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

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

CEM Sampling Location: Benzene Recovery Unit Reboiler

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

I. ACCURACY ASSESSMENT RESULTS (CGA):

| | NOx #1 | NOx #2 | O ₂ #1 | O ₂ #2 |
|-------------------------|----------------|----------------|-------------------|-------------------|
| <u>CGA</u> | (low scale) | (high scale) | (low scale) | (high scale) |
| Date of Audit | 8/6/15 | 8/6/15 | 8/5/15 | 8/5/15 |
| Audit Gas Cylinder No. | LL165998 | LL167083 | LL42566 | LL42613 |
| Date of Audit Gas Cert. | 2/4/15 | 2/14/14 | 1/28/13 | 1/30/13 |
| Type of Certification | EPA Protocol 1 | EPA Protocol 1 | EPA Protocol 1 | EPA Protocol 1 |
| Certified Audit Value | 24.7 ppmv | 55.1 ppmv | 5.95 vol % | 10.04 vol % |
| CEM Response Value | 24.1 ppmv | 53.5 ppmv | 6.63 vol % | 10.97 vol % |
| Accuracy | 2.4% | 2.9% | 11.4% | 9.3% |
| Standard | <15% | <15% | <15% | <15% |

II. CALIBRATION DRIFT ASSESSMENT

A. Out-of Control Periods:

1. Dates: <u>8/15/15 06:45 - 8/16/15 17:45</u>, 35 hours

- 2. Number of Days ____1.5___
- B. Corrective Actions: On 8/16/15 the daily calibration check on the BRU O₂ CEMS differed from the gas standard by greater than 2% due to a faulty O₂ cell. Valero replaced the O₂ cell.

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

Pollutant: NO_x

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

Reporting period dates: From 7/1/15 to 9/30/15

Date submitted: 10/30/15

Company: Valero Refining - Meraux LLC

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

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

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

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

CEM Sampling Location: No.1 Crude Heater

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

I. ACCURACY ASSESSMENT RESULTS (CGA):

| | NOx #1 | NOx #2 | O ₂ #1 | O ₂ #2 |
|-------------------------|----------------|----------------|-------------------|-------------------|
| <u>CGA</u> | (low scale) | (high scale) | (low scale) | (high scale) |
| Date of Audit | 9/30/15 | 9/30/15 | 9/30/15 | 9/30/15 |
| Audit Gas Cylinder No. | LL165998 | LL167083 | LL53416 | LL167062 |
| Date of Audit Gas Cert. | 2/4/15 | 2/14/14 | 2/28/14 | 2/28/14 |
| Type of Certification | EPA Protocol 1 | EPA Protocol 1 | EPA Protocol 1 | EPA Protocol 1 |
| Certified Audit Value | 24.7 ppmv | 55.1 ppmv | 6.01 vol % | 10.01 vol % |
| CEM Response Value | 25.3 ppmv | 55.0 ppmv | 6.04 vol % | 10.02 vol % |
| Accuracy | 2.4% | 0.2% | 0.5% | 0.1% |
| Standard | <15% | <15% | <15% | <15% |

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

II. CALIBRATION DRIFT ASSESSMENT

| A. | Out-of Control Periods: | | N. | |
|----|-------------------------|-----|----|--|
| | 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-bb | c, Paragraph 49.a.ii) |
| Reporting period dates: From _7/1/15_to_9/30/15_ | | |
| Date submitted: 10/30/15 | | |
| 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 | | a Header |
| CEM Sampling Location: North Flare Stack, North Flare Header | | 5 Ficauci |
| - · · · · · · · · · · · · · · · · · · · | | |
| CEM Span Value: Total Sulfur, Dual Range: 0-10,000 ppm, 10,0 | 00-1,000,000 ppm | |
| I. ACCURACY ASSESSMENT RESULTS (CGA): | | |
| Date of Audit Audit Gas Cylinder No. Date of Audit Gas Cert. Type of Certification Certified Audit Value (ppmv) CEM Response Value (ppmv) Accuracy Standard 1 Valero unable to obtain EPA Protocol 1 certified | H ₂ S #1 (low scale) 8/4/15 LL54215 2/11/13 EPA Protocol 1 1021.0 1033.7 1.2% <15% ed gases greater that | H ₂ S #2 (high scale) 8/4/15 CC21387 4/23/15 Certified Gas ¹ 10140.0 10080.0 0.6% <15% an 1000 ppm. |
| II. CALIBRATION DRIFT ASSESSMENT | | |
| A. Out-of Control Periods: | | |
| 1. Dates: <u>N/A</u> | | |
| 2. Number of Days <u>N/A</u> | | |
| B. Corrective Actions: N/A | | |

(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: From7/1/15_ to_9/30/15_ Date submitted:10/30/15_ 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 (CGA): H ₂ S #1 H ₂ S #2 | | | | |
|--|--|---|--|---|
| Reporting period dates: From _7/1/15 to _9/30/15 Date submitted: _10/30/15 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 (CGA): H ₂ S #1 | Pollutant: Total Sulfur | | | |
| Date submitted: 10/30/15 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 (CGA): H ₂ S #1 | Applicable NSPS Subpart: <u>Ja</u> (Required by Consent Decree | e: 3:10-cv-00563-bl | oc, Paragraph 49.a.ii) | |
| 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 (CGA): H ₂ S #1 H ₂ S #2 (low scale) (high scale) Date of Audit Gas Cylinder No. LL54215 CC21387 Date of Audit Gas Cert. 2/11/13 4/23/15 Type of Certification EPA Protocol 1 Certified Gas¹ Certified Audit Value (ppmv) 1021.0 10140.0 CEM Response Value (ppmv) 1029.0 10033.0 Accuracy 0.8% 1.1% Standard <15% <15% ¹ Valero unable to obtain EPA Protocol 1 certified gases greater than 1000 ppm. | Reporting period dates: From 7/1/15 to 9/30/15 | | | |
| 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 | Date submitted: 10/30/15 | | | |
| 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 (CGA): H ₂ S #1 H ₂ S #2 (low scale) (high scale) Date of Audit Gas Cylinder No. LL54215 CC21387 Date of Audit Gas Cert. 2/11/13 4/23/15 Type of Certification EPA Protocol 1 Certified Gas¹ Certified Audit Value (ppmv) 1021.0 10140.0 CEM Response Value (ppmv) 1029.0 10033.0 Accuracy 0.8% 1.1% Standard <15% <15% ¹ Valero unable to obtain EPA Protocol 1 certified gases greater than 1000 ppm. | Company: Valero Refining - Meraux LLC | | | |
| Monitor Manufacturer and Model No.: Thermo Scientific SOLA II Process Unit(s) Description: North Flare Stack (EPN 20-72, EQT 0035), Hydrocracker Flare Header CEM Sampling Location: North Flare Stack, Hydrocracker Flare Header (Y-AT-302) CEM Span Value: Total Sulfur, Dual Range: 0-10,000 ppm, 10,000-1,000,000 ppm I. ACCURACY ASSESSMENT RESULTS (CGA): H ₂ S #1 H ₂ S #2 (low scale) (high scale) Date of Audit 8/4/15 8/4/15 Audit Gas Cylinder No. LL54215 CC21387 Date of Audit Gas Cert. 2/11/13 4/23/15 Type of Certification EPA Protocol 1 Certified Gas¹ Certified Audit Value (ppmv) 1021.0 10140.0 CEM Response Value (ppmv) 1029.0 10033.0 Accuracy 0.8% 1.1% Standard <15% <15% ¹ Valero unable to obtain EPA Protocol 1 certified gases greater than 1000 ppm. | Address: 2500 East St. Bernard Highway, Meraux, LA 70075 | | | |
| Process Unit(s) Description: North Flare Stack (EPN 20-72, EQT 0035), Hydrocracker Flare Header CEM Sampling Location: North Flare Stack, Hydrocracker Flare Header (Y-AT-302) CEM Span Value: Total Sulfur, Dual Range: 0-10,000 ppm, 10,000-1,000,000 ppm I. ACCURACY ASSESSMENT RESULTS (CGA): H ₂ S #1 H ₂ S #2 | Emission Limitation: None | | | |
| Process Unit(s) Description: North Flare Stack (EPN 20-72, EQT 0035), Hydrocracker Flare Header CEM Sampling Location: North Flare Stack, Hydrocracker Flare Header (Y-AT-302) CEM Span Value: Total Sulfur, Dual Range: 0-10,000 ppm, 10,000-1,000,000 ppm I. ACCURACY ASSESSMENT RESULTS (CGA): H ₂ S #1 H ₂ S #2 | Monitor Manufacturer and Model No.: Thermo Scientific SOLA | A II | | |
| CEM Sampling Location: North Flare Stack, Hydrocracker Flare Header (Y-AT-302) CEM Span Value: Total Sulfur, Dual Range: 0-10,000 ppm, 10,000-1,000,000 ppm I. ACCURACY ASSESSMENT RESULTS (CGA): H ₂ S #1 H ₂ S #2 (low scale) (high scale) Date of Audit | | | ker Flare Header | |
| CEM Span Value: Total Sulfur, Dual Range: 0-10,000 ppm, 10,000-1,000,000 ppm I. ACCURACY ASSESSMENT RESULTS (CGA): H ₂ S #1 H ₂ S #2 (low scale) (high scale) Audit Gas Cylinder No. LL54215 CC21387 Date of Audit Gas Cert. 2/11/13 4/23/15 Type of Certification EPA Protocol 1 Certified Gas¹ Certified Audit Value (ppmv) 1021.0 10140.0 CEM Response Value (ppmv) 1029.0 10033.0 Accuracy 0.8% 1.1% Standard <15% <15% 1 Valero unable to obtain EPA Protocol 1 certified gases greater than 1000 ppm. | | | | |
| I. ACCURACY ASSESSMENT RESULTS (CGA): H ₂ S #1 H ₂ S #2 (low scale) (high scale) Audit Gas Cylinder No. LL54215 CC21387 Date of Audit Gas Cert. 2/11/13 4/23/15 Type of Certification EPA Protocol 1 Certified Gas Certified Audit Value (ppmv) 1021.0 10140.0 CEM Response Value (ppmv) 1029.0 10033.0 Accuracy 0.8% 1.1% Standard <15% <15% Valero unable to obtain EPA Protocol 1 certified gases greater than 1000 ppm. | • | • | | |
| Date of Audit Date of Audit Audit Gas Cylinder No. Date of Audit Gas Cert. Date of Audit Gas | | | | |
| Date of Audit 8/4/15 8/4/15 Audit Gas Cylinder No. LL54215 CC21387 Date of Audit Gas Cert. 2/11/13 4/23/15 Type of Certification EPA Protocol 1 Certified Gas¹ Certified Audit Value (ppmv) 1021.0 10140.0 CEM Response Value (ppmv) 1029.0 10033.0 Accuracy 0.8% 1.1% Standard <15% <15% 1 Valero unable to obtain EPA Protocol 1 certified gases greater than 1000 ppm. | I. ACCURACY ASSESSMENT RESULTS (CGA): | | | |
| I. CALIBRATION DRIFT ASSESSMENT | Audit Gas Cylinder No. Date of Audit Gas Cert. Type of Certification Certified Audit Value (ppmv) CEM Response Value (ppmv) Accuracy | (low scale) 8/4/15 LL54215 2/11/13 EPA Protocol 1 1021.0 1029.0 0.8% | (high scale) 8/4/15 CC21387 4/23/15 Certified Gas ¹ 10140.0 10033.0 1.1% | |
| | ¹ Valero unable to obtain EPA Protocol 1 certif | ied gases greater that | an 1000 ppm. | |
| A Out-of Control Periods: | I. CALIBRATION DRIFT ASSESSMENT | | | |
| The Car of Control 1 broads. | A. Out-of Control Periods: | | | |
| 1. Dates: <u>N/A</u> | 1. Dates: <u>N/A</u> | | | |
| 2. Number of Days <u>N/A</u> | 2. Number of Days N/A | | | |
| B. Corrective Actions: N/A | B. Corrective Actions: N/A | | | _ |

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

| Pollutant: Total Sulfur | | | | |
|---|-----------------------|--|---------------------------------|---------------------------------------|
| Applicable NSPS Subpart: <u>Ja</u> (Required by Consent Decree: 3:10-cv-00563-bbc, Paragraph 49.a.ii) | | | | |
| Reporting period dates: From 7/1/15 to 9/30/15 | | | | |
| Date submitted: 10/30/15 | | | | |
| 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 (CGA): | | | | |
| | | | H ₂ S #1 (low scale) | H ₂ S #2 (high scale) |
| | | Date of Audit | 8/4/15 | 8/4/15 |
| | | Audit Gas Cylinder No. | LL54215 | CC21387 |
| | | Date of Audit Gas Cert. | 2/11/13 | 4/23/15 |
| | | Type of Certification Certified Audit Value (ppmv) | EPA Protocol 1 1021.0 | Certified Gas ¹ 10140.0 |
| | | CEM Response Value (ppmv) | 1070.7 | 10103.0 |
| | • | Accuracy (ppinty) | 4.9% | 0.4% |
| | | Standard | <15% | <15% |
| ¹ Valero unable to obtain EPA Protocol 1 certified gases greater than 1000 ppm. | | | | |
| II. CALIBRATION DRIFT ASSESSMENT | | | | |
| A. | Out-of Control Period | ods: | | |
| | 1. Dates: | N/A | | |
| | 2. Number of Day | s <u>N/A</u> | | |
| B. | Corrective Actions: | N/A | | |
| | | | | _ |