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Draft Regulation 12-16: Refining Facility-Wide Emissions Limits &
Draft Regulation 11-18: Reduction of Risk from Air Toxic Emissions at Existing Facilities

Mr. Gregg Nudd
Manager, Rule Development Section
Bay Area Air Quality Management District
375 Beale Street, Suite 600
San Francisco, CA 94105

Dear Mr. Nudd:

The Valero Refining Company – California (Valero) Benicia Refinery is located within the Bay Area Air Quality Management District (BAAQMD) jurisdiction and has a throughput capacity of over 165,000 barrels per day, providing transportation fuels and high quality employment opportunities in the Bay Area. The Benicia refinery will be significantly impacted by the draft regulations issued by the District on October 14, 2016, referenced above. We appreciate the opportunity to comment on the Draft Regulations: 12-16 and 11-18, and the Draft Environmental Impact Report--Initial Study for both draft regulations.

Valero supports the comments of the Western States Petroleum Association (WSPA) and the California Council for Environmental and Economic Balance (CCEEB) and incorporates their comments by reference herein.

Draft Regulation 12-16 Petroleum Refining Emissions Limits

Valero has significant concerns about Regulation 12-16 because the District has drafted a "Refinery Emissions Caps Rule" based on a proposal from a non-governmental organization (NGO), instead of acting as an objective third party with technical expertise, direction from the Board of Directors notwithstanding. Valero appreciates the District's Staff Report pointing out the possible ramifications of adopting Regulation 12-16, such as its legality and its impact on California's larger economy. Valero objects to Regulation 12-16 for the reasons outlined below, many of which have been mentioned in the Staff Report.

Establishing numeric limits on GHGs, PM, NO_x and SO_2 (to cap refinery emissions) would impede Valero's ability to run permitted sources and should be eliminated from consideration. Current throughput levels were legally permitted through the District's existing regulatory process. The requirement to reduce emissions below permitted levels is contrary to BAAQMD and Federal New

Source Review (NSR) requirements, circumvents other District permitting and offset rules (Regulations 2-1, 2-2, and 2-5), renders the District's air permitting program fundamentally inconsistent with the Federal New Source Review program, and is not necessary to monitor and control emissions and public health impacts.

Draft Regulation 12-16 disregards all the health and environmental analyses that support the refinery's current permitted emission limits in favor of arbitrarily preventing increases above recent historical actual emissions. This is pointed out on page 18 of the staff report ("The data from these monitoring stations show that air quality in refinery areas is comparable to other urbanized locations for PM2.5, NOx, and SO2. Air District maximum readings for PM2.5 or NOx do not come from the refinery-area monitors.").

In the case of NO_x, SO_2, and GHGs, the District is proposing emission limits for pollutants that either meet National Ambient Air Quality Standards (NAAQS) and State Ambient Air Quality Standards or for which a NAAQS is non-existent (GHGs). The NAAQS are standards established by the USEPA under the authority of the Clean Air Act (42 U.S.C. 7401 et seq.) that apply to outdoor air throughout the country. Primary standards are designed to protect human health, with an adequate margin of safety, including for sensitive populations such as children, the elderly, and individuals suffering from respiratory diseases. Essentially the NAAQS defines the level at which a pollutant can be present without adversely affecting the community. These standards are established after an intensive rulemaking process that is supported by extensive research and data, including peer-reviewed studies and thorough technical justification. In this instance, the District is arbitrarily selecting new levels for these pollutants without any data or justification to support the necessity, appropriateness, or benefit of the new standards.

To the extent that Draft Regulation 12-16 is claiming to support public health by capping refinery emissions, it is duplicative of other District rules that already address toxic emissions and therefore unnecessary. The District currently regulates toxics pursuant to BAAQMD Regulation 2-5, "New Source Review of Toxic Air Contaminants", the Community Air Risk Evaluation (CARE) Program, Federal NESHAPs/MACT regulations, and California Air Resources Board's (CARB) Airborne Toxic Control Measures. The BAAQMD is proposing Draft Rule 11-18 to target health impacts directly.

Proposed Regulation 12-16 would deprive Valero of the flexibility to operate within legally obtained and demonstrably protective emission limits established through previous permitting processes, many of which addressed the same concerns cited as the basis for this rulemaking by requiring installation of pollution control technology costing hundreds of millions of dollars. This unreasonable and arbitrary deprivation and constraint of operational flexibility unfairly reduces the return on previous investments in pollution control technology in defiance of California's vested rights doctrine.

For example, Valero invested three quarters of a billion dollars in 2011 to build a flue gas scrubber and two new crude furnaces to abate the Coker and FCCU gases which reduced SO_2 and other criteria pollutant emissions by thousands of tons per year. At the same time, increased crude capacity was permitted following the District's permitting regulations and the CEQA process. Draft

Regulation 12-16's proposed numeric emissions limits being below what was legally permitted would nullify Valero's investment.

Proposed Numeric Limits for Criteria Pollutants and GHGs (Tables 12-16-301 through 305)

The Proposed numeric limits for PM, NO_x and SO_2 reference the Annual Emissions Inventories reported to ARB via CEIDARS for 2010-2014 (Tables 12-16-302 through 12-16-305 footnotes), the very numbers that were claimed to be inaccurate and insufficient, and which justified adoption of Regulation 12-15 in April of 2016. As you know, emissions inventories calculated using the new guidelines do not represent how historic emissions were determined. How can these numeric limits be complied with given they are inconsistent with future emissions inventory calculations?

Valero was treated differently from the other refineries and support facilities when determining the SO_2 emissions in Table 12-16-305, and NOx and PM as well, because it appears that 2010 was not included in the baseline. We request that the same baseline of 2010-2014 be used for Valero. It is stated in the Staff Report (last paragraph, page 20), *"In one general scenario, the refineries decide to make physical improvements in order to reduce emissions to allow for increases in refining capacity while staying below the cap."* Valero made such an investment in 2011 (Flue Gas Scrubber Project-- FGS) and should be allowed to use its Potential to Emit (PTE) for SO_2, NOx and PM associated with this project. Otherwise, Valero is being penalized for its FGS investment (roughly $750 million), which reduced SO_2 emissions in the Air Basin drastically. As proposed in Table 12-16-305, Valero's SO_2 emissions constitute only 2.4% of total SO_2 emissions, and its emissions baseline leaves it with very little flexibility for future operations.

Proposed GHG Caps will simply shift production to jurisdictions outside the Bay Area, and will result in corresponding increases in GHGs in other parts of California or out of State. Since refineries are already subject to CARB's Cap and Trade program, it is not clear what benefits the District is aiming for by capping refinery GHGs in its air basin.

Valero would like to point out that applying the PADD 5 refinery utilization to the Bay Area Refineries is an inherently flawed assumption; it certainly does not represent Benicia Refinery (Page 23 of Staff Report). In addition, emissions and refining capacity are not linearly correlated. To assert that Regulation 12-16 emissions caps, at a level 7% higher than current operations, would allow the Benicia Refinery to run at 92.8% utilization is erroneous. The same erroneous assertion is repeated on Page 39 of the Staff Report (Page 39, last paragraph). *"Rule 12-16 would limit Bay Area refinery emissions to a level 7 percent higher than current operations. Based on the analysis detailed elsewhere in this report, Air District staff believes this cap to be consistent with the current full-production capacity of Bay Area refineries".* We request that these references be removed and the caps not be applied.

Determination of Compliance (12-16-501)

Section 12-16-501.5 (Emission Limit Exceedance) states that "... exceedance of an emission limit shall be considered a violation for each day of the calendar year for the relevant emission

inventory." An exceedance to an emission cap should be considered a violation after the date the limit was exceeded but not for the entire calendar year.

Draft Regulation 11-18 Reduction of Risk from Air Toxic Emissions at Existing Facilities

AB 2588 requires stationary sources to report the types and quantities of certain substances routinely released into the air every 4 years with the goal of identifying facilities having localized impacts, ascertaining health risks, notifying nearby residents of significant risks, and reducing those significant risks to acceptable levels.

SB 1731 requires facility operators to conduct a risk reduction audit of their facility and to develop a risk reduction plan if a district has identified the facility as having a significant or unreasonable risk.

These two bills were adopted well over 20 years ago and provide the authority to regulate air toxics and require facilities to address the reduction of significant risks. Since the District has standards in place and the authority to address health risks posed by facility emissions, it is unclear why Regulation 11-18 is needed.

A Health Risk Assessment using the Office of Environmental Health Hazard Assessment's (OEHHA) Air Toxic Hot Spots Risk Assessment Guidelines released in 2015 will overstate risk, because the 2015 guidance utilized a new methodology for estimating the health risk from air toxics. For this reason, Valero disagrees with the risk action levels proposed by Regulation 11-18. The OEHAA guidance states that the risk assessment process has a great deal of uncertainty and is designed to err on the conservative side. As a result, calculated refinery risks will be significantly higher (by a factor of three or more) compared to previous HRAs, even though there has not been an actual increase in refinery emissions.

As part of the regulatory development process to inform the U.S. Environmental Protection Agency's (EPA) Risk and Technology Rule, the EPA modeled air toxic emissions from refineries in the United States and found no unacceptable risks. The District has not shown why the EPA modeling and resultant findings are not scientifically sound and why the District therefore must deploy this proposed rule.

Best Available Retrofit Control Technology (TBARCT Regulation 11-18-204)

TBARCT is defined in concept, but a compilation of these technologies is not readily available. We would like some clarification in the rule language of how this will be made available, and how the four options defined in 11-18-204 will be compiled.

Risk Action Level for Cancer Risk (Regulation 11-18-214)

The District has failed to provide a scientific basis for reducing the cancer risk from the current 100-in-1 million to 10-in-1 million. Since the purpose of 11-18 is to "ensure that facilities that emit toxic air contaminants do not pose an unacceptable risk to nearby residents", we request that the

District explain how 10-in-1 million is deemed the right threshold for "acceptable" versus "unacceptable" risk.

Risk Reduction Measures (Regulation 11-18-216)

This states "Changes to production processes, feedstocks, product formulations...." as ways to reduce risk. These suggestions are too vague and open-ended. The Benicia Refinery was built to process certain feedstocks and make CARB gasoline. There may not be sufficient flexibility to "reinvent" the refinery in those areas.

Risk Reduction Plan Requirements (Regulation 11-18-301)

11-18-301.2 requires that **all sources** be controlled by current TBARCT or be lower than the significant risk thresholds in 11-18-217. Given the significant risk threshold for cancer risk of 1 per million, Valero believes it is possible to lower the overall facility health risk without visiting each source at the facility. Since it is likely that a Risk Reduction Plan will trigger "modifications" and NSR, please explain how the rules will work together and how TBARCT will come into play. Please refer to Sections 4 and 5 in Valero's November 28, 2016 comment letter on Regulation 2-5 for our detailed concerns.

Health Risk Assessment Information Requirement (Regulation 11-18-401)

Valero would like additional details on how the "refinery" will participate in the input being fed to HRA and the modeling results. With regard to information request, depending of what type of information is being requested, 30 days may not be sufficient. Presumably, Reg 12-15 inventories will be the main source of information for toxic emissions.

Insufficient Time for Submitting and Executing a Risk Reduction Plan (Regulation 11-18-402)

Facilities are given 180 days from notification to submit a Risk Reduction Plan, and three years from first submittal of the draft plan to execute that plan. Both of these durations are insufficient. Depending on the extent of reduction measures (TBARCT), 180 days may not be enough to put together a plan accurate enough to be executed in 3 years from the submittal date of the plan. In addition, review times by the District, Refinery and Public have not been accounted for. Given permitting, project planning, funding and execution requirements, three years is insufficient by any measure and the timeline should be extended, with the compliance deadline being 3 years from the date of the plan's final approval by the District, the Refinery, and the Public.

Please note the typo in referring to "Section 11-18-213". Valero believes the District meant to refer to "11-18-214".

Updated Risk Reduction Plan (Regulation 11-18-405)

Section 11-18-405 states, "If information becomes available after the initial APCO approval of a Plan regarding health risks posed by a facility or emissions reduction technologies that may be

used by a facility that would significantly impact health risks to exposed persons, the APCO may require a facility owner/operator to update the Plan to reflect the information and resubmit the Plan to the APCO for approval pursuant to Section 11-18-401." The way this section is currently drafted, the District can request at any time that the facility install new TBARCT, thereby creating an endless loop that never allows the facility to have certainty with respect to the effect of its capital expenditures or its level of emissions. We recommend that the District provide a better determination of what level of change of risk would be a significant impact and more detail on the timing and approval process for requiring a facility to resubmit the Plan.

In conclusion, for all the reasons discussed above, we urge you to reject draft Regulation 12-16 (Refinery caps) and to maintain the current significant risk threshold in the existing Regulation 11-18.

Please contact me at (707) 745-7900 or don.cuffel@valero.com if you have any questions.

Sincerely,

Donald W. Cuffel, Director
Environmental, Health, Safety &
Community/Government Affairs

IS/tac

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