



3485 Pacheco Boulevard
Martinez, CA 94553

September 21, 2020

CERTIFIED MAIL – RETURN RECEIPT REQUESTED

Bay Area Air Quality Management District
ATTN: Mail Stop FM1
375 Beale Street, Suite 600
San Francisco, CA 94105

To Whom It May Concern:

Subject: July 8, 2020 Reportable Flaring Event Incident Report-Public Version

Pursuant to Regulation 12 Rule 12 Section 406, Martinez Refining Company submits the following information regarding a reportable flaring event as defined in Regulation 12-12-208 that occurred on July 8, 2020. The attached report is the public version and discusses the cause of the flaring event and any prevention measures considered to prevent recurrence of the event.

If you have any questions concerning the information, please contact Rick Shih at (925) 313-3743 or richard.shih@pbfenergy.com.

Sincerely,

A handwritten signature in black ink, appearing to be "GJ", with a long horizontal line extending to the right.

Gordon Johnson
Manager, Environmental Affairs
Martinez Refining Company

Attachment

Regulation 12 Rule 12 Reportable Flaring Event Causal Analysis Report

1. **Report Date:** September 09, 2020
2. **Refinery Name and Site Number:** Martinez Refining Company - BAAQMD Site # A0011
3. **Refinery Contact and Phone Number:** Rick Shih (925) 313-3743
4. **Flare Identification:** LOP flare S-1471
5. **Flaring Event Duration:**
 - a. **Date:** July 8, 2020
 - b. **Time:** 4:04 PM – 4:35 PM
 - c. **Total Duration of Event:** 0.5 hours
6. **Brief Description of Flaring Event:** Flaring at LOP flare when a compressor, [REDACTED], tripped off resulting in SO₂ emissions greater than 500 pounds in a 24-hour period occurred.
7. **Process Flow Diagram:** see attached process flow diagram
8. **Volume of Gas Flared:** 0.2 MMSCF
9. **Total Emissions due to flaring based on Regulation 12 Rule 11 Methodology:**
 - a. 92 lbs of methane
 - b. 108 lbs of non-methane hydrocarbons
 - c. 1142 lbs of sulfur dioxide
10. **Was the Gas Scrubbed?** The vent gas that went to the flare was not scrubbed.
11. **Primary Cause of Flaring Event including Detailed Description of the Cause and Contributing Factors:**

The Saturates Gas Plant (SGP) serves to separate heavier hydrocarbon from process gases. Compressor [REDACTED] is part of the SGP and compresses feed coming into a 15 pound header leading to the SGP. On July 8, 2020, [REDACTED] tripped off resulting in flaring at the LOP flare. During the efforts to identify the cause of the flaring, an air line to a valve that controls oil flow to [REDACTED] was found disconnected. The tubing was safely reconnected and procedures were followed for restarting the compressor. After the compressor was restarted, flaring ended.

Prior to the event, the turbine that drives the compressor was experiencing intermittent harmonics that is believed to have been caused by a steam leak. The increase in harmonics created a high frequency vibration that was being transferred to an oil line. This oil line had support brackets connecting to the air line. The harmonics caused the air line fitting to loosen, and air was lost to the valve, causing [REDACTED] to trip.

12. **Immediate Corrective Actions Taken:**

Evaluated cause of flaring and found air line disconnected. Air line was reconnected and the compressor was restarted, resulting in the end of flaring
13. **Was the Flaring the Result of an Emergency?**

Yes. The flaring was a result in the loss of oil to the compressor causing the compressor to safely shut down.

14. Was the Flaring Consistent with an Approved FMP?

Yes, the flaring was consistent with Martinez Refining Company approved Flare Management Plan (FMP). As stated on page 3-1 of the FMP, Martinez Refining Company believes the key to flare minimization is careful planning to avoid flaring coupled with evaluation of any flaring events that occur and incorporation of lessons learned back into the planning process to further reduce flaring. As part of the FMP, Martinez Refining Company developed procedures to implement this process. As stated on page 3-1 of the FMP, “when these procedures are followed, any flaring is consistent with the FMP.” Operations followed procedure C(F)-20 – Unanticipated Flaring. This procedure addresses flare events caused by process upsets or unplanned events.

15. Was the Flaring due to a Regulatory Mandate to Vent to a Flare?

The flaring was not due to a regulatory mandate to vent to the flare.

16. Prevention Measures Considered to Minimize Flaring from this Type of Flaring Event

The following preventative measures have been considered to minimize flaring from this type of event:

- A clamp with rubber bushing was attached to the air line to minimize vibration.
- Two brackets that connect the air line to the oil line were disconnected to minimize transfer of vibration from the oil line to the air line.

Figure 1: Process Flow Diagram of Sats Gas Plant

[The figure has been redacted from the Public Version as it contain Business Confidential Information]