



April 29, 2022

Mr. Wayne Nastri
Executive Officer
South Coast Air Quality Management District
21865 Copley Drive
Diamond Bar, CA 91765

Dear Mr. Nastri,

In response to your November 15, 2019 request for quarterly updates regarding implementation of the enhanced mitigation measures described in our August 30, 2019 letter to the Hon. Larry McCallon, Chair of the South Coast Air Quality Management District Refinery Committee, Ultramar Inc. (hereafter “Valero”) provides the following final update for these measures.

Valero has completed all aspects of the commitments detailed in our August 30, 2019 Proffer Letter. All remaining installations were completed during the scheduled Alky ReVAP unit turnaround in 1Q2022.

The projects outlined in our letter include:

- *Item 1 - Installation of Open Path Perimeter HF Sensors.* Valero committed to install open path detection monitors around the perimeter of the alkylation unit within one year of adoption of the Board’s resolution in this matter, i.e., by September 6, 2020. This project was completed and fully commissioned by August 28, 2020, as noted in our September 2, 2020 letter.
- *Item 2 - Installation of Flange Guards.* Valero committed to install flange guards on each flange in the alkylation unit in main acid service greater than 2 inches in diameter by the completion of the next scheduled turnaround. All flange guards were installed prior to completion of the Alky ReVAP unit turnaround in 1Q2022.
- *Item 3 - Automation of Water Curtain System.* Valero committed to automation of the water curtain system upon completion of the next scheduled Alky ReVAP turnaround. Engineering funding was approved in September 2019 for this project. Preliminary engineering design was completed in May 2020. The refinement engineering phase was completed in March, 2021, including finalization of the Cause and Effect logic. Associated sensor electronics and PLC were received in mid-April. Installation of the water valve modifications and PLC modifications started in August, 2021, and were completed during the scheduled Alky ReVAP turnaround in 1Q2022. The Water Curtain Automation System went through Site Acceptance Testing and was placed in service on March 9, 2022 ahead of the completion of the 1Q2022 turnaround. This project was fully implemented by completion of the scheduled Alky ReVAP turnaround in 1Q2022.

- *Item 4 - Installation of Additional Point Source Detectors.* In conjunction with the water curtain automation project described above, Valero committed to install additional point source detectors by completion of the next scheduled Alky ReVAP turnaround. As noted above, engineering funding was approved in September 2019, preliminary engineering was completed in May 2020, with refinement engineering completed in March 2021. As outlined in our January update, 13 additional point source detectors were installed as well as an additional 21 open path detectors as part of the water automation scope. An additional 3 open path detectors were installed around the acid boots. Installation of the new point source and open path detectors started in August 2021. This project was fully implemented by completion of the Alky ReVAP turnaround in 1Q2022.
- *Item 5 - Acid Settler Debris Grid.* Valero committed to develop a preliminary engineering design for a debris grid as described in Valero's August 30, 2019 letter within 180 days of the District's acceptance of Valero's proffer. Based on the Board's adoption of Resolution No. 19-19 on September 6, 2019, the debris grid preliminary design was to be completed by March 4, 2020. Preliminary design engineering results were sent to the District on March 3, 2020. The refinement phase of engineering was completed in March 2021. On July 6, 2021, we received approval from the City of Los Angeles for the associated structural steel. Construction started in August 2021 and was completed December 17, 2021.
- *Item 6 - Acid Settler Riser/Leg Rain Out Barrier/Shroud.* Valero committed to develop a preliminary engineering design for barrier/shroud systems for the acid settler risers and legs and the depropanizer acid boot, as described in Valero's August 30, 2019 letter, within 180 days of the District's acceptance of Valero's proffer. Based on the Board's adoption of Resolution No. 19-19 on September 6, 2019, the barrier/shroud preliminary engineering designs were to be completed by March 4, 2020. Preliminary design engineering was completed with the results sent to the District on March 3, 2020. The refinement phase of engineering was completed in March 2021. On July 6, 2021, we received approval from the City of Los Angeles for the associated structural steel. Construction started in August 2021 and was completed December 17, 2021.

Please note that prior to the installation of these additional safety measures, Valero's HF alkylation unit had operated safely with no off-site incident since it was first built in 1982 and Valero had spent nearly \$200 million on HF risk reduction, including but not limited to:

- Detailed operations training and procedures
- Comprehensive general mechanical integrity (MI) program
- Completed a 2-year HF specific MI program for 100% inspection of every HF acid service carbon steel component
- Elite emergency response team
- Alkylation early leak detection systems
- 33 sensors throughout the unit and the perimeter with alarms at the facility and SCAQMD
- Rapid acid dump system
- Remotely activated water curtain
- Point and shoot water mitigation
- Pump deluge systems
- Utilization of ReVAP (reduced volatility alkylation process)

Valero has continued to operate the HF alkylation unit with no off-site incidents since the Proffer Letter. We hope this information is helpful to you. If you have any questions, please do not hesitate to contact me.

Very truly yours,



Kyle Sharon
Vice President and General Manager

CC (e-mail): Hon. Ben Benoit, SCAQMD Governing Board Chair
Hon. Mayor Larry McCallon, SCAQMD Governing Board Member/Refinery Committee Chair