



September 10, 2021

Ms. Susan Nakamura  
Assistant Deputy Executive Officer, Planning & Rules  
South Coast Air Quality Management District  
Diamond Bar, CA 91765  
Via electronic mail at Snakamura@aqmd.gov

Re: Proposed Rule 1109.1

Dear Ms. Nakamura,

Ultramar Inc. (Valero) submits the following comments on South Coast Air Quality Management District (SCAQMD or District) Proposed Rule 1109.1, based on the September 1 Workshop version of the rule and the accompanying preliminary draft staff report. Valero operates a petroleum refinery in Wilmington, California and would be subject to the proposed rule as adopted by the District Governing Board. Valero supports the District's efforts to reduce emissions in the South Coast Air Basin (basin) and looks forward to continuing working with the District to identify feasible, cost-effective solutions.

The purpose of the proposed rule is to establish current and future best available retrofit control technology (BARCT) for various NOx emitting equipment at the five refineries in the basin and associated industries, while transitioning these facilities from the current regulatory scheme established by NOx RECLAIM.

We appreciate the tremendous effort staff has put into this complex task and the time that staff has taken to try to understand our particular issues. Valero is the smallest refinery in the basin in both volume and footprint and has unique constraints in constructing additional controls. With the very limited available space at the refinery, we must carefully engineer any add-on controls for affected equipment, which is a time and resource-intensive exercise unique to Valero's operations. Staff has included several provisions in the proposed rule that are very helpful, such as recognizing current BARCT (Interim Limits) and the need to schedule turnarounds to install controls to implement future-effective BARCT.

However, Valero still has several issues with the current proposal, most of which relate to the proposed fluid catalytic cracking unit (FCCU) BARCT of 8 ppm for some units with existing controls and 2 ppm for others.

#### RECLAIM

First, we do not believe staff has properly considered the baseline for purposes of determining BARCT for FCCUs. The proposal begins with a baseline that looks at the state of equipment and controls at each facility and largely ignores the fact that facilities took efforts to comply with the RECLAIM Program since its

inception in 1993 and the multiple methods taken to achieve emission targets. The approach taken does not transition from existing RECLAIM, rather it establishes a new rule as though no current BARCT regulations exist. No effort is made in the proposed rule to deconstruct RECLAIM, rather, it completely overlooks the current BARCT strategies that comprise RECLAIM. This is largely due to the misconception that RECLAIM failed because not all equipment at refineries has control equipment installed. This was never a metric of RECLAIM. The success of RECLAIM was meant to be measured by the overall programmatic reduction in mass emissions that were equivalent to those that would be achieved by command and control rules and did not specify specific controls<sup>1</sup>. Participation in the program through RECLAIM trading credit purchases essentially subsidized installation of controls at other facilities by providing funds to offset the cost to install control equipment. Ignoring the actions facilities took to comply with RECLAIM puts many RECLAIM facilities that relied on the program as designed and implemented at a disadvantage as compared to others, depending on how a facility opted to comply.

BARCT under RECLAIM was properly implemented through a very involved process of looking at all of the equipment under the program, determining appropriate BARCT, including future-effective BARCT for each equipment category, estimating the mass emissions reductions that would be achieved through the implementation of BARCT, and then converting the total mass emission reductions into facility mass emissions caps and shaving those emission caps over the proper timeframe calculated to implement BARCT. Each facility could then properly choose the manner in which they would achieve mass emission reduction targets at their respective facilities. They could either put controls on the identified equipment category, control emissions from other equipment at the facility, purchase emission credits from other facilities that over-controlled, or a combination of the above. In the end, whichever method was chosen, the facility that met the ever-declining emissions cap, met BARCT for the facility and should be credited with meeting BARCT for its equipment. Staff's methodology of establishing new BARCT limitations and the cost of those controls largely ignores all of the investments made to meet the legal and regulatory requirements of BARCT unless a control device was installed. Again, this arbitrarily places some facilities at a distinct disadvantage over others.

The RECLAIM market driven compliance mechanism has been effective and enabled some facilities to develop new BARCT that may not have been achieved without allowing others to invest in control technology development through the purchase of credits. The purchase of credits helped to subsidize controls for other RECLAIM participants. A prime example of this is the recently adopted Rule 1117. The facilities attest that the controls were much too cost prohibitive to install without the ability to sell credits to offset the installations costs of these controls. These types of accomplishments must be accounted for in any transition from RECLAIM.

Valero, during its many years of operation under the RECLAIM program, opted to comply using a combination of allowed methodology and as one method, chose to purchase RECLAIM Trading credits. As

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<sup>1</sup> See, e.g., Final Staff Report for the Regional Clean Air Incentives Market, October 1993, at page 1-1:

"The goal of RECLAIM is to achieve the emission reduction objectives for the Basin by providing facility operators with the flexibility to choose how to make emission reductions, thereby lowering compliance costs and providing incentives for the development and implementation of air pollution control technologies. Implementation of RECLAIM will reduce emissions from sources in the program to the same extent that they would be required to reduce emissions through implementation of existing regulations and the Air Quality Management Plan (AQMP). RECLAIM is designed to ensure that *the program achieves equivalent emission reductions*, an equal or greater level of enforcement, lower implementation costs, fewer job impacts, and no adverse public health impacts, compared to the existing program." (emphasis added)



proposed, Rule 1109.1 does nothing to recognize this valid compliance mechanism and puts Valero at an economic disadvantage as compared to other refineries that would be subject to the new rule, when they relied on a valid regulatory program for many years. For instance, when conducting the required cost element of BARCT for FCCUs, the District simply estimates the cost of controls for the facility, without accounting for either the overall reductions the facility made over the years, including through the purchase of credits, and estimates costs of additional selective catalytic reduction (SCR) as though Valero has done nothing to control emissions. This cost is then compared to other FCCUs where the facility opted to partially control emissions through add-on controls. The result is that the District would have Valero pay twice for emission controls (credits plus SCR), while others pay only once (for SCR). To remedy this inequity, the District should either start with an assumption of the BARCT control that the District calculated when setting the RECLAIM shave with which Valero has complied or add the cost of the credits Valero purchased to the cost of the controls the District now seeks to have Valero install when conducting the cost-effectiveness evaluation.

### BARCT for FCCUs

To further compound the disproportionate effect of the proposed rule, the District is seeking to establish BARCT for FCCUs to be controlled under PR 1109.1 at 2ppm NOx averaged over 365 days. Valero does not believe this is achievable in a cost-effective manner.

BARCT is an emissions limitation established for a class or category of sources under California Health & Safety Code Section 40406. The District has long considered the category of source as FCCUs. In fact, the rulemaking has for the past few years centered on this principle.

The equipment category is FCCUs. There are only 5 units in the equipment category. In this source category, one FCCU is controlled by an SCR that has been installed and is reportedly on average meeting a 2 ppm limit. Two other units have SCRs installed as controls but meet an 8 ppm limit. Another has filed an application to install an SCR at 2 ppm. Rather than setting one unified emission limit for all FCCUs, the District is proposing to break up this very small equipment category into even smaller segments, essentially establishing individual emission limits for each facility. That is inconsistent with regulatory requirements under Health and Safety Code, Division 26, Part 3 (and similar provisions) for establishing BARCT, and does not meet the District's mandates to establish emissions limits for a source category. The District staff would have the unit currently at 2 ppm, remain at 2 ppm, the two units that are able to operate at 8 ppm would remain at 8 ppm, and the other two units, which currently do not have an SCR, would have to meet a 2 ppm limit.

To justify splitting this category up unit by unit, the District does a cost analysis on the four units that would have to do additional controls, and then throws half of the units out of the cost equation, labeling them "outliers" without providing a statistical basis for how this was determined. This is not an objective, scientific determination; rather, this is picking and choosing controls in order to maximize total emission reductions. There is no equitable or technically supportable way to divide this source category in a manner consistent with the Health and Safety Code (as referenced above), and thus should be looked at in the way it was intended, as a whole source category of five FCCUs, and BARCT should be established for the category as a whole. A proper BARCT analysis would look at one emission limitation for the entire class and analyze the cost for all units to comply, thus setting the BARCT limitation at the level that meets all the technological and cost requirements to establish BARCT. Any division of the category by the District places some facilities in a disadvantage compared to others, and has the District picking winners and losers rather than objectively

establishing BARCT and requiring all affected facilities to meet that limit. By arbitrarily splitting the category into single facilities and completely discounting the considerable investments made to achieve RECLAIM program goals through purchase of credits, the proposed FCCU BARCT assessment artificially deflates the costs associated with installation of controls and meanwhile creates competitive disadvantages for the facilities that must bear these costs.

### Implementation Schedule

Valero appreciates staff working with the refineries to understand the complexities of engineering and installing equipment in setting BARCT deadlines. This affects technical feasibility and is a crucial element to consider in establishing BARCT. However, we are still concerned that the schedule for FCCUs is not achievable. Valero would likely rely upon the I-Plan Option 3. However, this option does not allow any additional time for the installation of controls on the FCCU. In order to meet the next scheduled turnaround, any engineering design would need to be completed and an application submitted in approximately one year. Given the limited footprint at the Wilmington Refinery, as noted above and previously communicated to the District, an engineering design is a complex task and will take more time. Therefore, we request that the percentage of emission reductions for Phase I of the I-Plan Option 3 be reduced to allow additional time to properly design a pollution control system for the FCCU.

Again, Valero is committed to working with the District to resolve all remaining RECLAIM transition issues and to obtain the emission reductions necessary in the South Coast Air Basin.

Sincerely,



Mark Phair  
Vice President and General Manager