VALERO

October 25, 2013

CERTIFIED: 7003 3110 0001 1311 8701

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 2013
Valero Refining - Meraux LLC, Agency Interest # 1238
2500 East St. Bernard Hwy., St. Bernard Parish, Meraux, LA
Title V Permit Numbers: 2500-00001-V8

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 2013.

For this reporting period, no CEMS had excess emissions greater than or equal to 1 percent of the total operating time. CEMS Downtime greater than 5 percent of the total operating time occurred at: Boiler TB-01 (EPN 1-06, EQT 0010) NOx/O_2; North Flare Stack (EPN 20-72, EQT 0035), Hydrocracker Flare Header Total Sulfur; and South Flare Stack (EPN 3-77, EQT 0049) Total Sulfur. 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,

Lauren K. Bird
Vice President & General Manager
Valero Refining – Meraux LLC

Enclosures

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

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

(per 40 CFR 60.7(d))

Pollutant: **Opacity**

Applicable NSPS Subpart: J

Reporting period dates: From 7/01/13 to 9/30/13
Date submitted: 10/30/13

Company: Valero Refining - Meraux LLC
Address: 2500 East St. Bernard Highway, Meraux, LA 70075

Emission Limitation: Opacity shall not exceed 30% for more than one 6-minute interval in any 1-hour period

Monitor Manufacturer and Model No.: Teledyne Monitor Labs LightHawk 560

Date of Latest CMS Certification or Audit: Certification (4/20/13)

Process Unit(s) Description: #2 FCCU ESP Stack (EPN 2-77, EQT 0032)

Total source operating time in reporting period[1]: 132,480 minutes

Emissions Data Summary[1]	
1. Duration of excess emissions in reporting period due to:	*(minutes)*
a. Startup/shutdown	0
b. Control equipment problems	0
c. Process problems	60
d. Other known causes	0
e. Unknown causes	0
2. Total duration of excess emission	60
3. Total duration of excess emissions x (100) [Total source operating time][2]	0.1 %

CMS Performance Summary[1]	
1. CMS downtime in reporting period due to:	*(minutes)*
a. Monitor equipment malfunctions	0
b. Non-Monitor equipment malfunctions	0
c. Quality assurance calibration	70
d. Other known causes	0
e. Unknown causes	0
2. Total CMS Downtime	70
3. Total duration of CMS Downtime x (100) [Total source operating time][2]	0.1 %

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

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

(per 40 CFR 60.7(d))

Pollutant: **CO**

Applicable NSPS Subpart: J (Required by Consent Decree: 3:10-cv-00563-bbc, Paragraph 27)

Reporting period dates: From 7/01/13 to 9/30/13
Date submitted: 10/30/13

Company: Valero Refining - Meraux LLC
Address: 2500 East St. Bernard Highway, Meraux, LA 70075

Emission Limitation: CO corrected to 0% O_2 shall not exceed 500 ppm on a 1 hour rolling average

Monitor Manufacturer and Model No.: Thermo Environmental 48i (CO)/Servomex 1155 (O_2)

Date of Latest CMS Certification or Audit: CGA on 9/9/13 (CO), 7/30/13 (O_2)

Process Unit(s) Description: #2 FCCU ESP Stack (EPN 2-77, EQT 0032)

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

Emissions Data Summary[1]	
1. Duration of excess emissions in reporting period due to:	*(hours)*
a. Startup/shutdown	0
b. Control equipment problems	0
c. Process problems	5
d. Other known causes	0
e. Unknown causes	0
2. Total duration of excess emission	5
3. Total duration of excess emissions x (100) [Total source operating time][2]	0.2 %

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

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

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

(per 40 CFR 60.7(d))

Pollutant: **SO_2**

Applicable NSPS Subpart: J (Required by Consent Decree: 3:10-cv-00563-bbc, Paragraph 18)

Reporting period dates: From 7/01/13 to 9/30/13
Date submitted: 10/30/13

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 50 ppm on a 7 day rolling average and 25 ppm on a 365 day rolling average (Consent Decree Limits)

Monitor Manufacturer and Model No.: Thermo Environmental 43i (SO_2)/Servomex 1155 (O_2)

Date of Latest CMS Certification or Audit: CGA on 9/3/13 (SO_2), 7/30/13 (O_2)

Process Unit(s) Description: #2 FCCU ESP Stack (EPN 2-77, EQT 0032)

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

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

CMS Performance Summary[1]	
1. CMS downtime in reporting period due to:	*(hours)*
a. Monitor equipment malfunctions	2
b. Non-Monitor equipment malfunctions	0
c. Quality assurance calibration	44
d. Other known causes	0
e. Unknown causes	0
2. Total CMS Downtime	46
3. Total duration of CMS Downtime x (100) [Total source operating time][2]	2.1 %

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

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

(per 40 CFR 60.7(d))

Pollutant: **NO_x**

Applicable NSPS Subpart: None (Required by Consent Decree: 3:10-cv-00563-bbc, Paragraph 15)

Reporting period dates: From 7/01/13 to 9/30/13
Date submitted: 10/30/13

Company: Valero Refining - Meraux LLC
Address: 2500 East St. Bernard Highway, Meraux, LA 70075

Emission Limitation: NOx corrected to 0% O_2 shall not exceed 80 ppm on a 7 day rolling average and 40 ppm on a 365 day rolling average (Consent Decree Interim Limits)

Monitor Manufacturer and Model No.: Thermo Environmental 42i (NOx)/Servomex 1155 (O_2)

Date of Latest CMS Certification or Audit: CGA on 8/29/13 (NOx), 7/30/12 (O_2)

Process Unit(s) Description: #2 FCCU ESP Stack (EPN 2-77, EQT 0032)

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

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

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

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

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

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

Pollutant: **SO_2**

Applicable NSPS Subpart: Ja

Reporting period dates: From 7/01/13 to 9/30/13
Date submitted: 10/30/13

Company: Valero Refining - Meraux LLC
Address: 2500 East St. Bernard Highway, Meraux, LA 70075

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

Monitor Manufacturer and Model No.: Brimstone SGX-231(SO_2)/Rosemount Oxymitter 4000(O_2)

Date of Latest CMS Certification or Audit: CGA on 9/3/13 (SO_2), 8/27/13 (O_2)

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

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

Emissions Data Summary[1]	
1. Duration of excess emissions in reporting period due to:	*(hours)*
a. Startup/shutdown	18
b. Control equipment problems	0
c. Process problems	0
d. Other known causes	0
e. Unknown causes	0
2. Total duration of excess emission	18
3. Total duration of excess emissions x (100) [Total source operating time][2]	0.8 %

CMS Performance Summary[1]	
1. CMS downtime in reporting period due to:	*(hours)*
a. Monitor equipment malfunctions	4
b. Non-Monitor equipment malfunctions	0
c. Quality assurance calibration	4
d. Other known causes	0
e. Unknown causes	0
2. Total CMS Downtime	8
3. Total duration of CMS Downtime x (100) [Total source operating time][2]	0.4 %

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

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

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

Pollutant: SO_2

Applicable NSPS Subpart: Ja

Reporting period dates: From 7/01/13 to 9/30/13
Date submitted: 10/30/13

Company: Valero Refining - Meraux LLC
Address: 2500 East St. Bernard Highway, Meraux, LA 70075

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

Monitor Manufacturer and Model No.: Brimstone 991-CEM-X(SO_2)/ Rosemount Oxymitter 4000(O_2)

Date of Latest CMS Certification or Audit: CGA on 9/3/13(SO_2), 8/27/13 (O_2)

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

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

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

CMS Performance Summary[1]	
1. CMS downtime in reporting period due to:	*(hours)*
a. Monitor equipment malfunctions	0
b. Non-Monitor equipment malfunctions	0
c. Quality assurance calibration	41
d. Other known causes	0
e. Unknown causes	0
2. Total CMS Downtime	41
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.

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

(per 40 CFR 60.7(d))

Pollutant: **H_2S**

Applicable NSPS Subpart: J

Reporting period dates: From 7/01/13 to 9/30/13
Date submitted: 10/30/13

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 8/5/13

Process Unit(s) Description: Area 1 Fuel Drum for Boiler TB-01 (EPN 1-06, EQT 0010); MDH Product and Fractionator Heaters (EPN 2-92, EQT 0033)

Total source operating time in reporting period: EQT 0010 – 2,098 hours; EQT 0033 – 1822 hours

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

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

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

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

(per 40 CFR 60.7(d))

Pollutant: H_2S

Applicable NSPS Subpart: J

Reporting period dates: From 7/01/13 to 9/30/13
Date submitted: 10/30/13

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 8/5/13

Process Unit(s) Description: Area 1 Fuel Drum for Boiler B-7 (EPN 1-07, EQT 0011)

Total source operating time in reporting period: 1,709 hours

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

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

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

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

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

Pollutant: H_2S

Applicable NSPS Subpart: J and Ja

Reporting period dates: From 7/01/13 to 9/30/13
Date submitted: 10/30/13

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

Monitor Manufacturer and Model No.: Ametek 4661

Date of Latest CMS Certification or Audit: CGA on 8/6/13

Process Unit(s) Description: Area 2 Fuel Drum for: No.1 Crude Heater (EPN 12-72A, EQT 0022); Vacuum Heater (EPN 1-76, EQT 0013); 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); ROSE Heater (EPN 1-80, EQT 0014); Benzene Recovery Unit Reboiler (EPN 1-09, EQT 0127)

Total source operating time in reporting period: EQT 0022, 0013, 0023, 0024, 0027, 0028, 0014, and 0127 - 2,208 hours; EQT 0029 - 2,133 hours;

Emissions Data Summary[1]	
1. Duration of excess emissions in reporting period due to:	*(hours)*
a. Startup/shutdown	9
b. Control equipment problems	0
c. Process problems	0
d. Other known causes	0
e. Unknown causes	0
2. Total duration of excess emission	9
3. Total duration of excess emissions x (100) [Total source operating time][2]	0.4%

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	8
e. Unknown causes	0
2. Total CMS Downtime	10
3. Total duration of CMS Downtime x (100) [Total source operating time][2]	0.5 %

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

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

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

Pollutant: **H_2S**

Applicable NSPS Subpart: J

Reporting period dates: From 7/01/13 to 9/30/13
Date submitted: 10/30/13

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 8/6/13

Process Unit(s) Description: Area 2 Fuel Drum for: DHT Charge Heater (EPN 5-73, EQT 0058)

Total source operating time in reporting period: 1,740 hours

Emissions Data Summary[1]	
1. Duration of excess emissions in reporting period due to:	*(hours)*
a. Startup/shutdown	9
b. Control equipment problems	0
c. Process problems	0
d. Other known causes	0
e. Unknown causes	0
2. Total duration of excess emission	9
3. Total duration of excess emissions x (100) [Total source operating time][2]	0.5 %

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	8
e. Unknown causes	0
2. Total CMS Downtime	10
3. Total duration of CMS Downtime x (100) [Total source operating time][2]	0.6 %

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

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

(per 40 CFR 60.7(d))

Pollutant: **H_2S**

Applicable NSPS Subpart: J

Reporting period dates: From 7/01/13 to 9/30/13
Date submitted: 10/30/13

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 8/6/13

Process Unit(s) Description: Area 4 Fuel Drum for Alky Reboiler (EPN 1-77, EQT 0078)

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

Emissions Data Summary[1]	
1. Duration of excess emissions in reporting period due to:	*(hours)*
a. Startup/shutdown	0
b. Control equipment problems	0
c. Process problems	8
d. Other known causes	0
e. Unknown causes	0
2. Total duration of excess emission	8
3. Total duration of excess emissions x (100) [Total source operating time][2]	0.4 %

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

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

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

(per 40 CFR 60.7(d))

Pollutant: **H_2S**

Applicable NSPS Subpart: J

Reporting period dates: From 7/01/13 to 9/30/13
Date submitted: 10/30/13

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 8/7/13

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

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

Emissions Data Summary[1]	
1. Duration of excess emissions in reporting period due to:	*(hours)*
a. Startup/shutdown	0
b. Control equipment problems	0
c. Process problems	8
d. Other known causes	0
e. Unknown causes	0
2. Total duration of excess emission	8
3. Total duration of excess emissions x (100) [Total source operating time][2]	0.4 %

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	28
d. Other known causes	0
e. Unknown causes	0
2. Total CMS Downtime	28
3. Total duration of CMS Downtime x (100) [Total source operating time][2]	1.3 %

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

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

(per 40 CFR 60.7(d))

Pollutant: **H_2S**

Applicable NSPS Subpart: J

Reporting period dates: From 7/01/13 to 9/30/13
Date submitted: 10/30/13

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 8/7/13

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

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

Emissions Data Summary[1]	
1. Duration of excess emissions in reporting period due to:	*(hours)*
a. Startup/shutdown	8
b. Control equipment problems	0
c. Process problems	0
d. Other known causes	0
e. Unknown causes	0
2. Total duration of excess emission	8
3. Total duration of excess emissions x (100) [Total source operating time][2]	0.4 %

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

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

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

(per 40 CFR 60.7(d))

Pollutant: NO_x

Applicable NSPS Subpart: Db

Reporting period dates: From 7/01/13 to 9/30/13
Date submitted: 10/30/13

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 Lumus 11, Serial No. 23042-5-8018413

Date of Latest CMS Certification or Audit: CGA on 8/28/13 (NOx), 8/2/13 (O_2)

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

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

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

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

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

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

(per 40 CFR 60.7(d))

Pollutant: **NO_x**

Applicable NSPS Subpart: Db

Reporting period dates: From 7/01/13 to 9/30/13
Date submitted: 10/30/13

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 Lumus 11, Serial No. 23042-5-8018413

Date of Latest CMS Certification or Audit: CGA on 8/28/13 (NOx), 8/2/13 (O_2)

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

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

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

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

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

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

(per 40 CFR 60.7(d))

Pollutant: NO_x

Applicable NSPS Subpart: Db

Reporting period dates: From 7/01/13 to 9/30/13
Date submitted: 10/30/13

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), Thermo Environmental (O_2)

Date of Latest CMS Certification or Audit: CGA on 8/29/13 (NOx), 8/2/13 (O_2)

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

Total source operating time in reporting period: 2,098 hours

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

CMS Performance Summary[1]	
1. CMS downtime in reporting period due to:	*(hours)*
a. Monitor equipment malfunctions	0
b. Non-Monitor equipment malfunctions	0
c. Quality assurance calibration	239
d. Other known causes	72
e. Unknown causes	0
2. Total CMS Downtime	311
3. Total duration of CMS Downtime x (100) [Total source operating time][2]	14.8 %

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

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

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

Pollutant: NO_x

Applicable NSPS Subpart: Ja

Reporting period dates: From 7/01/13 to 9/30/13
Date submitted: 10/30/13

Company: Valero Refining - Meraux LLC
Address: 2500 East St. Bernard Highway, Meraux, LA 70075

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

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

Date of Latest CMS Certification or Audit: CGA on 8/28/13 (NOx), 8/26/13 (O_2)

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

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

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

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

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

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

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

Pollutant: **Total Sulfur**

Applicable NSPS Subpart: Ja[1] (Required by Consent Decree: 3:10-cv-00563-bbc, Paragraph 49.a.ii)

Reporting period dates: From 7/01/13 to 9/30/13
Date submitted: 10/30/13

Company: Valero Refining - Meraux LLC
Address: 2500 East St. Bernard Highway, Meraux, LA 70075

Emission Limitation: None

Monitor Manufacturer and Model No.: Thermo Scientific SOLA II

Date of Latest CMS Certification or Audit: CGA on 9/11/13

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	81
d. Other known causes	4
e. Unknown causes	0
2. Total CMS Downtime	85
3. Total duration of CMS Downtime x (100) [Total source operating time][3]	3.8 %

[1] According to 40 CFR 60.107a(e), in place 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.

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

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

Pollutant: **Total Sulfur**

Applicable NSPS Subpart: Ja[1] (Required by Consent Decree: 3:10-cv-00563-bbc, Paragraph 49.a.ii)

Reporting period dates: From 7/01/13 to 9/30/13
Date submitted: 10/30/13

Company: Valero Refining - Meraux LLC
Address: 2500 East St. Bernard Highway, Meraux, LA 70075

Emission Limitation: None

Monitor Manufacturer and Model No.: Thermo Scientific SOLA II

Date of Latest CMS Certification or Audit: CGA on 9/11/13

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

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

Emissions Data Summary[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	149
d. Other known causes	0
e. Unknown causes	0
2. Total CMS Downtime	149
3. Total duration of CMS Downtime x (100) [Total source operating time][3]	6.8 %

[1] According to 40 CFR 60.107a(e), in place 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.

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

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

Pollutant: **Total Sulfur**

Applicable NSPS Subpart: Ja[1] (Required by Consent Decree: 3:10-cv-00563-bbc, Paragraph 49.a.ii)

Reporting period dates: From 7/01/13 to 9/30/13
Date submitted: 10/30/13

Company: Valero Refining - Meraux LLC
Address: 2500 East St. Bernard Highway, Meraux, LA 70075

Emission Limitation: None

Monitor Manufacturer and Model No.: Thermo Scientific SOLA II

Date of Latest CMS Certification or Audit: CGA on 9/11/13

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

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

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

CMS Performance Summary[1]	
1. CMS downtime in reporting period due to:	*(hours)*
a. Monitor equipment malfunctions	0
b. Non-Monitor equipment malfunctions	0
c. Quality assurance calibration	128
d. Other known causes	0
e. Unknown causes	0
2. Total CMS Downtime	128
3. Total duration of CMS Downtime x (100) [Total source operating time][2]	5.8 %

[1] According to 40 CFR 60.107a(e), in place 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.

GASEOUS AND OPACITY EXCESS EMISSIONS AND MONITORING SYSTEMS PERFORMANCE

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

Pollutant: **SO_2**
Applicable NSPS Subpart: Ja
Reporting period dates: From 7/01/13 to 9/30/13
Date submitted: 10/30/13
Company: Valero Refining - Meraux LLC
Address: 2500 East St. Bernard Highway, Meraux, LA 70075
Emission Limitation: SO_2 corrected to 0% O_2 shall not exceed 250 ppm on a 12-hour rolling average
Monitor Manufacturer and Model No.: Brimstone SGX-231(SO_2)/Rosemount Oxymitter 4000(O_2)
Date of Latest CMS Certification or Audit: CGA on 9/3/13 (SO_2), 8/27/13 (O_2)
Process Unit(s) Description: #2 SRU Incinerator (EPN 1-93, EQT 0019)
Total source operating time in reporting period: 2,208 hours

EXCESS EMISSIONS

Date	Start	End	Duration (hours)	Max 12-HRA (ppm)	Cause	Corrective Action
8/8/13	08:05		18	>500	SO_2 at 0% O_2 > 250 ppm, 12-HRA, with SO_2 emissions less than 500 lbs/day above the allowable limit due to an unexpected shutdown of the #2 SRU. The root cause was the failure of an Uninterruptable Power Supply that supplied power to key fuel gas valves in the #2 SRU.	Please see the attached letter dated 9/17/13 for further information on root causes and corrective actions. Valero completed the unit startup per the SSM Plan.
8/9/13		02:05				
TOTAL			18			

CMS PERFORMANCE[1]

Date	Start	End	Duration (hours)	Cause	Corrective Action
8/11/13	17:16	21:16	4	SO_2 offline due to electrical transient believed to have been caused by lighting. Valero found a damaged internal RTD.	Valero replaced the damaged RTD, calibrated the analyzer and returned it to service.
8/27/13	07:42	08:42	1	O_2 Cylinder Gas Audit.	N/A
8/27/13	13:37	14:37	1	Adjusted for calibration drift.	N/A
9/3/13	10:05	12:05	2	SO_2 Cylinder Gas Audit.	N/A
TOTAL			8		

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

GASEOUS AND OPACITY EXCESS EMISSIONS AND MONITORING SYSTEMS PERFORMANCE

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

Pollutant: **SO_2**
Applicable NSPS Subpart: Ja
Reporting period dates: From 7/01/13 to 9/30/13
Date submitted: 10/30/13
Company: Valero Refining - Meraux LLC
Address: 2500 East St. Bernard Highway, Meraux, LA 70075
Emission Limitation: SO_2 corrected to 0% O_2 shall not exceed 250 ppm on a 12-hour rolling average.
Monitor Manufacturer and Model No.: Brimstone 991-CEM-X(SO_2)/ Rosemount Oxymitter 4000(O_2)
Date of Latest CMS Certification or Audit: CGA on 9/3/13(SO_2), 8/27/13 (O_2)
Process Unit(s) Description: #3 SRU Incinerator (EPN 5-00, EQT 0079)
Total source operating time in reporting period: 2,208 hours

EXCESS EMISSIONS cont.						
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
7/10/13	14:36	18:36	4	After noticing that response time delays were gradually increasing, the SO_2 analyzer taken out of service to steam out the sample line.	Valero calibrated the analyzer and returned it to service.
8/27/13	10:20		22	Sample line plugged, SO_2 analyzer out of service.	Valero steamed out the sample line, calibrated the analyzer, and returned it to service.
8/28/13		08:20			
8/29/13	08:34	09:34	1	SO_2 adjusted for calibration drift.	N/A
8/30/13	08:18	12:18	4	Sample probe disassembled and cleaned. A large amount of material had accumulated in the sample probe and was causing the response time delays and plugging.	Valero reinstalled the sample probe, calibrated the analyzer and, returned it to service.
9/3/13	13:02	15:02	2	SO_2 Cylinder Gas Audit.	N/A
9/5/13	10:02	11:02	1	O_2 analyzer fault.	Reset.
9/5/13	15:00	16:00	1	O_2 analyzer fault.	Reset.
9/6/13	07:54	10:54	3	O_2 sensor replaced.	Calibrated and placed in service.
9/16/13	13:15	14:15	1	SO_2 adjusted for calibration drift.	N/A
9/25/13	13:17	14:17	1	SO_2 adjusted for calibration drift.	N/A
9/26/13	13:40	14:40	1	SO_2 adjusted for calibration drift.	N/A
TOTAL			41		

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

GASEOUS AND OPACITY EXCESS EMISSIONS AND MONITORING SYSTEMS PERFORMANCE

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

Pollutant: **H_2S**
Applicable NSPS Subpart: Ja

Reporting period dates: From 7/01/13 to 9/30/13
Date submitted: 10/30/13

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 8/6/13

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

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

Ja EXCESS EMISSIONS						
Date	Start	End	Duration (hours)	Max 12-HRA (ppm)	Cause	Corrective Action
8/8/13	10:16	19:16	9	>300	H_2S > 162 ppm, 3-HRA due to an unexpected shutdown of the #2 SRU. Valero cut stripping steam to the #1 Amine unit to prevent acid gas flaring. This resulted in elevated H_2S in the refinery fuel gas system.	Please see the attached letter dated 9/17/13 for further information on root causes and corrective actions.
TOTAL			9			

Ja CMS PERFORMANCE[1]					
Date	Start	End	Duration (hours)	Cause	Corrective Action
7/23/13	08:50	16:50	8	Sample pressure regulator failed.	Replaced regulator, cleaned and calibrated analyzer.
7/31/13	07:45	08:45	1	Adjusted for calibration drift.	N/A
8/6/13	08:00	09:00	1	Cylinder Gas Audit.	N/A
TOTAL			10		

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

GASEOUS AND OPACITY EXCESS EMISSIONS AND MONITORING SYSTEMS PERFORMANCE

(per 40 CFR 60.7(c))

Pollutant: **NO_x**
Applicable NSPS Subpart: Db
Reporting period dates: From 7/01/13 to 9/30/13
Date submitted: 10/30/13
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), Thermo Environmental (O_2)
Date of Latest CMS Certification or Audit: CGA on 8/29/13 (NOx), 8/2/13 (O_2)
Process Unit(s) Description: Boiler TB-01 (EPN 1-06, EQT 0010)
Total source operating time in reporting period: 2,098 hours

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

CMS PERFORMANCE					
Date	Start	End	Duration (hours)	Cause	Corrective Action
8/2/13	10:22	11:22	1	O_2 Cylinder Gas Audit.	N/A
8/22/13	13:34	14:34	1	Adjusted for calibration drift.	N/A
8/12/13	8:17		72	Out of Control. The results of the daily calibration checks were not recorded by the data historian. Valero created an automatic function that excludes the daily calibration checks from the real data. The exclusion function was turned on before the tags for the calibration data were created.	Valero created the tags for capturing the calibration data.
8/15/13		8:17			
8/22/13	13:34	14:34	1	Adjusted for calibration drift.	N/A
8/29/13	13:23	14:23	1	NOx Cylinder Gas Audit.	N/A
9/6/13	8:20		72	Out of Control. The O_2 analyzer daily calibration check > 4x the allowable limit on 9/7 and 9/8. Valero failed to take corrective action and the analyzer calibrated satisfactorily on its own on 9/9.	Valero counseled the operator responsible for checking the daily calibration checks.
9/9/13		8:20			
9/9/13	10:07	11:07	1	CO Cylinder Gas Audit.	N/A
9/20/13	8:20		48	Out of Control. The O_2 analyzer daily calibration check > 4x the allowable limit on 9/21. Valero failed to take corrective action on 9/21.	Valero counseled the operator responsible for checking the daily calibration checks. On 9/22, Valero calibrated the analyzer.
9/22/13		8:20			

GASEOUS AND OPACITY EXCESS EMISSIONS AND MONITORING SYSTEMS PERFORMANCE

(per 40 CFR 60.7(c))

Pollutant: **NO_x**
Applicable NSPS Subpart: Db
Reporting period dates: From 7/01/13 to 9/30/13
Date submitted: 10/30/13
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), Thermo Environmental (O_2)
Date of Latest CMS Certification or Audit: CGA on 8/29/13 (NOx), 8/2/13 (O_2)
Process Unit(s) Description: Boiler TB-01 (EPN 1-06, EQT 0010)
Total source operating time in reporting period: 2,098 hours

CMS PERFORMANCE cont.					
Date	Start	End	Duration (hours)	Cause	Corrective Action
9/25/13	08:30		32	Out of Control. O_2 analyzer daily calibration check > 4x the allowable limit on 9/26.	Valero calibrated the analyzer and returned it to service.
9/26/13		16:30			
9/27/13	13:00	15:00	2	Replaced O_2 sensor.	Valero calibrated the analyzer and returned it to service.
9/27/13	15:00		81	Out of Control. The O_2 analyzer daily calibration check > 4x the allowable limit. Valero made multiple attempts to repair and calibrate the analyzer, only to have it fail again the next day.	Valero observed that the calibration checks were low when the stack O_2 was low and high when the stack O_2 was high. Believing that the stack gas was possibly interfering with the calibrations, Valero overhauled and cleaned the sample probe on 10/1.
10/1/13		00:00			
TOTAL			311		

GASEOUS AND OPACITY EXCESS EMISSIONS AND MONITORING SYSTEMS PERFORMANCE

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

Pollutant: **NO_x**

Applicable NSPS Subpart: Ja

Reporting period dates: From 7/01/13 to 9/30/13
Date submitted: 10/30/13

Company: Valero Refining - Meraux LLC
Address: 2500 East St. Bernard Highway, Meraux, LA 70075

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

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

Date of Latest CMS Certification or Audit: CGA on 8/28/13 (NOx), 8/26/13 (O_2)

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

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

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
8/26/13	10:53	11:53	1	O_2 Cylinder Gas Audit.	N/A
8/28/13	08:16	09:16	1	NOx Cylinder Gas Audit.	N/A
TOTAL			2		

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

GASEOUS AND OPACITY EXCESS EMISSIONS AND MONITORING SYSTEMS PERFORMANCE

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

Pollutant: **Total Sulfur**
Applicable NSPS Subpart: Ja (Required by Consent Decree: 3:10-cv-00563-bbc, Paragraph 49.a.ii)
Reporting period dates: From 7/01/13 to 9/30/13
Date submitted: 10/30/13
Company: Valero Refining - Meraux LLC
Address: 2500 East St. Bernard Highway, Meraux, LA 70075
Emission Limitation: None
Monitor Manufacturer and Model No.: Thermo Scientific SOLA II
Date of Latest CMS Certification or Audit: CGA on 9/11/13
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

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
8/1/13	10:28	11:28	1	Analyzer shutdown to replace electronics card.	Calibrated the analyzer and returned it to service.
8/1/13	12:02	15:02	3	New electronics card failed, old card put back in.	Calibrated the analyzer and returned it to service.
9/11/13	10:42	12:42	2	Cylinder Gas Audit.	N/A
9/13/13	07:41		79	Out of Control. The pressure regulator on the mid range calibration gas bottle failed and vented the entire bottle to the atmosphere. The calibration was not checked against the mid range standard on 9/14 and 9/15. The zero and high range checks were satisfactory.	Valero installed a new regulator and calibration gas bottle on 9/16.
9/16/13		14:41			
TOTAL			85		

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

GASEOUS AND OPACITY EXCESS EMISSIONS AND MONITORING SYSTEMS PERFORMANCE

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

Pollutant: **Total Sulfur**
Applicable NSPS Subpart: Ja (Required by Consent Decree: 3:10-cv-00563-bbc, Paragraph 49.a.ii)
Reporting period dates: From 7/01/13 to 9/30/13
Date submitted: 10/30/13
Company: Valero Refining - Meraux LLC
Address: 2500 East St. Bernard Highway, Meraux, LA 70075
Emission Limitation: None
Monitor Manufacturer and Model No.: Thermo Scientific SOLA II
Date of Latest CMS Certification or Audit: CGA on 9/11/13
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

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
7/1/13	15:03	16:03	1	Adjusted for calibration drift.	N/A
7/2/13	14:08	15:08	1	Adjusted for calibration drift.	N/A
7/12/13	10:32	11:32	1	Adjusted for calibration drift.	N/A
7/15/13	14:01	15:01	1	Adjusted for calibration drift.	N/A
7/13/13	06:50		56	Out of Control. The calibration check of the mid range gas standard > 4x the allowable limit on 9/14 and 9/15. Valero failed to take corrective action on 9/14.	Valero calibrated the analyzer on 9/15. Valero counseled the operator responsible for checking the daily calibration checks.
7/15/13		14:50			
7/18/13	10:14	14:14	4	Analyzer taken offline to replace 10-port valve. Calibrated.	N/A
9/9/13	10:17	14:17	4	Analyzer taken offline to replace 10-port valve rotor. Calibrated.	N/A
9/11/13	10:42	12:42	2	Cylinder Gas Audit.	N/A
9/13/13	06:42		79	Out of Control. The pressure regulator on the mid range calibration gas bottle failed and vented the entire bottle to the atmosphere. The calibration was not checked against the mid range standard on 9/14 and 9/15. The zero and high range checks were satisfactory.	Valero installed a new regulator and calibration gas bottle on 9/16.
9/16/13		13:42			
TOTAL			13		

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

GASEOUS AND OPACITY EXCESS EMISSIONS AND MONITORING SYSTEMS PERFORMANCE

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

Pollutant: **Total Sulfur**
Applicable NSPS Subpart: Ja (Required by Consent Decree: 3:10-cv-00563-bbc, Paragraph 49.a.ii)
Reporting period dates: From 7/01/13 to 9/30/13
Date submitted: 10/30/13
Company: Valero Refining - Meraux LLC
Address: 2500 East St. Bernard Highway, Meraux, LA 70075
Emission Limitation: None
Monitor Manufacturer and Model No.: Thermo Scientific SOLA II
Date of Latest CMS Certification or Audit: CGA on 9/11/13
Process Unit(s) Description: South Flare Stack (EPN 3-77, EQT 0049)
Total source operating time in reporting period: 2,184 hours

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
7/2/13	14:51	15:51	1	Adjusted for calibration drift	N/A
7/10/13	13:05	14:05	1	Adjusted for calibration drift	N/A
7/12/13	13:26	14:26	1	Adjusted for calibration drift	N/A
7/19/13	12:45	15:45	3	Analyzer malfunctioned after daily validation. Sample pump failed.	Sample pump replaced. Analyzer calibrated and returned to service.
7/22/13	09:52	13:52	4	Analyzer taken offline to replace 10-port valve. Calibrated.	N/A
9/9/13	10:17	18:17	8	Analyzer taken offline to replace 10-port valve rotor. Calibrated.	N/A
9/11/13	10:42	12:42	2	Cylinder Gas Audit	N/A
9/13/13	08:42		78	Out of Control. The pressure regulator on the mid range calibration gas bottle failed and vented the entire bottle to the atmosphere. The calibration was not checked against the mid range standard on 9/14 and 9/15. The zero and high range checks were satisfactory.	Valero installed a new regulator and calibration gas bottle on 9/16.
9/16/13		14:42			
9/29/13	08:51		30	Out of Control. The calibration check of the mid range gas standard > 4x the allowable limit on 9/30.	Valero calibrated the analyzer on 9/30.
9/30/13		14:51			
TOTAL			128		

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

DATA ASSESSMENT REPORT

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

Pollutant: **Opacity**

Applicable NSPS Subpart: J

Reporting period dates: From 7/01/13 to 9/30/13
Date submitted: 10/30/13

Company: Valero Refining - Meraux LLC
Address: 2500 East St. Bernard Highway, Meraux, LA 70075

Emission Limitation: Opacity shall not exceed 30% for more than one 6-minute interval in any 1-hour period

Monitor Manufacturer and Model No.: Teledyne Monitor Labs LightHawk 560

Process Unit(s) Description: #2 FCCU ESP Stack (EPN 2-77, EQT 0032)

CEM Sampling Location: #2 FCCU ESP Stack

CEM Span Value: Opacity 100%

I. ACCURACY ASSESSMENT RESULTS

Not applicable to opacity monitors.

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: **CO**

Applicable NSPS Subpart: J (Required by Consent Decree: 3:10-cv-00563-bbc, Paragraph 27)

Reporting period dates: From 7/01/13 to 9/30/13
Date submitted: 10/30/13

Company: Valero Refining - Meraux LLC
Address: 2500 East St. Bernard Highway, Meraux, LA 70075

Emission Limitation: CO corrected to 0% O_2 shall not exceed 500 ppm on a 1 hour rolling average

Monitor Manufacturer and Model No.: Thermo Environmental 48i (CO)/Servomex 1155 (O_2)

Process Unit(s) Description: #2 FCCU ESP Stack (EPN 2-77, EQT 0032)

CEM Sampling Location: #2 FCCU ESP Stack

CEM Span Value: Carbon Monoxide 1000 ppm

I. ACCURACY ASSESSMENT RESULTS (CGA):

	CO #1 (low scale)	CO #2 (high scale)	O_2 #1 (low scale)	O_2 #2 (high scale)
Date of Audit	9/9/13	9/9/13	7/30/13	7/30/13
Audit Gas Cylinder No.	LL38472	LL16838	LL42560	LL42613
Date of Audit Gas Cert.	1/29/13	1/29/13	1/28/13	1/30/13
Type of Certification	EPA Protocol 1	EPA Protocol 1	EPA Protocol 1	EPA Protocol 1
Certified Audit Value	249.3	546.1	5.95	10.04
CEM Response Value	246.0	527.3	6.53	10.83
Accuracy	1.3%	3.4%	9.7%	7.9%
Standard	<15%	<15%	<15%	<15%

II. CALIBRATION DRIFT ASSESSMENT

A. Out-of Control Periods:

1. Dates: N/A

2. Number of Days N/A

B. Corrective Actions: N/A

DATA ASSESSMENT REPORT

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

Pollutant: **SO_2**

Applicable NSPS Subpart: J (Required by Consent Decree: 3:10-cv-00563-bbc, Paragraph 18)

Reporting period dates: From 7/01/13 to 9/30/13
Date submitted: 10/30/13

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 50 ppm on a 7 day rolling average and 25 ppm on a 365 day rolling average

Monitor Manufacturer and Model No.: Thermo Environmental 43i (SO_2)/Servomex 1155 (O_2)

Process Unit(s) Description: #2 FCCU ESP Stack (EPN 2-77, EQT 0032)

CEM Sampling Location: #2 FCCU ESP Stack

CEM Span Value: Sulfur Dioxide 500 ppm

I. ACCURACY ASSESSMENT RESULTS (CGA):

	SO_2 #1 (low scale)	SO_2 #2 (high scale)	O_2 #1 (low scale)	O_2 #2 (high scale)
Date of Audit	9/3/13	9/3/13	7/30/13	7/30/13
Audit Gas Cylinder No.	LL166006	LL165997	LL42560	LL42613
Date of Audit Gas Cert.	2/8/13	2/8/13	1/28/13	1/30/13
Type of Certification	EPA Protocol 1	EPA Protocol 1	EPA Protocol 1	EPA Protocol 1
Certified Audit Value	125.0	279.2	5.95	10.04
CEM Response Value	140.3	303.7	6.53	10.83
Accuracy	12.2%	8.8%	9.7%	7.9%
Standard	<15%	<15%	<15%	<15%

II. CALIBRATION DRIFT ASSESSMENT

A. Out-of Control Periods:

1. Dates: 8/12/13 - 8/13/13

2. Number of Days 1.5

B. Corrective Actions: The calibration check on 8/13 was below the span > 4x the allowable limit due to low pressure in the calibration gas bottle. Valero installed a new bottle later that same day and calibrated the analyzer.

DATA ASSESSMENT REPORT

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

Pollutant: **NOx**

Applicable NSPS Subpart: None (Required by Consent Decree: 3:10-cv-00563-bbc, Paragraph 15)

Reporting period dates: From 7/01/13 to 9/30/13
Date submitted: 10/30/13

Company: Valero Refining - Meraux LLC
Address: 2500 East St. Bernard Highway, Meraux, LA 70075

Emission Limitation: Not Applicable

Monitor Manufacturer and Model No.: Thermo Environmental 42i (NOx)/Servomex 1155 (O_2)

Process Unit(s) Description: #2 FCCU ESP Stack (EPN 2-77, EQT 0032)

CEM Sampling Location: #2 FCCU ESP Stack

CEM Span Value: Nitrogen Oxide 250 ppm

I. ACCURACY ASSESSMENT RESULTS (CGA):

	NOx #1 (low scale)	NOx #2 (high scale)	O_2 #1 (low scale)	O_2 #2 (high scale)
Date of Audit	8/29/13	8/29/13	7/30/13	7/30/13
Audit Gas Cylinder No.	LL164501	LL166013	LL42560	LL42613
Date of Audit Gas Cert.	2/5/13	2/8/13	1/28/13	1/30/13
Type of Certification	EPA Protocol 1	EPA Protocol 1	EPA Protocol 1	EPA Protocol 1
Certified Audit Value	54.7	135.5	5.95	10.04
CEM Response Value	56.0	140.9	6.53	10.83
Accuracy	2.3%	4.0%	9.7%	7.9%
Standard	<15%	<15%	<15%	<15%

II. CALIBRATION DRIFT ASSESSMENT

A. Out-of Control Periods:

1. Dates: N/A

2. Number of Days N/A

B. Corrective Actions: N/A

DATA ASSESSMENT REPORT

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

Pollutant: **SO_2**

Applicable NSPS Subpart: Ja

Reporting period dates: From 7/01/13 to 9/30/13
Date submitted: 10/30/13

Company: Valero Refining - Meraux LLC
Address: 2500 East St. Bernard Highway, Meraux, LA 70075

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

Monitor Manufacturer and Model No.: Brimstone SGX-231(SO_2)/Rosemount Oxymitter 4000(O_2)

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 (low scale)	SO_2 #2 (high scale)	O_2 #1 (low scale)	O_2 #2 (high scale)
Date of Audit	9/3/13	9/3/13	8/27/13	8/27/13
Audit Gas Cylinder No.	LL166006	LL165997	LL42560	LL42613
Date of Audit Gas Cert.	2/8/13	2/8/13	1/28/13	1/30/13
Type of Certification	EPA Protocol 1	EPA Protocol 1	EPA Protocol 1	EPA Protocol 1
Certified Audit Value	125.0	279.2	5.95	10.04
CEM Response Value	132.3	289.0	6.10	10.20
Accuracy	5.8%	3.5%	2.5%	1.6%
Standard	<15%	<15%	<15%	<15%

II. CALIBRATION DRIFT ASSESSMENT

A. Out-of Control Periods:

1. Dates: N/A

2. Number of Days N/A

B. Corrective Actions: N/A

DATA ASSESSMENT REPORT

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

Pollutant: **SO_2**

Applicable NSPS Subpart: Ja

Reporting period dates: From 7/01/13 to 9/30/13
Date submitted: 10/30/13

Company: Valero Refining - Meraux LLC
Address: 2500 East St. Bernard Highway, Meraux, LA 70075

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

Monitor Manufacturer and Model No.: Brimstone 991-CEM-X (SO_2), Rosemount Oxymitter 4000 (O2)

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

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

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

I. ACCURACY ASSESSMENT RESULTS (CGA):

	SO_2 #1 (low scale)	SO_2 #2 (high scale)	O_2 #1 (low scale)	O_2 #2 (high scale)
Date of Audit	9/3/13	9/3/13	8/27/13	8/27/13
Audit Gas Cylinder No.	LL166006	LL165997	LL42560	LL42613
Date of Audit Gas Cert.	2/8/13	2/8/13	1/28/13	1/30/13
Type of Certification	EPA Protocol 1	EPA Protocol 1	EPA Protocol 1	EPA Protocol 1
Certified Audit Value	125.0	279.2	5.95	10.04
CEM Response Value	126.3	281.7	5.90	10.00
Accuracy	1.0%	0.9%	0.8%	0.4%
Standard	<15%	<15%	<15%	<15%

II. CALIBRATION DRIFT ASSESSMENT

A. Out-of Control Periods:

1. Dates: N/A

2. Number of Days N/A

B. Corrective Actions: N/A

DATA ASSESSMENT REPORT

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

Pollutant: **H_2S**

Applicable NSPS Subpart: J

Reporting period dates: From 7/01/13 to 9/30/13
Date submitted: 10/30/13

Company: Valero Refining - Meraux LLC
Address: 2500 East St. Bernard Highway, Meraux, LA 70075

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

Monitor Manufacturer and Model No.: Ametek 4661

Source Unit: Area 1 Fuel Drum for Boiler TB-01 (EPN 1-06, EQT 0010)

CEM Sampling Location: Area 1 Fuel Drum

CEM Span Value: Hydrogen Sulfide, 300 ppm

I. ACCURACY ASSESSMENT RESULTS (CGA):

	H_2S #1 (low scale)	H_2S #2 (high scale)
Date of Audit	8/5/13	8/5/13
Audit Gas Cylinder No.	LL37408	SG9115786ALB
Date of Audit Gas Cert.	3/5/13	3/5/13
Type of Certification	EPA Protocol 1	EPA Protocol 1
Certified Audit Value	75.7	164.3
CEM Response Value	72.7	155.7
Accuracy	4.0%	5.2%
Standard	<15%	<15%

II. CALIBRATION DRIFT ASSESSMENT

A. Out-of Control Periods:

1. Dates: N/A

2. Number of Days N/A

B. Corrective Actions: N/A

DATA ASSESSMENT REPORT

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

Pollutant: **H_2S**

Applicable NSPS Subpart: J and Ja (Benzene Recovery Unit Reboiler Subject to Ja)

Reporting period dates: From 7/01/13 to 9/30/13
Date submitted: 10/30/13

Company: Valero Refining - Meraux LLC
Address: 2500 East St. Bernard Highway, Meraux, LA 70075

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

Monitor Manufacturer and Model No.: Ametek 4661

Source Unit: Area 2 Fuel Drum for: MDH Product and Fractionator Heaters (EPN 2-92, EQT 0033); 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); DHT Charge Heater (EPN 5-73, EQT 0058); Benzene Recovery Unit Reboiler (EPN 1-09, EQT 0127)

CEM Sampling Location: Area 2 Fuel Drum

CEM Span Value: Hydrogen Sulfide, 300 ppm

I. ACCURACY ASSESSMENT RESULTS (CGA):

	H_2S #1 (low scale)	H_2S #2 (high scale)
Date of Audit	8/6/13	8/6/13
Audit Gas Cylinder No.	LL37408	SG9115786ALB
Date of Audit Gas Cert.	3/5/13	3/5/13
Type of Certification	EPA Protocol 1	EPA Protocol 1
Certified Audit Value	75.7	164.3
CEM Response Value	75.3	163.1
Accuracy	0.6%	0.7%
Standard	<15%	<15%

II. CALIBRATION DRIFT ASSESSMENT

A. Out-of Control Periods:

1. Dates: N/A

2. Number of Days N/A

B. Corrective Actions: N/A

DATA ASSESSMENT REPORT

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

Pollutant: **H_2S**

Applicable NSPS Subpart: J

Reporting period dates: From 7/01/13 to 9/30/13
Date submitted: 10/30/13

Company: Valero Refining - Meraux LLC
Address: 2500 East St. Bernard Highway, Meraux, LA 70075

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

Monitor Manufacturer and Model No.: Ametek 4661

Process Unit(s) Description: Area 4 Fuel Drum for Alky Reboiler (EPN 1-77, EQT 0078)

CEM Sampling Location: Area 4 Fuel Drum

CEM Span Value: Hydrogen Sulfide, 300 ppm

I. ACCURACY ASSESSMENT RESULTS (CGA):

	H_2S #1 (low scale)	H_2S #2 (high scale)
Date of Audit	8/6/13	8/6/13
Audit Gas Cylinder No.	LL37408	SG9115786ALB
Date of Audit Gas Cert.	3/5/13	3/5/13
Type of Certification	EPA Protocol 1	EPA Protocol 1
Certified Audit Value	75.7	164.3
CEM Response Value	73.0	156.0
Accuracy	3.6%	5.1%
Standard	<15%	<15%

II. CALIBRATION DRIFT ASSESSMENT

A. Out-of Control Periods:

1. Dates: N/A

2. Number of Days N/A

B. Corrective Actions: N/A

DATA ASSESSMENT REPORT

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

Pollutant: **H_2S**

Applicable NSPS Subpart: J

Reporting period dates: From 7/01/13 to 9/30/13
Date submitted: 10/30/13

Company: Valero Refining - Meraux LLC
Address: 2500 East St. Bernard Highway, Meraux, LA 70075

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

Monitor Manufacturer and Model No.: Ametek 4661

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

CEM Sampling Location: Area 6 Fuel Drum

CEM Span Value: Hydrogen Sulfide, 300 ppm

I. ACCURACY ASSESSMENT RESULTS (CGA):

	H_2S #1 (low scale)	H_2S #2 (high scale)
Date of Audit	8/7/13	8/7/13
Audit Gas Cylinder No.	LL37408	SG9115786ALB
Date of Audit Gas Cert.	3/5/13	3/5/13
Type of Certification	EPA Protocol 1	EPA Protocol 1
Certified Audit Value	75.7	164.3
CEM Response Value	74.4	159.3
Accuracy	1.8%	3.0%
Standard	<15%	<15%

II. CALIBRATION DRIFT ASSESSMENT

A. Out-of Control Periods:

1. Dates: 8/8/13 – 8/9/13

2. Number of Days 1.1

B. Corrective Actions: The calibration check on 8/9 was > 4x the allowable limit above the reference gas value. Valero adjusted and calibrated the analyzer. Valero believes that the problem was related to the analyzer being exposed to an extended period of high H_2S concentration on 8/8.

DATA ASSESSMENT REPORT

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

Pollutant: **H_2S**

Applicable NSPS Subpart: J

Reporting period dates: From 7/01/13 to 9/30/13
Date submitted: 10/30/13

Company: Valero Refining - Meraux LLC
Address: 2500 East St. Bernard Highway, Meraux, LA 70075

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

Monitor Manufacturer and Model No.: Ametek 4661

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

CEM Sampling Location: Area 6 Fuel Drum

CEM Span Value: Hydrogen Sulfide, 300 ppm

I. ACCURACY ASSESSMENT RESULTS (CGA):

	H_2S #1 (low scale)	H_2S #2 (high scale)
Date of Audit	8/7/13	8/7/13
Audit Gas Cylinder No.	LL37408	SG9115786ALB
Date of Audit Gas Cert.	3/5/13	3/5/13
Type of Certification	EPA Protocol 1	EPA Protocol 1
Certified Audit Value	75.7	164.3
CEM Response Value	77.3	163.4
Accuracy	2.1%	0.5%
Standard	<15%	<15%

II. CALIBRATION DRIFT ASSESSMENT

A. Out-of Control Periods:

1. Dates: N/A

2. Number of Days N/A

B. Corrective Actions: N/A

DATA ASSESSMENT REPORT

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

Pollutant: **NO_x**

Applicable NSPS Subpart: Db

Reporting period dates: From 7/01/13 to 9/30/13
Date submitted: 10/30/13

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 23042-5-8018413

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 (low scale)	NOx #2 (high scale)	O_2 #1 (low scale)	O_2 #2 (high scale)
Date of Audit	8/28/13	8/28/13	8/2/13	8/2/13
Audit Gas Cylinder No.	CC367708	LL164501	LL42560	LL42613
Date of Audit Gas Cert.	1/23/12	2/5/13	1/28/13	1/30/13
Type of Certification	EPA Protocol 1	EPA Protocol 1	EPA Protocol 1	EPA Protocol 1
Certified Audit Value	24.9	54.7	5.95	10.04
CEM Response Value	25.1	54.4	5.97	10.06
Accuracy	0.8%	0.6%	0.3%	0.2%
Standard	<15%	<15%	<15%	<15%

II. CALIBRATION DRIFT ASSESSMENT

A. Out-of Control Periods:

1. Dates: N/A

2. Number of Days N/A

B. Corrective Actions: N/A

DATA ASSESSMENT REPORT

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

Pollutant: **NO_x**

Applicable NSPS Subpart: Db

Reporting period dates: From 7/01/13 to 9/30/13
Date submitted: 10/30/13

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 23042-5-8018413

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 (low scale)	NOx #2 (high scale)	O_2 #1 (low scale)	O_2 #2 (high scale)
Date of Audit	8/28/13	8/28/13	8/2/13	8/2/13
Audit Gas Cylinder No.	CC367708	LL164501	LL42560	LL42613
Date of Audit Gas Cert.	1/23/12	2/5/13	1/28/13	1/30/13
Type of Certification	EPA Protocol 1	EPA Protocol 1	EPA Protocol 1	EPA Protocol 1
Certified Audit Value	24.9	54.7	5.95	10.04
CEM Response Value	26.0	54.3	5.98	10.09
Accuracy	4.4%	0.8%	0.5%	0.5%
Standard	<15%	<15%	<15%	<15%

II. CALIBRATION DRIFT ASSESSMENT

A. Out-of Control Periods:

1. Dates: N/A

2. Number of Days N/A

B. Corrective Actions: N/A

DATA ASSESSMENT REPORT

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

Pollutant: NO_x
Applicable NSPS Subpart: Db
Reporting period dates: From 7/01/13 to 9/30/13
Date submitted: 10/30/13
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 (NOx)/(O_2)
Process Unit(s) Description: Boiler TB-01 (EPN 1-06, EQT 0010)
CEM Sampling Location: Boiler TB-01
CEM Span Value: Nitrogen Oxide 500 ppm, Oxygen 25 %

I. ACCURACY ASSESSMENT RESULTS (CGA):

	NOx #1 (low scale)	NOx #2 (high scale)	O_2 #1 (low scale)	O_2 #2 (high scale)
Date of Audit	8/29/13	8/29/13	8/2/13	8/2/13
Audit Gas Cylinder No.	LL166013	LL65256	LL42560	LL42613
Date of Audit Gas Cert.	2/8/13	2/18/13	1/28/13	1/30/13
Type of Certification	EPA Protocol 1	EPA Protocol 1	EPA Protocol 1	EPA Protocol 1
Certified Audit Value	135.5	272.4	5.95	10.04
CEM Response Value	135.0	266.7	5.73	9.77
Accuracy	0.4%	2.1%	3.7%	2.7%
Standard	<15%	<15%	<15%	<15%

II. CALIBRATION DRIFT ASSESSMENT

A. Out-of Control Periods:

1. Dates: 8/12/13 – 8/15/13, 9/6/13 – 9/9/13, 9/20/13 – 9/22/13, 9/25/13 – 9/26/13, 9/27/13 – 10/1/13

2. Number of Days 12.7

B. Corrective Actions: 8/12/13 – 8/15/13: The results of the daily calibration checks were not recorded by the data historian. Valero created an automatic function that excludes the daily calibration checks from the real data. The exclusion function was turned on before the tags for the calibration data were created. Valero created the tags for capturing the calibration data.

9/6/13 – 9/9/13: The O_2 analyzer daily calibration check > 4x the allowable limit on 9/7 and 9/8. Valero failed to take corrective action and the analyzer calibrated satisfactorily on its own on 9/9. Valero counseled the operator responsible for checking the daily calibration checks.

9/20/13 – 9/22/13: The O_2 analyzer daily calibration check > 4x the allowable limit. Valero failed to take corrective action on 9/21. Valero counseled the operator responsible for checking the daily calibration checks. On 9/22, Valero calibrated the analyzer.

9/25/13- 9/26/13: The O_2 analyzer daily calibration check > 4x the allowable limit on 9/26. Valero calibrated the analyzer and returned it to service.

9/27/13 – 10/1/13: The O_2 analyzer daily calibration check > 4x the allowable limit on 9/21. Valero made multiple attempts to repair and calibrate the analyzer, only to have it fail again the next day. Valero observed that the calibration checks were low when the stack O_2 was low and high when the stack O_2 was high. Believing that the stack gas was possibly interfering with the calibrations, Valero overhauled and cleaned the sample probe on 10/1.

DATA ASSESSMENT REPORT

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

Pollutant: **NO_x**

Applicable NSPS Subpart: Ja

Reporting period dates: From 7/01/13 to 9/30/13
Date submitted: 10/30/13

Company: Valero Refining - Meraux LLC
Address: 2500 East St. Bernard Highway, Meraux, LA 70075

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

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

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

CEM Sampling Location: Benzene Recovery Unit Reboiler

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

I. ACCURACY ASSESSMENT RESULTS (CGA):

	NOx #1 (low scale)	NOx #2 (high scale)	O_2 #1 (low scale)	O_2 #2 (high scale)
Date of Audit	8/28/13	8/28/13	8/26/13	8/26/13
Audit Gas Cylinder No.	CC367708	LL164501	LL42560	LL42613
Date of Audit Gas Cert.	1/23/12	2/5/13	1/28/13	1/30/13
Type of Certification	EPA Protocol 1	EPA Protocol 1	EPA Protocol 1	EPA Protocol 1
Certified Audit Value	24.9	54.7	5.95	10.04
CEM Response Value	23.8	51.6	5.75	9.65
Accuracy	4.4%	5.7%	3.4%	3.9%
Standard	<15%	<15%	<15%	<15%

II. CALIBRATION DRIFT ASSESSMENT

A. Out-of Control Periods:

1. Dates: N/A

2. Number of Days N/A

B. Corrective Actions: N/A

DATA ASSESSMENT REPORT

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

Pollutant: **Total Sulfur**

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

Reporting period dates: From 7/01/13 to 9/30/13
Date submitted: 10/30/13

Company: Valero Refining - Meraux LLC
Address: 2500 East St. Bernard Highway, Meraux, LA 70075

Emission Limitation: None

Monitor Manufacturer and Model No.: Thermo Scientific SOLA II

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

CEM Sampling Location: North Flare Stack, North Flare Header

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

I. ACCURACY ASSESSMENT RESULTS (CGA):

	H_2S #1 (low scale)	H_2S #2 (high scale)
Date of Audit	9/11/13	9/11/13
Audit Gas Cylinder No.	LL54215	CC138917
Date of Audit Gas Cert.	2/11/13	2/19/13
Type of Certification	EPA Protocol 1	Certified Gas
Certified Audit Value	1021.0	10020.0
CEM Response Value	1041.8	10088.1
Accuracy	2.0%	0.7%
Standard	<15%	<15%

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

II. CALIBRATION DRIFT ASSESSMENT

A. Out-of Control Periods:

1. Dates: 9/13/13 – 9/16/13

2. Number of Days 3.3

B. Corrective Actions: The pressure regulator on the mid range calibration gas bottle failed and vented the entire bottle to the atmosphere. The calibration was not checked against the mid range standard on 9/14 and 9/15. The zero and high range checks were satisfactory. Valero installed a new regulator and calibration gas bottle on 9/16.

DATA ASSESSMENT REPORT

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

Pollutant: **Total Sulfur**

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

Reporting period dates: From 7/01/13 to 9/30/13
Date submitted: 10/30/13

Company: Valero Refining - Meraux LLC
Address: 2500 East St. Bernard Highway, Meraux, LA 70075

Emission Limitation: None

Monitor Manufacturer and Model No.: Thermo Scientific SOLA II

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

CEM Sampling Location: North Flare Stack, Hydrocracker Flare Header

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

I. ACCURACY ASSESSMENT RESULTS (CGA):

	H_2S #1 (low scale)	H_2S #2 (high scale)
Date of Audit	9/11/13	9/11/13
Audit Gas Cylinder No.	LL54215	CC138917
Date of Audit Gas Cert.	2/11/13	2/19/13
Type of Certification	EPA Protocol 1	Certified Gas
Certified Audit Value	1021.0	10020.0
CEM Response Value	1014.2	10001.2
Accuracy	0.7%	0.2%
Standard	<15%	<15%

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

II. CALIBRATION DRIFT ASSESSMENT

A. Out-of Control Periods:

1. Dates: 7/13/13 – 7/15/13, 9/13/13 – 9/16/13

2. Number of Days 5.6

B. Corrective Actions: 7/13/13 – 7/15/13: The calibration check of the mid range gas standard > 4x the allowable limit on 9/14 and 9/15. Valero failed to take corrective action on 9/14. Valero calibrated the analyzer on 9/15. Valero counseled the operator responsible for checking the daily calibration checks.
9/13/13 – 9/16/13: The pressure regulator on the mid range calibration gas bottle failed and vented the entire bottle to the atmosphere. The calibration was not checked against the mid range standard on 9/14 and 9/15. The zero and high range checks were satisfactory. Valero installed a new regulator and calibration gas bottle on 9/16.

DATA ASSESSMENT REPORT

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

Pollutant: **Total Sulfur**

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

Reporting period dates: From 7/01/13 to 9/30/13
Date submitted: 10/30/13

Company: Valero Refining - Meraux LLC
Address: 2500 East St. Bernard Highway, Meraux, LA 70075

Emission Limitation: None

Monitor Manufacturer and Model No.: Thermo Scientific SOLA II

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

CEM Sampling Location: South Flare Stack

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

I. ACCURACY ASSESSMENT RESULTS (CGA):

	H_2S #1 (low scale)	H_2S #2 (high scale)
Date of Audit	9/11/13	9/11/13
Audit Gas Cylinder No.	LL54215	CC138917
Date of Audit Gas Cert.	2/11/13	2/19/13
Type of Certification	EPA Protocol 1	Certified Gas
Certified Audit Value	1021.0	10020.0
CEM Response Value	1039.8	9900.9
Accuracy	1.8%	1.2%
Standard	<15%	<15%

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

II. CALIBRATION DRIFT ASSESSMENT

A. Out-of Control Periods:

1. Dates: 9/13/13 – 9/16/13, 9/29/13 – 9/30/13

2. Number of Days 4.5

B. Corrective Actions: 9/13/13 – 9/16/13: The pressure regulator on the mid range calibration gas bottle failed and vented the entire bottle to the atmosphere. The calibration was not checked against the mid range standard on 9/14 and 9/15. The zero and high range checks were satisfactory. Valero installed a new regulator and calibration gas bottle on 9/16. 9/29/13 – 9/30/13: The calibration check of the mid range gas standard > 4x the allowable limit on 9/30. Valero calibrated the analyzer on 9/30.

VALERO

September 17, 2013

CERTIFIED: 7003 3110 0001 1311 8725

Department of Environmental Quality
Single Point of Contact (SPOC)
Office of Environmental Compliance
Attn: Emergency Response
P.O. Box 4312
Baton Rouge, LA 70821-4312

Re: UNAUTHORIZED DISCHARGE NOTIFICATION REPORT
Valero Refining – Meraux LLC, Agency Interest #1238
2500 E. St. Bernard Hwy, St. Bernard Parish, Meraux, LA
Title V Permit: 2500-00001-V8
SERC Incident #: 13-03516

Gentlemen,

Valero Refining-Meraux LLC (Valero) is submitting this written notification for an air upset incident reported verbally to the Department on 8/8/13, pursuant to LAC 33:III.927, Louisiana Air Emission Permit General Condition XI.A. and 40 CFR 70 General Condition R.1. Valero has previously submitted a written notification on 8/15/13. This is the final written notification. The incident is described as follows:

#2 SRU Shutdown 8/8/13

Should you have any questions regarding this submission, please contact 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,

VALERO REFINING – MERAUX LLC

Lauren K. Bird
Vice President and General Manager
Meraux Refinery

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

EMERGENCY OCCURRENCE AND/OR AIR UPSET NOTIFICATION FORM

COMPANY NAME: Valero Refining – Meraux LLC
PHYSICAL LOCATION: 2500 E. St. Bernard Hwy.
CITY, STATE, ZIP: Meraux, LA 70075
TELEPHONE NO: (504) 271-4141

DATE/TIME OF CALL: 8/8/13 09:49
DEQ OFFICIAL CONTACTED: Dennis McCory, SERC Hazardous Materials Hotline Operator
VALERO OFFICIAL WHO MADE CALL: Daniel Patnoad

APPLICABLE PERMIT INVOLVED? 2500-00001-V8

EMISSION PT. SOURCE(S) INVOLVED?

Point Sources	EPN	EQT
No. 1 Crude Heater	12-72A	0022
NHT Charge Heater	14-72	0023
NHT Debut Reboiler	15-72	0024
NHT Depent Reboiler	16-72	0027
Platformer Charge Heater	17-72a,b,c	0028
Platformer Debut Reboiler	19-72	0029
DHT Charge Heater	5-73	0058
Vacuum Heaters	1-76	0013
No. 2 Alky Reboiler	1-77	0078
ROSE Heater	1-80	0014
Hydrocracker/Hydrotreater/Fractionator Charge Heaters	1-00	0009
Boiler B-5	2-00	0030
Boiler B-6	3-00	0048
BenFree Reboiler	1-09	0127
SRU #2 Incinerator	1-93	0019

APPLICABLE AIR QUALITY REGULATIONS INVOLVED? LAC 33:III.927

UPSET DESCRIPTION, CAUSE, AND WHAT OFFSITE IMPACT RESULTED:
On August 8, 2013, starting at approximately 08:05, Valero experienced excess emissions of Sulfur Dioxide (SO_2) and Hydrogen Sulfide (H_2S) at the #2 Sulfur Recovery Unit (SRU) and several refinery fuel gas-fired sources due to an unexpected shutdown of the #2 SRU. After the shutdown of the #2 SRU, Valero cut stripping steam to the #1 Amine unit to prevent acid gas flaring. This eventually resulted in increased SO_2 emissions from heaters and boilers due to elevated H_2S in the refinery fuel gas system.

Valero maintenance personnel were in a Satellite Equipment Building to replace a cooling fan on an Uninterruptible Power Supply (UPS). When an electrician opened the cabinet to identify the cooling fan, the UPS shut down and electrical power was lost to several key fuel gas valves on the #2 SRU. The valves moved to their fail-safe position (shut) and the #2 SRU shut down.

Valero determined the root cause of the UPS shutdown to be the failure of a static switch control card. The card showed clear evidence of damage on one component. Valero also identified the following contributing factors:

1. An intermittently failing cooling fan was first identified in December 2012. Valero received the replacement fan in January 2013, but did not change it out until August 2013.
2. This particular UPS model has been identified as having static switch failures due to design issues.
3. Preventative maintenance was performed on this UPS in June 2013, but the fan was not changed out at the time.

The electrician manually restored power to the #2 SRU fuel gas valves via the manual bypass switch on the UPS. Valero initiated its sulfur shedding procedure in various process units to minimize SO_2 emissions, while working to restart the #2 SRU.

Valero provided verbal notification to the SPOC Hotline as soon as it became apparent that the event would result in a release greater than the Reportable Quantity of SO_2. Valero performed mobile downwind ambient monitoring for SO_2 and H_2S. Valero received no citizen complaints regarding this event.

DATE/TIME RELEASE BEGAN AND TIME IT LASTED:
SO_2 emissions from heaters, boilers, and the #2 SRU Incinerator occurred on 8/8/13 from 08:05 to 8/8/13 17:32 for a duration of 9.5 hours.

WHICH SPECIFIC POLLUTANTS WERE EMITTED AND HOW MUCH OF EACH COMPOUND WAS RELEASED?
SO_2, estimated at 5,779 pounds, and H_2S, estimated at 16 pounds.

WHAT OTHER AGENCIES WERE NOTIFIED? LDEQ and LEPC.

IMMEDIATE CORRECTIVE ACTION TAKEN?
Valero restored power to the #2 SRU fuel gas valves, initiated its sulfur shedding procedure to minimize SO_2 emissions, and restarted the #2 SRU.

SPECIFIC ACTIONS TAKEN/PLANNED TO PREVENT RECURRENCE?
The static switch control card was replaced and the UPS was returned to service approximately two hours after it had failed. Valero will also evaluate the following actions to further decrease the likelihood of reoccurrence:

1. Replacing the UPS with a newer, more reliable model.
2. Changing out the 120 VAC fuel gas valves to 24 VDC valves that are then powered by the more reliable Distributed Control System (DCS) power supplies.
3. Performing a test of the DCS power supply.

WAS THE RELEASE PREVENTABLE? (if no, provide details):
Yes.

REGULATION NOTIFICATION REQUIREMENT(S):
_x_ LAC 33:III.927 (Upset/Emergency)
_x_ LAC 33:I.3917 (RQ)
___ LAC 33:III.5107B (Air Toxics)

SIGNATURE D. Patterson DATE 8/13/13
TITLE Sr. Environmental Engineer

SERC Incident #13-03516

CALCULATION SHEET

#2 SRU Shutdown (8/8/13)
Valero Refining – Meraux LLC

Heaters and Boilers Emissions Calculations

Estimated emissions from the combustion of H_2S containing gas:

Pounds of SO_2 = [FR][TD][ConcH_2S][EF][1.69×10^{-7}]

Pounds of H_2S = [FR][TD][ConcH_2S][1-EF][8.96×10^{-8}]

FR	=	Average Flow Rate of gas combusted (SCFH)
TD	=	Total Duration (hrs)
ConcH_2S	=	Average Concentration of H_2S in gas (ppm)
EF	=	Combustion Efficiency
1.69×10^{-7}	=	[lb mole H_2S/379.5 scf H_2S][64 lbs SO_2/lb mole H_2S]/1000000
8.96×10^{-8}	=	[lb mole H_2S/379.5 scf H_2S][34 lbs H_2S/lb mole H_2S]/1000000

SRU Incinerator Calculations

Estimated emissions from Incinerator SO_2 monitoring:

Pounds of SO_2 = [FR][TD][ConcSO_2][1.69×10^{-7}]

Pounds of H_2S = [FR][TD][ConcSO_2][1-EF][8.96×10^{-8}]/[EF]

FR	=	Average Flow Rate of (SCFH)
TD	=	Total Duration (hrs)
ConcSO_2	=	Average Concentration of SO_2 in Incinerator Exhaust (ppm)
EF	=	Combustion Efficiency
1.69×10^{-7}	=	[lb mole SO_2/379.5 scf SO_2][64 lbs SO_2/lb mole H_2S]/1000000
8.96×10^{-8}	=	[lb mole H_2S/379.5 scf H_2S][34 lbs H_2S/lb mole H_2S]/1000000

Notes:

1. Heaters and Boilers -The flow rates was measured by fuel gas flow meters. The H_2S concentration was estimated using a Fuel Drum H_2S Analyzer that measures H_2S concentration from 0-300 ppm. During periods where the Fuel Drum H_2S Analyzer was at maximum scale (i.e. >300 ppm), a value of 600 ppm (2 x 300 ppm) was substituted unless measured otherwise by manual sampling (Dragers).
2. The flow rate for the SRU Incinerator calculations was estimated using engineering judgment based on material balance and stack test information. The SO_2 concentrations were measured using a CEMS spanned from 0-500 ppm. During periods where the SO_2 CEMS was at maximum scale (i.e. > 500 ppm), a value of 1000 ppm (2 x 500 ppm) was substituted.

CALCULATION SHEET

#2 SRU Shutdown (8/8/13)
Valero Refining – Meraux LLC

Emissions Calculations									
Point Source(s)	Start	Stop	TD (hrs)	FR (SCFH)	ConcH_2S or ConcSO_2 (ppm)	EF	SO_2 (lbs)	H_2S (lbs)	Event Description
#2 SRU Incinerator	8/8/13 08:05	8/8/13 17:06	9.0	147,671	2,051	0.995	461	1	SO_2 @ O% O2 > 250 ppm
Area 2 Fuel Drum	8/8/13 08:44	8/8/13 17:32	8.8	672,104	4,787	0.995	4,761	13	H_2S > 162 ppm
Area 4 Fuel Drum	8/8/13 09:27	8/8/13 16:54	7.4	46,181	1,835	0.995	105	0	H_2S > 162 ppm
Hydrocracker Heaters Fuel Drum	8/8/13 09:32	8/8/13 16:39	7.1	201,770	798	0.995	192	1	H_2S > 162 ppm
Hydrocracker Boilers Fuel Drum	8/8/13 09:01	8/8/13 17:22	8.3	155,487	1,198	0.995	260	1	H_2S > 162 ppm
						Total	5,779	16	

SERC Incident #13-03516