



Valero Refining Company-Tennessee, L.L.C. • 2385 Riverport Road • Memphis, Tennessee 38109

ENV – 074/23

August 11, 2023

Certified Mail Request Number 7011 0470 0002 5089 8204

City of Memphis Office of Emergency Management
2668 Avery Street
Memphis, TN 38112

RE: Follow-up Notification

OEM Operations:

On July 25, 2023, notifications were provided by Valero Refining Company-Tennessee, L.L.C., (the Refinery) to the City of Memphis Office of Emergency Management (OEM), via telephone call, that the Refinery was experiencing a release of Sulfur Dioxide (SO₂) and had potentially exceeded the Reportable Quantity (RQ). The Refinery is providing written follow-up for the SO₂ exceedance for this event pursuant to 40 CFR Part 355.

Notifications were also made to the Tennessee Emergency Management Agency (TEMA), and the Shelby County Office of Preparedness (SCOP). Additionally note that the Shelby County Health Department Division of Air Pollution Control (SCHD) is also copied on this correspondence.

If additional information is needed, please contact Greg Swearingen, Manager Environmental Engineering.

Sincerely,

A handwritten signature in black ink that reads 'Eric Brown'.

Eric Brown
Vice-President and General Manager

Attachment

cc: Larry Smith, SCHD – Certified Mail No. 7011 0470 0002 5089 8211

Release Information for OEM

1) Name of Owner or Operator:

Valero Refining Company-Tennessee, L.L.C.

2) Site Name and Address:

Valero Memphis Refinery
Mailing Address - 2385 Riverport Road
Physical Address - 543 West Mallory Avenue
Memphis, Tennessee 38109

3) Substance Released:

Sulfur Dioxide (SO₂)

4) Estimated quantity released into the environment:

The total release quantity of Sulfur Dioxide (SO₂) was 941 pounds.

5) Time and Duration of Release:

On July 25th at about 6:51 PM, the City of Memphis and the extended region experienced a series of power surges and power losses as a result of a 3rd party power supplier substation failure. Subsequently, the Refinery experienced unplanned shutdowns due to the power interruption. Nearly all of the major pumps and compressors at the Refinery shutdown, and safety systems automatically engaged.

Refinery units depressured to the flare system as designed. The power loss caused a shutdown of all of the Refinery steam boilers which supply steam to the Refinery flares. Adequate steam to mitigate smoke from the Refinery flares was therefore not available until the boilers could be restarted.

In addition to SO₂ emissions from flaring, SO₂ emissions from heater combustion increased because the Refinery amine system (which removes H₂S from the Refinery fuel system) shut down due to power loss. The amine system was partially normalized by 12:00 pm July 26th, reducing the fuel system H₂S below permit limits. The Refinery sulfur plants shutdown due to the loss of Refinery power which also contributed to the SO₂ release. The sulfur plants were restarted when Refinery conditions permitted.

The Refinery rolling 24-hr SO₂ emissions exceeded the 500 pound reportable quantity from 23:00 on July 25th to 22:00 on July 26th.

6) Medium into which the release occurred:

Air.

7) Actions taken to respond to and contain the release:

Refinery units were shutdown by the loss of power to the Refinery. The units were secured to a safe posture until restart could be safely accomplished. The initial flaring ended when the Refinery units had depressured to a safe level after the power loss. The Refinery amine system was normalized and the sulfur units were placed in safe standby.

8) Known or anticipated acute or chronic health risk associated with the release:

No known or anticipated acute or chronic health risk associated with this release.

9) Where appropriate, advice regarding medical attention necessary for exposed individuals:

Not applicable for this event.



Valero Refining Company-Tennessee, L.L.C. • 2385 Riverport Road • Memphis, Tennessee 38109

ENV – 075/23

August 11, 2023

Certified Mail Request Number 7011 0470 0002 5089 8181

Tennessee Emergency Management Agency
Attn: Operations
3041 Sidco Drive
Nashville, TN 37204

**RE: Follow-up Notification for Tennessee Emergency Management Agency (TEMA)
REPORT NUMBER 1438**

TEMA Operations:

On July 25, 2023, initial notification was provided by Valero Refining Company-Tennessee, L.L.C., (the Refinery) to TEMA, via telephone call, that the Refinery was experiencing a release of Sulfur Dioxide (SO₂) and had potentially exceeded the reportable quantity (RQ). A TEMA representative, Garrett Scott, issued report number 1438 for the event. The Refinery is providing the attached written follow-up for the SO₂ exceedance for this event pursuant to 40 CFR Part 355.

Notifications were also made to the City of Memphis of Office Emergency Management, the Shelby County Office of Preparedness, and the Shelby County Health Department Division of Air Pollution Control (SCHD) for this event. Note, SCHD is also copied on this correspondence.

If additional information is needed, please contact Greg Swearingen, Manager Environmental Engineering.

Sincerely,

A handwritten signature in black ink that reads 'Eric J. Brown'.

Eric Brown
Vice-President and General Manager

Attachment

cc: Larry Smith, SCHD – Certified Mail No. 7011 0470 0002 5089 8198

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Release Information for TEMA Report Number: 1438

1) Name of Owner or Operator:

Valero Refining Company-Tennessee, L.L.C.

2) Site Name and Address:

Valero Memphis Refinery
Mailing Address - 2385 Riverport Road
Physical Address - 543 West Mallory Avenue
Memphis, Tennessee 38109

3) Substance Released:

Sulfur Dioxide (SO₂)

4) Estimated quantity released into the environment:

The total release quantities of Sulfur Dioxide (SO₂) was 941 pounds.

5) Time and Duration of Release:

On July 25th at about 6:51 PM, the City of Memphis and the extended region experienced a series of power surges and power losses as a result of a 3rd party power supplier substation failure. Subsequently, the Refinery experienced unplanned shutdowns due to the power interruption. Nearly all of the major pumps and compressors at the Refinery shutdown, and safety systems automatically engaged.

Refinery units depressured to the flare system as designed. The power loss caused a shutdown of all of the Refinery steam boilers which supply steam to the Refinery flares. Adequate steam to mitigate smoke from the Refinery flares was therefore not available until the boilers could be restarted.

In addition to SO₂ emissions from flaring, SO₂ emissions from heater combustion increased because the Refinery amine system (which removes H₂S from the Refinery fuel system) shut down due to power loss. The amine system was partially normalized by 12:00 pm July 26th, reducing the fuel system H₂S below permit limits. The Refinery sulfur plants shutdown due to the loss of Refinery power which also contributed to the SO₂ release. The sulfur plants were restarted when Refinery conditions permitted.

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8) Known or anticipated acute or chronic health risk associated with the release:

No known or anticipated acute or chronic health risk associated with this release.

- 9) Where appropriate, advice regarding medical attention necessary for exposed individuals:
Not applicable for this event.