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Martinez, CA 94553

VIA EMAIL

July 30, 2021

Jacob Finkle
Bay Area Air Quality Management District
375 Beale Street, Suite 600
San Francisco, CA 94105
jfinkle@baaqmd.gov

Subject: Martinez Refining Company Comments on June 2021 IS/NOP of DEIR for Draft Regulation 13 Rule 5 for Petroleum Refinery Hydrogen Plants

Dear Mr. Finkle:

The Martinez Refining Company LLC (MRC) appreciates the opportunity to provide the attached comments on the Bay Area Air Quality Management District (BAAQMD) Initial Study (IS) and Notice of Preparation (NOP) of a Draft Environmental Impact Report (DEIR) for the proposed Regulation 13 Rule 5 for Petroleum Refinery Hydrogen Plants (Draft Rule). MRC comments are contained in Attachment A. Separate comments are being submitted by Air Products (AP), which owns/operates the three hydrogen plants (Hydrogen Plants) at the Martinez Refinery (Refinery), and the Western States Petroleum Association (WSPA), both of which we support and incorporate by reference. In a separate letter, MRC has also provided comments on the Draft Rule. These comments as well as the comments in this letter must be addressed in full by the BAAQMD before the Draft Rule proceeds further.

MRC, jointly with AP, requests a meeting with the BAAQMD to address comments regarding the IS/DEIR and the Draft Rule.

Please note that in submitting this letter, MRC reserves the right to supplement its comments as it deems necessary, especially if additional or different information is made available to the public regarding the Draft Rule rulemaking process.

Please contact Rick Shih at (925) 313-0586 or Richard.shih@pbfenergy.com for any questions concerning these comments.

Martinez Refining Company Comments – NOP of DEIR for Regulation 13 Rule 5

Sincerely,



Gordon Johnson
Manager, Environmental Affairs
Martinez Refining Company

Attachment

Attachment A

MRC offers the following comments to the IS. This submission is made to specifically address the aspects of the rulemaking process that MRC believes do not comply with applicable law including by reason of the IS being improper, unsupported, and premature.

The IS fails to meet the requirements of certain provisions of California law, including the HS&C, and CEQA, and this failure will render the Draft Rule invalid if adopted in its current form. These comments, along with MRC’s written and verbal comments provided to the District on the dates and forums shown in the Table 1 below, AP’s, WSPA’s, and other refineries’ and stakeholders’ comments, must be considered and addressed before the District continues with its current rulemaking process.

Table 1 MRC Meetings and Comments

Forum	Dates
Face-to Face Meetings/Refinery Tours	June 10, 2019 January 13, 2020
Submitted Written Comments	October 19, 2020
Public Workshops/Meetings	July 27, 2021

Note: Table does not include separate WSPA meetings and WSPA comment letters that MRC attended and supports.

- Evaluate Air Quality Impacts from Construction:** The construction of a flare to comply with the Draft Rule will result in greenhouse gases, criteria pollutants, and toxic air contaminants from activities needed to construct the flare and support infrastructure. For example, emissions will result from vehicles being driven by construction workers and equipment used at the Refinery to build and install piping, condensation recovery systems, instrumentation, fuel enrichment system, flare structure, and other support equipment. Natural gas and nitrogen gas lines will need to be installed. In addition, existing equipment will likely need to be relocated to accommodate the new flare system. The impact to air quality from these construction activities must be evaluated in the DEIR.
- Evaluate Impacts from Supplemental Natural Gas:** The Draft Rule targets hydrogen vent streams from hydrogen plants with combustible concentrations that will, at times, have low-heating values that would result in poor combustion (and, at times, below levels to sustain any level of combustion). For example, to comply with the Draft Rule, during start up activities, streams from hydrogen plants consisting of mostly nitrogen will need to be sent to a flare. To combust these streams in a flare, supplemental natural gas will need to

be added. Although the IS mentions "pilot" gas, the IS does not consider the air quality impacts of increased greenhouse gases, criteria pollutants, and toxic air contaminants and does not consider impacts to energy resources from burning supplemental natural gas. More specifically, the DEIR must consider the following impacts:

- a. **VOC Emissions:** The intent of the Draft Rule is to not only limit methane emissions from hydrogen plants but also other organic emissions that are not greenhouse gases. However, the non-methane organic compounds from hydrogen vents to be regulated by the Draft Rule already meets the stringent requirements under BAAQMD Regulation 8, Rule 2 of 300 ppm and 15 pounds per day (total carbon). Therefore, the non-methane organic emissions are already limited to low levels. The combustion of supplemental natural gas (and any methane in the nitrogen rich stream) will result in the generation of non-methane organic compounds, thereby offsetting the small reduction in the already limited quantities of non-methane organic in hydrogen vent streams. The generation of additional non-methane organic compounds associated with the Draft Rule from the installation of flares will need to be carefully evaluated and compared against the potential reduction to assess the benefit of the Draft Rule.
- b. **Other Criteria Pollutant and Toxic Emissions:** As acknowledged by the IS, the Draft Rule will increase other criteria pollutants and toxic air contaminants but the IS does not consider the contribution from supplemental fuel from the installation and operation of flares to comply with the Draft Rule. The analysis of the increase of these emissions from the combustion of natural gas as supplemental fuel to comply with the Draft Rule must be included in the DEIR.
- c. **Methane Emissions:** The combustion of natural gas, not just as pilot gas, but also as supplemental gas to increase the heat content of the vent stream from the hydrogen plants, will result in the generation of methane emissions, the key gas this Draft Rule is intended to control. As with non-methane organic compounds, the generation of additional methane from the installation and operation of flares to comply with the Draft Rule (including from the combustion of supplemental natural gas) will need to be carefully evaluated and compared against the potential reductions to assess the benefit of the Draft Rule.
- d. **Energy Impacts:** While the energy section of the IS discusses the need for natural gas to operate the pilot lights, the IS does not address the need of supplemental natural gas to increase the heat content of the material being flared to achieve good combustion. The impact of the supplemental natural gas from the installation and operation of flares to comply with the Draft Rule will need to be carefully accounted for in the DEIR, particularly considering the control of very low-concentration streams impacts the very heart of the CEQA checklist question VI.a. of whether the Draft Rule will "result in potentially significant environmental impact due to wasteful, inefficient or unnecessary consumption of energy

resources, during ... operations". The IS concludes "Less Than Significant Impact" without consideration of these very low-heating value streams, which could be potentially significant when considering the multiple flares that might be required to be installed to comply with the Draft Rule.

- e. **Project Alternatives.** The DEIR must consider reasonable alternatives to the Draft Rule. The DEIR should consider if there are other sources that can achieve greater methane reductions.