



Shawn Lee
HES Manager, Richmond Refinery
(510) 242-1400
ShawnLee@chevron.com

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Mr. Greg Stone
Supervising Air Quality Engineer
Bay Area Air Quality Management District
375 Beale Street, Suite 600
San Francisco, CA 94105

Comments on May 2017 Workshop Draft Regulation 2, Rule 1 and 2

Dear Mr. Stone:

Chevron Products Company, a division of Chevron U.S.A. Inc., Richmond Refinery (“Chevron”) is opposed to the May 2017 workshop draft amendments to Bay Area Air Quality Management District’s (“District”) Regulation 2, Rule 1 and Rule 2. In addition to the comments below, this letter hereby incorporates by reference all written comments from the Western States Petroleum Association and the American Fuel and Petrochemical Manufacturers on this draft of the rules.

Rule 1 and 2 – The Crude and GHG BACT changes should be decoupled from the technical/administrative revisions

The proposed changes to regulate the crude slates of refineries and to make the GHG BACT threshold more stringent is needlessly tied to the minor technical/administrative revisions to the rules. Specifically, to the extent the corrections that the EPA has requested is driving the timing of this proposed rulemaking, those corrections should be handled first and separately from all the other proposed changes. The proposal to regulate crude slates from refineries and to establish a much more stringent threshold for GHG BACT have very significant impacts to businesses and are precedent-setting. Deliberation and stakeholder engagement should not be needlessly limited or rushed.

Rule 1 – California Environmental Quality Act

The California Environmental Quality Act (“CEQA”) requires the District to consider the whole of the action; both direct and indirect environmental impacts from the entire project. Public Resources Code, § 21000 *et seq.* CEQA is further implemented by the CEQA Guidelines, Title 14, California Code of Regulations, § 15000 *et seq.* Rules 2-1 and 2-2 are being considered for environmental review. The District should prepare an EIR that will also review and compare the cumulative impacts of these rules with the recently adopted and planned rules which are part of a suite of regulations identified by the District as the Petroleum Refinery Emissions Reduction

Richmond Refinery
Chevron Products Company
A Division of Chevron U.S.A. Inc.
841 Chevron Way, Richmond, CA 94801

Strategy. The combined suite of regulations is part of a larger plan to reduce purported refinery emissions in the Bay Area by at least 20% within just a few years.

The District is currently investigating whether changes in crude slate processed by refineries increase emissions with the data it is collecting under Rule 12-15's crude slate reporting requirements. The final Staff Report to Rule 12-15 explained that the requirement for refineries to provide the District with crude slate and non-crude feedstock information would "enable the Air District to determine whether there is a correlation between changes in crude slate and feedstock changes and increases in emissions" and that "determination of a correlation (or lack thereof) will help the Air District decide whether such changes should be addressed in future regulations." Final Staff Report for Rule 12-15 (April 2016), at 17. Rule 12-15 is therefore linked to the changes proposed in Rule 2-1, section 2-1-233 and 2-1-243, which only affect refineries. Meanwhile, Rule 12-15 is also clearly linked to the District's rulemaking efforts for Rules 12-16, 11-18 and 13-1, all of which are in some way connected to the "concerns" that the District has expressed with respect to crude slate changes. In fact, Rules 12-15 and 12-16 were originally reviewed together in an EIR that was abandoned by the District. It is clear that all of these rules are designed to be implemented together toward the same 20% reduction goal and, therefore, should be analyzed together to assess individual and cumulative environmental impacts.

CEQA prohibits "segmenting" projects to create the appearance of a lesser degree of impact. To date, the District has consistently segmented and limited its analyses to individual rules, excluding consideration of the rules it has recently adopted as part of the "Refinery Strategy" (Rules 6-5, 8-18, 11-10, 12-15 and 9-14) and the rules currently under development (Rule 12-16, 13-1, Reg. 2-1, Reg. 2-2) pursuant to this same strategy. WSPA has previously commented upon these segmenting and piecemeal issues, and Chevron incorporates those comments by reference here.¹ The District cannot piecemeal the analysis of environmental impacts from the Refinery Strategy project that are clearly derived to work toward the common goal of a 20% emissions reduction target. Without a true analysis of the whole project, it is impossible to quantify and understand the magnitude of the impact the adopted and proposed changes will have on the regulated industry.

The District cannot piecemeal the analysis of environmental impacts from the Petroleum Refinery Emissions Reduction project that are clearly derived to work toward the common goal of a 20% reduction target. Furthermore, the District must ensure that its analysis and findings are based upon creditable substantive evidence, that a reasonable range of alternatives are considered, that the project decisions meet the purpose and need, significant impacts are avoided

¹ See WSPA Comment Letter on Proposed Reg. 6-5, 8-18, 9-14, 11-10, 12-15, and 12-16 (Nov. 23, 2015); Marne S. Sussman (Pillsbury Winthrop Shaw Pittman LLP), letter to Honorable Chair Mar, and Members of the Board of Directors, Bay Area Air Quality Management District, "Re: Legal Issues Pertaining to Refinery Emission Cap Option for Proposed Regulation 12-16" (July 19, 2016); WSPA Comment Letter on Draft Project Description for Regulation 12, Rule 16 and Regulation 11, Rule 18 (September 9, 2016); WSPA Comment Letter on Proposed Reg. 12-16 and 11-18 (Nov. 29, 2016); WSPA Comment Letter on Proposed Reg. 12-16 and Draft EIR for Rules 12-16 and 11-18 (May 8, 2017); WSPA Comment Letter on Proposed Reg. 9-14 and 12-15 (Feb. 22, 2016); WSPA Comment Letter on Proposed Reg. 12-15 (Apr. 8, 2016); WSPA Comment Letter on Proposed Reg 13-1 (Apr. 21, 2017); WSPA Comment Letter on Proposed Reg. 12-16 and Draft EIR for Rules 12-16 and 11-18 (May 8, 2017) and the amended Rule 12-16 (June 12, 2017).

or mitigated and that the whole of the action is identified and analyzed. Lastly, the District must ensure that the definitions for terms presented in Rules 12-15, 12-16, 13-1, 2-1 and 2-2 are consistent. If a definition is in fact modified, then the District needs to explain why the modification is necessary and why that modification does not apply in other refinery related rules.

Rule 1 – The District has failed to make findings of necessity and authority for the proposed regulation of crude slates

Chevron has serious concerns regarding the District’s intent and basis for its proposal to regulate crude slate changes at refineries through Regulation 2, Rule 1, section 2-1-233 and 2-1-243. The District has failed to make a finding of authority to adopt the proposed amendments. Regulation 2, Rule 1 is modeled after, if not borrows its authority from, the federal New Source Review program. As the District staff report explains, New Source Review is a “pre-construction program”, requiring a permit before installing a new emission source or modifying an existing emission source. Any change in crude slate that a refinery can process with existing equipment inherently does not create a new emission source nor modifies an existing emissions source. Therefore, such activity is inherently not subject to new source review. As coffee beans are a naturally varying raw material to cafes and metal ores are a naturally varying raw material to smelters, crude oil is similarly a naturally varying raw material to a petroleum refinery. It is naturally occurring and varies in composition between different reservoirs and within reservoirs. It is also a globally traded commodity, subject to both long-term and daily changes in value. A petroleum refinery will process a continuously changing blend of crude oils and will often make immediate purchase and production decisions to respond to continuously changing market values of feedstocks and products, to maximize utilization of corresponding plants, and to protect equipment integrity. For all these reasons, the crude blend a refinery processes is inherently subject to continuous variability and is extremely commercially sensitive. Any change in crude slate that a refinery can process with existing equipment should not require review by the District, let alone a permit. Regulating such activity amounts to interfering with interstate and global commerce. This sets a dangerous precedent for the District to regulate commercial activity upstream of emission points. This District has not cited what law or regulation permits or requires it to regulate commercial activity.

The District has failed to make a finding of necessity to adopt the proposed amendments. The District has explained on page 10 of its staff report that the proposed amendments are a necessity because “*concerns* have been raised that refineries may be making changes associated with moving to new crude slates that are subject to NSR permitting requirements, but without obtaining NSR permits or complying with the substantive requirements of the NSR program” (emphasis added). It goes on further to say “refineries are large, complex operations, and any modifications associated with crude slate changes may be relatively subtle and not immediately obvious” and that “this situation presents a compliance and enforcement concern”. However, the District has failed to substantiate the concern or even establish that it is realistic. The changes necessary to move to new crude slates, to the degree they would be subject to NSR permitting requirements (i.e. physical change or change in method of operation that also causes an increase in

emissions), would inherently not be subtle. Refinery process units downstream of crude units are designed to further refine a specific range of hydrocarbon, usually removing impurities, converting low value hydrocarbons to higher value hydrocarbons, or adjusting the properties of hydrocarbons. The presence, capacity, and types of these process units determines the range of crude blends the refinery can process. Therefore, refinery changes that enable processing a wider range of crude slate, to the degree that would cause an increase in emissions, require installing new types of entire process units, installing additional process units of existing types, or installing additional processing capacity of existing types and modifying existing throughput limits. These types of projects are not subtle. For example, at the Chevron Richmond Refinery, the Refinery Modernization Project was explicitly stated to enable processing crude blends with higher sulfur content. The project components that enables this were the replacement of the existing hydrogen plant with a larger capacity hydrogen plant, the installation of a new hydrogen sulfide plant and significant modifications to the existing sulfur recovery units. These changes are not subtle or even relatively subtle. Chevron duly applied for permits under Regulation 2 without the currently proposed amendments. This concern is not a demonstrated problem, but a perceived potential for a problem at best and paranoia at worst. Indeed, the District offers no substantiation of the concerns nor does it explain how changes in the characteristics of a crude slate—to the degree which it defines as significant—would necessarily result in a significant increase in emissions or how they would be used to calculate a change in emissions at an emissions source. Adopting regulatory requirements on this type of premise attempts to set another dangerous precedent, whereby the District can find a rule to be a necessity based solely on speculation. Doing so does not satisfy the requirement for the District to make the finding of necessity under the CA Health and Safety Code and paves the way to unbounded rulemaking.

Rule 1 – The crude slate requirements is duplicative with other District rulemaking efforts

In addition to the new crude slate requirements in Regulation 2, Rule 1, the District has proposed other several new regulations to address concerns about crude slate changes, including Regulation 12, Rule 16, Regulation 13, Rule 1, and Regulation 11, Rule 18. These four regulations have all been proposed in response to community concerns about the speculated change in crude slate changes, and three of them (Regulation 2, Rule 1, Regulation 13, Rule 1, and Regulation 11, Rule 18) were proposed as alternatives to Regulation 12, Rule 16. However, Regulation 12, Rule 16 is on the verge of adoption and the other two rules are in active development. If “concerns” about crude slate changes is a valid air quality problem that a regulation should address, the District still needs to explain how the three alternatives, and in this case Regulation 2, Rule 1, addresses the concern about crude slate changes in a way the other regulations do not. Otherwise, the need to regulate crude slates through Regulation 2, Rule 1 is moot.

Rule 1 – The definition of Significant Crude Slate Change lacks clarity

In section 2-1-243, “Significant Crude Slate Change” is defined using the terms “crude oil” and “feedstocks received from outside the refinery”. These two terms can be interpreted to mean

individual crude oils or feedstocks purchased, or the blend of crude oils or feedstocks fed to a process unit, or both. The District needs to clarify which of these were the District's intent.

Rule 1 - The calendar years used to define a Significant Crude Slate Change is too narrow

The calendar years used to define a Significant Crude Slate Change is too narrow to represent the full range of crude reasonably expected to occur with Chevron using existing equipment. In the District's staff report, the District fails to provide any technical basis for why the baseline of crude slate that a refinery can process is reasonably represented by a recent four year period, 2013-2016. In fact, there is no reason why the baseline period should have a lower bound at all. The District's proposal of using a mean plus three standard deviations presupposes that any changes associated with a crude slate change only serves to increase the range of crude characteristics that a refinery can process. This is also consistent with comments from community stakeholders that crude slates are getting "heavier". It stands to reason then that expanding the baseline period to be without a lower bound will only add in time periods when changes have not yet occurred to enable processing a wider range of crude oils. Adding any lower bound to the baseline period only serves to arbitrarily constrain the range of crude slate characteristics to those which may have been simply more economical during the proposed period, but which were not in any way constrained by the physical equipment/limitations of the refinery at the time.

With regards to the upper bound of 2016, the District has failed to consider projects which enable refineries to process crude slates of a wider range of characteristics and have been permitted through Regulation 2, but have not yet started operation. The proposed upper bound would subject such projects to a second round of new source review. Chevron has already permitted a project (Chevron Refinery Modernization Project)—to enable processing a crude slate of higher sulfur content—through Regulation 2. However, this project is not expected to become operational until well after 2016.

Rule 1 - The method used to define a Significant Crude Slate Change is unreasonable

The method to define a significant change is comprised of two parts: the monthly average compared against a baseline mean plus three standard deviations. The monthly average is unreasonable because, except for toxic air contaminants, new source review modification tests assess emissions on an annual basis. Additionally, the "concerns" about crude slate changes are understood be long-term or permanent changes. Due to natural variations in crude oil compositions and market conditions, a refinery may easily process a crude slate which may be an outlier, having a single monthly average characteristic that exceeds the mean plus three standard deviations, when the remaining 11 months are within the mean plus three standard deviations.

The mean plus three standard deviation threshold is unreasonable because it inexplicably excludes the minimums and maximums. If the refinery has processed a crude blend that are at the 0th or 100th percentile in the past, the refinery should be allowed to process it without any

District review. This problem is exacerbated by the baseline period for reasons described previously.

Rule 1 – The revised definition of a facility needs further clarification

The definition for a facility was revised through the addition of section 2-1-213.2, which addresses portable sources of emissions and when they should be included in the definition of a facility. The criteria for the source not being a part of a facility is that “it remains at the facility for less than 12 months (or, in the case of multiple temporary sources that are used in succession for the same purpose at the facility, the total time period that all such sources remain at the facility is less than 12 months)”.

The term “at the facility” needs to be clarified. For example, would a contractor’s on-site storage yard be considered “at the facility”? As written, section 2-1-213.2 provides a driver for removing contractor staging areas from refinery property, which would increase emissions due to the increased transportation of portable equipment to and from off-site locations.

The District needs to clarify if “12 months” are consecutive months or any 12 months over all time. The latter can result in all temporary, but intermittently used sources to ultimately become a part of the facility.

Lastly, the District needs to clarify the term “for the same purpose”. Consider two scenarios: a pump is used on a storage tank at one time and then used on a different storage tank at another time, a pump is used on a storage tank at one time and then used at an oil-water separator.

Rule 2 – The District needs to explain why a more stringent GHG BACT threshold is necessary

In section 2-2-304.2, the District has proposed a GHG BACT threshold of 25,000 tpy CO₂e which is much more stringent in three respects. First, the threshold is a 66% numerical reduction. Second, this lower threshold appears to apply regardless if the project is a major facility, unlike federal NSR PSD GHG BACT. Third, this lower threshold also appears to apply regardless if the project is a modification for a criteria pollutant, unlike federal NSR PSD GHG BACT. If this last point is not the District’s intention, section 2-2-304.2 needs to be revised to provide clarity.

The District’s justification for lowering the GHG BACT threshold from 75,000 tons per year to 25,000 tons per year is based on the number of additional permit applications that would need to be processed, rather than the actual quantity of emissions that would be reduced. The proposed change will likely generate additional paperwork and justification for fee increases, but is not likely to result in any significant GHG reductions. Apart from energy efficiency, there is no proven add-on BACT. Since new sources are largely already implementing BACT for GHG, there are not any substantive GHG reductions that are likely to be feasible for sources at the 25,000 tons per year level. The District should evaluate the extent to which changing the BACT threshold might lead to GHG emissions reductions before changing the threshold, especially

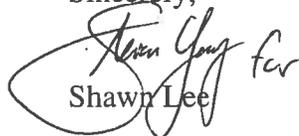
when state has implemented a declining cap and offers stronger economic drivers to reduce GHGs through AB32.

Rule 2 – The time limit for offset refunds is too short

For offset refunds required by the EPA, the proposed changes to 2-2-411.1 identify that the deadline for a request is “within 2 years of issuance of the authority to construct or within 6 months of issuance of the permit to operate”. In some cases, the permit to operate might be granted prior to (or shortly after) commencement of operation, and operating time is needed to determine the extent to which credits may be warranted. Chevron requests that this deadline be changed from “or within 6 months of issuance of the permit to operate” to “within 18 months of the issuance of the permit to operate or 18 months of the commencement of operation”.

Please contact Mr. Steven Yang at (510) 242-5292 if you have any questions.

Sincerely,

 Shawn Lee