

WEB 2/26/13



ST. CHARLES REFINERY • Valero Refining - New Orleans, L.L.C. • P. O. Box 518 • Norco, Louisiana 70079-0518 • Telephone (985) 764-8611

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MAR 01 2013

DEQ

Single Point of Contact

February 26, 2013

7011 3500 0001 6349 2026

USPS Certified Mail:

LA Dept. of Environmental Quality
ATTN: Surveillance Division – SPOC
“Unauthorized Discharge Notification Report”
P. O. Box 4313
Baton Rouge, LA 70821- 4313

LDEQ Southeast Regional Office
Building 4, Suite 420
201 Evans Road,
New Orleans, LA 70123-5230

State Emergency Response Commission
Office of the State Police
P. O. Box 66168.
Baton Rouge, LA 70896

Calli T. Madere, Acting Council Secretary
St. Charles Parish Emergency Group
Email pdf: cmadere@stcharlesgov.net
and cc: penny@st-charles.la.us

Subject: Unauthorized Discharge Notification Report
AI # 26003
Incident Date: 02/19/13
LA Police Incident #: 13-00746

Lobudice, Theresa
ER
513-23480
T146729

Dear Sir/Madam:

- 1. Name, address, telephone number, Agency Interest (AI) number, and any other applicable identification numbers of the person, company, or other party who is filing the written report, and specific identification that the report is the written follow-up report required by LAC 33:I.3925:

Company Name: Valero St. Charles Refinery
Address: P. O. Box 518, Norco, LA 70079 (14902 River Road)
Telephone Number: 985-764-8611
AI No.: 26003

This is the first written follow-up report required by LAC 33:I.3925 for this incident.

- 2. Time and date of notification, the official contacted when reporting, the name of the person making that notification, and identification of the site or facility, vessel, transport vehicle, or storage area from which the unauthorized discharge occurred:

On February 19, 2013, at approximately 07:30 hrs, Ms. Carolyn Baker made the following notifications that the Recycle Gas Compressor in the Diesel Hydrotreating unit had malfunctioned resulting in excess SO₂ emissions at Flares 1, 2, 3 and 4.

<u>Agency</u>	<u>Date/Time</u>	<u>Valero Rep</u>	<u>Action</u>	<u>Agency Rep</u>	<u>Purpose</u>
State Police	02/19/13 07:38 am	Carolyn Baker	Call Made	Dennis McCrary	Initial Notification
DEP	02/19/13 07:45 am	Carolyn Baker	Call Made	Lee Hebert	Initial Notification
DEQ	02/19/13 08:25 am	Carolyn Baker	Call Received	Theresa Logiudice	Follow up
DEQ	02/19/13 08:36 am	Rob Martin	Call Made	Theresa Logiudice	Follow up
DEQ	02/19/13 09:18 am	Rob Martin	Email made	Theresa Logiudice	Follow up
DEQ	02/19/13 10:25 am	Carolyn Baker	Email made	Theresa Logiudice	Email Air Monitoring Results
DEQ	02/19/13 10:45 am	Carolyn Baker	Email Received	Theresa Logiudice	Acknowledged email
DEQ	02/19/13 3:13pm	Carolyn Baker	Email made	Theresa Logiudice	Follow up
DEQ	02/19/13 09:26 pm	Carolyn Baker	Left Voicemail	Theresa Logiudice	All Clear
State Police	02/19/13 09:27 pm	Carolyn Baker	Call Made	Operator Thompson	All Clear
DEP	02/19/13 09:31 pm	Carolyn Baker	Call Made	Eric	All Clear

3. Date(s), time(s), and duration of the unauthorized discharge and, if not corrected, the anticipated time it is expected to continue:

Date of Discharge: 02/19/2013
 Time of Discharge: Approximately 04:11 am
 Duration: Approximately 14 hours 15 minutes

4. Details of the circumstances and events leading to any emergency condition, including incidents of loss of sources of radiation and if the release point is subject to a permit:

Details of this incident are still under investigation at this time. These details will be submitted in a follow-up correspondence accompanied with a root cause failure analysis (RCFA).

a. The current permitted limit for the pollutant(s) released:

SO₂
 50 pounds per hour (hourly maximum), Flare 1
 50 pounds per hour (hourly maximum), Flare 2
 25 pounds per hour (hourly maximum), Flare 3
 25 pounds per hour (hourly maximum), Flare 4

NOx

31 pounds per hour (hourly maximum), Flare 1
31 pounds per hour (hourly maximum), Flare 2
12.95 pounds per hour (hourly maximum), Flare 3
12.95 pounds per hour (hourly maximum), Flare 4

VOCs:

28.5 pounds per hour (hourly maximum), Flare 1
28.5 pounds per hour (hourly maximum), Flare 2
4.74 pounds per hour (hourly maximum), Flare 3
4.74 pounds per hour (hourly maximum), Flare 4

CO:

168.30 pounds per hour (hourly maximum), Flare 1
168.30 pounds per hour (hourly maximum), Flare 2
28.05 pounds per hour (hourly maximum), Flare 3
28.05 pounds per hour (hourly maximum), Flare 4

PM10/2.5

1.0 pounds per hour (hourly maximum), Flare 1
1.0 pounds per hour (hourly maximum), Flare 2
0.17 pounds per hour (hourly maximum), Flare 3
0.17 pounds per hour (hourly maximum), Flare 4

H₂S

1.00 pounds per hour (hourly maximum), Flare 1
1.00 pounds per hour (hourly maximum), Flare 2
0.5 pounds per hour (hourly maximum), Flare 3
0.5 pounds per hour (hourly maximum), Flare 4

b. The permitted release point/outfall ID:

Source ID: EQT 013, EQT 007, EQT 034, and EQT 360
Descriptive Name: Flares 1, 2, 3, and 4

c. Which limits were exceeded for air releases?

The estimated emissions are still under review and will be submitted in a follow up report.

- 5. Common or scientific chemical name of each specific pollutant that was released as the result of an unauthorized discharge, including the CAS number and U.S. Dept. of Transportation hazard classification, and best estimate of amounts of any or all released pollutants (expressed in pounds, including calculations):**

Common or scientific chemical name = Sulfur Dioxide, SO₂
CAS # 7446-09-5
U.S. DOT hazard class = UN1079

Emissions estimates have not yet been completed.

- 6. Statement of actual or probable fate or disposition of the pollutant or source of radiation and what off-site impact resulted:**

A power interruption caused the Diesel Hydrotreating (DHT) Recycle Gas Compressor to malfunction and de-pressure to the flare system.

- 7. Remedial actions taken, or to be taken, to stop unauthorized discharges or to recover pollutants or sources of radiation:**

We safely shut down the DHT. No pollutants were recouped.

- 8. Procedures or measures which have or will be adopted to prevent recurrence of the incident or similar incidents, including incidents of loss of sources of radiation:**

This incident is still under investigation. No procedures or preventive measures have been identified at this time. This information will be submitted in a follow-up report.

- 9. If an unpermitted or unlicensed site or facility is involved in the unauthorized discharge, a schedule for submitting a permit or license application to the department, or rationale for not requiring a permit or license:**

N/A

- 10. The reporting party's status (former or present owner, operator, disposer, etc.):**

Valero Refining – New Orleans, L.L.C. is the present owner of the facility.

- 11. For discharges to the ground or groundwater, the following information shall also be included: all information of which the reporting party is aware that indicates pollutants are migrating, including, but not limited to, monitoring well data; possible routes of migrations; and all information of which the reporting party is aware regarding any public or private wells in the area of the migration used for drinking, stock watering, or irrigation:**

N/A

12. What other agencies were notified:

The agencies listed in question number 2 were the only agencies notified.

13. Names of all other responsible parties of which the reporting party is aware:

N/A

14. A determination by the discharger of whether or not the discharge was preventable; if not, an explanation of why the discharge was not preventable.

The incident is still under investigation. We have not yet made a determination on whether or not this discharge was preventable. This information will be submitted in a follow-up report.

15. The extent of injuries, if any:

There were no injuries as a result of this incident.

16. The estimated quantity, identification, and disposition of recovered materials, if any:

No material was recovered from this event.

If you have any questions pertaining to this incident or require additional information please call Mr. Rob Martin 985-764-5605.

Sincerely,



Carolyn F. Baker
Sr. Environmental Engineer

Enclosure

Pm 4-19-13



ST. CHARLES REFINERY • Valero Refining - New Orleans, L.L.C. • P. O. Box 518 • Norco, Louisiana 70079-0518 • Telephone (985) 764-8611

April 19, 2013

AI 26003

T 146729
513-23480
Theresa Coakley
SERO

USPS Certified Mail:

7011 3500 0001 6349 4334

LA Dept. of Environmental Quality
ATTN: Surveillance Division – SPOC
“Unauthorized Discharge Notification Report”
P. O. Box 4313
Baton Rouge, LA 70821-4313

LDEQ Southeast Regional Office
Building 4, Suite 420
201 Evans Road,
New Orleans, LA 70123-5230

State Emergency Response Commission
Office of the State Police
P. O. Box 66168.
Baton Rouge, LA 70896

Ms. Tiffany K. Clark, Council Secretary
Email: tclark@stcharlesgov.net
and
pduhe@stcharlesgov.net

Subject: Unauthorized Discharge Notification Report
AI # 26003
Incident Date: 02/19/2013
LA Police Incident #: 13-00746

Dear Sir/Madam:

The Valero St. Charles site was unable to complete the investigation within 60-days of the above referenced incident. We are providing this status update in accordance with LAC 33:I 3925. We expect to issue the final letter shortly

If you have any questions pertaining to this incident please call me at 985-764-8611.

Sincerely,

Robert J.T. Martin, P.E.
Environmental Manager

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APR 26 2013

DEQ
Single Point of Contact

PM 6/7/13



ST. CHARLES REFINERY • Valero Refining - New Orleans, L.L.C. • P. O. Box 518 • Norco, Louisiana 70079-0518 • Telephone (985) 764-8611

June 7, 2013

7011 3500 0001 6349 8240

SI3-23480
T 146729
AI= 26003
Theresa, Logiudice

USPS Certified Mail:
LA Dept. of Environmental Quality
ATTN: Surveillance Division – SPOC
“Unauthorized Discharge Notification Report”
P. O. Box 4313
Baton Rouge, LA 70821- 4313

LDEQ Southeast Regional Office
Building 4, Suite 420
201 Evans Road,
New Orleans, LA 70123-5230

State Emergency Response Commission
Office of the State Police
P. O. Box 66168.
Baton Rouge, LA 70896

Tiffany K. Clark, Council Secretary
St. Charles Parish Emergency Group
Email pdf: telark@stcharlesgov.net
and cc: pduhe@st-charles.la.us

Subject: Unauthorized Discharge Notification Report
AI # 26003

RECEIVED

Incident Date: 02/19/13

LA: Police Incident #: SI3-007467

JUN 12 2013

DEQ

Dear Sir/Madam:

Single Point of Contact

- Name, address, telephone number, Agency Interest (AI) number, and any other applicable identification numbers of the person, company, or other party who is filing the written report, and specific identification that the report is the written follow-up report required by LAC 33:1.3925:**

Company Name: Valero St. Charles Refinery
 Address: P. O. Box 518, Norco, LA 70079 (14902 River Road)
 Telephone Number: 985-764-8611
 AI Number: 26003

This is the final written follow-up report required by LAC 33:1.3925 for this incident. An update letter was submitted on April 19, 2013.

- Time and date of notification, the official contacted when reporting, the name of the person making that notification, and identification of the site or facility, vessel, transport vehicle, or storage area from which the unauthorized discharge occurred:**

On February 19, 2013, at approximately 07:30 hrs, Ms. Carolyn Baker made the following notifications that the Recycle Gas Compressor in the Diesel Hydrotreating (DHT) unit had malfunctioned resulting in excess SO₂ emissions at Flares 1, 2, and 4.

A

<u>Agency</u>	<u>Date/Time</u>	<u>Valero Rep</u>	<u>Action</u>	<u>Agency Rep</u>	<u>Purpose</u>
State Police	02/19/13 07:38 am	Carolyn Baker	Call Made	Dennis McCrary	Initial Notification
DEP	02/19/13 07:45 am	Carolyn Baker	Call Made	Lee Hebert	Initial Notification
DEQ	02/19/13 08:25 am	Carolyn Baker	Call Received	Theresa Logiudice	Follow up
DEQ	02/19/13 08:36 am	Rob Martin	Call Made	Theresa Logiudice	Follow up
DEQ	02/19/13 09:18 am	Rob Martin	Email made	Theresa Logiudice	Follow up
DEQ	02/19/13 10:25 am	Carolyn Baker	Email made	Theresa Logiudice	Email Air Monitoring Results
DEQ	02/19/13 10:45 am	Carolyn Baker	Email Received	Theresa Logiudice	Acknowledged email
DEQ	02/19/13 3:13pm	Carolyn Baker	Email made	Theresa Logiudice	Follow up
DEQ	02/19/13 09:26 pm	Carolyn Baker	Left Voicemail	Theresa Logiudice	All Clear
State Police	02/19/13 09:27 pm	Carolyn Baker	Call Made	Operator Thompson	All Clear
DEP	02/19/13 09:31 pm	Carolyn Baker	Call Made	Eric	All Clear

3. Date(s), time(s), and duration of the unauthorized discharge and, if not corrected, the anticipated time it is expected to continue:

Date of Discharge: 02/19/2013
 Time of Discharge: Approximately 04:10
 Duration: Approximately 14 hours 15 minutes

4. Details of the circumstances and events leading to any emergency condition, including incidents of loss of sources of radiation and if the release point is subject to a permit:

On February 19, 2013, at approximately 04:10, the DHT Recycle Gas Compressor (K-15-53) malfunctioned resulting in a unit shutdown and a release to the flare of 828 pounds of sulfur dioxide. The GE Multilin relay indicated a short due to apparent moisture intrusion that caused arcing which damaged the insulators and cables. The cables were repaired and the insulators were replaced. A cover for the capacitor cabinet was fabricated to cover the holes due to rust which allowed water inside to prevent any further damage from inclement weather. Heavy rain was in the area at the time of the incident.

a. The current permitted limit for the pollutant(s) released:

SO₂

- 50 pounds per hour (hourly maximum), Flare 1
- 50 pounds per hour (hourly maximum), Flare 2
- 25 pounds per hour (hourly maximum), Flare 3
- 25 pounds per hour (hourly maximum), Flare 4

NO_x

- 31 pounds per hour (hourly maximum), Flare 1
- 31 pounds per hour (hourly maximum), Flare 2
- 12.95 pounds per hour (hourly maximum), Flare 3
- 12.95 pounds per hour (hourly maximum), Flare 4

VOCs:

- 28.5 pounds per hour (hourly maximum), Flare 1
- 28.5 pounds per hour (hourly maximum), Flare 2
- 4.74 pounds per hour (hourly maximum), Flare 3
- 4.74 pounds per hour (hourly maximum), Flare 4

CO:

- 168.30 pounds per hour (hourly maximum), Flare 1
- 168.30 pounds per hour (hourly maximum), Flare 2
- 28.05 pounds per hour (hourly maximum), Flare 3
- 28.05 pounds per hour (hourly maximum), Flare 4

PM_{10/2.5}

- 1.0 pounds per hour (hourly maximum), Flare 1
- 1.0 pounds per hour (hourly maximum), Flare 2
- 0.17 pounds per hour (hourly maximum), Flare 3
- 0.17 pounds per hour (hourly maximum), Flare 4

H₂S

- 1.00 pounds per hour (hourly maximum), Flare 1
- 1.00 pounds per hour (hourly maximum), Flare 2
- 0.5 pounds per hour (hourly maximum), Flare 3
- 0.5 pounds per hour (hourly maximum), Flare 4

b. The permitted release point/outfall ID:

Source ID: EQT 013, EQT 007, and EQT 360
Descriptive Name: Flare 1, Flare 2, and Flare 4

c. Which limits were exceeded for air releases?

We exceeded the maximum hourly permitted emissions for SO₂ at Flare 1; SO₂, VOCs, and PM_{10/2.5} at Flare 2; and SO₂, NO_x, VOCs, CO, PM_{10/2.5}, and H₂S for Flare 4. We also

exceeded the reportable quantity for SO₂ as a result of the incident. For Flares 1 and 4, we exceeded the maximum pounds of SO₂ per 24 consecutive hour period. The estimated emissions associated with this incident are found in Attachment 1.

5. Common or scientific chemical name of each specific pollutant that was released as the result of an unauthorized discharge, including the CAS number and U.S. Dept. of Transportation hazard classification, and best estimate of amounts of any or all released pollutants (expressed in pounds, including calculations):

Common or scientific chemical name = Sulfur Dioxide, SO₂
CAS # 7446-09-5
U.S. DOT hazard class = UN1079

The estimated emissions associated with this incident are included as Attachment 1.

6. Statement of actual or probable fate or disposition of the pollutant or source of radiation and what off-site impact resulted:

Gas from the DHT Recycle Gas Compressor was combusted in Flares 1, 2 and 4, and the resulting combustion byproducts rapidly dispersed.

7. Remedial actions taken, or to be taken, to stop unauthorized discharges or to recover pollutants or sources of radiation:

Emissions were minimized by restarting the recycle gas compressor.

8. Procedures or measures which have or will be adopted to prevent recurrence of the incident or similar incidents, including incidents of loss of sources of radiation:

1. Communicate this incident to all affected personnel.
2. Replace the existing cabinet on the next turn-around.
3. Modify the existing roof/cover to provide better protection from inclement weather. (A temporary repair was already completed.)
4. Survey similar cabinets for damage and make required repairs and/or replacements.
5. Establish a preventive maintenance program for similar cabinets plant-wide.
6. Determine the necessity of the capacitors for K-15-53 and either replace or remove them.
7. Improve effectiveness of and/or training on the maintenance work process to ensure that repair findings/discovery scope during the course of work that is not addressed at the time is captured in a work order.
8. Draft an emergency operating procedure to address the loss of the recycle compressor.

9. If an unpermitted or unlicensed site or facility is involved in the unauthorized discharge, a schedule for submitting a permit or license application to the department, or rationale for not requiring a permit or license: N/A

10. The reporting party's status (former or present owner, operator, disposer, etc.):

Valero Refining – New Orleans, L.L.C. is the present owner of the facility.

11. For discharges to the ground or groundwater, the following information shall also be included: all information of which the reporting party is aware that indicates pollutants are migrating, including, but not limited to, monitoring well data; possible routes of migrations; and all information of which the reporting party is aware regarding any public or private wells in the area of the migration used for drinking, stock watering, or irrigation: N/A

12. What other agencies were notified:

The agencies listed in question number 2 were the only agencies notified.

13. Names of all other responsible parties of which the reporting party is aware: N/A

14. A determination by the discharger of whether or not the discharge was preventable; if not, an explanation of why the discharge was not preventable.

This incident was reasonably preventable.

15. The extent of injuries, if any:

There were no injuries as a result of this incident.

16. The estimated quantity, identification, and disposition of recovered materials, if any:

No material was recovered from this event.

If you have any questions pertaining to this incident or require additional information please call Mr. Rob Martin 985-764-5605.

Sincerely,



Ralph Phillip
Vice President and General Manager

Enclosure

Attachment 1

Basis:

Start Time:	End Time:	Duration (hrs)	Flare 1 (lb SO ₂)	Flare 2 (lb SO ₂)	Flare 4 (lb SO ₂)	Total Flow (scf)	SO ₂ (lb)	H ₂ S (lb)	Flares 1 & 2 > 50 lb SO ₂	Flares 3 & 4 > 25 lb SO ₂	Flares 1 & 2 > 1 lb H ₂ S	Flares 3 & 4 > 0.5 lb H ₂ S
2/19/13 4:10	2/19/13 5:10	1	144.5	0.0	140.0	3788891	284.5	1.4	Y	Y	Y	Y
2/19/13 5:10	2/19/13 6:10	1	48.6	0.0	131.2	443784	179.8	0.9	N	N	Y	Y
2/19/13 6:10	2/19/13 7:10	1	29.6	0.0	54.3	377352	83.9	0.4	N	N	Y	Y
2/19/13 7:10	2/19/13 8:10	1	15.2	0.0	27.9	294819	43.1	0.2	N	N	Y	Y
2/19/13 8:10	2/19/13 9:10	1	7.8	31.9	14.2	368940	53.9	0.3	N	N	N	N
2/19/13 9:10	2/19/13 10:10	1	0.0	62.8	0.0	429997	62.8	0.3	Y	Y	N	N
2/19/13 10:10	2/19/13 11:10	1	0.0	57.8	0.0	395664	57.8	0.3	Y	Y	N	N
2/19/13 11:10	2/19/13 12:10	1	0.0	35.3	0.0	241333	35.3	0.2	N	N	N	N
2/19/13 12:10	2/19/13 13:10	1	0.0	0.0	0.0	0	0.0	0.0	N	N	N	N
2/19/13 13:10	2/19/13 14:10	1	0.0	0.0	0.0	0	0.0	0.0	N	N	N	N
2/19/13 14:10	2/19/13 15:10	1	0.4	3.9	0.0	24492	4.3	0.0	N	N	N	N
2/19/13 15:10	2/19/13 16:10	1	3.4	2.5	0.0	197585	5.8	0.0	N	N	N	N
2/19/13 16:10	2/19/13 17:10	1	3.5	2.7	0.0	209885	6.2	0.0	N	N	N	N
2/19/13 17:10	2/19/13 18:10	1	0.3	10.6	0.0	371372	11.0	0.1	N	N	N	N

Emission calculation:

Criteria Pollutant:	Emission Factor (lb/mmbtu)	Flare #1	Flare #2	Flare #4	Total Released (lbs)
CO	0.37	330.0	715.6	405.0	1450.7
NOx	0.068	60.7	131.5	74.4	266.6
PM 10/2.5	0.0028	2.5	5.4	3.1	11.0
VOC	0.14	124.9	270.8	153.3	548.9
SO ₂	N/A	253.2	207.5	367.6	828.3
H ₂ S	N/A	1.3	1.0	1.8	4.1

$$Q_{SO_2, \text{released}} = \left(\frac{x \text{ scf}_{H_2S}}{hr} \right) \left(\frac{y \text{ scf}_{H_2S}}{\text{scf}_{H_2S}} \right) \left(\frac{\text{lb - mole}_{H_2S}}{379 \text{ scf}_{H_2S}} \right) \left(\frac{0.995 \text{ lb - mole}_{SO_2}}{\text{lb - mole}_{H_2S}} \right) \left(\frac{64 \text{ lb}_{SO_2}}{\text{lb - mole}_{SO_2}} \right) = \frac{z \text{ lb}_{SO_2}}{hr}$$