Office of the Executive Officer Wayne Nastri 909.396.2100, fax 909.396.3340

Via email and US Mail

March 19, 2019

Natalie Irwin Valero Wilmington Refinery 2402 East Anaheim Street Wilmington, CA 90744

## SCAQMD Partial Approval of the Fenceline Monitoring Plan for the Ultramar, Inc., Valero Wilmington Refinery, California (Facility ID 800026) SCAQMD Rule 1180

On August 1, 2018, the Valero Wilmington Refinery (Valero) submitted to the South Coast Air Quality Management District (SCAQMD) a draft fenceline air monitoring plan pursuant to SCAQMD Rule 1180, and as required by the Health and Safety Code section 42705.6. SCAQMD staff reviewed the draft plan and provided the refinery with comments. On January 18, 2019 Valero submitted a revised fenceline air monitoring plan (Plan) which was published for public comment on January 23, 2019. The public comment period closed on February 06, 2019. Based on the comments received and additional staff review, SCAQMD is pleased to inform you that elements 2 and 3.1 through 3.4 of Valero's Plan have been approved, provided that Valero agrees to the additions and modifications outlined below and shown in Exhibit A:

- Include additional air monitoring equipment (i.e., OP-FTIR and UV-DOAS) to achieve
  adequate spatial coverage along the Western boundary of the refinery, where most of the
  processing units and storage tanks are located (see Exhibit A for details).
- 2. Provide GPS coordinates and heights above ground level for all proposed fenceline air monitoring equipment (e.g., open path monitors, reflectors, and point monitors).
- 3. In order to properly detect potential fugitive emissions from large storage tanks located along the Northern boundary of the refinery (identified in Figure 2-12 as BTEX, Styrene and 1,3-butadiene sources), place the retro-reflector along path 2A at or higher than the height of the closest tanks.
- 4. Extend the length of path 2A, 3A, and 3B as shown in Exhibit A.
- 5. Provide a contingency plan to install additional UV-DOAS and OP-FTIR systems in case the detection capabilities of the UV-DOAS and/or OP-FTIR systems (e.g. detection limits for one or more of all measured pollutants) are found to be inadequate during the first 6 months of operation. This is because SCAQMD is concerned that the length of newly proposed paths 2A and 3B are longer than the 500 meter maximum recommended in the Rule 1180 Guidelines.
- 6. Include one additional set of point monitors, consisting of a hydrogen sulfide (H<sub>2</sub>S) instrument and a black carbon (BC) instrument. With this addition, a total of four sets of

- point monitors (each comprised of a H<sub>2</sub>S and BC instruments) will be installed at the refinery fenceline, as illustrated in Exhibit A.
- 7. The location of the meteorological station on Figure 2-9 is identified as on top of a building, which is not recommended by the US EPA Quality Assurance Handbook for Air Pollution Measurement Systems, Volume IV: Meteorological Measurements. If Valero wishes to maintain this location, then a detailed justification should be included in the Plan. Alternatively, identify a more appropriate site for the meteorological station.
- 8. Provide a contingency plan to identify remedies and/or alternatives in the event any of the proposed monitoring locations/paths would become unavailable/infeasible due to difficulties in obtaining permits, power, lines of sight, or any other related complications to the proposed fenceline monitoring system, within one week of becoming aware of any such complication.
- 9. Characterize and outline residential areas surrounding the refinery. SCAQMD received a number of public comments stating that Valero provided an inadequate description of the location of nearby residences. Specifically, many areas identified in Figure 2-4 as "Industrial" have residences scattered throughout. SCAQMD staff was able to substantiate these claims by examining portions of Wilmington directly west of the refinery, between Anaheim Street and East E Street. This area is identified as "industrial" in Figure 2-4 of Valero's Plan, and not identified as "Residential" in Figure 2-5. SCAQMD staff identified single-family homes along Pioneer Ave, and apartment complexes along Flint Ave. Staff determined that some of these residences are about 0.6 miles away from the refinery fenceline. Additionally, Leeward Bay Marina, located about 0.13 miles west of the refinery fenceline, has a large number of live-in boats.
- 10. Provide a more accurate explanation and description of proximity to sensitive receptors other than schools, such as residences, daycare centers, hospitals, nursing homes and recreational areas. By focusing solely on neighboring schools, the current Plan provides an incomplete description of sensitive receptors in the area.
- 11. The modeling results used in the development of the Plan is based on old and potentially outdated emission inventory data (2006-2007). If Valero wishes to utilize 2006-2007 emissions inventory and 2009 HRA information, then a detailed justification should be included in the Plan. Alternatively, Valero should conduct additional modeling, using updated emissions and modeling tools recommended in the Rule 1180 guidelines.
- 12. Substantially expand the implementation schedule presented in Section 5. An acceptable implementation schedule would contain main project milestones with projected completions dates, and proposed remedies and/or contingencies if the proposed milestones cannot be met or are delayed for any reason.

SCAQMD will continue to work with Valero to finalize and approve the remaining elements of their Plan (namely, Section 3.5 – Routine Maintenance and Failure Management; Section 4 – Data Management and Presentation; Section 5 – Implementation Schedule; and Appendix A – Quality Assurance Project Plan (QAPP) and Standard Operating Procedures (SOP) for air monitoring equipment). SCAQMD intends that all elements of the Plan will be in operation by the January 1, 2020 deadline in Health and Safety Code section 42705.6 for the fenceline air monitoring system.

Please have your authorized person sign in the space allocated below to agree with the conditions put forward in this letter, and return the signed copy to SCAQMD within fourteen (14) days from the date of this letter. Partial approval of Valero's Plan will take effect on the date this letter is signed by Valero. In accordance with Rule 1180, Valero must commence fenceline air monitoring no later than one year from the date of Plan approval, and Health and Safety Code section 42705.6 requires installation and operation by January 1, 2020. Your partial approval will become effective on the date of Valero's signed certification below.

## Valero certification:

I understand, accept, and agree to the conditions of the partial approval of Valero's Plan.

V.P. 3 GENERAL MLR Position

MARCH 27,2019

Should you have any questions regarding this approval letter, please contact Dr. Andrea Polidori at (909) 396-3283, or via email at apolidori@aqmd.gov.

Executive Officer

South Coast Air Quality Management District

Attachment WN:MMM:JCL:AP:OP:ld

Exhibit A - Valero