

Rule 12-15: Responses to Comments

A. List of Comments Received in Response to Posting for 3/16/2016 Hearing (this hearing was subsequently delayed; additional comments in response to posting for 4/20/2016 hearing are in Section B). General comments are addressed before the more-specific comments included in these letters.

1. Tesoro Refining, 2/22/2016
2. CCEEB, 2/24/2016
3. Jay Gunkelman, 2/22/2016
4. Beveridge & Diamond (for WSPA), 2/22/2016
5. Iren Suhami (Valero) email, 2/23/2016
6. Phillips 66, 2/22/2016
7. Valero Refining, 2/22/2016
8. Valero Refining, 11/23/2015
9. Jeffrey Kilbreth, 3/31/2016
10. CBE, 9/21/2015 (Note: This letter and its attachments primarily address draft Regulation 12-16. Only comments related to draft Regulation 12-15 are addressed here; these appear in the attachment to the 9/21/2015 letter entitled "*Supplemental Comments of Communities for a Better Environment Including Revisions to Proposed Rules 12-15 and 12-16*" and dated "25 September 2015".)

A.1 General Comments and Responses

Many comments from WSPA and the refineries were concerned with the necessity of the proposed regulation and whether the approach that the Air District has taken with respect to CEQA constitutes inappropriate segmentation or piecemealing. These issues will be addressed generically at the front of this document, with more specific responses as appropriate in response to specific comments.

Necessity and Reasonableness of the Proposed Regulation:

WSPA's comments regarding "necessity" included the following:

"The 'necessity' that must be demonstrated is defined by the common meaning of that word:

'Absolutely required; 'Required by obligation, convention or compulsion.' See Webster's

II, New Riverside University Dictionary. The requirement that the District demonstrate the 'need' for a regulation . . . subjects the adoption of a District regulation to a substantive showing that the regulation is not merely desirable or of potential use, but that the regulation is "necessary" before it can be imposed on the governed."

The Air District believes WSPA's interpretation is incorrect. WSPA relies on a dictionary definition but does not account for key language in H&S Code Section 40727(b)(1), which provides that "necessity means that a need exists for the regulation, or for its amendment or repeal, as demonstrated by the record of the rulemaking authority." The plain language of the statute thus refutes the idea that a regulation must be shown to be "absolutely necessary."

Response:

The Air District believes that a showing of "necessity" as defined in H&S Code Section 40727(b)(1) is made when it is demonstrated that a proposed regulation would further progress towards attainment of a legislatively-mandated goal. An obvious example is attaining and maintaining compliance with a federal or state air quality standards -- a goal which traditionally has been the driving force behind much of California air district rulemaking. Showing that a proposed rule would make progress towards this goal establishes that "a need exists for the regulation."

For attainment and maintenance of air quality standards, this interpretation of "necessity" is further reinforced by H&S Code Section 40001(c), which provides that "[pr]ior to adopting any rule or regulation to reduce criteria pollutants, a district shall determine that there is a problem that the proposed rule or regulation will alleviate and that the rule or regulation will promote the attainment or maintenance of state or federal ambient air quality standards." Sections 40001 and 40727(b)(1) are naturally read in harmony as different formulations of the same standard. That standard is not one of "absolute necessity," but rather that a rule will be helpful in achieving a legislatively-mandated clean air goal.

Proposed Rule 12-15 does not contain provisions to reduce emissions. Improved emissions inventories, fence-line monitoring, and crude slate reports will either facilitate implementation of existing regulations to reduce emissions, or will provide a basis for future regulations as appropriate. This raises the question of how to interpret the "necessity" finding for provisions such as these that do not effect emissions reductions but rather are informational in nature. Regulations such as these promote informed decision-making, and are thus essential to the Air District's broader efforts.

It could not have been the intent of the legislature that a "necessity" finding is limited only to regulations that mandate emissions reductions. Nor could it have been the legislature's intent that informational regulatory provisions must guarantee future emissions reductions. Information-gathering is often, by necessity, exploratory in nature. Additional steps, such as technical feasibility and cost-benefit analysis, must occur before it is known whether information can serve as the basis for regulations that reduce emissions. The Air District

therefore believes a finding of “necessity” can be made for an informational regulatory provision if it is reasonably calculated to produce data useful in achieving a legislatively-mandated goal. This is also consistent with Health & Safety Code Section 41511, which expressly grants air districts authority to adopt rules the purpose of which is to determine the nature of emissions from regulated sources.

Aside from the Section 40727 “necessity” finding, other considerations factor in to determining whether a rule is legally supported. Perhaps foremost among these, a rule must be “reasonable,” which is another way of stating that the rulemaking record demonstrates that the rule is not arbitrary and capricious. As a conceptual matter, the “reasonableness” standard is distinct from the finding of “necessity” required by H&S Code Section 40727. Determining whether a regulation is supported by the record is thus at least a two-step process. Once it is determined that “a need exists for the regulation,” a subsequent step is to determine whether the regulation, and each provision in the regulation, is “reasonable.” The Air District carries the burden of demonstrating each of these steps in the rulemaking record.

Many comments from the refineries appear to conflate the “necessity” and “reasonableness” standards, essentially arguing that a specific provision is not necessary because it is not reasonable. In responding to such comments below, the Air District will distinguish necessity from reasonableness.

Segmentation or Piecemealing:

Comment: WSPA asserts that the Air District’s adoption and consideration of the various rules comprising the “refinery strategy,” (the Board of Director’s October 14, 2014 Resolution), without conducting a comprehensive CEQA review of all such rules, amounts to segmentation, or piecemealing, under CEQA. The following are quotes from WSPA’s February 22, 2016 comments:

“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. At the December 16, 2015 adoption hearing, the executive officer stated that the three adopted rules would achieve 14% of the 20% goal. The District however consistently limits its analyses to individual rules, excluding consideration of the rules it has recently adopted as part of this “strategy.” WSPA, p. 2.

“Combined, the District’s adopted, proposed, and planned rules will fundamentally rewrite the regulatory compliance obligations of an entire industry. And yet the District’s analysis insists on evaluating these rules separately: it first severed Rules 12-15, 12-16, and 9-14 from Rules 6-5, 8-18, and 11-10; then it severed Rule 12-15 and 9-14 from 12-16; then it further severed portions of Rule 12-15 for a future rulemaking; and now, even though it proposes to adopt the remaining portions of Rules 12-15 and 9-14 together, it nevertheless insists on evaluating these two rules entirely separately from each other.” WSPA, p. 6.

“The District has admitted that all of these past, present, and future rules are part and

parcel of the same strategy to reduce emissions from refineries, but it has refused to consider the cumulative costs and other impacts of compliance with so many substantive new requirements at the same time.”

Response:

The Air District believes the manner in which it has considered and adopted rules implementing the Board of Directors’ October 2014 Refinery Strategy Resolution does not constitute piecemealing for two primary reasons. First, because the Refinery Strategy Resolution was not itself a CEQA project, it follows that rules implementing it are not susceptible to being piecemealed as part of a larger CEQA project. Second, under established judicial precedent, because each rule implementing the Refinery Strategy Resolution has independent utility, analyzing these rules separately is appropriate, and does not constitute piecemealing.

Before addressing WSPA’s CEQA argument, it is useful to put this issue into proper context. WSPA’s comments characterize the Refinery Strategy as qualitatively different from the Air District’s historic approach to regulating refinery emissions. The Air District believes this is inaccurate and misleading. While it is true that the Air District’s Board of Directors has recently prompted an acceleration of rule development efforts related to refineries, the Air District’s approach to rulemaking and the methodologies used are no different than in the past, and the rules themselves have the same independent utility as rules pre-dating the Refinery Strategy. The difference in rulemaking activity undertaken pursuant to the Refinery Strategy is at most quantitative over a given period of time, but there is no qualitative difference that would indicate the larger policy effort referred to as the “Refinery Strategy” is itself a CEQA project.

For almost 50 years, virtually since its inception as an agency, the Air District has been adopting rules applicable to Bay Area refineries. Prior to 2015, at least 22 rules developed, adopted, and from time to time amended by the Air District were applicable to refineries, while another 4 rules developed by the federal EPA have been incorporated into Air District rules and are enforced by the Air District.

Notwithstanding this extensive historical effort, regulation of refinery emissions was neither complete nor static prior to the Board of Director’s 2014 adoption of the Refinery Strategy. This is evident, for instance, in the 2010 Clean Air Plan. The Clean Air Plan is a periodically updated document that functions in a manner roughly analogous to a scoping document for rulemaking efforts the Air District anticipates over the next few years. The 2010 Plan identified various measures affecting (among other sources) refineries. Some of these measures were later identified as possible components of the Refinery Strategy.

2010 Clean Air Plan Stationary Source Measure 8 – addressing reduction of SO₂ from petroleum coke calcining – was later identified as a component of the Refinery Strategy and, as Rule 9-14, is proposed for adoption simultaneously with Rule 12-15. 2010 Clean Air Plan Stationary Source Measure 10 -- contemplating further NO_x reductions to refinery boilers and heaters – has been considered as a possible component of the Refinery Strategy but is farther behind in its

development. Stationary Source Measure 18 -- "Revisions to the Hot Spots Air Toxics Program" -- would entail enhancement of the Air District's hot spots program in a manner similar to that proposed in December, 2015 for what would have been new Rule 12-16, and is still under consideration for refineries as well as other stationary sources. Rule 12-15 was not identified in the 2010 Plan, but was included as "Action Item 4" in the Air District's 2012 Work Plan (a list, required pursuant to Health & Safety Code Section 40923 of regulations planned for adoption in the coming year).

The overlap between the 2010 Clean Air Plan, the 2012 Work Plan, and the current Refinery Strategy effort is tangible evidence of the continuity of the Air District's efforts to reduce refinery emissions before and after the Board of Director's 2014 adoption of the Refinery Strategy. WSPA has not argued that the cumulative historic effort to regulate refinery emissions is a unified CEQA project such that evaluating each rule separately constitutes piecemealing. Such an argument would advocate for the impossible, namely, that the Air District should have at some point in the past foreseen and analyzed under CEQA the future of refinery regulation. WSPA's piecemealing argument appears to go back only to the October 2014 Board Resolution. The question begged by WSPA's argument is, what distinguishes the current regulatory effort conducted under the "Refinery Strategy" moniker from the decades of continual regulatory development that preceded it?

The Air District believes the answer to this question highlights one of the errors in WSPA's reasoning. In the midst of the Air District's continuous effort to regulate refinery emissions, the Board of Directors in 2014 set a policy goal of achieving a 20% reduction in certain emissions by the year 2020. WSPA seems to be arguing that this policy pronouncement was transformative from a CEQA standpoint, and sets the current regulatory effort apart from the historic and ongoing effort as a discrete CEQA project that cannot be piecemealed.

The Air District believes there is no legal merit to this attempt to characterize a policy statement with no legal significance as an action having significance under CEQA. The mere fact the various rules now being considered for adoption to regulate refinery emissions would be steps towards achievement of a policy goal set by the Board of Director's does not make these contemplated rules a single CEQA project susceptible to piecemealing.

The Air District's legal analysis starts with the proposition that if what distinguishes the current rulemaking effort from the historic and ongoing effort to reduce refinery emissions is the existence of the 2014 Refinery Strategy Board Resolution, and if the Board Resolution was not itself a CEQA project, then there is no larger CEQA project encompassing the current rulemaking effort that could be susceptible to piecemealing. Put another way, if the 2014 Board Resolution has no significance under CEQA, then it did not have potential to change the CEQA significance of anything else, including the rules identified as making progress towards the policy goal announced in the resolution.

The 2014 Board Resolution was a statement by the Air District Board of Directors setting an aspirational goal to achieve a certain degree of emissions reductions from refineries within a certain period of time. The Resolution expressly states this as a “goal.” Indeed, it is in the nature of a board resolution as an instrument that it can do no more. A resolution is the expression by the members of the Air District governing board of a position or sense. It has no regulatory effect, and is neither a necessary nor sufficient basis for any subsequent action that might have regulatory effect.

A “project,” for CEQA purposes, is “an activity which may cause either a direct physical change in the environment, or a reasonably foreseeable indirect physical change in the environment.” The Refinery Strategy Board Resolution fails to meet this definition because it is not an “activity” at all. The Air District has found no cases holding that an action such as a Board resolution setting a policy goal is a project subject to CEQA. Unlike, say, a general plan for land development or an agreement to allocate funds, the Refinery Strategy Board resolution was not a legal or functional prerequisite to further rulemaking.

WSPA may be arguing that, although the 2014 Refinery Strategy Board Resolution is not itself a project, it was reasonably foreseeable that rules implementing it would be adopted, and that this foreseeability is enough to create a larger CEQA project corresponding to the Refinery Strategy effort. However, as explained above, it was foreseeable that additional rules regulating refinery emissions would be developed by the Air District even without the Board Resolution. Such rules were in development prior to the Board Resolution, and some of these rules later became identified as part of the Refinery Strategy.

Even if, hypothetically, the rules comprising the Refinery Strategy were in some sense authorized by a prior regulatory action, separate CEQA analysis of each rule would still be proper because each rule has independent utility. See, e.g., *Del Mar Terrace Conservancy, Inc. v. City Council of the City of San Diego*, 10 Cal.App. 4th 712 (1992). Air District rules generally have independent utility because each operates independently of the others to reduce emissions from a specific operation, and because the emissions reduction from each rule advances the goal of reducing emissions regardless of whether another rule is adopted. With one exception, each rule that has been adopted or considered in the context of the Refinery Strategy has independent utility in this sense.

Two of the rules considered in the context of the Refinery Strategy arguably did have a functional interdependence. As it was proposed in late 2015, draft Rule 12-16 would have depended in part on information required pursuant to draft Rule 12-15. For this reason, the Air District analyzed these draft rules together in a single EIR. Rule 12-16 has since been taken back for re-examination, while Rule 12-15, as now proposed, has been significantly revised since the 2015 version, with links to Rule 12-16 removed. The information required by currently-proposed Rule 12-15 will be relevant to implementation of a wide variety of existing Air District rules, in addition to possibly informing future regulatory efforts.

As WSPA points out, the Air District sought to combine various Refinery Strategy rules together into common CEQA documents. In each of these combined CEQA analyses it was noted that rules were being combined for administrative convenience only, and that no inference was created that the rules were functionally interdependent. WSPA in its comments cites these various bundling actions as evidence of piecemealing. But this argument simply assumes what it seeks to prove. If there is no larger CEQA project encompassing these various rules, then the significance of combining them in one CEQA document is a purely administrative. Nor is it otherwise legally improper to combine distinct CEQA projects into one CEQA document. See, *Neighbors of Cavitt Ranch v. County of Placer*, 106 Cal. App. 4th 1092 (2003).

WSPA's statement that "planned rules will fundamentally rewrite the regulatory compliance obligations of an entire industry" hints at an argument that the extent of this regulatory effort somehow creates a CEQA project larger than the individual rules. As an aside, the Air District believes WSPA's statement is hyperbole. More importantly, such an argument, which implies that the Air District should be able to predict the economic impact of yet-to-be-adopted rules on an industry and compare it to some threshold of significance, does not fit within any recognized CEQA doctrine. CEQA is concerned with effects on the environment, not socioeconomic effects on industry sectors.

Legal arguments aside, it is unclear what WSPA believes would serve as a practical solution to its complaint. If, for instance, CEQA analysis should have been completed prior to the Board announcing the 20% reduction policy goal, such an analysis would have been pure speculation. Analysis of an emissions reduction figure is an empty exercise unless the details of how those reductions will be achieved are known. The Refinery Strategy Board Resolution was a directive to staff to attempt to develop such details. It is implausible that CEQA requires the governing board of a public agency to conduct a CEQA study prior to issuing such a directive to its staff.

Alternatively, WSPA may be implying that, at some point subsequent to the Refinery Strategy Board Resolution, the Air District was obligated to conduct a CEQA study regarding the totality of its efforts to reach the 20% reduction goal. The main practical difficulty with this idea is that the draft rules and rule concepts considered in the context of the Refinery Strategy effort have been in continual flux as new information and analysis (much of it coming from the public and the refineries themselves) has emerged. This iterative process of proposing ideas, soliciting feedback, and revising proposals is of course entirely appropriate for development of a single rule. This iterative nature is multiplied as additional rules are developed during the same time frame. With several rules simultaneously under consideration, an attempt to conduct CEQA analysis on the totality of such an effort would result in an endless loop of revision and recirculation of CEQA documents, effectively foreclosing the adoption of any rules under consideration.

A.2 Responses to Individual Comments for 3/16/2016 Hearing

1. Tesoro Refining – 2/22/2016

- 1-1 The District has not made a finding of necessity for new Emissions Inventory requirements in Reg 12-15.

Response: See our general comments above and the Staff Report concerning the necessity of the regulations. The Emissions Inventory described in Rule 12-15 serves the same purpose as the “permit renewal questionnaire” that is sent to each refinery on an annual basis, which is required to be completed by the refinery as a condition of permit renewal, and which is the basis for the refinery’s estimated emissions. The new Emissions Inventory will eventually replace the “permit renewal questionnaire,” with possible duplication of these two documents necessary for 2016 calendar year data. The new Emissions Inventory, like the current “permit renewal questionnaire,” is a necessary element of the Air District’s permitting program (required by US EPA) and also necessary for the Air District to meet its statutory obligations to provide emissions data to CARB, with regard to criteria pollutants.

With regard to toxic air contaminants (TACs), the Air District has a long-standing regulatory program that requires permitted facilities, including refineries, to quantify emissions of TACs for inventory and fee purposes and to comply with properly-established permit limits on TAC emissions. Continued implementation of these existing requirements will be through the new Emissions Inventory rather than the current “permit renewal questionnaire.”

With regard to GHGs, the Air District has, since 2008, implemented a fee program (Regulation 3, Schedule T) for GHG emissions that requires permitted facilities, including refineries, to quantify emissions of GHGs for inventory and fee purposes. Continued implementation of these existing requirements will be through the new Emissions Inventory rather than the current “permit renewal questionnaire.”

GHG’s are an “air pollutant” as defined in Health & Safety Code Section 39013 (which specifically mentions carbon). Health and Safety Code Section 39002 provides that Air District have primary authority to regulate air pollutants, and expressly allows air districts to set standards more stringent than those in State law. Air districts therefore have authority to regulate GHG’s, which have been the subject of State legislation and CARB rules.

The authority for both the current “permit renewal questionnaire” and the new Emissions Inventory is Healthy & Safety Code Sections 41511 and 42303.

- 1-2 The level of effort required to calculate fugitive dust from vehicles, as described in the proposed Emission Inventory Guidance is out of proportion to the level of emission from these sources.

Response: The Air District disagrees, the calculation is not complex and the emissions are potentially significant. The calculation requires the use of one equation from the EPA repository of emissions calculations (known as AP-42). That equation only requires information already known to the refinery, such as the size of the trucks and the distance they travel within the fence-line. Based on Air District calculations at refineries, many tons per year of particulate matter emissions are due to these operations and the time required to do the calculation should be less than an hour the first year and substantially less in subsequent years.

- 1-3 The proposed definition of “emissions inventory” contradicts state, federal and District reporting requirements and the District has not analyzed this inconsistency at the level of detail required by H&SC 40727.2(d).

Response: Appendix D provides a detailed analysis of this issue. The Air District’s determination is that there is overlap with state and federal requirements but no duplication. Where there is overlap, the Air District’s requirements are more specific as required for the purposes of this rule, and are thus appropriate to carrying out the Air District’s powers and duties

- 1-4 The proposed definition of “petroleum refinery” is inconsistent with various state, federal and District regulations.

Response: The comment does not explain why inconsistency is problematic. Because the Rule 12-15 definition serves a different purpose than is the case for other programs, consistency is not necessarily an appropriate goal. Note, however, that the definition of “Petroleum Refinery” has been amended, the definition of “Petroleum Refinery Owner/Operator” has been deleted (removing responsibility for compliance by separately-owned or controlled support facilities), and a new definition of “Support Facility” has been added.

- 1-5 The inclusion of cargo carriers into the refinery emissions inventory is extremely problematic.

Response: The goal in seeking emissions estimates for cargo carriers has been to form a more complete picture of the emissions attributable to refinery operations. Given the refineries’ objections to producing these emissions estimates from “mobile sources,” the Air District has decided to make refineries responsible only for estimating emissions from cargo carriers during loading and unloading. During these activities, the cargo carrier is a stationary source and is under control of the refinery. Information provided regarding loading and unloading emissions will allow Air District staff to extrapolate emissions during transit to produce a more complete emissions profile. These estimates will necessarily rely on assumptions, but will result in a more complete and accurate emissions inventory than is currently available.

Each Bay Area refinery is subject to Air District permit conditions that require it to account for cargo carrier emissions in some manner. The refineries therefore have some familiarity with estimating emissions from cargo carrier loading and unloading. The Emissions Inventory Guidance will provide further assistance regarding how refineries can estimate these emissions.

- 1-6 The District has not made a sufficiently detailed finding of necessity for new Crude Slate requirements.

Response: See the general response above regarding the interpretation of “necessity.” See also response to WSPA comments, Section II, Comment 2, below. The Staff Report contains a substantial analysis of how crude slate changes may drive changes in emissions of a number of different pollutants. Understanding the relationship between crude slate changes and refinery emissions is a preliminary step towards future regulation that may help attain ambient air quality standards. The crude slate informational requirements of Rule 12-15 will not directly reduce emissions, but the requirements are reasonably calculated to provide information that may enable future emissions reductions. The Air District therefore is able to support a finding that a need exists for the regulation (H&S Code Section 40272(b)(1)), and that the regulation will promote attainment of air quality standards (H&S Code Section 40001(c)).

- 1-7 There is a lack of clarity with regard to the reporting requirements for the crude slate.

Response: The definition of “crude slate” has been deleted, the definition of “monthly crude slate report” has been significantly amended, and Table 1 has been added to further specify the information required to be made available to the District.

- 1-8 The rule does not provide sufficient detail regarding the energy assessment.

Response: The requirement to submit energy utilization reports has been removed. The Air District is continuing to evaluate various approaches for addressing greenhouse gas emissions from refineries. Some of these approaches require this information and some do not. If needed, this information will be required in future rulemaking actions.

- 1-9 Community Monitoring

Response: Several commenters expressed concerns about the refinery operators being responsible for siting and operating community air monitors. The Air District has decided to take the responsibility for siting and operating these monitors. The monitoring stations will be funded with a broad-based fee through the pending update to Regulation 3: Fees. This approach will offer the same level of information to

the Air District and the public, while addressing concerns raised by both the refineries and community groups.

- 1-10 The most-recent Air Monitoring Guidelines (dated August 2015) are still in draft status, and is unclear in several areas. Also, the proposed fence-line monitoring requirements are contradictory to the monitoring requirements in the recently-promulgated federal refinery MACT and the District has not analyzed this inconsistency at the level of detail required by H&SC 40727.2(d).

Response: The comment does not identify any specific contradiction (i.e., a reason why both requirements cannot be complied with at the same time) between the Air Monitoring Guidelines and the recently-promulgated federal refinery MACT. However, in response to this comment, the MACT has been reviewed and the comparison of similar requirements has been updated in Attachment D of the staff report. The fence-line monitoring serves a different purpose than that in the MACT. Any overlap between the two is appropriate to carry out the Air District's powers and duties. The guidelines will be finalized prior to the adoption of Rule 12-15.

2. CCEEB – 2/24/2016

- 2-1 Clarification of purpose of Energy Utilization Analyses

Response: The requirement to submit energy utilization reports has been removed.

- 2-2 Clarification of "less than optimum" term for Energy Utilization Analyses and Request for 2-year Preparation Schedule

Response: The requirement to submit energy utilization reports has been removed.

- 2-3 Public Comment on Annual Emissions Inventory Report

Response: The process for public participation in the emissions inventory development has been modified to ensure that Air District-approved inventories are made available to the public as quickly as possible. The public will have the opportunity to review the emissions inventories and provide comments to the Air District after they are posted. The Air District will correct deficiencies identified if those corrections will ensure a more accurate and complete emissions inventory.

- 2-4 Concern about Staff Report References to Potential Changes to Regulation 2

Response: Air District staff referred to potential changes to Regulation 2 in the spirit of transparency. At this point, no changes to Regulation 2 have been drafted and therefore this comment is premature. As a result, this discussion has been removed from the Staff Report.

3. Jay Gunkelman, 2/22/2016

- 3-1 Request to add a rule requirement that Chevron and Phillips 66 be required to maintain current fence-line monitoring systems while Reg 12-15 is being implemented, and to prohibit removing or altering these existing systems to meet monitoring requirements in Reg 12-15.

Response: Existing fence-line monitors at refineries are in place as a result of requirements unrelated to Air District prohibitory rules such as proposed Rule 12-15. Therefore, it would be improper for the draft rule to impose any requirements on those monitors.

- 3-2 Request additional requirements for: 1) a report, prior to acceptance of air monitoring systems, describing how local communities were engaged in the equipment and site selection process; and 2) an annual report on the current status of the monitoring systems and a solicitation of community input on improvements to monitoring systems.

Response: 1) The review and approval process for air monitoring systems is already extensive. An additional report on public engagement would be duplicative since all parties “who submitted comments” are already required to be notified of final action by the APCO. 2) An annual report on monitor status is unnecessary since monitors are required to be operated in accordance with approved plans, and so their status will conform to these publicly-available plans. Rule 12-15 would provide for ongoing, 5-year reviews of the Air Monitoring Guidelines with the possibility of changes to the guidelines. Any substantive change to air monitoring requirements as a result of this process would include an opportunity for public comment.

- 3-3 Request change to require fence line monitoring at support facilities if it can be demonstrated the facility was in violation of state or federal ambient air quality standards.

Response: The fence-line monitoring required under the proposed rule will augment existing and planned community-based monitors.

4. Beveridge & Diamond (for WSPA), 2/22/2016**Attachment A, Section II. Comments on Both Rules (where comment applies to Rule 12-15)**

- 4-1 Page 5. WSPA requests that the District extend the comment period to provide for full, fair, and meaningful public review, even if doing so requires delaying the hearing date.

Response: The public comment period will not be extended and the hearing date will not be delayed. However, District staff will consider all comments received prior to the public hearing. Rule 12-15 has been through two iterations of public comment. The second comment period was deemed necessary due to the extent of changes made in response to comments received during the first comment period. The Air District believes the notice and comment process for 12-15 has been robust.

- 4-2 Page 5. The District has not satisfied its obligation under H&SC 40727 to identify its statutory authority for the proposed regulations.

Response: The Staff Report includes citations to authority for each provision.

- 4-3 Page 6. The District has not satisfied its obligation under H&SC 40727 to provide a detailed comparison of each element of the proposed regulations to the same elements of all relevant existing rules.

Response: Appendix D provides a detailed comparison of each element of the proposed regulation. The Air District's determination is that there is overlap with state and federal requirements but no duplication. Where there is overlap, the Air District's requirements are more specific as required for the purposes of this rule. The Air District has determined that any duplication or overlap is thus appropriate to carry out the Air District's powers and duties.

Attachment A, Section III. Comments on Regulation 12, Rule 15

Instead of addressing the "General Comments" beginning on page 7, responses are provided to "B. Comments on Specific Provisions" starting on page 20, "Attachment B, WSPA Technical Comments" starting on page 26, and the "Table of Detailed Comments" beginning on page 39.

B. Comments on Specific Provisions

- 4-4 Page 20. The District does not have the authority to require facilities to include emissions from cargo carriers in their facility emissions inventories.

Response: See the earlier response regarding cargo carrier emissions.

- 4-5 Page 21. Inclusion of emissions from non-refinery activities.

Response: The proposed regulation has been modified so that refinery operators will not be responsible for providing data on the emissions of support facilities. Those facilities will provide emissions inventory data directly to the Air District.

- 4-6 Page 22. Emissions Inventory and air monitoring guidelines: No opportunity for public review or comment has been provided.

Response: WSPA and other parties have submitted comments on the draft Emissions Inventory and Air Monitoring guidelines and Air District staff has considered these

comments. The Air District disagrees with WSPA's assertion that the guidelines are tantamount to regulation and thus must be adopted through the procedures applicable to regulations. The guidelines are intended to be helpful in understanding how the Air District will implement Rule 12-15, but the guidelines do not have the force and effect of law. Air monitoring plans and emissions inventories will be evaluated on a case-by-case basis. Any inconsistencies between the submitted plans and the Air District guidelines will be evaluated based on whether the refinery has provided an adequate explanation for the submitted plan.

- 4-7 Page 23. The trade secret protections set forth in the draft rule are insufficient to adequately protect highly confidential data, such as that requested in the crude slate reports. Also, the District has not demonstrated that its cyber security measures are adequate.

Response: Trade secret protections derive from statute, not from air district rules. The purposes of Section 12-15-407 is merely to facilitate paperwork flow. The Air District takes cyber-security very seriously, for protection of its own information as well as that submitted by regulated facilities. However, there is no requirement that a demonstration of security measures be made before the Air District's information-gathering authority can be exercised.

- 4-8 Page 24. Energy Utilization Analyses.

Response: See the previous response regarding the energy utilization analysis.

Attachment B, WSPA Technical Comments

- 4-9 Page 26. Crude Slates: The District does not adequately protect the confidentiality of crude slate data and has not provided a basis for needing this data to establish emission limits.

Response: The draft rule has been amended to not require submission of crude slate data, but simply access to this data and to summary information that masks the properties of discrete crude oil shipments and crude oil blends. Also see response 4-7, above, regarding confidentiality. Regarding the finding of "necessity," see response 1-6 above, which also refers to the Staff Report's treatment of this topic.

- 4-10 Page 26. Crude Slate Characteristics and Emissions: The Staff Report includes several unreferenced and misleading statements about how different properties of crude oil may impact emissions.

Response: District staff disagrees that the Staff Report is misleading. It is a summary-level analysis, but it is accurate. See also response to WSPA Comment II, Section 2, below.

- 4-11 Page 28. The draft Emissions Inventory Guidelines add inaccuracy and are subjective and incomplete AND (page 31) current Emissions Inventory interpretations by District staff grossly overestimate emissions.

Response: The draft Emissions Inventory Guidelines are intended to be continually-improving, living documents and include provisions for revising specific emission factors or emission calculation methodology (Section 4) as well as the guidelines generally (Section 10), which anticipate that proposed changes may be suggested by affected refineries and include a public comment period for general guidelines revisions. The Air District disagrees with WSPA's general assessment, but has and will continue to consider any specific suggestions for improvement of the guidance.

- 4-12 Page 31. The proposed schedule is unworkable (GHG inventory and Air Monitoring Plan submission).

Response: With regard to the GHG inventory, Air District staff has rejected the CARB GHG reports as adequate for the purposes of the draft rule because it does not provide the appropriate level of detail, so the schedule for the CARB submittals is irrelevant. With regard to the Air Monitoring Plans, the community monitoring element has been removed from the draft rule which should allow submittal of the remaining fence-line element as required by the draft rule. Much of the needed time referenced in WSPA's comments on this subject having to do with planning and design will take place during the development, review and approval of the monitoring plan. The Air District has extensive experience developing new air monitoring systems and the majority of time is spent determining locations, designing the system, and determining what infrastructure is needed in order to bring a system online. All of this work will likely be accomplished or determined as part of the Air Monitoring Plan. Based on the Air Districts experience with installing and operating ambient air monitoring networks, one year is adequate time for installation and set-up of the monitors since this only involves executing the plan, potentially applying for permits (which should be minimal), and acquiring equipment. Should additional time be necessary that is beyond the refinery's control, there are many avenues that are available to the refineries to request additional time. This component of Rule 12-15 is critical to determine if emissions are potentially moving into nearby communities and should be brought online as quickly as possible. See also response to specific comment on 12-15-502, below.

- 4-13 Page 33. Mobile source inclusion needs to be restricted.

Response: See the earlier response regarding cargo carrier emissions.

- 4-14 Page 34. Energy Utilization analyses.

Response: See the earlier response regarding the removal of this requirement.

4-15 Page 34. Monitoring.

Response: With regard to lack of clarity for fence-line monitors in the Air Monitoring Guidelines, the instances cited as unclear are examples of flexibility within the guidelines for monitor placement and number of monitors. As noted in other responses, the community monitoring element has been removed from the guidelines. With regard to the requirements of H&SC 40727.2, Air District staff disagrees that the level of analysis of the relationship between the proposed regulation requirements and other applicable requirements is insufficient.

4-16 **Table of Detailed Comments****Responses to comments for each indicated section are as follows:**

- 12-15-101 See our earlier response on necessity and Attachment D to the Staff Report includes the necessary analysis of similar regulatory requirements.
- 12-15-207 This comment is moot because this section of the draft rule has been deleted.
- 12-15-208 Air District staff disagrees that the proposed requirements are contradictory or that the level of analysis of the relationship between the proposed regulation requirements and other applicable requirements is insufficient.
- 12-15-209 A separate definition of "Support Facility" has been added to the draft rule. Further, Support Facilities are explicitly exempted from air monitoring requirements.
- 12-15-211 The definition of "crude slate" has been deleted, the definition of "monthly crude slate report" has been significantly amended, and Table 1 has been added to further specify the information required to be made available to the District.
- 12-15-212 The definition of "Petroleum Refinery" has been revised in the draft rule for clarity.
- 12-15-213 This comment is moot because this section of the draft rule has been deleted.
- 12-15-217 Air District staff are in the process of revising the definition of Toxic Air Contaminant in Rule 2-5. We expect these definitions to be consistent by the end of that rulemaking process.
- 12-15-401 With regard to necessity, please see the section on necessity and reasonableness earlier in this document. With regard to consistency, Air District staff has rejected the CARB and EPA GHG reports as lacking the level of detail that would be adequate for the purposes of the draft rule. Source-level emissions are required for the purposes of this rule.

- 12-15-401.3 See the comment above regarding consistency. With regard to trade secret protection (“Other”), Section 402.4 states that aggregate, rather than source-specific, GHG data will be posted publically. For other pollutants, the report will include emissions at the source level with basic information about the methodology. Emissions data cannot be claimed as “trade secret.” However, this issue must be addressed case-by-case, not generically in a reporting rule.
- 12-15-401.4 With regard to consistency, Air District staff has determined that the CARB GHG reports are not adequate for the purposes of the draft rule, so the differences between these reports is irrelevant.
- 12-15-401.5 The definition of “crude slate” has been deleted, the definition of “monthly crude slate report” has been significantly amended, and Table 1 has been added to further specify the information required to be made available to the Air District.
- 12-15-402 402.1: Air District staff believes that the rule language, as clarified by the emissions inventory guidelines are sufficiently clear to enable compliance. “Deficiencies” refers to plan elements that do not meet the requirements of Section 12-15-401.
- 402.3: This comment is moot because this section of the draft rule has been deleted.
- 402.4: Whether a refinery will be in violation after the Air District unilaterally revises an ongoing emissions inventory will be decided on a case-by-case basis. Section 401 states that a refinery must obtain and maintain approval of an annual emissions inventory. Failure to do so is a violation of Section 12-15-401.
- 12-15-403 The question of authority to require community monitoring is moot because the community monitoring element has been removed from the guidelines. With regard to clarity, Air District staff believes that the draft rule and associated inventory guidelines provide adequate guidance to allow compliance. The air monitoring guidelines are intended to be helpful in this regard, and Air District staff will respond to inquiries seeking further clarity if needed. Air monitoring plans will be evaluated on a case-by-case basis to determine whether each plan is consistent with the requirements of Section 12-15-403.
- 12-15-404 404.1: With regard to clarity, Air District staff believes that the draft rule and associated air monitoring guidelines provide adequate guidance to allow compliance. However, Section 12-15-403 is also intended to allow sufficient flexibility to adapt to differing circumstances at each refinery. If refineries were identical, then specific fence-line monitoring requirements could be specified in the rule. But that is obviously not the case.

404.3: Air District staff does not disagree with this comment, but does not believe that a change to the draft rule or associated documents is necessary.

404.6: This comment is moot because this section of the draft rule has been deleted.

404.7: This comment is moot because this section of the draft rule has been deleted.

- 12-15-405 This comment appears to assume (without justification) that the Air District will treat the emissions inventory guidelines as if they have the force and effect of law. This is incorrect. The emissions inventory guidelines are not being incorporated by reference into the rule. Rule 12-15 refers to the guidelines so that the uninitiated reader will know they exist. The guidelines are intended to be helpful, but each emissions inventory will be evaluated case-by-case to determine whether it meets the requirements of Section 12-15-401.
- 12-15-406 See previous response.
- 12-15-407 See response 4-7 above.
- 12-15-408 This comment is moot because this section of the draft rule has been deleted.
- 12-15-409 With regard to clarity, the definition of “crude slate” has been deleted, the definition of “monthly crude slate report” has been significantly amended, and Table 1 has been added to further specify the information required to be made available to the District. With regard to non-duplication, the Air District recognizes some overlap with US DOE reporting, but requires additional information. For historical crude slate data, the rule only requires the refineries to report what is already available. For future crude slate reports, all of the data elements will be required. The Air District recognizes that some additional testing may be required in order to provide this data. But in the unlikely event that this testing could not be conducted by the refinery’s in-house labs, the costs are likely to be less than \$200/sample, which is not an unreasonable expense. With regard to necessity, please see the discussion on necessity and reasonableness.
- 12-15-410 This comment is moot because this section of the draft rule has been deleted.
- 12-15-501 This comment is moot because this section of the draft rule has been deleted.
- 12-15-502 The fence-line monitoring network will be an important tool in ensuring that refinery neighbors are not subject to unacceptably high levels of benzene and other pollutants, and will help to “groundtruth” the emissions inventories. The Air District therefore intends to allow no more time than is reasonably necessary for fence-line monitors to be up and running. Air District staff has reviewed the

new federal fence-line monitoring requirements in the revised refinery MACT, and concluded that EPA allowed an overly-generous amount of time to install the required passive sample tube monitoring. The Air District continues to believe that one year from approval of the air monitoring plan is adequate. Many of the items referenced in WSPA's comments on this subject relate to planning and design that will necessarily occur during development, review and approval of the monitoring plan. A plan submitted for review that lacked these planning and design elements would likely not be approvable. Management and training can also begin while the plan is under development. Air District staff will be available to consult on plan development so that refineries can begin to gauge which elements of a plan will be approvable, and thus begin training their staff accordingly even while activities such as instrument siting and installation are underway. Based on the Air Districts experience with installing and operating ambient air monitoring networks, one year is adequate time for installation and set-up of the monitors.

The Air District recognizes the potential for factors beyond the refineries' control to interfere with the schedule for installation. If local building permits, to the extent they are necessary, are applied for in a timely and appropriate manner, any delay should be minimal. If excessive delays occur through no fault of the refinery, the refinery has the option of applying for an Air District variance or may discuss with Air District staff the exercise of enforcement discretion. In the Air District's experience, process anomalies such as this are best handled on a case-by-case basis and through a process wherein due diligence can be verified. However, timelines in the rule should be based on an assumption of diligence and reasonable progress, and timely conduct by other responsible regulatory agencies.

- 12-15-503 The definition of "crude slate" has been deleted, the definition of "monthly crude slate report" has been significantly amended, and Table 1 has been added to further specify the information required to be made available to the Air District.
- 12-15-601 This comment is moot because this section of the draft rule has been deleted.
- 12-15-602 This comment is moot because this section of the draft rule has been deleted.

4-17 Attachment C – Initial Study / Neg Dec (Regulation 12-15 comments only)

Section I

- Comment 1 "The District needs to clearly identify the project and assess the whole of the project, including its cumulative impacts" [i.e., avoid "piecemealing"].

Response: Please see the discussion on piecemealing at the beginning of this document.

Comment 2 “The District has no legal authority over the regulation of mobile sources and yet is attempting to require the refineries to gather information from mobile sources from the time those sources enter the District’s jurisdiction, as part of the refineries emissions inventory”.

Response: Please see our response on cargo carrier emissions earlier in this document.

Section II

Comment 1 “The District needs to explain why it analyzed Rules 6-5, 8-18 and 11-10 as part of the project identified as the Reduction Strategy, but has now segmented Rules 12-15 and 9-14 as separate projects”.

Response: Please see the discussion on piecemealing at the beginning of this document.

Comment 2 WSPA’s February 22, 2016 letter makes several comments regarding the finding of “necessity” for the 12-15 crude slate requirements: 1) If the Air District is justifying the crude slate requirements based on a future possibility of emissions increases associated with crude slate changes, then such a hypothetical concern does not meet the standard for “necessity” in H&S Code Section 40727(b)(1); 2) if the Air District’s justification is a concern that crude slate changes at refineries may constitute “modifications” for which permits are not being obtained, such a concern would be based on future changes to Air District rules regulating “modifications,” and thus is too hypothetical to meet the “necessity” standard; 3) refineries are sufficiently controlled, so further regulation is not justified; 4) it has not been shown that changes in crude slates will increase emissions; 5) due to intervening variables, it is not possible to correlate crude slate changes to emissions increases; and 6) any correlation that may exist is not sufficient to demonstrate causation between crude slate changes and refinery emissions.

Response: As explained in the Staff Report, the Air District acknowledges the uncertain relationship between crude slate changes and refinery emissions. Indeed, that uncertainty is an explicit basis for the crude slate informational requirements of Rule 12-15. However, on a qualitative level, it is broadly recognized that changes in crude can have a very significant impact on emissions are based on sound scientific principles. The 2014 primer by the American Petroleum Institute entitled “Understanding Crude Oil and Product Markets” (included as an attachment to this document) states:

“Without more intensive processing (and associated investment in complex refining capacity) heavier crudes tend to produce proportionally higher quantities of less valuable products such as residual fuel oil and asphalt. Similarly, certain impurities in crudes make them much more difficult to process effectively into refined products that meet current standards. Sulfur is a common impurity in crude oil that must be removed from most transportation fuels to meet ever more stringent air quality requirements.”

More intensive processing typically requires additional fuel combustion with associated combustion emissions. API gravity (a measure of crude “heaviness” or viscosity) and sulfur content are among the properties the Air District seeks access to in Rule 12-15. This relationship between crude properties and air emissions is treated in more detail in the Staff Report.

The crude slate informational requirements of Rule 12-15 will not be burdensome for refineries. Much of the required information is already kept in the normal course of business. Refineries may need to revise that existing information into a different format for purposes of complying with Rule 12-15. To the extent new information needs to be generated through further sampling and analysis, the cost should be very reasonable, especially given that refineries typically have some ability to do this sampling and analysis on site. To the extent assistance from a contractor is required, the cost should be minor.

Considering the uncertain relationship between crude slate changes and refinery emissions, the potential that investigation may prove the relationship to be significant, and the relative low cost of conducting such an investigation, the Air District has chosen in Rule 12-15 to impose informational requirements that will make such an investigation possible. The crude slate requirements of Rule 12-15 are reasonably calculated to yield information that will help alleviate an air quality problem and achieve other legislatively-mandated goals, and thus meet the “necessity” standard of Section 40727(b)(1).

The following are responses to WSPA’s specific arguments as enumerated above:

- 1) The broad trend in the industry towards use of heavier crudes has elevated concerns in Bay Area communities affected by refinery emissions that such changes may be increasing emissions now and in the future. However, as WSPA asserts (and the Air District does not dispute), the Bay Area refineries have been processing a wide variety of crudes throughout their history. The possibility of Bay Area refineries trending towards heavier crudes is relevant background for this rule, but is not a key premise justifying the need for Rule 12-15. Rule 12-15 is justified based on the well-established principle that changes in crude can significantly impact refinery emissions. It is thus not only future changes, but

changes that have been occurring routinely and may not have been sufficiently examined, that are the aim of Rule 12-15.

- 2) WSPA is incorrect in its assertion (WSPA, pp. 7-8) that the concern regarding “modifications” only becomes relevant if Air District permitting rules are changed. Under current Air District Rule 2-1, a change in process stream materials (such as a change in the character of processed crude) may meet the definition of “alter” (i.e., may be an “alteration”), if existing permit limits are exceeded. An “alteration” requires a permit, and in some circumstances an “alteration” can also be a “modification,” which not only requires a permit but also must meet certain substantive requirements such as Best Available Control Technology. The concern has been raised that refineries may not be properly attributing exceedances of emissions limits to changes in crude characteristics. In other words, while emissions exceedances are generally being reported, there may be insufficient analysis to determine whether these exceedances are due to changes in a process stream material, namely, crude. The concern is that refineries may therefore be proceeding with alterations, and possibly modifications, without the proper permit under the Air District’s current rules.

As an aside, the concern regarding possible non-compliance with current Air District permitting rules does not necessarily imply a deliberate strategy of deception. The lack of a clear understanding of how crude slate changes affect emissions may be genuine. It is the goal of Rule 12-15 crude slate requirements to improve that understanding.

The Air District has also discussed the possibility of revising Rule 2-1 to expand the definition of “alter” such that changes in process streams may be deemed an alteration regardless of whether emissions limits are exceeded. The intent of these rule changes would be to expand the universe of crude slate changes that undergo review by the Air District so as to enable a more proactive approach. The point, for present purposes, is merely to note that crude slate information is relevant to current Air District permit rules as well as ideas for changes to those rules. WSPA’s comment appears to misunderstand this distinction.

WSPA’s comment implies that it believes the Air District has abandoned the more general justification for requiring crude slate information. This is not the case. Understanding the relationship of crude slate characteristic to refinery emissions will help determine whether this may be a productive avenue for pursuing cost-effective emissions reductions. Conversely, if no relationship is demonstrated, this would indicate that resources should be focused elsewhere. The Air District’s information-gathering authority pursuant to Health & Safety Code Sections 41511 and 42303 is broad enough to allow this type of investigatory inquiry.

3 and 4) While refinery emissions (and emissions from Bay Area stationary sources in general) have declined over time, as explained in the Staff Report, more progress needs to be made to improve ambient air quality and also to better safeguard communities living near refineries. The Air District rejects the argument that declining emissions trends somehow undermines the finding of “necessity” pursuant to H&S Code Section 40727 for further regulation. (WSPA, pp. 8-9)

The Air District also finds unpersuasive the argument that, just because refinery emissions have been declining at the same time that crude slates have been changing, crude slate changes are therefore not an appropriate subject for regulation. Air quality regulations and refinery modernizations have been primary factors in reducing emissions. Whether and to what extent crude slate changes have been a variable affecting emissions within this larger trend is not known. WSPA’s argument, if it proves anything, only tends to show that crude slate changes are probably a lesser variable than new regulations and modernization projects. However, crude slate changes may nevertheless be a significant variable presenting cost-effective opportunities for emissions reductions.

WSPA cites an article funded by Chevron, USA, examining the relationship between the decline in overall refinery emissions over a 20-year period with the characteristics of crude processed during that time. While it is true that industry-wide statistics do not suggest a link between crude characteristics and emissions increases, a macro-analysis such as this is not able to separate distinct causal factors. As noted above, the idea that heavier crudes require more processing is based on engineering principles so widely accepted that even API’s popular literature admits of no debate on this point. That more processing produces more emissions is likewise intuitively apparent. The information required by Rule 12-15 will allow examination of cause and effect at particular refineries operating under known conditions. The probative value of this investigation into cause and effect far exceeds a 20-year industry macro-analysis.

5 and 6) As noted in WSPA’s comment (p. 9), Rule 12-15 seeks to enable a comparison of average monthly crude slate parameters to refinery emissions. Correlating individual crude batches to emissions is not possible for the very reasons WSPA states, and is not the objective of Rule 12-15. The refineries appear to have consistently misunderstood the Air District’s intent in this regard. The Air District has no per se interest in examining refineries’ activities in procuring batches of crude. The Air District’s interest begins at the point that blended crude is introduced to the crude unit, as this is the point at which a product exists that is impacting air emissions. Air District staff have repeatedly attempted to clarify this point, and do so again here.

WSPA asserts that “the annual [emission inventory] compilation will not allow the District to trace emissions that occurred at the precise time a crude blend containing that crude oil was being processed.” (WSPA, p. 10). The annual emissions inventory is only one source of information for emissions. Although it is an element of Rule 12-15, its primary purpose is not related to the crude slate requirements of Rule 12-15. More relevant for this purpose will be the real-time data generated from monitoring emissions points and, to a lesser extent, the future fence-line monitoring required by Rule 12-15, in addition to other monitoring already in place and/or planned in the future. The monthly crude slate report will be compared to real time monitoring data to examine for correlations. Examining crude more frequently than monthly would enhance the probative value of this exercise, but would also increase costs for the refineries.

WSPA identifies utilization rates, ambient temperatures, catalyst characteristics, other processing materials, and upsets/accidents as variables that have greater potential to affect refinery emissions as compared to the character of crude processed, and argues that these variables will obscure the effects of crude characteristics to the point that any causal effect with emissions will be masked. (WSPA, p. 10) There is no reason at this point to conclude that the variables identified by WSPA cannot be taken into account. There will be information available as to each, and each variable is fairly well understood in isolation. For instance, methods already exist to take into account the effect of ambient temperature on emissions.

WSPA also points out that emissions levels are affected by measurement techniques, and vary according to measurements technologies, frequency, and emissions factors. While this is correct, it does not cast doubt on the analysis of the relationship of crude characteristics to emissions. These variables will be known, and are accounted for even more easily than some of the other factors discussed in the preceding paragraph.

Determining whether a causal relationship exists between crude characteristics and emissions on a granular level such as this is a novel endeavor. However, doing so appears entirely feasible given the methodologies and expertise possessed by the Air District. While correlation does not necessarily equal causation, accounting for variables such as those discussed here can yield a strong inference of causation.

WSPA argues that the fact that refinery emissions are generally already subject to emissions limits “will make it impossible for the District to trace a clear causal link between specific crude blends and emissions from different refineries.” (WSPA, p. 10). This argument appears to be a non-sequitur. Whether crude

characteristics cause emissions changes is a factual inquiry having nothing to do with whether those emissions are above or below legal limits.

Comment 4 “Attributing emissions from mobile sources ... to refineries is unfounded.”

Response: Please see earlier responses regarding cargo carrier emissions.

Comment 5 “Objectives listed in 12-15 include reducing SO₂ and PM emissions.”

Rule 12-15 includes no emission limits for SO₂ or PM, or any other air pollutant, nor any mechanism that would lead to mandated emission reductions.

Response: Please see earlier discussion on necessity and reasonableness.

Comment 6 “The District is improperly segmenting the review of the Reduction Strategy.”

Response: Please see earlier discussion on piecemealing.

Comment 7 Does not apply to Rule 12-15.

Comment 8 “The District ... stated to the public that these rules [including Regulation 12-15] were part of the Reduction Strategy”.

Response: Please see earlier discussion on piecemealing.

Comment 9 “The items the District wants to determine seem better suited for the funding of studies to perhaps gather data or measure emissions, rather than regulate an industry for an unknown”.

Response: Please see the earlier discussion on necessity and reasonableness.

Comment 10 “... the District attempts to increase its jurisdictional reach by including within an emissions inventory for a stationary source from unrelated mobile sources...”.

Response: Please see earlier responses regarding cargo carrier emissions.

Comment 11 “The District needs to make it clear to the public and the decision-maker that it has no authority over mobile sources and that this proposed Rule will not grant such authority and therefore fails to meet its objectives”.

Response: Please see earlier responses regarding cargo carrier emissions.

Comment 12 This comment is moot because this section of the rule has been deleted.

Comment 13 “The District makes a finding that any cumulative impacts from Rules 12-15 and 9-14 are less than significant. However, the District does not analyze these proposed rules with the recently adopted Rules 6-5, 8-18, and 11-10...”.

Response: Please see the earlier responses regarding piecemealing.

Comment 14 Flawed Analysis.

Response: This appears to be a summary of preceding comments rather than a comment requiring a detailed response.

5. Iren Suhami (Valero) email, 2/23/2016

5-1 Comment regarding an apparent typographical error in Sections 401.6/401.7.

Response: Both of these Sections have been deleted and replaced with Section 12-15-409 which has a different structure than the sections it replaces, making this comment moot.

6. Phillips 66, 2/22/2016

6-1 This letter expresses support for the Beveridge & Diamond / WSPA comment letter dated 2/22/2016.

7. Valero Refining, 2/22/2016

7-1 Page 1. The January 2016 Initial Study / Negative Declaration ... does not adequately disclose the environmental impacts of the proposed regulations because it fails to address air quality impacts that may reasonably be expected to occur on a statewide level, as required by ... CEQA.

Response: Rule 12-15 requires reporting of emissions-related data, requires that refineries make available certain information related to raw materials, and requires that fence-line air monitors be installed. The impacts of these requirements are limited, and are described accurately in the Initial Study / Negative Declaration.

7-2 Page 2. The District has not demonstrated the necessity of the proposed regulation.

Response: See the earlier discussion on necessity and reasonableness.

7-3 Page 3. "Definitions. Greenhouse Gases"

Response: Please see previous responses regarding the need for more detailed GHG information than is available from CARB reports.

7-4 Page 3. "Annual Emissions Inventory"

Response: Please see previous responses regarding the need for more detailed GHG information than is available from CARB reports.

7-5 Page 3. "Monthly Crude Slate Report"

Response: The definition of "crude slate" has been deleted, the definition of "monthly crude slate report" has been significantly amended, and Table 1 has been added to further specify the information required to be made available to the Air District.

7-6 Page 4. "Petroleum Refinery"

Response: The definition of "Petroleum Refinery Owner/Operator" has been deleted, which removes responsibility for compliance by separately-owned support facilities.

7-7 Page 4. "Petroleum Refinery Owner/Operator"

Response: The definition of "Petroleum Refinery Owner/Operator" has been deleted, which removes responsibility for compliance by separately-owned support facilities.

7-8 Delete superfluous definitions of "Receptor Location" and "Sensitive Receptor".

Response: These definitions have been deleted from the draft rule.

7-9 Page 5. "Annual Emissions Inventory and Monthly Crude Slate Reports"

Response: The definition of "crude slate" has been deleted, the definition of "monthly crude slate report" has been significantly amended, and Table 1 has been added to further specify the information required to be made available to the Air District.

7-10 Page 5. "Review and Approval of Annual Emissions Inventory and Monthly Crude Slate Reports"

Response: Please see the earlier response regarding public participation in the review of the annual emissions inventory reports.

7-11 Page 6. "Review and Approval of Air Monitoring Plans"

Response: The community monitoring requirement has been removed from the draft rule. However, the new fence-line monitoring requirements in the revised refinery MACT have been reviewed and Air District staff has determined that these requirements are inadequate to satisfy the objectives of draft Rule 12-15 because of limited pollutant coverage.

7-12 Page 7. "Submittal of HRA Modelling Protocol and HRA"

Response: These sections have been deleted from the draft rule.

7-13 Page 7. "Energy Utilization Analysis"

Response: The energy assessment requirement has been removed from the draft rule.

7-14 Page 7 “Monthly Crude Slate Reports for 2012, 2013, 2014 and 2015”

Response: This historical data is necessary to establish baseline crude processing.

7-15 Page 8. Socio-Economic Analysis

Response: Air District staff has reviewed the comments related to the estimate of refinery revenue and profit and the significance finding for the estimated rule cost impacts, and determined that the existing socio-economic analysis is appropriate. Without detailed information from Valero regarding how their local conditions would differ from the assumptions in the analysis, there is no way to address the concerns raised. Regarding the issue of cumulative impact of rules, see our earlier comments on piecemealing and segmentation.

8. Valero Refining, 11/23/2015

The comments in this letter are either addressed in the responses to the later 2/22/2016 letter, or refer to rule provisions that are no longer included in draft Rule 12-15.

9. Jeffry Kilbreth, 3/31/2016

9-1 Reduce 6-month time allowance for inventory preparation (inventory for previous year due by June 30) to 3 months.

Response: A 6-month allowance matches the long-standing historical process for submission of data by permit holders. The new emission inventory guidelines - where permit holders calculate most emissions themselves using methods specified by the Air District and verified by Air District staff - represent a significant change from the previous process - where permit-holders mostly provided throughput data and Air District staff performed most emission calculations. Although less time may be necessary in the future when the new process has been established, the refineries will likely need all of 6 months to implement the new process.

9-2 Add selenium, mercury and hydrogen content to crude slate properties.

Response: Air District staff believes that the properties in the current draft rule are an adequate starting point. If data indicates that further crude slate properties are needed, the Air District will amend the rule.

9-3 Timeline for Air Monitoring Guidelines

Response: The Air Monitoring Guidelines will be included for adoption with the other Rule 12-15 documents. However, community monitoring has been removed from the guidelines.

9-4 The District should indicate how and when refinery energy efficiency and implementation of BACT to refinery sources will be implemented.

Response: Neither of these are elements of draft Rule 12-15. Air District staff are actively considering how best to address refinery energy efficiency, but is not yet prepared to publicly discuss a strategy. The Air District will provide more information on this topic to the Board and public in the near future.

10. CBE, 9/21/2015 (Note: The numbering convention in the cited attachment is used here, appended to the identifier "10-"; page numbers refer to those shown on the attachment.)

10-2-2 Page 3. Initiate a moratorium on new source review permitting for refineries until monitoring and reporting required under Rule 12-15 are complete. CBE also expressed concern about the lack of emissions information for some TACs in the current emissions inventory.

Response: The Air District does not have the authority to restrict anyone from applying for and obtaining a New Source Review permit in compliance with the current rules governing permitting. We are moving as quickly as possible to address concerns about crude slate changes and possible increases in GHG emissions. The Air District agrees that improvements to the emissions inventory will be required to conduct accurate HRAs, that is one of the reasons the Air District is proposing Rule 12-15. It is important to note that when a permit triggers toxic new source review, complete information on the TAC emissions for that project is incorporated into the toxics review process under Rule 2-5. That same information is not always updated in the annual emissions inventory. This is one of the problems that Rule 12-15 is intended to help solve.

10-2-4 Page 6. The APCO should develop and publish on the website the PREP, crude slates, modeling protocols, HRA assessments, air monitoring plans, energy utilization plans, etc.

Response: The Air District has proposed a process for detailed technical review of these documents with opportunities for public participation. The Air District believes that this process is adequate to ensure the accuracy of the data, and as transparent as possible.

10-2-6 Page 8. Make monthly average crude slate data publicly available.

Response: Air District staff believes that the process in draft Rule 12-15 balances the need for transparency with legitimate confidentiality concerns of the refiners.

10-2-7 Page 9. Add language requiring refinery owners to provide all records required under the Section to the APCO.

Response: No change is necessary; the APCO may request any information needed to determine compliance with any regulations.

- 10-2-8 Page 9. Make annual average refinery-wide energy usage and intensity data publicly available.

Response: Please see earlier comments regarding energy efficiency data.

- 10-2-9 Page 10. Make emissions and ambient air quality data publicly available.

Response: In order to minimize the delay in processing inventory submittals, those submittals will not be subject to additional public comment. However, the Air District will consider any comments received on the resulting published emissions inventories. Ambient monitoring data will be publically available.

- 10-2-11 Page 10. PREP comments.

Response: This comment is moot because the PREP has been removed from the draft rule.

- 10-2-12 Page 11. Add to Section 12-15-401.2 the requirement to include in emission summaries how different types of emissions were monitored or calculated (in other words, state which emissions are unmonitored).

Response: Section 401.2 has been amended in the draft rule.

- 10-2-13 Page 12. Add to Sections 12-15-401.3 and 402.3 the requirement to detail the monitoring method (and, if applicable, any change in monitoring method) used to determine the emission rate for each pollutant from each source.

Response: Section 401.2 has been amended in the draft rule.

- 10-2-14 Page 12. Improve the definition of monthly crude slate report.

Response: The definition of "crude slate" has been deleted, the definition of "monthly crude slate report" has been significantly amended, and Table 1 has been added to further specify the information required to be made available to the Air District.

- 10-2-15 Page 13. Add details to crude slate report and require crude slate report to be published on the website.

Response: The Air District does not believe this level of detail is appropriate for the purposes of this draft Rule.

- 10-2-16 Page 14. Establish a particulate matter speciation monitoring program.

Response: Although not included in draft Rule 12-15, District staff is considering this option for further study.

10-2-17 Page 14. Establish a volatile emissions monitoring program.

Response: Although not included in draft Rule 12-15, Air District staff is considering this option for further study.

10-2-18 Page 15. The APCO shall publish a list of air pollutants that have the potential to cause harm from acute exposure during worst-case incidents and ensure that fence-line and community monitors monitor these pollutants.

Response: This is beyond the scope of the current rulemaking.

10-2-19 Page 15. The APCO shall determine the potential pathways of emission plumes that may occur in various combinations of weather conditions and potential incidents and publish visual representations in relation to fence-line and community monitors on the website.

Response: The locations of fence-line monitors will be determined on a case-by-case basis as described in previous responses. Community monitoring has been removed from the draft rule.

10-2-20 Page 15. The APCO shall identify and publish all known limitations of each HRA.

Response: This comment is moot because the HRA has been removed from the draft rule.

10-2-22 Page 16. Require the APCO to determine the potential to emit of each toxic air contaminant that the refinery has not reported adequate emissions monitoring data to include in a HRA.

Response: This comment is moot because the HRA has been removed from the draft rule.

10-2-23 Page 17. Revise the Significant Risk in Section 12-15-301.2 to 10 in a million from 25 in-a-million. Replace “refinery-wide” cancer risk in Rules 12-15 and 12-16 with cumulative cancer risk.

Response: This comment is moot because the HRA has been removed from the draft rule.

B. List of Comments Received in Response to 3/21/2016 Posting for 4/20/2016 Hearing

1. Beveridge & Diamond (for WSPA), 4/8/2016
2. Phillips 66, 4/8/2016
3. Valero Refining, 4/8/2016

Comments and Responses

1. Beveridge & Diamond (for WSPA), 4/8/2016

This comment letter includes the previous comment letter dated 2/22/2016. Responses to the earlier letter are included elsewhere in this “Response to Comments” document. Other, specific comments in this letter are addressed here, unless included in the response to the earlier letter:

1-1 Page 2. “Public Notice and Comment”

Response: Air District staff will consider all comments received, to the extent practical, prior to the public hearing. Rule 12-15 has been through two iterations of public comment. The second comment period was deemed necessary due to the extent of changes made in response to comments received during the first comment period. The Air District believes the notice and comment process for Rule 12-15 has been robust.

1-2 Page 2. “Monthly Crude Slate Reports – General Comments”

Response: This general comment regarding the necessity of the proposed regulation is addressed in the response to the same comment in WSPA’s 2/22/16 letter.

1-3 Page 2. “12-15-408”: maintain data “only in the manner it is kept in the normal course of business”.

Response: Air District staff has considered and rejected this suggestion because of the concern that not allowing the Air District to specify a data format will make review of the data unnecessarily time-consuming. The Air District’s intent is that the refineries compile summary reports of historical data from existing records of crude slate and feedstock characteristics. For new crude shipments, some additional data may need to be developed by the refineries in order to supply the parameters specified in the rule.

1-4 Page 3. “Historical Data”

Response: The effective date in Section 12-15-408.1 has been changed to “effective [one year after adoption].” Also, for ongoing data, Section 12-15-408.2 has been clarified by adding “no later than 30 days after the end of each calendar month.”

1-5 Page 3. “Ongoing Reports”

Response: Air District staff has considered and rejected this suggestion because of the concern that limiting data as suggested may partially defeat the purpose of the rule by not allowing Air District staff to characterize the range of important crude oil and feedstock properties. The Air District recognizes that some additional testing may be

required, but in the unlikely event that this testing could not be conducted by the refinery's in-house labs, the costs are likely to be less than \$200/sample, which is not an unreasonable expense.

1-6 Page 3. "Timing"

Response: Air District staff has considered and rejected this suggestion to collect crude slate data on an annual basis to correspond to the annual emissions inventories because crude data averaged over an entire year would obscure seasonal and other less-than-annual variations in properties.

1-7 Page 3. "Crude oil Blends"

Response: Air District staff has considered and rejected this suggestion. Air District staff believes that the previous changes to definitions in the draft rule posted on 3/21/16 accurately and unambiguously identify the data required by the draft rule. However, in order to clarify again, the rule only requires the submittal of monthly averages. The Air District does not need data on individual crude shipments other than for confirmation of monthly average data. That confirmation process can take place on site at the refinery.

1-8 Page 3. "Other Feedstocks"

Response: Air District staff has considered this suggestion, including possibly setting a de minimis level for individual feedstocks. However, Air District staff has concluded that it has insufficient basis at this time to set a de minimis level without a possible significant degradation of the quality of data that would be available.

1-9 Page 4. "Confidentiality"

Response: This comment requests that the Air District limit its information-gathering authority in order to assuage concerns about inadvertent release of trade secret information. The Air District takes protection of trade secret information seriously, and has procedures in place to prevent inadvertent release. The Air District likewise takes cybersecurity very seriously. However, there is no requirement for the Air District to make a demonstration regarding cybersecurity prior to exercising its information-gathering authority.

1-10 Page 4/5. "Supporting Data"

Response: The previous changes to Section 12-15-408.1 limited the obligation to provide historical data "to the extent this information is available." Beyond that, Air District staff believes that the meaning of the requirement to provide "detailed supporting data" is self-evident and also explicit: it is data that will allow "verification of monthly summaries."

1-11 Page 5. "General Comments"

Response: These comments regarding necessity, authority, etc., are addressed elsewhere in this "Response to Comments" document.

1-12 Page 5/6. "Support facilities and Cargo Carriers"

Response: With regard to Support Facilities, previous changes to the draft rule posted on 3/21/16 relieved refinery operators from responsibility for Support Facility emissions inventories.

With regard to cargo carriers, please see the discussion earlier in this document regarding cargo carrier emissions.

1-13 Page 6. "Public Participation"

"Public versions" of the emissions inventories will be prepared by the Air District. Air District staff previously removed a public review provision for inventory submittals from Section 12-15-402 in the interest of eliminating non-critical process delays. For the same reason, Air District staff will not add a facility review for the public inventories.

1-14 Page 6/7/8. "Emission Inventory Guidelines"

Response: Here, WSPA reiterates previous comments that are addressed elsewhere in this "Response to Comments" document.

1-15 Page 8/9. Fence-Line Monitoring

Response: Time is of the essence and this monitoring network will be an important tool in ensuring that refinery neighbors are not subject to unacceptably high levels of benzene and other pollutants. Air District staff has reviewed the new federal fence-line monitoring requirements in the revised refinery MACT, and concluded that EPA allowed an overly-generous amount of time to install the required passive sample tube monitoring, and that the allowance in draft Rule 12-15 for fence-line monitoring is adequate. Much of the required time referenced in WSPA's comments on this subject having to do with planning and design will take place during the development, review and approval of the monitoring plan. A plan submitted for review that lacked these planning and design elements would likely not be approvable. The Air District has extensive experience developing new air monitoring systems and the majority of time is spent determining locations, designing the system, and determining what infrastructure is needed in order to bring a system online. All of this work will likely be accomplished or determined as part of the Air Monitoring Plan. Based on the Air Districts experience with installing and operating ambient air monitoring networks, one year is adequate time for installation and set-up of the monitors since this only involves executing the plan, potentially applying for permits (which should be

minimal), and acquiring equipment. Should additional time be necessary that is beyond the refinery's control, there are many avenues that are available to the refineries to request additional time. This component of Rule 12-15 is critical to determine if emissions are potentially moving into nearby communities and should be brought online as quickly as possible.

1-16 Page 9. "12-15-403"

Response: The effective date in Section 12-15-403 has been changed to "effective [one year after adoption]."

1-17 Page 9. "12-15-406"

Response: Here, WSPA reiterates previous comments that are addressed elsewhere in this "Response to Comments" document.

1-18 Page 10. "12-15-407"

Response: Here, WSPA reiterates previous comments that are addressed elsewhere in this "Response to Comments" document.

1-19 Page 10. "CEQA Analysis"

Response: Here, WSPA reiterates previous comments that are addressed elsewhere in this "Response to Comments" document.

2. Phillips 66, 4/8/2016

2-1 This letter expresses support for the Beveridge & Diamond / WSPA comment letter dated 8/8/2016.

3. Valero Refining, 4/8/2016

Page 1 of this letter includes a general comment that the proposed rule does not meet the statutory standard of necessity. This comment is addressed in response to previous comments by WSPA and Valero and is included in this "Response to Comments" document. Other, specific comments in this letter are addressed here:

3-1-a Page 2. "Definitions. Greenhouse Gases"

Response: Air District staff has addressed this issues regarding the use of CARB GHG reports for the purposes of the draft rule in the "Response to Comments" document See previous responses on this question for more details.

3-1-b Page 2. "Annual Emissions Inventory"

Response: See previous responses on this question addressed elsewhere in the “Response to Comments” document.

3-1-c Page 2. “Monthly Crude Slate Report”

Response: Air District staff believes that all ambiguities related to crude oil and properties of interest to the Air District, have been eliminated in the current draft of Rule 12-15 by previous changes to definitions.

3-1-d Page 2. “Support Facility”

Response: In accordance with the most-recently posted draft Rule 12-15, refinery inventories (used for permit billing) will not include emissions from Support Facilities.

3-2 Page 3. “Review and Approval of Annual Emissions Inventory”

Response: This comment acknowledges previous changes to draft Rule 12-15.

3-3 Page 3. “Air Monitoring Plans”

Response: In response to this comment, the new federal fence-line monitoring requirements in the revised refinery MACT have been reviewed and Air District staff has determined that these requirements are inadequate to satisfy the objectives of draft Rule 12-15. The Air Monitoring Guidance is designed to allow flexibility when developing an Air Monitoring Plan, so if compounds cannot be measured effectively, refineries must provide rationale for why compounds of interest were not included in the plan, however the cost analysis suggests that cost of air monitoring systems are not prohibitive.

3-4 Page 3. “Review and Approval of Air Monitoring Plans”

Response: Air District staff believes that the draft rule and associated air monitoring guidelines provide adequate guidance to allow compliance. However, Section 12-15-403 is also intended to allow sufficient flexibility to adapt to differing circumstances at each refinery. If refineries were identical, then specific fence-line monitoring could be set forth in the Rule. Given the significant differences amongst refineries, the best approach is to allow refineries flexibility to develop plans suiting their particular situation.

3-5 Page 3. Availability of Historical Monthly Crude Reports

Response: With regard to confidentiality, refinery submittals and other information is protected in accordance with H&SC §44346 and will be handled by the Air District in accordance with these requirements.

With regard to the due date for historic data, in response to this comment, the effective date in Section 12-15-408.1 has been changed to “effective [one year after

adoption].” Also, for ongoing data, Section 408.2 has been clarified by adding “no later than 30 days after the end of each calendar month.”

3-6 Page 4. “Energy Utilization Analysis”

Response: This comment acknowledges previous changes to draft Rule 12-15.

3-7 Page 4. “Emission Inventory Guidelines”

Response: Here, Valero reiterates previous comments that are addressed elsewhere in this “Response to Comments” document.