August 30, 2019

The Honorable Larry McCallon
South Coast Air Quality Management District
Chairman, Refinery Committee
21865 Copley Drive
Diamond Bar, CA 91765

Dear Mayor McCallon,

On behalf of Ultramar Inc., owner and operator of the Wilmington Refinery (Ultramar), I am pleased to proffer Ultramar's commitment to enhance our state-of-the-art hydrofluoric alkylation mitigation systems with unprecedented additional layers of protection.

As we have maintained throughout the District's consideration of Proposed Rule 1410, Ultramar has served as an industry leader in developing and implementing state-of-the-art approaches to minimize the likelihood that a release of hydrogen fluoride (HF) could occur and to provide for rapid detection and response in the unlikely event that a release were to occur. In addition to the systems currently in place, Ultramar, working with the District and other stakeholders, has identified additional measures that we believe will support and complement our existing systems and will provide additional measures of safety.

In lieu of further rulemaking or the need for a new or modified memorandum of understanding, Ultramar will commit to implement the following:

1. ***Open Path Perimeter HF Sensors.*** In addition to the open path monitors to be installed at the fenceline of the Wilmington Refinery pursuant to Rule 1180, Ultramar will install open path perimeter HF sensors around the Alky ReVAP Unit to further facilitate early detection and prompt response to any potential release of HF. Placement, design, and installation of the sensors will be done in accordance with Ultramar's engineering standards and pursuant to process safety hazard analysis. These sensors will be installed within one year of the District accepting this proposal.

2. ***Flange Guards.*** Ultramar shall install guards on each flange in the Alky ReVAP Unit in main acid service greater than 2 inches diameter. This measure is expected to improve rain out and subsequent capture of any acid released at a flange by the water mitigation system, and thus is expected to eliminate the potential for flange leaks to result in an offsite release. Design and installation of the flange guards will be done in

accordance with Ultramar's engineering standards and pursuant to process safety hazard analysis. Absent issues that necessitate delay that are identified at the design phase, the flange guards will be installed no later than the completion of the next scheduled Alky ReVAP turnaround; however, if issues are identified in the design and engineering phase that preclude installation of the flange guards during the next scheduled Alky ReVAP turnaround, the flange guards will be installed no later than completion of the subsequent Alky ReVAP turnaround.

3. ***Automation of Water Curtain System.*** Ultramar will complete installation of a system to automate operation of the existing water curtain system in the Alky ReVAP Unit to expedite the activation of the water curtain systems. Design, installation and operation of the curtain automation system will be done in accordance with Ultramar's engineering standards and pursuant to process safety hazard analysis. Absent issues that necessitate delay that are identified at the design phase, the water curtain automation will be installed no later than the completion of the next scheduled Alky ReVAP turnaround; however, if issues are identified in the design and engineering phase that preclude installation of the automation during the next scheduled Alky ReVAP turnaround, the automation shall be installed no later than completion of the subsequent Alky ReVAP turnaround.

4. ***Additional Point Source Detectors.*** Ultramar will install additional point source detectors at locations optimized to further facilitate precise, rapid detection and response to any potential release of MHF. This measure is expected to facilitate rapid and accurately targeted activation of the water mitigation and acid dump systems, whether these are activated automatically or manually. Placement, design and installation of the detectors will be done in accordance with Ultramar's engineering standards and pursuant to process safety hazard analysis. These additional point source detectors will be installed by the completion of the next scheduled Alky ReVAP turnaround.

5. ***Acid Settler Debris Grid.*** In order to reduce the potential for a release resulting from penetration of the acid unit settler by a projectile, Ultramar will evaluate and design a debris grid to mitigate impacts to the elevated section of the acid settler. The debris grid placement, design and installation will be done in accordance with Ultramar's engineering standards and pursuant to process safety hazard analysis. This debris grid will be designed to prevent the creation of a confined space, to avoid interference with existing HF mitigation systems, to minimize the confinement of flammable vapors, and to continue to provide for free ingress and egress from the unit within the safety and structural limitations of the unit. Within 180 days of the District's acceptance of this proffer, Ultramar shall develop a preliminary engineering design for the debris grid. Absent issues that necessitate delay that are identified at the design phase, the debris

grid will be installed no later than the completion of the next scheduled Alky ReVAP turnaround; however, if issues are identified in the design and engineering phase that preclude installation of the grid during the next scheduled Alky ReVAP turnaround, the grid will be installed no later than completion of the subsequent Alky ReVAP turnaround.

6. ***Acid Settler Riser/Leg Rain Out Barrier/Shroud.*** Ultramar will design, engineer, and install Rain Out Barrier/Shroud systems for the Acid Settler Risers and Legs and the Depropanizer Acid Boots to reduce the momentum of any potential release from these systems and redirect the material downward, thus enhancing rain out and capture by the water mitigation systems. These shroud systems will be similar to that already employed on the Acid Coolers within the unit. Additional barriers or shrouding will be installed on the elevated acid piping that feeds the Settler. This mitigation measure reduces the potential for an offsite release resulting from a compromise to the settler system piping by improving rainout and subsequent capture of any released material by the water mitigation systems. The Rain Out Barrier/Shroud placement, design, and installation will be done in accordance with Ultramar's engineering standards and pursuant to process safety hazard analysis. Preliminary design of the Acid Settler Riser/Leg Rain Out Barrier/Shroud and Depropanizer Acid Boot Rain Out Barrier/Shroud systems will be completed within 180 days of the District's acceptance of this proffer. Absent issues that necessitate delay that are identified at the design and engineering phase, the Acid Settler Riser/Leg Rain Out Barrier/Shroud and Depropanizer Acid Boot Rain Out Barrier/Shroud will be installed no later than the completion of the next scheduled Alky ReVAP turnaround; however, if issues are identified in the design and engineering phase that preclude installation of one or both barrier/shroud systems during the next schedules Alky ReVAP turnaround, the Acid Settler Riser/Leg Rain Out/Barrier System and/or Depropanizer Acid Boot Rain Out Barrier/Shroud shall be installed no later than completion of the subsequent Alky ReVAP turnaround.

It is important to note that the District and Ultramar already have an existing Memorandum of Understanding from 2003 (Agreement), under which the District agreed to refrain from further regulation of HF. Nothing in this letter from Ultramar, nor the District's acceptance or rejection of this proffer, shall supersede or alter the existing Agreement. However, by accepting this proffer, the District and Ultramar will avoid the potential for litigation arising out of the Agreement.

District, Ultramar and other stakeholders have expended almost three years in considering mitigation measures and alternatives. This has taxed the resources of all those involved and resulted in no viable alternatives beyond enhanced mitigation measures described in this letter. We believe there is limited benefit from continuing on this course. Ultramar has a long history of safely operating the Wilmington HF alkylation unit and has remained in compliance with the Agreement.

We have already installed the best mitigation systems available and continuously work to improve them. Now, we stand ready to facilitate the closure of this process by committing publicly to implement even more safety improvements.

Thank you for your consideration of our proposal.

Sincerely,

Mark Phair
VP & General Manager
Ultramar Inc.

cc: Richard Walsh, VP & Deputy General Counsel
Elizabeth Bourbon, Sr. Managing Counsel
Scott Folwarkow, Executive Director Governmental Affairs