

**BAY AREA AIR QUALITY MANAGEMENT DISTRICT**  
**UPDATES TO NEW SOURCE REVIEW AND TITLE V PERMITTING REGULATIONS**  
**RESPONSES TO COMMENTS ON FINAL VERSION OF PROPOSED AMENDMENTS**

October 31, 2012

Over the past year, Staff of the Bay Area Air Quality Management District have been developing amendments to the District’s New Source Review (NSR) and Title V permitting programs. These Proposed Amendments will update the District’s NSR and Title V programs to address recent regulatory developments. The Proposed Amendments will revise certain provisions in District Regulation 2, Rules 1, 2, 4, and 6 in which the NSR and Title V programs are set forth.

Air District Staff have been working with interested stakeholders during the rule development process to solicit their advice and input in developing the Proposed Amendments. As part of this process, District Staff published a number of preliminary drafts of the Proposed Amendments and asked interested members of the public to review and comment on them. Based on this input, District Staff prepared a final version of the Proposed Amendments, which Staff will present to the District’s Board of Directors for consideration on November 7<sup>th</sup>, 2012. District Staff received 8 additional comments on the final version, which are attached to this document.<sup>1</sup> District Staff have reviewed all of these comments and have prepared responses as set forth in this document. All of the comments received are summarized below, along with District Staff’s responses to each one. The comments are addressed in alphabetical order based on the name of the commenter, as follows:

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Air District Staff thank all of the commenters for the time and effort they put into reviewing and commenting on the Proposed Amendments to Regulation 2, and look forward to discussing the amendments and the comments received on them at the November 7<sup>th</sup> Board of Directors meeting.

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<sup>1</sup> All of the comment letters are also available in their entirety on the District’s homepage for the Regulation 2 Update project at [www.baaqmd.gov/Divisions/Engineering/Proposed-Reg-2-Changes.aspx](http://www.baaqmd.gov/Divisions/Engineering/Proposed-Reg-2-Changes.aspx). The final version of the Proposed Amendments, as well as earlier drafts and additional documentation including the final Staff Report and Environmental Impact Report, are also available there.

## COMMENTS OF THE CALIFORNIA COUNCIL FOR ENVIRONMENTAL AND ECONOMIC BALANCE

The District received the following comments from California Council for Environmental and Economic Balance (CCEEB).

**CCEEB Comment 1 – NAAQS Protection Requirement (Proposed Section 2-2-308) for Non-Attainment Pollutants:** CCEEB’s first comment concerned the NAAQS Protection Requirement in proposed Section 2-2-308. This provision requires that a new or modified source that will result in a significant net increase in emissions must demonstrate that the project’s emissions will not cause or contribute to a violation of any National Ambient Air Quality Standard (NAAQS).<sup>2</sup> CCEEB stated a concern that this requirement would “prohibit permitting in many portions of the Bay Area.” CCEEB’s concern is that if existing ambient concentrations of any criteria pollutant increase so that background air quality exceeds the NAAQS, then any additional emissions from a new project will be contributing to that existing exceedance and will be prohibited. CCEEB urged the District not to adopt this provision. CCEEB alternatively commented that if the District does adopt it, it should not submit it to EPA for inclusion into the California State Implementation Plan.

**Response:** CCEEB has commented on this provision a number of times during this rulemaking project, and District Staff have addressed CCEEB’s comments in written responses as well as during multiple in-person meetings and telephone discussions. District Staff refer to their earlier responses for a full explanation of the District’s evaluation of these issues.<sup>3</sup>

To summarize briefly, this requirement will not act as a prohibition on worthwhile new development projects. First of all, background concentrations in the Bay Area are not above the NAAQS for any pollutants covered by this requirement, and so there are no “portions of the Bay Area” where the scenario described by CCEEB could arise. In every part of the Bay Area, there is additional “headroom” below the NAAQS that can accommodate some additional increases from new projects without resulting in a NAAQS violation. Furthermore, even if current downward emission trends were to reverse themselves and background concentrations were to rise above the NAAQS at some point, the proposed NAAQS Protection Requirement provides a number of avenues through which beneficial new projects can satisfy the requirement, even where background concentrations already exceed the NAAQS. These include the following:

- Projects can use “netting”, or showing that their net emissions increase (taking into account any emissions decreases at the source within the previous 5 years) will be less than significant.

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<sup>2</sup> This provision is explained in detail in the Staff Report, in Section IV.B.3.a., pp. 81-82. The final Staff Report (dated September 26, 2012) is available at [www.baaqmd.gov/~media/Files/Engineering/Proposed%20Reg%202%20Changes/Public%20Hearing/Final%20Reg%202%20Updates%20Staff%20Report%20September%2026%202012.ashx?la=en](http://www.baaqmd.gov/~media/Files/Engineering/Proposed%20Reg%202%20Changes/Public%20Hearing/Final%20Reg%202%20Updates%20Staff%20Report%20September%2026%202012.ashx?la=en).

<sup>3</sup> Staff’s Response to Comments document addressing earlier comments received on the NAAQS Protection is available at [www.baaqmd.gov/~media/Files/Engineering/Proposed%20Reg%202%20Changes/2nd%20Draft%20Response%20to%20Comments](http://www.baaqmd.gov/~media/Files/Engineering/Proposed%20Reg%202%20Changes/2nd%20Draft%20Response%20to%20Comments). Staff’s response to CCEEB’s earlier comments on the NAAQS Protection Requirement is on pp. 9-10 of that document.

- For projects that will result in a significant increase even after netting is applied, these projects can comply with the requirement by showing that their impacts on ambient concentrations will not exceed the “Significant Impact Level” (SIL). The requirement will use the same procedures as EPA’s “Prevention of Significant Deterioration” (PSD) modeling, which establish that emissions below the SIL are *de minimis* and are not treated as causing or contributing to any NAAQS exceedance.<sup>4</sup> If a project can show that its impacts are below this *de minimis* level, they will satisfy the NAAQS Protection Requirement. CCEEB’s comment appears to suggest that projects with impacts below the SIL will still be prohibited, but this is not the case. Proposed Section 2-2-308 explicitly states that the requirement will be implemented using the same PSD modeling provisions that apply for the PSD air quality impacts analysis requirement in Section 2-2-305, and these provisions incorporate EPA’s *de minimis* SIL approach.
- Even where a project cannot show that its impacts are below the SIL, the project would still be able to comply by obtaining local emission reductions to counteract its contributions to any NAAQS exceedance. The NAAQS Protection Requirement is designed to ensure that significant new emissions increases do not cause air quality to violate the NAAQS, and so a project with new emissions that will cause a violation can comply with the requirement by shutting down or curtailing existing emissions to counteract the new emissions and ensure that the NAAQS are not violated.

All of these compliance avenues will be available to proposed projects to satisfy proposed Section 2-2-308. Thus, even if existing air quality were to worsen such that background concentrations exceed the NAAQS – which District Staff do not expect to happen, but is the scenario that CCEEB appears to be concerned about – beneficial new projects could still be permitted under these approaches.

It is true that if a proposed will still end up causing a NAAQS violation (or making a significant contribution to an existing NAAQS violation) after exhausting all of these compliance options, then the source will not be able to get a permit under this provision. But keeping new and modified sources from causing violations of the health-based NAAQS is precisely the purpose of the NSR permitting program. District Staff do not believe that allowing new projects that will cause or substantially contribute to violations of the NAAQS would be an appropriate policy outcome, and do not believe that CCEEB or its members would want to be responsible for causing or significantly contributing to NAAQS violations either. Under this proposed requirement, beneficial projects that will not cause or contribute to NAAQS violations will be able to comply with the requirement and be permitted, and projects that will cause or significantly contribute to NAAQS violations will be prohibited (or will have to be modified to make sure that NAAQS violations will be avoided). As such, the proposed requirement will support the policy goals that CCEEB cites in its comment – to “provide flexibility for future growth and development” – and at

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<sup>4</sup> The NAAQS Protection Requirement will use the same procedures as for EPA’s PSD program. Under these procedures, if a project will make a slight incremental contribution to an exceedance of the NAAQS, the project is not considered to “cause or contribute” to the exceedance for PSD permitting purposes if the contribution is less than the *de minimis* level represented by the SIL. This same rule will apply to non-attainment pollutants under the proposed NAAQS Protection Requirement.

the same time support the important policy goal of ensuring that the air we breathe in the Bay Area complies with the NAAQS.

Finally, with respect to submitting this requirement to EPA for inclusion in the State Implementation Plan (SIP), District Staff are continuing to consider this issue as of the date of publication of this Response to Comments document. District Staff will provide a further response at a later date. Whether or not the provision is included in the SIP will not make any substantive difference in how the provision functions or what it will require permit applicants to demonstrate in order to obtain a permit.

**CCEEB Comment 2 – Definition of “Modification”:** CCEEB objected to adding the “federal backstop” provision in Section 2-2-234.2.<sup>5</sup> CCEEB stated that it disagrees with EPA that adding this provision is required under the federal NSR rules. CCEEB stated that it believes that the District’s existing modification test is at least as stringent as what is required by those rules. CCEEB stated that adding the federal backstop is therefore not legally required and would add unnecessary complexity to NSR applicability determinations.

**Response:** CCEEB has commented on this issue as well in earlier communications, and District Staff have discussed it with CCEEB in writing and verbally. District Staff refer to their earlier responses for a full explanation of the District’s evaluation of these issues.<sup>6</sup> In summary, EPA Region IX Staff have informed the District in clear terms that EPA will no longer accept the District’s current “modification” definition, and that the federal backstop provision is required. EPA Region IX Staff have indicated that their earlier approval of the District’s current definition was in error, and that the District must revise it in order to continue to have an approved NSR program.

**CCEEB Comment 3 – “Need for Greater Understanding to Ease Permitting Concerns”:** CCEEB stated a concern about “uncertainty” in how NSR permitting will be implemented under the Proposed Amendments. CCEEB also stated a concern about whether District Staff will be given the proper training to ensure that they will implement NSR permitting under the Proposed Amendments “consistently, accurately, and in an efficient manner.” CCEEB suggested two actions in this regard: (1) CCEEB requested that District Staff hold a meeting to allow CCEEB’s members who are concerned about how NSR permitting will be implemented to “walk through permitting examples with District Staff” in order to understand how the NSR permitting process will work under the Proposed Amendments; and (2) CCEEB requested that District Staff use the time between rule adoption and final EPA approval to evaluate whether any additional clarifications to the rule language are needed, and to seek further amendment if any such needs are identified.

**Response:** As District Staff have explained in discussing this issue with stakeholders and in responses to prior comments, the clarifications being made in the Proposed Amendments will not change the way that NSR permitting is implemented under the District’s regulations (except for the specific revisions

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<sup>5</sup> The “federal backstop” provision is described in detail in Section IV.A.1.b. of the Staff Report, pp. 31-34.

<sup>6</sup> District Staff’s responses to CCEEB’s earlier written comments on this issue are on p. 10 of the October 10, 2012 response to comments document, which is available at [www.baaqmd.gov/~media/Files/Engineering/Proposed%20Reg%202%20Changes/2nd%20Draft%20Comments%20Response%2010%2010%2012.pdf](http://www.baaqmd.gov/~media/Files/Engineering/Proposed%20Reg%202%20Changes/2nd%20Draft%20Comments%20Response%2010%2010%2012.pdf).

discussed in the Staff Report, such as where new PM<sub>2.5</sub> requirements are being added, *etc.*). District Staff welcome the opportunity to discuss with stakeholders how NSR permitting works – both currently under the existing procedures that are not being changed, and under the new provisions that are being added or amended – and have already contacted CCEEB to set up such a meeting. District Staff will discuss how the requirements work at that meeting, and will be happy to walk through examples that CCEEB or its members want to discuss. District Staff also envision additional meetings of this type continuing into the future as part of an effort to ensure that everyone involved – including District Staff, facility representatives, consultants, and members of the public – are as fully informed and educated as possible into how the District’s NSR permitting program works. District Staff are also committed to continuing to evaluate Regulation 2 going forward to see where and how it can be improved further. If there are areas where additional clarification is necessary, District Staff will discuss these with affected stakeholders, develop revised regulatory language to address them, and propose the revisions to the Board of Directors for further action prior to EPA’s final approval.

## COMMENTS OF CALIFORNIA ENERGY COMMISSION

The District received a letter from the California Energy Commission (CEC) supporting the proposal to adopt “Prevention of Significant Deterioration” (PSD) permitting provisions for approval by EPA.<sup>7</sup> The CEC stated that the current situation, in which most provisions of the NSR program are implemented by the District but the PSD element is administered federally under EPA’s permitting provisions, “has imposed unnecessary burdens on permit applicants, including applicants for new electric generating power plants, by imposing regulatory expenses, financial uncertainty, and sometimes years of delay to complete the federal review process.” The CEC continued that:

Adoption of the proposed rules regarding PSD will result in an integrated state air permit, thereby avoiding the redundancy and inefficiency involved in the separate federal permit process. The proposed new rules thus promote government efficiency and regulatory certainty for permit applicants.

The CEC supported the proposed adoption of the PSD provisions for these reasons.

District Staff acknowledge and appreciate the CEC’s support and agree with the CEC’s stated reasoning. District Staff have proposed adopting a District PSD program for EPA approval based on these very same considerations. District Staff look forward to further coordination with the CEC on air quality issues relating to thermal power plants subject to the CEC’s licensing authority.

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<sup>7</sup> The adoption of these PSD provisions is discussed in Sections III.C. (p. 23) and IV.B.2. (pp. 71-80) of the Staff Report.

## COMMENTS OF CALPINE CORPORATION

The District received the following comments from Calpine Corporation (Calpine).

**Calpine Comment I – Support for Adopting “Prevention of Significant Deterioration” Requirements:** In Section I of Calpine’s comment letter, the company stated that it “strongly endorses the District’s proposal to move forward with adoption of amendments to Regulation 2 that can ultimately be approved by EPA as part of the California State Implementation Plan (‘SIP’) pursuant to 40 C.F.R. § 51.166.” Calpine stated that EPA approval of a District PSD program will “avoid unnecessarily duplicative and lengthy processes associated with issuance of separate permits pursuant to both the District’s rules and 40 C.F.R. § 52.21.”

**Response:** Air District Staff appreciate this support for obtaining EPA approval of District PSD permitting regulations. As stated above in connection with the CEC’s comment on this issue, District Staff agree that having a single set of NSR permitting regulations for facilities in the Bay Area, covering both the PSD and Non-Attainment NSR requirements of the NSR Program, will simplify and streamline the permitting process.

**Calpine Comment II – NAAQS Protection Requirement:** In Section II of the comment letter, Calpine expressed a concern about the NAAQS Protection Requirement in proposed Section 2-2-308.<sup>8</sup> Calpine stated that the District should not adopt this requirement with respect to PM<sub>2.5</sub> because of “potential difficulties applicants would experience demonstrating compliance with the 24-hour PM<sub>2.5</sub> NAAQS.” Calpine’s concerns about demonstrating compliance with the 24-hour PM<sub>2.5</sub> NAAQS included the following:

- Calpine stated that EPA’s federal NSR regulations do not require a NAAQS compliance demonstration for non-attainment pollutants such as PM<sub>2.5</sub>, and EPA has never previously required it in any permitting agency’s NSR program. Calpine noted that EPA Region IX Staff have said that a NAAQS compliance demonstration “could” be used to demonstrate compliance with the federal NSR requirements of 40 C.F.R. Sections 51.160(a) and 51.160(b), but Calpine stated that the NAAQS compliance modeling demonstration is not the only means of doing so and is not required in order to satisfy those requirements.
- Calpine commented that Section 2-2-308 “lacks regulatory coherence” because it states that the NAAQS compliance demonstration under Section 2-2-308 will be made using the same modeling procedures that are used for the NAAQS compliance demonstration under the PSD requirements. Calpine suggested that this creates an inconsistency because the PSD requirements include an exemption for non-attainment pollutants such as PM<sub>2.5</sub>. Calpine commented that this exemption shows that the PSD NAAQS compliance analysis methodologies are not appropriate for determining whether a project will cause or contribute to a NAAQS exceedance for non-attainment pollutants.

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<sup>8</sup> The NAAQS Protection Requirement is discussed in detail in Section IV.B.3.a. of the Staff Report, pp. 81-82.

- Calpine stated that requiring projects to demonstrate that they will not cause or contribute to a NAAQS violation is not necessary to protect the NAAQS. Calpine stated that emission levels are coming down across the Bay Area, and that these reductions will ensure that the region complies with the PM<sub>2.5</sub> NAAQS without the need for any demonstration by individual projects.
- Calpine stated that “it may be extremely difficult, if not impossible, in certain locations throughout the Bay Area to demonstrate that a source will not cause or contribute to an exceedance of the 24-hour PM<sub>2.5</sub> NAAQS.” Calpine cited two factors that it claims could create such difficulty. First, Calpine stated that EPA is considering requiring PM<sub>2.5</sub> precursors to be included in the PSD modeling analysis (although it has not required precursors to be included to date) and no adequate modeling tools for precursors exist at this time. Calpine stated that if EPA starts requiring precursor modeling for PM<sub>2.5</sub>, making such a modeling demonstration could be impossible without the necessary modeling tools. Second, Calpine stated that in certain areas background PM<sub>2.5</sub> concentrations may be above the NAAQS, and in those areas it would be impossible to make a demonstration that a new project would not be causing or contributing to an NAAQS exceedance. Calpine stated that the requirement would be a de facto construction moratorium in such areas, and that District Staff should prepare an evaluation describing where such areas might be located. Calpine acknowledged that in areas where background concentrations exceed the NAAQS, a project can still satisfy the NAAQS Protection Requirement in proposed Section 2-2-308 by showing that its PM<sub>2.5</sub> emissions will not cause an increase in pollution levels above the “Significant Impact Level”, or “SIL”. But Calpine stated that the PM<sub>2.5</sub> SIL is set so low that most sources with significant PM<sub>2.5</sub> emissions will result in at least one exceedance of the SIL. Calpine also noted that there is ongoing litigation regarding EPA’s established PM<sub>2.5</sub> SILs, and that the petitioner in that litigation claims that reliance on SILs as *de minimis* impact levels for purposes of PSD modeling should not be allowed at all. Calpine stated that given the uncertainty regarding (i) whether EPA will require PM<sub>2.5</sub> precursor modeling in order to demonstrate compliance with the NAAQS and (ii) the continued use of EPA’s PM<sub>2.5</sub> SILs, the NAAQS compliance demonstration requirement in proposed Section 2-2-308 “could act as a bar to new construction throughout portions of the Bay Area where the NAAQS is already or nearly exceeded, regardless of the *de minimis* contribution a source would make to such exceedances.”

**Response:** Calpine has raised similar concerns regarding the NAAQS Compliance Requirement in proposed Section 2-2-308 in previous comments, as have other commenters, and District Staff have addressed them in written responses as well as verbally. District Staff refer to those earlier responses for a further explanation of the District’s evaluation of these issues.<sup>9</sup>

With respect to the specific concerns cited by Calpine here, District Staff have considered these issues as follows.

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<sup>9</sup> District Staff’s responses to Calpine’s earlier written comments on this issue are on pp. 2-4 of the October 10, 2012 response to comments document, which is available at [www.baaqmd.gov/~media/Files/Engineering/Proposed%20Reg%202%20Changes/2nd%20Draft%](http://www.baaqmd.gov/~media/Files/Engineering/Proposed%20Reg%202%20Changes/2nd%20Draft%20Comments%20Response%2010-10-12.pdf)



With respect to whether the proposed NAAQS Protection Requirement is required by 40 C.F.R. Sections 51.160(a) and (b), the proposal to adopt this requirement is not based on an interpretation that it is required by EPA's federal NSR program requirements. As District Staff explained in response to Calpine's comment on this point on the second draft of the Proposed Amendments, Staff are proposing this requirement because it is important from an air quality and public health perspective to ensure that the air we breathe does not contain unhealthy levels of PM<sub>2.5</sub> (or other criteria pollutants) in excess of the health-protective maximum standards established in the NAAQS – not because District Staff believe that it is legally required. EPA Region IX Staff have stated that they would like to see the District adopt this requirement, and District Staff have acknowledged that including the requirement will make EPA Region IX staff more comfortable in approving the District's program. But the fundamental basis for the requirement with respect to PM<sub>2.5</sub> is to ensure that new and modified sources do not push ambient PM<sub>2.5</sub> concentrations over the NAAQS, which would hamper the District's efforts to attain and maintain attainment and would subject people to breathing unhealthy levels of harmful PM<sub>2.5</sub>. Permitting new projects that would result in such an outcome would undermine all of the work that the District has been doing to bring the Bay Area into compliance with the PM<sub>2.5</sub> NAAQS in recent years, and is something that District Staff believe should be avoided.

With respect to the fact that the PSD program modeling requirements apply to attainment pollutants only and not to non-attainment pollutants, this is simply a reflection of how the PSD program works. It is not a suggestion that these modeling requirements cannot be used for non-attainment pollutants. Under the federal major NSR program, attainment pollutants are governed by the PSD requirements and non-attainment pollutants are governed by the Non-Attainment NSR requirements, and EPA therefore makes a clear distinction between what provisions apply to what category of pollutants. This is the reason why the PSD requirements contain an exemption for non-attainment pollutants in the C.F.R. section cited in Calpine's comments (40 C.F.R. Section 52.21(i)). The exemption is not an indication that the substantive requirements for PSD modeling – those contained in EPA's "Guideline on Air Quality Models" in Appendix W of 40 C.F.R. Part 51 ("Appendix W") – are somehow inappropriate for modeling non-attainment pollutants. Indeed, EPA requires these exact same Appendix W modeling requirements for non-attainment pollutants as well as attainment pollutants under 40 C.F.R. Section 51.160(f). That provision applies generally to all NSR pollutants, both attainment and non-attainment, and it requires the exact same Appendix W modeling requirements for non-attainment pollutants as are required for PSD modeling.<sup>10</sup> Moreover, in the context of modeling PM<sub>2.5</sub> impacts specifically, Calpine knows full well from its own experience that these Appendix W modeling requirements are appropriate for PM<sub>2.5</sub> modeling, regardless of whether PM<sub>2.5</sub> is an attainment pollutant or a non-attainment pollutant. As Calpine notes in the introductory section of its comment letter, Calpine obtained a permit for the Russell City Energy Center. That permit application included a demonstration that the facility will not cause or contribute to an exceedance of the 24-hour PM<sub>2.5</sub> NAAQS, which was made in accordance with Appendix W modeling guidelines. And that demonstration was finalized, and the permit issued, at a time when PM<sub>2.5</sub> was designated as a non-attainment pollutant. Calpine's own experience in this regard therefore

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<sup>10</sup> Compare 40 C.F.R. § 51.160(f)(1)&(2) with 40 C.F.R. § 51.166(l)(1)&(2). The language about the modeling procedures that need to be used is identical.

believes its assertion that it would be inappropriate to “incorporate[e] by reference the methodologies developed and utilized to demonstrate that a proposed source would not cause or contribute to a violation of the NAAQS for attainment pollutants.” Calpine’s own modeling demonstration for PM<sub>2.5</sub> impacts from the Russell City facility shows that these methodologies are appropriate for modeling PM<sub>2.5</sub>, even though PM<sub>2.5</sub> is designated as a non-attainment pollutant.

With respect to the fact that the District’s PM regulatory mechanisms have had success in bringing down PM levels and Calpine’s argument that the NAAQS Protection Requirement is unnecessary given the other applicable regulatory requirements and the downward emissions trend, District Staff disagree that these successes make the NAAQS Protection Requirement unnecessary. District Staff are proud of the District’s achievements in reducing PM emissions and that ambient PM levels in the Bay Area are coming down, and agree with Calpine that the District’s regulatory efforts in this area are robust and effective at reducing emissions. But that does not mean that a proposed new or modified source could never have an impact that caused PM<sub>2.5</sub> concentrations to go above the NAAQS, notwithstanding all of the requirements imposed by District regulations. Allowing such a project to go forward, and to have all of the District’s comprehensive efforts to ensure compliance with the NAAQS undermined and the Bay Area’s clean data record jeopardized, would not be in the public interest. District Staff therefore disagree that it is unnecessary to require new projects with significant PM<sub>2.5</sub> emissions increases to demonstrate that they will comply with the NAAQS. To the contrary, District Staff believe that ensuring that our air quality continues to comply with the PM<sub>2.5</sub> NAAQS is highly important, and the NAAQS Protection Requirement will add an important and necessary safeguard to help achieve that goal.

Finally, with respect to Calpine’s claim that there may be some locations where it would not be possible for a source to demonstrate that it will not be causing or contributing to a NAAQS exceedance, as District Staff have explained on a number of occasions and in response to previous comments, this is not the case. Background PM<sub>2.5</sub> concentrations are within the NAAQS at all monitored locations within the Bay Area, as demonstrated in the District’s Clean Data Finding, and so there are no locations where the situation that Calpine is worried about exists – i.e., where background concentrations already exceed the NAAQS. And even if background concentrations were to exceed the NAAQS, there are still a number of compliance mechanisms through which a project can satisfy the NAAQS Protection Requirement and demonstrate that it will not significantly contribute to such an exceedance.<sup>11</sup>

Calpine also expresses concern about one of these compliance mechanisms, demonstrating that the project’s incremental contribution to any NAAQS exceedance will be *de minimis* because it is below the SIL. Calpine states that (i) the 24-hour SIL for PM<sub>2.5</sub> is very low and may be difficult to comply with, and also (ii) that EPA’s PM<sub>2.5</sub> SILs are currently in litigation. With respect to the 24-hour SIL for PM<sub>2.5</sub>, although it is set (appropriately) at a conservative and health-protective level, it is still possible for beneficial new projects to use this SIL to show that they will not be significantly contributing to a NAAQS exceedance. Calpine used this SIL itself in demonstrating that its Russell City power plant referred to above would not significantly contribute to a NAAQS violation, showing that the plant’s contribution

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<sup>11</sup> District Staff outlined these compliance avenues above in response to CCEEB comment no. 1, on pp. 2-3 of this document.

would be below the SIL and therefore *de minimis* even at locations where there could be PM<sub>2.5</sub> NAAQS exceedances. EPA set the SILs at appropriate levels for the reasons the agency explained when it adopted the SILs, and contrary to Calpine's concerns the SILs can be used to demonstrate that a facility will not make a significant contribution to an existing NAAQS violation to the extent one may occur. And with respect to the ongoing litigation regarding EPA's PM<sub>2.5</sub> SILs, it is true that EPA may end up having to revisit these SILs and they may ultimately end up being revised. But that does not mean that SILs cannot be used in the interim, and it does not mean that SILs are likely to be invalidated altogether as a means of demonstrating that a facility will not significantly contribute to a NAAQS violation. The principle that NSR requirements contain implicit exemptions for *de minimis* situations such as impacts below a SIL has been firmly established by the D.C. Circuit,<sup>12</sup> and it is unlikely that it will be rejected by the courts despite the arguments of the petitioners in the current litigation over the PM<sub>2.5</sub> SILs. And with respect to Calpine's concern about EPA potentially requiring PM<sub>2.5</sub> precursors to be included under its Appendix W modeling procedures, District Staff do not believe that EPA will require such modeling if there are no available tools in order to do so, as Calpine suggests.<sup>13</sup> District Staff will continue to monitor EPA's consideration of PM<sub>2.5</sub> precursors in this context, but as a general matter Staff disagree that the fact that EPA is considering this issue presents a sound reason to postpone adopting the NAAQS Protection Requirement for PM<sub>2.5</sub>.

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<sup>12</sup> See *Alabama Power v. Costle*, 636 F.2d 323 (D.C. Cir. 1979).

<sup>13</sup> If EPA requires PM<sub>2.5</sub> precursors to be included in NAAQS compliance modeling, then this requirement will apply for PSD permitting in PM<sub>2.5</sub> attainment areas throughout the country. District Staff find it unlikely that EPA will adopt such a requirement unless there are adequate tools available in order to implement the requirement.

## COMMENTS OF COMMUNITIES FOR A BETTER ENVIRONMENT

The District received the following comments from Communities for a Better Environment (CBE).

**CBE Comment I. – Reference to CBE’s Previous Comments:** CBE noted that it provided comments on the first draft of the Proposed Amendments. CBE stated that it was “disappointed” that the final version of the Proposed Amendments did not incorporate the suggestions made in those comments.

**Response:** The final version of the Proposed Amendments does incorporate CBE’s suggestions where appropriate. District Staff provided a written response to CBE’s comments on the first draft, as well as to all of the other comments received on the first draft, in its May 25, 2012, Background Discussion document.<sup>14</sup> District Staff explained that in some cases they had revised the Proposed Amendments to incorporate the suggestions that were received, and in other cases explained that they had declined to do so because they disagreed that the suggestions were appropriate for various reasons. District Staff incorporated several specific suggestions made by CBE, including the suggestion not to allow inter-pollutant trading for compliance with the offset requirements for PM<sub>2.5</sub> precursors (see Comment I.B.2., pp. 3-4 of the Background Discussion document), and the suggestion to conduct a full CEQA Environmental Impact Analysis to ensure that the Proposed Amendments will not have any significant adverse impacts on the environment (see Comment V., p. 79 of the Background Discussion document). District Staff appreciated CBE’s input on these points. CBE’s suggestions were good ones and they helped make the final version of the Proposed Amendments stronger and more health-protective.

**CBE Comment II. – Applying BACT on a “Pollutant-Specific Basis”:** CBE stated that the District should not apply its Best Available Control Technology (BACT) requirement on a “pollutant-specific basis”. CBE’s comment concerns the new definition of “pollutant-specific basis” in proposed Section 2-2-222, and also the provision in proposed Section 2-2-301 that states that the District BACT requirement imposed under that section applies on a pollutant-specific basis. This means that BACT is required only for pollutants that a source emits in an amount of 10 pounds per day or more (and for modified sources, for modifications that will involve an increase in such pollutants). CBE objected to requiring BACT on a pollutant-specific basis. CBE commented that if a source emits any pollutant in an amount of 10 pounds per day or more, then it should require BACT for all pollutants emitted by that source – even for other pollutants emitted in an amount of less than 10 pounds per day. CBE stated that these emissions should be subject to the BACT requirement to address their potential health impacts. CBE stated that applying BACT on a pollutant-specific basis would be a relaxation from the District’s current NSR rules in violation of SB 288.<sup>15</sup> CBE further stated that “[t]he proposed amendments . . . are vague as to whether they will

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<sup>14</sup> See *Background Discussion for Second Draft of Proposed Amendments and Responses to Comments Received on First Draft* (May 25, 2012), available at [www.baaqmd.gov/~media/Files/Engineering/Proposed%20Reg%20%20Changes/2nd%20Draft/Background%20Report%20for%20Second%20Draft%20Amendments%20and%20Response%20to%20Comments%20on%20First%20Draft.ashx?la=en](http://www.baaqmd.gov/~media/Files/Engineering/Proposed%20Reg%20%20Changes/2nd%20Draft/Background%20Report%20for%20Second%20Draft%20Amendments%20and%20Response%20to%20Comments%20on%20First%20Draft.ashx?la=en).

<sup>15</sup> SB 288, the Protect California Air Act of 2003 (codified in Health & Safety Code Section 42500 *et seq.*), is a state law that prohibits any California air district from relaxing any NSR requirements that were in effect as of the end of 2002. SB 288 is discussed in detail in Section II.B.2.b.ii. of the Staff Report (p. 18).

allow the correct analysis of precursors. . . At a minimum, The District should cure the ambiguity of Section 2-2-222 and formally acknowledge the potential increased PM emissions from indirect precursors.” CBE also stated that the District should not rely on the requirements of CEQA as a “solution to the Pollutant-Specific Basis problem . . . .”

**Response:** BACT has always been applied on a pollutant-specific basis. The Proposed Amendments simply state this principle explicitly in Section 2-2-301 – and provide a definition of exactly what that term means in Section 2-2-222 – in order to ensure that the rules are clear on this point. This is an explicit codification of the way the District’s existing NSR rules work, not a relaxation of the rules, and so it does not implicate SB 288. Moreover, this rule reflects the long-standing policy position established by the legislature in Health & Safety Code Section 40919(a)(2), and reflected in the District’s NSR rules, that 10 pounds per day is the appropriate threshold for the BACT requirement in the Bay Area. District Staff have not found any reason to revisit this policy choice in the current rulemaking. This 10 pounds-per-day level sets a rigorous and appropriate threshold for implementing the BACT requirement. For PM<sub>2.5</sub> in particular – the focus of CBE’s comments – this threshold is far more stringent than what the District is required to do under the federal NSR requirements. The federal Clean Air Act only requires the District to impose BACT for sources with PM<sub>2.5</sub> emissions of 100 tons per year. The District’s proposed threshold of 10 pounds per day is far more stringent. With respect to PM<sub>2.5</sub> precursors, the District’s BACT requirement under proposed Section 2-2-301 will apply equally to PM<sub>2.5</sub> precursors as it does to direct PM<sub>2.5</sub> emissions. District Staff agree with CBE that PM<sub>2.5</sub> precursors are important to take into account in the District’s regulatory responses to Bay Area’s PM<sub>2.5</sub> air quality challenges, and the Proposed Amendments do just that. There is no vagueness or ambiguity on this point in the BACT requirement in proposed Section 2-2-301 (or in the PM<sub>2.5</sub> offsets requirements in proposed Section 2-2-303, which CBE’s comment also mentions in passing). They apply to PM<sub>2.5</sub> precursor emissions just as they do to direct PM<sub>2.5</sub> emissions. Finally, the District’s NSR rules under the Proposed Amendments do not “rely” on CEQA in any manner. CEQA is an independent legal requirement, and it functions as an additional protection to identify and avoid significant environmental impacts. The District’s NSR permitting requirements – including the BACT requirement – function independently to protect air quality by limiting emissions of air pollutants from sources that are subject to them. As noted above, the District’s current BACT threshold of 10 pounds per day, applied on a pollutant-specific basis, reflects a long-standing policy determination of the appropriate manner for addressing such emissions.

**CBE Comment III. – Applicability of NSR Permitting to Rebuild of Crude Unit at Chevron Richmond**

**Refinery:** CBE commented that the District has stated that it will require Chevron to use BACT in the rebuild of its crude unit at its refinery in Richmond, CA. CBE stated that implementing BACT for this project will ensure the safety of the community by requiring the most protective technology. CBE stated that it looks forward to participating in the permitting process, and providing input on the application of BACT.

**Response:** District Staff are currently reviewing Chevron’s plans to rebuild the crude unit at the Richmond refinery, and will evaluate the applicability of District permitting requirements as part of that review. That review has not been completed yet, and so District Staff are not in a position at this time to reach any conclusions about specific permitting requirements and how they may apply in this situation.

As a general matter, however, District Staff agree that the District BACT requirement requires the most protective technology and helps to protect public health and to ensure that the air is safe to breathe in all communities throughout the Bay Area. District Staff encourage CBE and all members of the public to participate in the District permitting process for regulated facilities in the Bay Area and to provide input on BACT determinations.

## **COMMENTS OF EPA REGION IX**

EPA Region IX Staff submitted a letter stating that they are continuing to review the responses that District Staff provided on EPA Region IX Staff's previous comments on earlier drafts of the Proposed Amendments. EPA Region IX Staff stated that the responses appear to address most of the issues raised in those comments, but that regional staff were considering a few remaining issues and consulting with EPA Headquarters staff. EPA Region IX Staff also stated that they were continuing to review the proposed amendments to the emissions banking procedures in Regulation 2, Rule 4, regarding specifying the amount of condensable PM emissions included in existing banked PM credits. EPA Region IX Staff encouraged District Staff to work with them further before adopting this element of the Proposed Amendments.

District Staff believe that they have addressed all of the concerns that EPA Region IX Staff have raised during this rulemaking process thus far, based on the responses provided to EPA Region IX Staff's earlier comments. District Staff will be happy to provide any additional information that EPA Region IX Staff may need on any of those issues. Regarding the provisions for specifying the amount of condensable emissions in existing PM credits, District Staff have reviewed all of the NSR requirements that may apply to these provisions and are confident that the Proposed Amendments satisfy them. EPA Region IX Staff have arranged for a conference call with District Staff in order to discuss these issues in more detail.

## COMMENTS OF PACIFIC GAS & ELECTRIC CO.

Pacific Gas & Electric Co. (PG&E) submitted a comment objecting to the proposed NAAQS Protection Requirement in proposed Section 2-2-308.<sup>16</sup> PG&E stated that the District should not adopt this requirement for the following reasons.

- PG&E noted that the NAAQS Protection Requirement is a new development that District Staff did not list as one of its goals when it initially began this rulemaking project. PG&E suggested that the impact of adding this requirement “has not been adequately analyzed” because it was not identified when District Staff first began discussing the Regulation 2 update project with the public in January and February of 2012.

**Response:** The first draft of the Proposed Amendments published in January of 2012 did not include the NAAQS Protection Requirement, as PG&E correctly notes. But comments from members of the public and further consideration by District Staff soon made clear the importance of adding such a requirement to ensure that new projects do not jeopardize the Bay Area’s compliance with the NAAQS, especially for PM<sub>2.5</sub> emissions. As the need for this requirement became clear, District Staff developed the proposed Section 2-2-308 and added it in the second draft of the proposed amendments. District Staff published this second draft – including the Section 2-2-308 NAAQS Protection Requirement – in May of 2012, along with a written staff analysis discussing the basis for it and how it would work.<sup>17</sup> District Staff also discussed the new requirement with the technical working group that was convened for this rulemaking project at a public meeting on June 7, 2012. District Staff also solicited written comment on this new requirement (as well as on all other aspects of the second draft). In response, District Staff received a number of comments from interested parties raising concerns about the requirement (many of them similar to PG&E’s here). District Staff carefully considered all of these comments, including the objections raised here by PG&E. In some cases District Staff agreed and made revisions to the proposed Section 2-2-308, and in other cases Staff disagreed. Based on this input, District Staff developed the final version of Section 2-2-308 as set forth in the Proposed Amendments. In connection with the final proposal, District Staff provided a detailed explanation of the basis for Section 2-2-308 in the Staff Report. (See Final Staff Report, Section IV.B.3.a., pp. 81-86.) District Staff also provided written responses to all of the comments it received regarding this issue, explaining either how Staff had agreed with the comments and revised the proposal accordingly, or that Staff had disagreed along with an explanation of the reasons why.<sup>18</sup> District Staff have also held a number of in-person meetings with members of the regulated community – including representatives from PG&E – to discuss the new requirement, the basis for it, how it will work in practice, and what the potential impacts may be on beneficial new projects. For all of these reasons, District Staff disagree that the requirement “has not

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<sup>16</sup> The proposed NAAQS Protection Requirement is explained in detail in the Staff Report, in Section IV.B.3.a., pp. 81-82.

<sup>17</sup> May 25, 2012, Background Discussion Document, Section I.C., pp. 6-7.

<sup>18</sup> See October 10, 2012, response to comments document, available at [www.baaqmd.gov/~media/Files/Engineering/Proposed%20Reg%202%20Changes/2nd%20Draft%](http://www.baaqmd.gov/~media/Files/Engineering/Proposed%20Reg%202%20Changes/2nd%20Draft%20Comments%20Response%20to%20Comments%2010-10-12.pdf)



been adequately analyzed” simply because it was not included in the first draft of the proposed amendments published nearly a year ago at the very beginning of this rule development project. To the contrary, the requirement has been analyzed in great depth, and District Staff have concluded that it is an appropriate and necessary safeguard to ensure that the NAAQS are protected while still allowing beneficial new projects to go forward as discussed in all of the documentation that District Staff have published on this issue to date.

- PG&E stated that the NAAQS Protection Requirement would prohibit construction of beneficial projects in certain areas, and “would likely push construction of new industrial facilities into more pristine areas of the region . . .” PG&E gave a hypothetical example of a new plant being considered as a replacement of an older, less-efficient existing plant 10 miles away. PG&E stated that the new plant would cause localized increases in PM<sub>2.5</sub> concentrations, and that if the existing PM<sub>2.5</sub> levels at the location of the new plant were already above the NAAQS then the new plant would not be able to be built because it would be contributing to an existing NAAQS exceedance. PG&E stated that such a plant would be permitted in other parts of the country under other regions’ NSR programs.

**Response:** District Staff have received a number of comments suggesting that the proposed NAAQS Protection Requirement will create an effective construction moratorium that will prohibit beneficial new projects. District Staff refer to their earlier responses for a full explanation of the District’s evaluation of these issues.<sup>19</sup> In short, the proposed NAAQS Protection Requirement will not prohibit beneficial new projects because it provides a number of compliance options that will allow projects to demonstrate compliance and obtain permits, as summarized above in response to CCEEB comment no. 1.

With respect to PG&E’s hypothetical example, District Staff would respond with a very similar real-world example that proves the contrary – that such projects can actually be permitted and built even with a NAAQS Protection Requirement in place. The Russell City Energy Center, addressed above in response to Calpine’s comment no. 2, was a power plant with significant PM<sub>2.5</sub> emissions similar to a number of PG&E power plants. Calpine proposed this new plant to provide generating capacity that would take the place of capacity provided by older, less-efficient equipment, as in PG&E’s example. Calpine made a demonstration that the new plant would not cause or contribute to any exceedance of the PM<sub>2.5</sub> NAAQS, using the exact same procedures and requirements that will apply under proposed Section 2-2-308. This example shows that PG&E’s concern is misplaced. The Air District can provide for beneficial new plants to be permitted and built in the Bay Area, while at the same time ensuring that we will continue to have clean air that complies with the NAAQS.

Finally, with respect to PG&E’s reference to how such projects would be treated in other regions around the country, if a proposed project really is going to cause a violation of the PM<sub>2.5</sub> NAAQS and throw a region out of attainment, and the permitting agency nonetheless allows such a project to be built, that

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<sup>19</sup> These issues are addressed in CCEEB’s comment no. 1 and Calpine’s comment no. 2 above and in WSPA’s comment no. 3 below, as well as in the Staff Report and in October 10, 2012, response to comments document.

region will suffer adverse consequences through the added regulatory burdens (not to mention the public health burdens) that come with non-attainment status. District Staff question whether any other region around the country would really prefer such an outcome. But regardless of what any other region may or may not prefer, District Staff do not believe that it would be appropriate to approve such projects for the Bay Area where they are going to jeopardize the Bay Area's attainment and maintenance of the NAAQS. The proposed NAAQS Protection Requirement establishes a mechanism that can safeguard the NAAQS and prevent this outcome while still allowing beneficial projects to be permitted and built.

- PG&E expressed a concern about what may happen in future regarding the Bay Area's situation vis-à-vis compliance with the NAAQS. PG&E stated that background pollutant concentrations could rise, or more conservative measurements of existing background concentrations could require higher background values to be used in permitting analyses. PG&E also stated that the NAAQS could be lowered and more stringent standards established. PG&E expressed a concern that in such situations, there would be less "headroom" to allow for new emissions increases from new projects without resulting in a NAAQS violation.

**Response:** District Staff appreciate these concerns about how the amount of "headroom" between background concentrations and the NAAQS could be reduced based on future developments. Currently background concentrations are below the NAAQS for all pollutants that will be subject to proposed Section 2-2-308, and so there is "headroom" that will allow a certain amount of new emission before the NAAQS will be exceeded. Moreover, emissions are currently decreasing and District Staff expect this situation to continue. There is no absolute guarantee that this situation will always exist, however, as PG&E points out. District Staff will continue to monitor this issue, and may decide to propose revisions to the NAAQS Protection Requirement in the future if appropriate to address concerns that background concentrations may be close to or exceeding the NAAQS. District Staff intend to discuss this issue with the Board of Directors at the public hearing on the Proposed Amendments and to propose that the Board of Directors adopt a resolution directing Staff to monitor and revisit this issue as appropriate. District Staff believe that it would be premature to predict how any such situations may arise at this time, however, or to specify what the most appropriate course of action would be if they do. The better approach will be to continue to monitor the situation and to take appropriate action when and if it becomes necessary. District Staff (as well as interested members of the public and the regulated community) will be in a better position to assess any such situation and develop an appropriate response once it actually occurs.<sup>20</sup>

- PG&E suggested that the District should rely on existing regulatory requirements, such as existing Non-Attainment NSR, PSD and CEQA requirements, to maintain good air quality and protect public health.

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<sup>20</sup> There is an argument that if background concentrations rise so that background exceeds the NAAQS, having such a requirement will become even more important, not less important. But all such arguments, and the appropriate response, can best be assessed when any such situation actually arises.

**Response:** District Staff appreciate the recognition of the strength of existing air quality protection requirements, many of which the District put in place. These other requirements are not a guarantee that no specific project will ever cause or significantly contribute to a NAAQS exceedance, however. This is the reason why the NAAQS Protection Requirement is necessary. The requirement will work in conjunction with these existing regulatory requirements to provide an additional safeguard to ensure that the NAAQS are protected.

- PG&E also offered alternative language for a NAAQS Protection Requirement that it suggested would be more appropriate. PG&E's alternative would (i) apply only to PM<sub>2.5</sub>, and not to any other criteria pollutants; (ii) lock in the current PM<sub>2.5</sub> NAAQS as the applicable air quality standard that needs to be complied with, so that if EPA revises the PM<sub>2.5</sub> NAAQS in future a project would not need to show that it complies with the revised standard; (iii) use higher SILs than the SILs that EPA has established (2.0 µg/m<sup>3</sup> instead of EPA's 1.2 µg/m<sup>3</sup> for 24-hour-average PM<sub>2.5</sub> impacts, and 0.5 µg/m<sup>3</sup> instead of EPA's 0.3 µg/m<sup>3</sup> for annual-average PM<sub>2.5</sub> impacts); (iv) allow projects to be built that will cause or contribute to a NAAQS violation if they will provide emission reduction credits that exceed the amount of new emissions from the project by a ratio linked to their distance from the proposed new project (a ratio of 1:1.2 for reductions within 15 miles from the project or 1:1.5 for reductions more than 15 miles from the project), on a theory that such increased offset ratios will ensure a "positive net air quality benefit"; and (v) allow projects to be built that will cause or contribute to a NAAQS violation if they will involve other environmental benefits such as reduced greenhouse gas emissions.

**Response:** District Staff has already considered many of these alternatives in developing the Proposed Amendments, but concluded that they would not provide any additional benefit or constitute a more appropriate approach to implementing the NAAQS Protection Requirement.

First, District Staff disagree that only the PM<sub>2.5</sub> NAAQS should be addressed by the requirement. PM<sub>2.5</sub> is obviously a pollutant of significant concern given the health effects associated with it and the fact that the air quality in the Bay Area is close to the NAAQS level at this time. But it is also important to ensure that the NAAQS for other criteria pollutants are also protected. District Staff have therefore left the requirement as applicable to all criteria pollutants.<sup>21</sup> District Staff have reviewed all permits that the District issued for new projects in the Bay Area over the past 12 years and found that very few (only 2) would actually trigger the requirement for pollutants other than PM<sub>2.5</sub>, so in practice Staff expect this to be a non-issue for such other pollutants. But to the extent that a new project were significant enough to exceed the applicable thresholds for these other pollutants, it is important to ensure that they do not result in a NAAQS exceedance for such pollutants.

Second, District Staff disagree that the requirement should lock in the current PM<sub>2.5</sub> NAAQS as the applicable standard. The requirement should focus on the most up-to-date standards available, and to the extent that EPA revises the NAAQS in the future to reflect a better understanding of air pollution and public health impacts, the NAAQS Protection Requirement in Section 2-2-308 should be aimed at

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<sup>21</sup> Section 2-2-308 makes an exception for ozone, which is not directly emitted from stationary sources and for which certain unique modeling challenges. See Staff Report Section IV.B.3.a., p. 81, fn. 68.

such updated standards. Moreover, to the extent that there are any related concerns that would arise from a lowering of the NAAQS, such as reduced “headroom” between background concentrations and the NAAQS, those issues can best be addressed if and when any such situation arises as explained above. As stated there, District Staff are committed to revisiting this requirement in the event that the NAAQS are revised and making any appropriate revisions at that time.

Third, District Staff disagree with the suggestion that EPA’s established SILs are inappropriate for PM<sub>2.5</sub> modeling purposes. EPA set forth the basis for these SILs in the Federal Register notice establishing them, and the District has concluded that the same analysis is appropriate for District purposes in the Russell City permit.<sup>22</sup> PG&E may prefer to have higher SILs, but it has not identified any reason why those SILs are more appropriate than EPA’s SILs or why EPA’s basis for setting those SILs was somehow flawed.<sup>23</sup>

Fourth, District Staff disagree that providing emission reduction credits that will exceed a project’s new emissions increases at a heightened ratio will necessarily ensure that there will not be any NAAQS exceedance. It is entirely possible that even if a project provides emission reduction credits worth 1.2 times or 1.5 times the new emission increases from the project, the project will still cause the NAAQS to be violated in the vicinity of the new emissions. Of course, if the emission reduction credits to be provided will in fact provide a “positive net air quality benefit” in the sense that ambient concentrations in the vicinity will actually be decreased, then those emission reductions can be included in the modeling demonstration to show that the project will not be causing or contributing to any NAAQS violation. But unless such a demonstration can be made, simply providing emission reduction credits at an increased ratio is not sufficient to ensure that the NAAQS will be protected.

Fifth, District Staff obviously support new projects that will provide environmental benefits such as improved efficiency and related greenhouse gas reduction benefits. The proposed NAAQS Protection Requirement is consistent with achieving those goals, as District Staff have explained. What is not appropriate is to undermine the District’s other important goals of attaining and maintaining the NAAQS in order to achieve those goals. We can address greenhouse gases and global climate without having to breathe unhealthy levels of PM<sub>2.5</sub> and other criteria pollutants in order to do so. District Staff disagree that it would be appropriate to include an exemption that would allow a project that may have greenhouse gas reductions associated with it to be permitted if it would push ambient PM<sub>2.5</sub> levels (or other criteria pollutant levels) over the NAAQS.

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<sup>22</sup> See Responses to Public Comments, Federal Prevention of Significant Deterioration Permit, Russell City Energy Center, BAAQMD Application No. 15487 (Feb. 2010), at Comment No. XIII.B.2., pp. 146-149 and accompanying footnotes (discussing basis for using PM<sub>2.5</sub> SILs, with reference to EPA’s adoption documents), available at [www.baaqmd.gov/~media/Files/Engineering/Public%20Notices/2010/15487/PSD%](http://www.baaqmd.gov/~media/Files/Engineering/Public%20Notices/2010/15487/PSD%20Comments/Response%20to%20Comments%20to%20the%20PSD%20Permit%20Application%20No.%2015487.pdf)

<sup>23</sup> PG&E also suggested that listing these SILs would “explicitly allow the de minimis screening level approach (SIL concept) if ambient levels become greater than the NAAQS.” As explained above, this is in fact already the case – proposed Section 2-2-308 as written allows for the de minimis SIL screening approach to be used. There is no need to recite the SILs explicitly in the rule in order to allow affected facilities to take advantage of this approach.

## COMMENTS OF VALERO REFINING COMPANY – CALIFORNIA

Valero Refining Company – California (Valero) submitted the following comments.

**Valero Comment 1 – District Responses to Previous Valero Comments:** Valero provided some further remarks to clarify its previous comments on the second draft of the Proposed Amendments with regard to the “NSR Reform” issue – i.e., whether the District should adopt EPA’s less-stringent NSR applicability test.<sup>24</sup> By way of further clarification, Valero first stated that some environmentally beneficial projects may not be undertaken if they are subject to additional NSR permitting requirements “because of the additional burdens associated with those requirements.” Second, Valero stated that not undertaking such projects would not lead to higher emissions, but it would hinder beneficial facility improvement projects and therefore slow the introduction of emission reductions. Valero stated that the NSR Reform approach is therefore more stringent than the pre-NSR Reform methodology.

**Response:** District Staff appreciate these clarifications. District Staff believe that these points are generally consistent with their understanding of what Valero’s position has been on this issue all along – that NSR Reform is more environmentally beneficial overall because it reduces permitting burdens that dissuade facilities from upgrading and modernizing their equipment. District Staff addressed these points in detail in Section IV.B.3.g.ii. of the Staff Report (pp. 98-105) and in the responses to the comments from Valero and others on this issue.

**Valero Comment 2 – NSR Reform Methodology:** Valero noted that SB 288 – the state law that prohibits any air district from relaxing its NSR rules from those that existed as of the end of 2002 – prohibits air districts from adopting NSR amendments that are less “stringent” than their current rules. Valero stated that SB 288 does not define “stringent”. Valero suggested that this requirement should be interpreted to protect the environment from “real emissions increases”. Valero stated that the District should therefore be able to use the NSR Reform approach for beneficial projects – projects whose primary purpose is emissions reduction, energy conservation, or state or federally mandated product reformulations. Valero suggested that the District should adopt the NSR Reform applicability methodologies for these types of projects, while requiring the pre-NSR Reform applicability methodologies for all other projects.

**Response:** There is nothing in the language or intent of SB 288 that distinguishes between different types of projects. If the District relaxes its NSR applicability methodology by incorporation the NSR Reform test under any circumstances, then that is a relaxation that is prohibited by SB 288 – even if such relaxation is limited to certain specific types of projects. District Staff understand the arguments that have been raised by Valero and other commenters that NSR permitting requirements hinder beneficial projects and that the District should adopt NSR Reform so as to encourage such projects. But the California Legislature also understood these arguments and disagreed with them in adopting SB 288,

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<sup>24</sup> NSR Reform is discussed at length in the Staff Report, pp. IV.B.3.G.ii, pp. 98-105. Valero’s prior comments on this issue and the District’s responses are discussed in the May 25 Background Discussion and Response to Comments document, in Comment III.2, pp. 24-29.

which prohibits any relaxation of the NSR applicability requirements for any projects – even for projects that may have some environmentally beneficial aspects.

**Valero Comment 3 – Emission Reduction Calculation Procedures (Section 2-2-605):** Valero commented on the procedures for crediting emission reductions when a “fully-offset” source is shut down under proposed Section 2-2-605.2. Proposed Section 2-2-605.2 states that when a “fully-offset” source is shut down, the amount of emission reduction credit available should be based on the source’s maximum potential to emit (PTE) before the shutdown (adjusted for current regulatory standards). Valero commented that the calculation should instead be based on the source’s existing permit limit (instead of its PTE) before the shutdown. Valero explained that this distinction would be important in cases where the source’s maximum physical capability to emit air pollutants is actually less than its permitted emissions limit.

**Response:** This comment addresses the unlikely situation where a source has an established permit limit that is actually greater than the maximum amount of emissions it can physically emit given its design and operational constraints, and where the source has provided offsets for the full amount of this permit limit. The District’s NSR rules are based on the principle that NSR permitting is based on a source’s PTE, and that if a source has a permit limit that is higher than its PTE for some reason, then the source’s actual PTE will be used (i.e., the maximum amount that it can physically emit) and not the higher permit limit. The language in the current proposed Section 2-2-605.2 reflects this principle. Affected facilities can avoid the situation where their physical PTE is lower than their fully-offset permit limit by providing offsets and taking permit limits that reflect their actual physical PTE and not some emissions level above the PTE. If a facility provides offsets and obtains a permit limit and then subsequently undertakes some physical change at the facility that reduces the source’s physical PTE to a level below this permit limit, the facility can apply at that time to bank the difference between the permit limit and the new, lower PTE. This will ensure that facilities in this situation will be able to recover the value of any offsets provided previously to support a “fully offset” permit limit.

**Valero Comment 4 – PM<sub>2.5</sub> Source Test Methodology:** Valero made two comments regarding PM<sub>2.5</sub> testing methods. First, Valero stated that the EPA-approved test methods for PM<sub>2.5</sub> contain certain inherent limitations that mean they cannot be used on stack emissions with a high temperature or high moisture content. Valero stated that where such limitations apply, this means that PM can be measured only as total PM based on EPA Method 5 and Method 202 – i.e., in such cases it is not possible to measure the PM<sub>2.5</sub> fraction specifically, only total PM. Second, Valero stated that for gaseous combustion devices, much of the PM emitted actually comes from PM introduced in the combustion air, not from the combustion process itself. Valero stated that these issues should be addressed, either in rule language or in the permitting record, “so that when new PM limits are set as part of a permit condition, available stack test methods are utilized to assist in developing the compliance limits.”

**Response:** The District is required to implement EPA’s NSR requirements in order to have an approved NSR program. EPA requires that the District establish PM<sub>2.5</sub> permit limits for all sources that trigger the NSR requirements, including those whose emissions have a high moisture content or high temperature. The Proposed Amendments include provisions allowing for alternative test methods to be used to

measure PM<sub>2.5</sub> where the EPA-approved test methods are not applicable, and District Staff will use those provisions where necessary to ensure that the best possible PM<sub>2.5</sub> test methods are used in setting PM limits and in determining compliance with such limits. These provisions will ensure that “available stack test methods are utilized” when setting PM emissions limits – either the EPA-approved PM<sub>2.5</sub> test methods where those are applicable, or the best alternative test methods where they are not. To the extent that there are limitations in such test methods, there is nothing more that the District can do other than use the best available methods. EPA requires that the District address PM<sub>2.5</sub> in permitting such sources, and the District is therefore required to do so as best it can given the test methods that are available. District Staff are confident that they will be able to do so with the testing methodologies that have been developed to date. In addition, EPA also requires that the District base its NSR permitting regulations on all of the pollutants that are emitted from a source, regardless of whether those pollutants are generated by the source itself or whether they are already present in the inputs into the process (i.e., entrained in the combustion air or present in the fuel combusted). EPA requirements currently do not allow a source to exclude PM emissions where the PM comes from PM introduced in the combustion air. The District’s NSR Rules therefore do not provide any exclusion for any such PM present in a source’s stack emissions.

## COMMENTS OF WESTERN STATES PETROLEUM ASSOCIATION:

The District received the following comments from the Western States Petroleum Association (WSPA).

**WSPA Comment 1 – Reorganization of Regulatory Provisions:** WSPA stated that the re-organization of certain provisions in Regulation 2 under the Proposed Amendments will “mak[e] it difficult for those in the regulated community to determine how the proposed changes would impact future projects.” WSPA requested that District Staff should hold another meeting of the technical working group that Staff convened for this project to discuss how the NSR and Title V permitting processes will work under the Proposed Amendments using example projects and how they will be permitted, flowcharts to demonstrate the process, etc.

**Response:** District Staff welcome the opportunity to meet with members of the regulated community and other members of the public to discuss how NSR and Title V permitting works. As District Staff have discussed in other venues, including in responses to earlier comments, District Staff are planning a comprehensive outreach and education program to improve the regulated community’s (and the general public’s) understanding of how the District’s NSR and Title V permitting programs work. These initiatives will include training sessions to inform and educate members of the public on what the regulations require, as well as an overhaul of the District’s permitting handbook so that it better describes the permitting process. District Staff would be more than happy to start this outreach process with WSPA and its members immediately, before the Board of Directors meets to consider the Proposed Amendments, and have contacted WSPA representatives to do so. District Staff intend to discuss specific examples with WSPA to illustrate how the NSR and Title V permitting programs work and to walk WSPA through the permit evaluation and issuance process.

District Staff also point out that the need for this educational outreach to members of the regulated community and the public (and the revision of the permitting handbook) have been present for some time, independent of the Proposed Amendments. As District Staff have gone through the rule development process for the Proposed Amendments, it has become clear that many in the regulated community (among others) do not have a strong understanding of how the District’s current permitting requirements work. District Staff believe that this situation has arisen in part because the rules are poorly organized in some aspects and not written in language that is clear and specific enough to be easily understood. The Proposed Amendments will address this situation by setting forth the regulatory requirements in a manner that is more clear and straightforward, which will help all users of the regulations to understand better how they work and what they require.<sup>25</sup> Thus, it is not the proposed reorganization of Regulation 2 that is causing the confusion WSPA cites about how these permitting programs will apply to future projects, it is primarily the lack of clarity and specificity in the District’s

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<sup>25</sup> Note that although the Proposed Amendments will make some important changes to the NSR and Title V programs, as discussed in the Staff Report and other documentation, these changes are actually quite limited in the larger context of all of the existing elements of these comprehensive permitting programs. As District Staff have stressed in the past, the bulk of the revisions simply revise the regulatory language to better state how the existing requirements apply under the current regulations. Much of the concern about how the revised regulations will apply actually stems from confusion and ambiguity about how the existing regulations apply today.



current regulations, which has unfortunately been present for a long time. The Proposed Amendments will address this problem by setting forth the regulatory requirements in a manner that specifies exactly what the regulations require more clearly and with more detail. Moreover, District Staff will further support these improvements in the regulations with the education and outreach discussed above to help ensure that all affected members of the regulated community understand how the NSR and Title V permitting programs work. District Staff look forward to working with WSPA and its members – and with all members of the regulated community and interested members of the public at large – as these efforts move forward.

**WSPA Comment 2 – Definition of “Modification” – the “Federal Backstop” Provision:** WSPA commented that the District should not adopt the “federal backstop” provision for the definition of “modification”.<sup>26</sup> WSPA commented that adding this element to the definition would complicate the rule because projects would need to be analyzed twice, under the two alternative tests, to ensure that they are not a “modification” that needs to obtain an NSR permit. WSPA stated that the “federal backstop” is not necessary to satisfy EPA’s NSR requirements as District Staff explained in the May 25 Background Discussion document. WSPA urged the District to adopt a one-part definition of “modification” and encourage EPA Region IX staff to approve it.

**Response:** WSPA made a very similar comment on the Second Draft of the Proposed Amendments, and District Staff provided a detailed response.<sup>27</sup> As District Staff explained in response, EPA Region IX Staff have now made clear that EPA will not be willing to approve the District’s NSR rule unless the District adds the federal backstop. As a result, the District has little choice but to add it to the “modification” definition. This continues to be the case.

**WSPA Comment 3 – NAAQS Protection Requirement (Proposed Section 2-2-308):** WSPA stated that the District should not adopt the proposed NAAQS Protection Requirement in proposed Section 2-2-308.<sup>28</sup> WSPA stated that requiring projects to demonstrate that they will not cause or contribute to a NAAQS exceedance “works satisfactorily in practice” for Prevention of Significant Deterioration (PSD) purposes. But WSPA objected to extending the requirement to additional NSR permitting beyond the PSD context. WSPA stated that extending this requirement beyond just PSD permitting will “substantially increas[e] permitting burdens.” WSPA stated that the District should not impose any requirements that are any more stringent than the minimum required by federal regulations.

**Response:** District Staff appreciate WSPA’s acknowledgement that the NAAQS compliance modeling requirement works in the PSD context. But District Staff disagree that it will be inappropriate or problematic to extend this requirement to other types of projects with significant emissions increases.

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<sup>26</sup> The federal backstop provision is discussed in the Staff Report in Section IV.A.1.b., pp. 31-34.

<sup>27</sup> Staff’s Response to Comments document addressing earlier comments received on the NAAQS Protection is available at [www.baaqmd.gov/~media/Files/Engineering/Proposed%20Reg%20%20Changes/2nd%20Draft%](http://www.baaqmd.gov/~media/Files/Engineering/Proposed%20Reg%20%20Changes/2nd%20Draft%20Response%20to%20Comments.pdf). Staff’s response to WSPA’s earlier comments on the “federal backstop” provision is on p. 17 of that document.

<sup>28</sup> The proposed NAAQS Protection Requirement in Section 2-2-308 is discussed in Section IV.B.3.a. of the Staff Report, pp. 81-82.

As District Staff have explained in the documentation discussing the basis for this requirement, it is just as important to ensure that the ambient air in the Bay Area complies with the NAAQS for non-attainment pollutants as it is for attainment pollutants, and it is equally important to address significant emissions increases at major facilities as it is at non-major facilities.<sup>29</sup> Put another way, it does not make much sense to conclude that a significant emissions increase is important and should be evaluated when it comes from a facility over the “major” facility threshold, but that the same significant emissions increase is not important and does not need to be evaluated when it comes from a facility that is under the threshold. The emissions are the same and the impacts are the same, and so it makes sense in both cases to ensure that the emissions will not cause or contribute to a NAAQS exceedance, which is what the proposed NAAQS Protection Requirement does. By the same token, it does not make much sense to conclude that a significant increase in emissions of a pollutant is important and should be evaluated when the District is administratively designated as “attainment” for a pollutant, but that the same significant emissions increase is not important and does not need to be evaluated if the District’s administrative designation changes to “non-attainment” for that pollutant. The emissions are the same and the impacts are the same, and so it makes sense in both cases to ensure that the emissions will not cause or contribute to a NAAQS exceedance, which again is what the NAAQS Protection Requirement does.

The situation with PM<sub>2.5</sub> – the pollutant that has generated the most debate and discussion among the commenters – illustrates the importance of this point. Up until December of 2009, this pollutant was designated as an attainment pollutant and was subject to a NAAQS compliance modeling analysis requirement under the PSD program, which is a requirement that WSPA says “works satisfactorily in practice.” In December of 2009, however, the administrative designation for this pollutant was changed to “non-attainment”, meaning that it was no longer subject to the PSD modeling requirements. But the change in administrative designation did not change the potential impacts of a significant increase in PM<sub>2.5</sub> emissions from a new project on the District’s ability to comply with the NAAQS or on public health. The proposed NAAQS Protection Requirement recognizes this reality and establishes a requirement that projects with such emissions increases will still have to demonstrate that they will not cause or contribute to a NAAQS exceedance in the same way that they did before. District Staff disagree with WSPA’s comment that continuing to apply this requirement – one that was working satisfactorily before the change in the designation for PM<sub>2.5</sub> – will “substantially increas[e] permitting burdens.” If anything, the permitting burdens will decrease compared with what they were before the PM<sub>2.5</sub> re-designation in 2009, because background PM<sub>2.5</sub> concentrations have come down since then, meaning that there is additional “headroom” to allow new PM<sub>2.5</sub> emissions to occur without resulting in an exceedance of the NAAQS.

For all of these reasons, as well as for all of the reasons that District Staff have explained in the documentation it has published to date addressing the proposed NAAQS Protection Requirement, District Staff disagree that adopting this requirement would be inappropriate or unduly burdensome. To the contrary, this requirement is an appropriate and targeted mechanism to help achieve the primary

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<sup>29</sup> See, e.g., Staff Report, Section IV.B.3.a., pp. 81-82.

purpose of the NSR program – to support the District in its efforts to ensure that the air we breathe in the Bay Area will attain and maintain the NAAQS.

District Staff do understand that this will be an additional requirement that applicants must satisfy in order to obtain an NSR permit, and that WSPA is interested in reducing the number of regulatory requirements that will apply to its members. But District Staff believe that the requirement will not be unduly burdensome and will not obstruct beneficial development projects, for all the reasons that District Staff have discussed previously – and even more importantly, that the benefits from the requirement in terms of ensuring that the Bay Area does not experience additional NAAQS violations outweigh any associated burdens. District Staff also understand and appreciate WSPA’s concerns about the mechanics of how the requirement will be implemented for sources subject to it, and have worked to address such concerns during this rulemaking process. These efforts are reflected in the changes that Staff have made in the final version of the NAAQS Protection Requirement in proposed Section 2-2-308. Finally, District Staff also understand and appreciate WSPA’s concerns that future developments may make it more difficult to comply with this requirement, for example if the NAAQS are lowered or if background concentrations rise such that it becomes harder to show that a new project will not cause or contribute to a NAAQS exceedance. District Staff have committed to monitoring this situation and will propose that the Board of Directors adopt a resolution that the District revisit this requirement in the future to address any such developments, as discussed in the responses to comments from PG&E (see p. 18 above). District Staff believe that these efforts to respond to and accommodate WSPA’s concerns have addressed the potential for difficulties in complying with this requirement that form the basis for WSPA’s comments. District Staff are hopeful that with these efforts WSPA will be able to support the adoption of this important requirement.

**WSPA Comment 4 – Regulations Should Provide Clear Roadmap:** Finally, WSPA also commented that it was “concerned” about District Staff’s earlier responses to certain comments. WSPA stated that commenters had asked how the District would address certain specific factual situations, and that in its responses District Staff had noted that each individual permit application needs to be reviewed on a case-by-case basis taking into account the specific facts and circumstances of the situation. WSPA also stated that District Staff had explained that when the Proposed Amendments are adopted, Staff will hold additional workshops and training sessions to ensure that all interested members of the public and of the regulated community understand how the District’s NSR and Title V permitting programs work, and will update the District’s Permitting Handbook to reflect the new requirements that are being added under the Proposed Amendments. WSPA commented that these statements by District Staff indicate that the Proposed Amendments are not sufficiently specific and detailed about what they require. WSPA stated that “[r]egulations should provide a clear roadmap for permit applicants and leaving implementation details to discussions after the proposed amendments are adopted creates enormous uncertainty.”

**Response:** District Staff strongly disagree that the Proposed Amendments are not clear and specific about what will be required for NSR and Title V permitting. The Proposed Amendments do provide a “clear roadmap” of what the District will require of permit applicants under these programs, and they specify in great detail exactly how the District will implement each of the specific requirements in these

permitting programs. District Staff have drafted the text of the Proposed Amendments to state the requirements with precise and detailed language. Moreover, Staff have provided in-depth explanations of how the requirements will work in the Staff Report and in responses to comments and other published documentation, and have held many hours of meetings with the regulated community and others to discuss how the requirements will work. Contrary to WSPA's assertion, the Proposed Amendments make it very clear what will be required (and what will not be required) in order for permit applicants to obtain NSR and Title V permits under Regulation 2. Indeed, the Proposed Amendments will greatly improve the clarity and specificity of the current Regulation 2 in these areas; the fact that the current regulatory language is unclear, ambiguous and confusing in a number of areas was one of the principal reasons why the District undertook this rulemaking project in the first place.

With respect to WSPA's comment that District Staff noted that each individual application needs to be evaluated on a case-by-case basis, this is true of every regulation, and District Staff's observation on this point does not mean that the Proposed Amendments are somehow insufficiently clear and specific. Several commenters gave hypothetical examples that provided a handful of facts about a situation, and then asked how the District would address such situations under the Proposed Amendments. In response, District Staff observed that it is impossible to give a definitive answer regarding hypothetical examples such as these because every real-life permitting situation needs to be addressed on a case-by-case basis. Permitting issues are necessarily very complicated given the complex nature of major industrial facilities, and there are inherently a large number of factual issues that need to be investigated and evaluated before a definitive answer can be given on how the permitting requirements apply in a specific situation. Given this reality, it is appropriate to provide a caveat that in responding to such hypothetical examples, District Staff can give only a general response and cannot provide the type of definitive response that can be developed only after a full review of all of the facts and circumstances presented by a specific situation. Moreover, after providing this important caveat, in each such situation District Staff did respond by describing how applicable regulatory requirements that were the subject of the comments apply as a general matter, providing the type of "clear roadmap" that WSPA is seeking about how the Proposed Amendments will work in practice. Rather than "creat[ing] enormous uncertainty," these responses informed the commenters as to what the regulations require. The fact that District Staff cannot provide definitive answers in response to abstract hypothetical questions does not suggest otherwise.

With respect to District Staff's statements that it will continue to provide outreach and training to regulated entities on how the District's permitting programs work, and will revise and update the permitting handbook, the fact that District Staff intend to do this also does not mean that the Proposed Amendments are somehow insufficiently clear and specific. Any time that regulations are revised, it is important to follow up the adoption of the revisions with outreach and education to ensure that the public is informed of what the revisions involve. Moreover, as explained in response to WSPA comment no. 1 above, in the case of Regulation 2's NSR and Title V permitting programs, there has been a need for such outreach and education to explain how the District's current regulations work for some time, regardless of whether or not the District adopts the Proposed Amendments. The fact that District Staff stated that they will provide further outreach and training to regulated entities and members of the

public simply reflects these realities. It is not an indication that the regulations are not sufficiently specific as drafted, or that District Staff are leaving important questions regarding how the NSR and Title V programs work unresolved to be answered after the Proposed Amendments are adopted. To the contrary, District Staff have spent over a year immersed in these issues, and they have addressed every implementation issue that they have identified or that has been raised by the public in the multiple rounds of meetings, discussions, and written comments on the Proposed Amendments. District Staff agree that outreach and education will continue to be important even after the Proposed Amendments are adopted, for the reasons outlined above. But District Staff strongly disagree that adoption is somehow premature at this point because the regulations are not clear and specific enough or because there are still unresolved questions about what exactly the regulations will require.

## **VERBAL COMMENTS REGARDING THE POTENTIAL FOR FUTURE REMOVAL OF PM<sub>2.5</sub> REQUIREMENTS UNDER SB 288:**

In addition to the written comments that District Staff received that are addressed above, members of the regulated community also raised a concern verbally in meetings with District Staff that Staff would like to respond to. The concern involves the addition of the NAAQS Protection Requirement for PM<sub>2.5</sub> and other new requirements for PM<sub>2.5</sub>. Some members of the regulated community were concerned that if these new requirements are added at this point, and later on it appears that they are no longer appropriate and should be removed from Regulation 2, that SB 288 would bar their removal because this would be a relaxation of the District's NSR rules. This is not the case. SB 288 by its terms applies to relaxations of the District's NSR rules as they existed as of December 31, 2002. Any new requirements that are added in 2012 are not subject to the SB 288 prohibition, because by definition they were not part of the rules that existed as of December 31, 2002. This includes the new NAAQS Protection Requirement for PM<sub>2.5</sub>, other new requirements for PM<sub>2.5</sub> such as the BACT and offsets requirements, and any other new requirements being added in the Proposed Amendments.

In addressing this point, District Staff also wish to point out that they believe that the new requirements being added in the Proposed Amendments are justified and appropriate based on all of the important policy considerations as explained in the Staff Report and related documentation. Moreover, in most cases these new requirements are also required under the Clean Air Act in order for EPA to approve the District's permitting programs. For these reasons, District Staff do not envision a future scenario in which the District would want to eliminate these provisions from Regulation 2. As a matter of law, however, if a situation was to arise where the District wanted to remove any of these provisions, SB 288 would not be a legal impediment to doing so. This issue was a matter of confusion and concern for certain members of the regulated community, and so District Staff wanted to respond in writing on the record to set forth how the SB 288 legal restrictions apply in this context.<sup>30</sup>

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<sup>30</sup> Note also that the applicability of SB 288 to new requirements being added in 2012 is different from the question of how SB 288 applies to PM requirements that were in effect as of 2002. This issue was addressed in footnote 94 on p. 99 of the Staff Report. As noted there, where there were PM requirements in effect as of 2002, there is some question about whether these requirements establish an SB 288 baseline for PM<sub>2.5</sub> against which any amendments addressing PM<sub>2.5</sub> would be assessed in the SB 288 "backsliding" analysis. But that scenario applies only for existing PM requirements that were in effect as of 2002. Any new requirements being added in 2012 are not subject to any SB 288 restrictions and can be removed at any time without running afoul of SB 288.



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October 26, 2012

Via e-mail: [clee@baaqmd.gov](mailto:clee@baaqmd.gov)

Ms. Carol Lee  
Bay Area Air Quality Management District  
939 Ellis Street  
San Francisco, California 94109

Re: Comments on the Bay Area Air Quality Management District's Proposed Amendments to Regulation 2 (Permits) New Source Review and Title V Permit Programs

Dear Ms. Lee:

Calpine Corporation ("Calpine") welcomes the opportunity to provide these comments on the Bay Area Air Quality Management District's ("BAAQMD" or the "District") proposed amendments to its New Source Review and Title V permit programs, as set forth at BAAQMD Regulation 2 (Permits), Rule 1 (General Requirements), Rule 2 (New Source Review), Rule 4 (Emissions Banking) and Rule 6 (Major Facility Review) ("Proposed Amendments").

## I. INTRODUCTION AND SUMMARY

Calpine is the state's largest independent power producer, owns the state's largest fleet of combined heat and power ("CHP") or cogeneration facilities and is also the state's largest provider of renewable energy, generating over 725 megawatts ("MW") of renewable geothermal energy. Calpine also owns and operates more facilities subject to the District's Major Facility Review (Title V) permitting program than any other company.

Calpine understands that the District's Proposed Amendments of its new source review ("NSR"), prevention of significant deterioration ("PSD") and Title V permit programs are needed to satisfy the requirements of the U.S. Environmental Protection Agency's ("EPA's") Greenhouse Gas ("GHG") Tailoring Rule, as well as to address the federal requirements for fine particulate matter (i.e., particulate matter with an aerodynamic diameter of less than 2.5 microns ("PM<sub>2.5</sub>")). Indeed, Calpine obtained the most recent federal PSD permit issued by the District for the ongoing construction of Russell City Energy Center, a highly efficient 620-MW combined cycle natural gas-fired power plant located in Hayward, California. The project's PSD permit, which was issued by the District pursuant to delegation of authority from EPA Region 9, was the first federal PSD permit to include "best available control technology" ("BACT") limits on GHG emissions.

Given Calpine's experience working with the District to obtain and defend the PSD permit for Russell City and, more generally, our experience permitting more major facilities in the Bay

Area than any other company, Calpine strongly endorses the District's proposal to move forward with adoption of amendments to Regulation 2 that can ultimately be approved by EPA as part of the California State Implementation Plan ("SIP") pursuant to 40 C.F.R. § 51.166. Implementation of the federal PSD program requirements pursuant to a SIP-approved program, rather than a delegation of authority from EPA Region 9, should avoid unnecessarily duplicative and lengthy processes associated with issuance of separate permits pursuant to both the District's rules and 40 C.F.R. § 52.21.

While we support the District's overall goals, we have one significant concern with the third and final draft of Proposed Amendments. Specifically, Calpine would ask that the District not finalize its proposal to require an unprecedented source impact analysis requirement for nonattainment pollutants. The source impact analysis requirement could be especially problematic with respect to the 24-hour PM<sub>2.5</sub> National Ambient Air Quality Standard ("NAAQS"), for which the Bay Area is designated nonattainment. Our comments on this issue are described in more detail below.

## **II. THE DISTRICT SHOULD NOT FINALIZE PROPOSED REGULATION 2-2-308**

In the final draft of the Proposed Amendments, BAAQMD proposes that "[t]he APCO shall not issue an authority to construct for a new or modified source that will result in a significant net increase in emissions of any pollutant for which a [NAAQS] has been established unless the APCO determines, based upon a demonstration submitted by the applicant, that such increase will not cause or contribute to an exceedance of any [NAAQS] for that pollutant." Proposed Amendments, Reg. 2-2-308 (entitled "NAAQS Protection Requirement"). Proposed Regulation 2-2-308 further states that this demonstration must be "made using the procedures for PSD Air Quality Impact Analyses." Although the source impact analysis would be required for all pollutants for which a NAAQS has been established, including non-attainment pollutants<sup>1</sup>, "[s]uch demonstration shall not be required for ozone."<sup>2</sup> The Bay Area is designated non-attainment for the 8-hour ozone NAAQS and 24-hour PM<sub>2.5</sub> NAAQS.

The second draft of proposed Regulation 2-2-308 would have required a source impact analysis for all pollutants for which a NAAQS has been established, including the ozone NAAQS. Calpine emphasized in its written comments on the second draft of the Proposed Amendments

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<sup>1</sup> See BAAQMD, Final Staff Report, Updates to BAAQMD New Source Review and Title V Permitting Programs, Regulation 2; Rules 1, 2, 4, and 6, at 81 (Sep. 26, 2012) (hereinafter, "Final Staff Report"), available at:

<http://www.baaqmd.gov/~media/Files/Engineering/Proposed%20Reg%202%20Changes/Public%20Hearing/Final%20Reg%202%20Updates%20Staff%20Report%20September%2026%202012.ashx?la=en>.

<sup>2</sup> Proposed Amendments, Reg. 2-2-308.



that fulfilling the source impact analysis requirement for ozone would be unworkable.<sup>3</sup> We appreciate that the District has exempted ozone from the Regulation 2-2-308 analysis requirement.

However, the proposed exclusion of ozone from the purview of Regulation 2-2-308 does not resolve our concerns with respect to requiring such a demonstration for all other nonattainment pollutants. While the District is currently developing documentation to submit to EPA demonstrating compliance with the NAAQS requirements for PM<sub>2.5</sub>,<sup>4</sup> the Bay Area is currently designated nonattainment for the 24-hour PM<sub>2.5</sub> NAAQS.

There are several reasons why Regulation 2-2-308 should not be approved in light of the potential difficulties applicants would experience demonstrating compliance with the 24-hour PM<sub>2.5</sub> NAAQS.

First, it is clear that, under governing federal regulations, a NAAQS compliance demonstration is not required for nonattainment pollutants, and EPA has *never* previously required, to our knowledge, a jurisdiction to incorporate a requirement for such a demonstration for nonattainment pollutants into a nonattainment NSR ("NNSR") permitting program as part of a SIP approval.

As the preamble to the rule implementing the NSR program for PM<sub>2.5</sub> states, "[o]nly sources subject to PSD must conduct air quality modeling."<sup>5</sup> Indeed, both EPA's Environmental Appeals Board and the U.S. Court of Appeals for the Ninth Circuit have affirmed that no provision of the Clean Air Act requires demonstration of attainment with the NAAQS for a nonattainment pollutant (in particular, 24-hour PM<sub>2.5</sub>) as a prerequisite of granting a PSD permit.<sup>6</sup>

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<sup>3</sup> See Letter to Carol Lee from Barbara McBride, re: Comments on the Bay Area Air Quality Management District's Proposed Amendments to Regulation 2 (Permits) New Source Review and Title V Permit Programs, at 4 (June 25, 2012) ("June 2012 Comments") (stating that "...it is extremely difficult to model the complex interactions of pollutants and atmospheric chemistry that result in ozone formation.").

<sup>4</sup> Final Staff Report, at 83, n. 70 ("District Staff expect that EPA will fully approve the District's submission [for the clean data determination] when it has had an opportunity to complete its review.").

<sup>5</sup> Final Rule, Implementation of the New Source Review (NSR) Program for Particulate Matter Less Than 2.5 Micrometers (PM<sub>2.5</sub>), 73 Fed. Reg. 28321, 28335 (May 16, 2008).

<sup>6</sup> *In re Russell City Energy Center, LLC*, PSD Appeal Nos. 10-01, 10-02, 10-03, 10-04 & 10-05, 15 Environmental Administrative Decisions \_\_\_, slip op. 122-127 (EAB, Nov. 18, 2010), available at: [http://yosemite.epa.gov/oa/EAB\\_Web\\_Docket.nsf/PSD%20Permit%20Appeals%20\(CAA\)/6AC7D419AF383FF9852577DF0069A6D1/\\$File/Denying%20Review....pdf](http://yosemite.epa.gov/oa/EAB_Web_Docket.nsf/PSD%20Permit%20Appeals%20(CAA)/6AC7D419AF383FF9852577DF0069A6D1/$File/Denying%20Review....pdf); *Chabot-Las Positas Community College*

We understand that the District believes proposed Regulation 2-2-308 is needed to satisfy 40 C.F.R. § 51.160(a) and (b), which, together, require that an approvable SIP must contain procedures for (i) determining whether any new or modified source will interfere with attainment or maintenance of any NAAQS, and (ii) preventing construction of a new or modified source if it will result in such interference.<sup>7</sup> However, in its comments to the District, EPA acknowledged that, although dispersion modeling “could” be used to meet these requirements, they could also be met through other means, such as “demonstrating these emission increases are already accounted for as growth in emission projections of an attainment demonstration.”<sup>8</sup> Thus, dispersion modeling on a source-by-source basis is not the only means of satisfying this requirement and we are aware of no instance in which EPA has previously required such a requirement as part of a “minor source” SIP.

Second, proposed Regulation 2-2-308 lacks regulatory coherence. Regulation 2-2-308 states that the source impact analysis must be conducted using the procedures specified in Regulation 2-2-305. In turn, the District notes that Regulation 2-2-305 incorporates by reference “the exemptions set forth in 40 C.F.R. Section 52.21(i).”<sup>9</sup> One of the exemptions in 40 C.F.R. § 52.21(i) states that the requirements of, *inter alia*, section 52.21(k) (i.e., source impact analysis) do not apply “to a major stationary source or major modification with respect to a particular pollutant if the owner or operator demonstrates that, as to that pollutant, the source or modification is located in an area designated as nonattainment under section 107 of the Act.”<sup>10</sup> Thus, the incorporated exemption makes clear that a NAAQS compliance demonstration is only required for attainment pollutants. This internal inconsistency further highlights that the District should not be requiring a NAAQS compliance demonstration for nonattainment pollutants, incorporating by reference the methodologies developed and utilized to demonstrate that a proposed source would not cause or contribute to a violation of the NAAQS for attainment pollutants.

Third, proposed Regulation 2-2-308 is unnecessary to ensure attainment of the NAAQS in the Bay Area. As the District itself notes, “[f]or ozone and PM<sub>2.5</sub>, the two pollutants for which the

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*District v. EPA*, 10-13870, memorandum disposition at 5 (9th Cir. May 4, 2012), available at: <http://www.ca9.uscourts.gov/datastore/memoranda/2012/05/04/10-73870.pdf>.

<sup>7</sup> Final Staff Report, at 83-84.

<sup>8</sup> Letter from Gerardo Rios, Chief Air Permits Office, EPA Region 9, to C. Lee, re: EPA Region 9 Comments on Draft Proposed Regulation 2, Rules 1 and 2 (Jul. 26, 2012), Enclosure, at 8.

<sup>9</sup> Final Staff Report, at 78.

<sup>10</sup> 40 C.F.R. § 52.21(i)(2).

Bay Area is designated as non-attainment, the District's emissions projections show an increase in emissions from stationary sources in future years, while at the same time showing overall reductions in total emissions leading towards attainment and maintenance of the NAAQS."<sup>11</sup> Such reductions will be assured through the other elements of the NNSR program. Indeed, applicants triggering the requirements of NNSR must achieve the lowest achievable emission rate ("LAER"), offset new emissions with creditable emissions reductions, certify that all major sources owned or operated by the applicant in the same state are in compliance, and conduct an alternative siting analysis that demonstrates net benefits. It is these requirements that will help ensure progress towards attaining the 24-hour PM<sub>2.5</sub> NAAQS, obviating the need for a NAAQS compliance demonstration for PM<sub>2.5</sub> (and any other nonattainment pollutant).

Fourth, proposed Regulation 2-2-308 should not be finalized because it may be extremely difficult, if not impossible, in certain locations throughout the Bay Area to demonstrate that a source will not cause or contribute to an exceedance of the 24-hour PM<sub>2.5</sub> NAAQS.

The District is adopting the nonattainment NAAQS compliance demonstration requirement upon the assumption that modeling for secondary particulate formation will not be required. The District states that "...the modeling [for 24-hour PM<sub>2.5</sub>] will be conducted in accordance with EPA's 'Guideline' in Appendix W and will follow the Guideline's requirements for PM<sub>2.5</sub>, which require modeling of direct PM emissions only, and not the impacts from how any precursor emissions may subsequently combine in the atmosphere to form secondary PM<sub>2.5</sub>."<sup>12</sup> However, EPA has acknowledged that "[s]econdary formation of PM<sub>2.5</sub> from emissions of NO<sub>x</sub>, SO<sub>x</sub> and other compounds from sources across a large domain will often contribute significantly to the total ambient levels of PM<sub>2.5</sub>, and may be the dominant source of ambient PM<sub>2.5</sub> in some cases."<sup>13</sup> For this reason, EPA recently granted reconsideration of Appendix W to develop appropriate modeling techniques to model secondary particulate formation attributable to a proposed source.<sup>14</sup> While one might assume that EPA would not revise Appendix W to require modeling for secondary particulate until such time that adequate tools are available for use by an individual source, at this time, no such tools exist. Without an understanding of how those tools will work – again, tools that will in all likelihood be developed for the task of demonstrating

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<sup>11</sup> Final Staff Report, at 84.

<sup>12</sup> Final Staff Report, at 81, n. 68.

<sup>13</sup> Letter from Gina McCarthy, EPA Assistant Administrator, to Robert Ukeiley, at 3 (Jan. 4, 2012), *available at*:  
[http://www.epa.gov/scram001/10thmodconf/review\\_material/Sierra\\_Club\\_Petition\\_OAR-11-002-1093.pdf](http://www.epa.gov/scram001/10thmodconf/review_material/Sierra_Club_Petition_OAR-11-002-1093.pdf).

<sup>14</sup> *Id.*

compliance in areas currently attaining the standard – it is simply impossible to know whether sources will even be able to demonstrate that they are not causing or contributing to the NAAQS and at what cost, should the Bay Area remain nonattainment for 24-hour PM<sub>2.5</sub>.

Further, unless the monitored background concentrations in the vicinity of a proposed source or modification are sufficiently below the NAAQS, it may simply be impossible for an existing or new source to demonstrate that it would not cause or contribute to a violation of the 24-hour PM<sub>2.5</sub> NAAQS. As a consequence, the District may be imposing a *de facto* construction moratorium upon those locations within the Bay Area that have monitored exceedances, while allowing construction to continue in those areas that are currently attaining the standard. At the very least, the District staff should prepare an evaluation for the Board, describing where, in particular, proposed Regulation 2-2-308 would act as a bar to further construction and where such construction would be allowed.

Additionally, it is not an adequate response to suggest that any source can continue to be constructed, so long as it would cause no exceedance of the SIL. The applicable SIL for 24-hour PM<sub>2.5</sub><sup>15</sup> is 1.2 µg/m<sup>3</sup>, which is so low that preliminary source impact modeling for sources in the Bay Area with significant emissions of PM<sub>2.5</sub> will in all likelihood result in at least one exceedance of the SIL.

Moreover, it is, at this time, unclear whether sources will be able to rely upon the SILs to demonstrate that they do not cause or contribute to a violation of the NAAQS, where violations are, in fact, already occurring or modeled to occur. EPA has voluntarily sought vacatur and remand of portions of its PM<sub>2.5</sub> SILs rulemaking (specifically, 40 C.F.R. § 51.166(k)(2) and 52.21(k)(2)), “so that [EPA] may consider how to revise those provisions to ensure that SILs are not used in circumstances where a source’s impact may lead to a NAAQS or increment violation.”<sup>16</sup> Until the ongoing litigation is finalized and EPA completes its anticipated reconsideration of these provisions, it is unclear whether SILs will even be available as a means of demonstrating compliance with the NAAQS where a violation already occurs or is projected to occur. Indeed, if the petitioner in that litigation were to succeed in its claims, even sources with emissions at all locations and times below the PM<sub>2.5</sub> SILs could not be constructed in an area where the highest monitored concentrations sometimes exceed the NAAQS.

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<sup>15</sup> Final Rule, Prevention of Significant Deterioration (PSD) for Particulate Matter Less Than 2.5 Micrometers (PM<sub>2.5</sub>)—Increments, Significant Impact Levels (SILs) and Significant Monitoring Concentration (SMC), 75 Fed. Reg. 64864, 64866 (Oct. 20, 2010); *see also* Letter from Gina McCarthy, EPA Assistant Administrator, to Robert Ukeiley, at 2-3, *supra* at nt. 13 (considering revisions to Appendix W to account for secondary PM<sub>2.5</sub> but also noting that the PM<sub>2.5</sub> SILs were finalized in 2010).


<sup>16</sup> *Sierra Club v. EPA*, No. 10-1413 (D.C. Cir.), Final Brief of Respondents (Jun. 26, 2012), at 34.

Ms. Carol Lee  
Bay Area Air Quality Management District  
October 26, 2012  
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In light of the uncertainty associated with the ability to rely upon SILs and the likelihood that modeling for secondary PM<sub>2.5</sub> formation will soon be required, the District's proposal of an unprecedented NAAQS compliance demonstration for nonattainment pollutants could act as a bar to new construction throughout portions of the Bay Area where the NAAQS is already or nearly exceeded, regardless of the *de minimis* contribution a source would make to such exceedances. Calpine does not believe this represents a sound technical or policy choice. Nor do we believe it is legally required to satisfy the requirements for an approvable NNSR, PSD and minor source permitting program. Accordingly, we strongly caution the District against finalizing proposed Regulation 2-2-308 and would recommend that it not be finalized at this time.

\* \* \* \*

Thank you for the opportunity to submit these comments. Please feel free to contact me at 925.557.2238 or [barbara.mcbride@calpine.com](mailto:barbara.mcbride@calpine.com) with any questions.

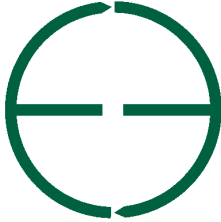
Sincerely 



Barbara McBride

Director, Environmental, Health and Safety,  
Western Region

cc: Alexander Crockett, Esq., Assistant Counsel  
Jim Karas, Director of Engineering  
Gregory Stone, Manager – Air Quality Engineer



## California Council for Environmental and Economic Balance

100 Spear Street, Suite 805, San Francisco, California 94105  
415-512-7890 phone, 415-512-7897 fax, [www.cceeb.org](http://www.cceeb.org)

### VIA ELECTRONIC MAIL

October 26, 2012

Ms. Carol Lee  
Bay Area Air Quality Management District  
939 Ellis Street  
San Francisco, CA 94109

RE: Proposed Amendments to Regulation 2 – New Source Review and Title V  
Permitting Programs

Dear Ms. Lee:

The California Council for Environmental and Economic Balance (“CCEEB”) is a coalition of California business, labor and public leaders that advances strategies to achieve a sound economy and a healthy environment. Founded in 1973, CCEEB is a non-profit and non-partisan organization.

Our members have great interest in Regulation 2, as it stands as the basis for all permitting decisions made by the District. Collectively, our members spend hundreds of millions of dollars to construct and modify facilities in the region and provide jobs to thousands of Bay Area residents. An effective permitting system that is understood by all stakeholders, especially the applicants and all appropriate District staff, is essential to the economic vitality of the region.

This letter is CCEEB’s third set of written comments on this proposal. We have met with members of your staff on numerous occasions and we have had a meeting with officials from EPA Region 9. Through all of this interaction, we have seen great improvement to the proposal, yet there remain three areas of significant concern.

1. Concerns with Requirement for Proposed NAAQS Compliance Demonstration for Non-Attainment Pollutants (Section 2-2-308)

Banked ERCs and offset provisions have been traditionally used to assure reasonable progress towards attainment and provide flexibility for future growth and development. The new proposal is based on net emission increases that include on-site contemporaneous reductions, not off-site banked ERCs. A proposed new facility, or expansion of an existing facility that would emit a significant quantity of a non-attainment pollutant, would not be permitted in an area that has an ambient background (monitored) concentration in excess of a

NAAQS (an impact less than a Significant Impact Level) would still incrementally contribute to background concentration). Should the District fall into non-attainment for PM<sub>2.5</sub> or other criteria pollutants, we fear that the rule as proposed would prohibit permitting in many portions of the Bay Area. This provision is not required under the Clean Air Act or by state law. We recommend that staff remove the provision from the proposal. If the District nevertheless adopts this provision, we strongly urge the District not to submit it to EPA for inclusion in the SIP, as the provision is not required by the Clean Air Act.

## 2. Federal Backstop Provision Adds Unnecessary Complexity

We understand that this requirement is added as a result of discussions and correspondence with EPA. We disagree with EPA's conclusion. To our knowledge, this dual approach has not been mandated by EPA in any other location. In an earlier draft, the District proposed using its existing definition of "modification." EPA approved this definition and the corresponding analysis when this rule was last submitted to EPA for SIP approval. The addition of a second definition of "modification," as suggested by EPA, would add significant complexity and uncertainty to the permitting process for most projects by requiring projects to be analyzed twice, using different methods. Certainly, this cannot be the desire of the District as the basis for a sound permitting system. We believe your earlier definition of "modification" *is as least as stringent* as EPA's definition. The District should adopt a single definition of "modification" as proposed in your earlier draft and work with EPA to show that such a definition is in compliance with the Clean Air Act.

## 3. Need for Greater Understanding to Ease Permitting Concerns

The proposed changes to Regulation 2 are significant and go well beyond the stated intent of incorporating PM<sub>2.5</sub> and GHGs. We are very concerned that the new rule will lead to greater uncertainty when preparing and processing permits. For example, if the rule is adopted as proposed, we will need to understand how to work with different sets of calculations, address the uncertainties of BACT for GHGs, factor in the potential limited availability of PM<sub>2.5</sub> ERCs, and gain a better understanding of modeling for PM<sub>10</sub>. Overlaying all of these concerns, we need assurance that District staff will have the proper training and be prepared to process permit applications consistently, accurately, and in an efficient manner.

To help ease the transition of these changes, CCEEB requests two actions by District staff. First, we believe it is necessary to hold one additional technical workgroup meeting prior to final adoption of the rule to allow stakeholders to walk through permitting examples with District staff in an effort to gain a clear understanding of how the District will make permitting decisions. It is critical that the regulated community has clear and consistent direction from all District staff when it comes to permitting decisions.

Ms. Carol Lee  
October 26, 2012  
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We also request that the District use the time from when the rule is submitted to EPA to a time prior to EPA approval to evaluate if additional clarification is needed with any rule language. Should the District identify the need for such changes, we ask the District to commit to an amended submittal prior to final EPA action.

Thank you for considering our views. We would be pleased to meet with you and your colleagues should you wish to discuss in more detail.

Sincerely,

A handwritten signature in blue ink that reads "Bill Quinn". The signature is fluid and cursive, with the first name "Bill" and the last name "Quinn" clearly legible.

William J. Quinn  
Vice President & Chief Operating Officer

cc: Mr. Jack Broadbent  
Mr. Alexander Crockett  
Mr. Jim Karas  
Mr. Gerald D. Secundy  
Members, CCEEB's Bay Area Partnership



COMMUNITIES

FOR A

BETTER

ENVIRONMENT



October 26, 2012

VIA EMAIL

Bay Area Air Quality Management District

Carol Lee

Greg Stone

939 Ellis Street

San Francisco, CA 94109

[clee@baaqmd.gov](mailto:clee@baaqmd.gov)

[gstone@baaqmd.gov](mailto:gstone@baaqmd.gov)

**RE: CBE Comments on BAAQMD's Proposed Amendments to BAAQMD Regulation 2**

The Bay Area Air Quality Management District ("District") proposes numerous amendments to regulations governing the New Source Review ("NSR") permitting requirements of new and modified sources. Communities for a Better Environment ("CBE") is an environmental health and justice organization that works in and with low income communities and communities of color in California's urban areas, including in the City of Richmond. We provide the following brief comments regarding BAAQMD's proposed amendments

First, on March 1, 2012, CBE provided its initial comments on the proposed amendments. We are disappointed to see that staff has not acted to incorporate our suggestions into the amendments.

Second, CBE is particularly concerned that the proposed amendments would weaken, or backslide<sup>1</sup>, the protection provided by a robust, multi-pollutant requirement of Best Available Control Technology ("BACT"). This concern is not only legal - Section 2-2-222, applying BACT analysis under a "Pollutant-Specific Basis" raises the likelihood of degenerating air quality regionwide and increased harm to CBE's members in particular. The new definition explicitly limits the pollutants that are addressed in a BACT analysis. Essentially, rather than requiring BACT for all criteria pollutants when any pollutant exceeds a threshold, the amendments would apply it only to the exceeding pollutant.

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<sup>1</sup> California Health and Safety Code Section 42500 through 42507 (SB288) mandates that the BAAQMD's NSR or PSD rules cannot be made less stringent than the rules that existed on December 30, 2002.

Single-pollutant BACT could have concrete mortality results in the Bay Area. BAAQMD acknowledges that Particulate Matter (“PM”) is linked to more than 1000 premature deaths annually. PM is regulated as a criteria pollutant. It also forms when two other pollutants – SO<sub>x</sub> and NO<sub>x</sub> – are released and combine. Under a single-pollutant rule, a refinery could propose a new source with SO<sub>x</sub> emissions that trigger BACT, and NO<sub>x</sub> emissions below the relevant threshold. Once released into the atmosphere, SO<sub>x</sub> and NO<sub>x</sub> will form PM. If the Pollutant-Specific Basis analysis only requires review of SO<sub>x</sub> levels, and not NO<sub>x</sub> levels that remain under the relevant applicability criteria, the same pollutant by pollutant analysis precludes examination of indirect NO<sub>x</sub> emissions that in reaction with SO<sub>x</sub> cause increased PM emissions.

The proposed amendments to Regulation 2 are vague as to whether they will allow the correct analysis of precursors. Contextually, this ambiguity could exacerbate the problem of allowing offsets, as CBE detailed in its March 1, 2012 Comments to the District. Offsets, allowing polluting facilities to pollute locally and offset the pollution elsewhere, inevitably harms health and to a disproportionate degree in communities like Richmond. Furthermore, the national standard for PM<sub>2.5</sub>, which the EPA adopted in 2006, and the District proposes to comply with, does not fully protect the public from what happens after the combustion of fossil fuels. At a minimum, The District should cure the ambiguity of section 2-2-222 and formally acknowledge the potential increased PM emissions from indirect precursors. This is critical in order to address the disproportionate impacts of the District’s choices on low-income communities.<sup>2</sup>

The District’s solution to the Pollutant-Specific Basis problem does not, in fact, solve the problem. In its Draft EIR for the proposed amendments, the District posits that:

Finally, CEQA will also apply to individual projects at the time of permitting, and the potential for any control equipment or other design aspects of a project to have secondary adverse air quality impacts will be evaluated at that time. Should projects be proposed that could potentially generate significant impacts or are unusual in nature, a separate project-specific CEQA analysis will be applied to evaluate and mitigate or avoid any such impacts.<sup>3</sup>

The District should not rely on the general police powers of local governing bodies to regulate an area where the District retains paramount authority. These governing bodies defer to BAAQMD’s air quality analysis. Further, project-by-project analysis is ineffective to address regional impacts. The only solution is to require BACT for all criteria pollutants if it is triggered for any criteria pollutant.

Third, on September 10, 2012, the District formally agreed that it would require Chevron to use the “best available technology” in the rebuild of its crude unit. Fittingly, the proposed amendments to the District’s Regulation 2 require an NSR permitting process and also the use Best Available Control Technology (“BACT”). Whether

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<sup>2</sup> Staff Report, pp. 5-6

<sup>3</sup> Draft EIR at 3-28, discussing secondary adverse air quality impacts of the proposed BACT

Chevron proposes its rebuild before or after completion of amendments to Regulation 2, the District is committed to ensuring the safety of the community by requiring Chevron to use the most protective technology is meaningful. CBE looks forward to participating in the District's transparent NSR permitting process for whatever Chevron proposes. The process will, we trust, include an opportunity to provide feedback on BACT, which is the technology that:

[on] a case-by-case basis, taking into account *energy, environmental, and economic* impacts and other costs, ... is achievable for such facility through application of production processes and available methods, systems, and techniques, including fuel cleaning, *clean fuels*, or treatment or innovative fuel combustion techniques for control of each such pollutant<sup>4</sup>

In sum, CBE appreciates the many improvements to the proposed rule amendments; however, CBE also has significant concerns. CBE recommends that staff revise the offset provisions to address disproportionate impacts on impacted communities. The District should also retain its multipollutant BACT analysis, or at least clarify its analysis of total, overall PM emissions. Specific to the City of Richmond, the District should clarify how it will follow through on its agreement to require the "best available technology" for refinery equipment damaged by Chevron's catastrophic recent corrosion and fire incident, and at a minimum promptly provide a full BACT analysis of that equipment.

In Health,

/s/

Roger Lin

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<sup>4</sup> Clean Air Act Section 169(3) (emphasis added)



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION IX  
75 Hawthorne Street  
San Francisco, CA 94105

October 26, 2012

Carol Lee, Senior Air Quality Engineer  
Bay Area Air Quality Management District  
939 Ellis Street  
San Francisco, California 94109

Dear Ms. Lee:

Thank you for your October 11, 2012 responses to our July 26, 2012 comment letter regarding the draft revisions to Bay Area Air Quality Management District's (District) Regulation 2, Rules 1 and 2. These revisions include several significant changes to the existing SIP approved rules, such as new provisions to provide a Prevention of Significant Deterioration program, incorporation of fine particulates (PM<sub>2.5</sub>) and greenhouse gas requirements, and other updates and clarifying revisions to the SIP. While your responses appear to address most of the issues raised in our comments, we are still considering a few remaining issues and in some cases consulting with Headquarters to ensure the provisions are approvable under the Clean Air Act.

We are also evaluating your proposed addition of Section 2-4-603 that allows the addition of the condensable portion of PM<sub>10</sub> or PM<sub>2.5</sub> to an existing emission reduction credit. It is not clear to us that credits granted in such a manner would be consistent with the offset principles under 40 CFR Part 51, Appendix S, or the federal integrity criteria of being surplus, quantifiable, permanent and federally enforceable. It also appears to allow Director's discretion, which we can only allow in narrow, well-defined circumstances. Therefore, we encourage the District to work with us further before adoption of this section of the rule at this time.

We look forward to continuing to work with you to resolve any issues that affect the approvability of these rules into the SIP. If you have any questions regarding these comments, please feel free to contact Shaheerah Kelly at (415) 947-4156 or Laura Yannayon at (415) 972-3534.

Sincerely,

A handwritten signature in cursive script that reads "Gerardo C. Rios".

fr Gerardo C. Rios  
Chief, Permits Office  
Air Division

cc: Jeff McKay, BAAQMD  
Jim Karas, BAAQMD  
Alexander Crockett, BAAQMD  
Gregory Stone, BAAQMD



**Pacific Gas and  
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October 22, 2012

**Jack Broadbent  
Executive Officer  
Bay Area Air Quality Management District  
939 Ellis Street  
San Francisco, CA 94109**

**Subject:** Proposed Amendments to BAAQMD Rules 2-1, 2-2, 2-4, 2-6

Dear Mr. Broadbent:

This letter is regarding proposed amendments to BAAQMD's permit rules (Regulation 2, Rules 1, 2, 4, & 6). PG&E wishes to provide comments and request reconsideration of the proposed provision regarding NAAQS protection requirements in Regulation 2, Rule 2, Section 308.

PG&E has been involved from the beginning of the rule amendment process, has participated in workshops and technical work group meetings, and has provided comments as these rules have gone through several revisions. PG&E is concerned that proposed Section 2-2-308 would effectively prohibit the construction of new facilities and modification of existing facilities that would otherwise be deemed beneficial in "nonattainment" areas. It would likely push construction of new industrial facilities into more pristine areas of the region – even in cases where the project would *decrease* emissions in the region!

BAAQMD staff originally stated during the workshop of February 22, 2012 that the intent of these rule amendments was to add existing federal requirements for PM<sub>2.5</sub> and GHGs into the BAAQMD's New Source Review procedures; to obtain EPA approval of BAAQMD's PSD permit regulations; and to clarify ambiguous provisions. Staff stated that there would be "no additional substantive changes" beyond those already in effect at local or federal level. However, midway through the process, District staff abruptly added a major provision (Section 2-2-308) that is outside of the scope of the objectives, and for which, the impact has not been adequately analyzed.

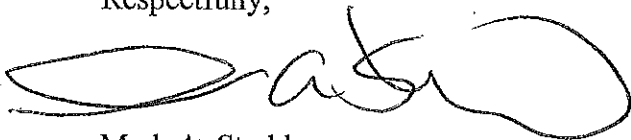
This provision would likely prohibit construction of new facilities that would otherwise be deemed beneficial and would create uncertainty in the permitting process that would inhibit planning of beneficial modifications to existing facilities in areas designated as "nonattainment" for the NAAQSs. The proposed provision could have significant impacts depending upon future changes in attainment status because of fluctuations in regional emissions and ambient air monitoring levels, enhanced ambient air monitoring (additional PM<sub>2.5</sub> monitors, new ultrafine PM monitors, and near-road monitors), meteorological variation, climate change, revision of

Jack Broadbent  
October 22, 2012  
Page 2

existing NAAQSs to more stringent levels, and potential establishment of new NAAQSs (e.g., ultrafine PM).

PG&E recommends that the BAAQMD remove Section 2-2-308 from the final rule or modify the provision to be less restrictive. We have attached more detailed comments to support our request and some alternative language for your consideration. Thank you in advance for your time and consideration of our request. We look forward to discussing in more detail. Should you have any questions or comments please do not hesitate to contact me at (415) 973-2889.

Respectfully,



Mark A. Strehlow  
Air Program Manager,  
Pacific Gas and Electric Company

cc:

Carol Lee  
Jim Karas  
Alexander Crockett  
Brian Bateman  
Henry Hilken  
Dan Belik

Attachment: **Appendix A: PG&E Comments Regarding Proposed Amendments to BAAQMD Permit Rules**

**Appendix B: Alternative 2-2-308**

**Appendix A: PG&E Comments Regarding  
Proposed Amendments to BAAQMD Permit Rules**

PG&E wishes to provide comments and request reconsideration of one of the BAAQMD's proposed provisions of Regulation 2, Rule 2:

**2-2-308 NAAQS Protection Requirement:** The APCO shall not issue an authority to construct for a new or modified source that will result in a significant net increase in emissions of any pollutant for which a National Ambient Air Quality Standard has been established unless the APCO determines, based upon a demonstration submitted by the applicant, that such increase will not cause or contribute to an exceedance of any National Ambient Air Quality Standard for that pollutant. Such demonstration shall be made using the procedures for PSD Air Quality Impact Analyses set forth in subsections 2-2-305.1 through 2-2-305.4. Such demonstration shall not be required for ozone. A PSD Air Quality Impact Analysis and determination for a new or modified source that satisfies the requirements of Section 2-2-305 shall satisfy the requirements of this Section for all pollutants included in such analysis.

PG&E is concerned that the effects of Section 2-2-308 would be to prohibit beneficial projects in areas that currently are or would likely become nonattainment and recommends that the BAAQMD remove this provision from the proposed rule prior to adoption. At the very least, the BAAQMD could adopt provisions that are more flexible but still consistent with federal NSR permitting requirements. PG&E has provided alternative language in Appendix B.

**Background:** U.S.EPA established National Ambient Air Quality Standards (NAAQS) for criteria pollutants and regulatory permitting procedures to ensure that permitting authorities would be able to allow new equipment and reasonable economic growth while maintaining good air quality in attainment areas (Prevention of Significant Deterioration) and achieving reasonable progress towards attainment in nonattainment areas (Nonattainment New Source Review). EPA's guidance is to treat new projects under one or the other new source program. A PSD-type air quality impact analysis is not required for nonattainment NSR because it would be impossible to show that sources of nonattainment pollutants would not contribute to exceedances of NAAQSs in areas where such exceedances already happen. EPA instead allows use of control equipment and Emission Reduction Credits to offset emission increases, providing regional benefits and assuring reasonable progress towards achieving attainment of a NAAQS while allow some necessary industrial growth.

**BAAQMD Proposal:** In contrast to EPA's approach, BAAQMD staff is now proposing to subject some projects to requirements of both of these programs: facilities subject to nonattainment NSR would also be subject to PSD-type requirements. In areas that have concentrations that exceed a NAAQS, a new project with significant emissions of a nonattainment pollutant<sup>1</sup> could not be permitted, regardless of whether the project would decrease emissions in the region and generally be considered beneficial. PG&E believes it would be better public policy to continue with the standard nonattainment NSR policies and use BACT and offsets to provide regional benefits (i.e., a "positive net air quality benefit" that EPA guidance requires for major nonattainment NSR).

Staff has commented that most projects that emit PM<sub>2.5</sub> would not be affected because recent ambient monitoring indicates levels about 15% below the 24-hour NAAQS and that this "headspace" would allow successful modeling demonstrations (that projects would not cause or contribute to a NAAQS exceedance). While this may be true for some projects at certain locations, ambient levels of PM<sub>2.5</sub> may not remain at or below current levels or even below NAAQS levels. In fact, staff acknowledged that the BAAQMD does not even intend to petition EPA for an attainment designation for PM<sub>2.5</sub> because of the uncertainty of maintaining the current level of monitoring values.

**Hypothetical Example:** Please consider this hypothetical example: a large combustion source is being considered to replace an older higher emitting source approximately 10 miles from the new site; the new facility will use Best Available Control Equipment for NO<sub>x</sub>; NO<sub>x</sub> emissions and GHG emissions would be reduced significantly by the replacement of the older less efficient source; no localized ERCs are available and ERCs from the older higher emitting plant are planned to offset the emissions increase at the new site. It is likely that the new PM<sub>2.5</sub> emissions would cause an increased impact in close proximity to the new site, although impacts elsewhere would be reduced (substantially more near the older plant that would be shut down). Because the new site is in an area with monitoring data that show exceedances of the PM<sub>2.5</sub> NAAQS, any incremental increase of PM<sub>2.5</sub> would contribute to an exceedance of the NAAQS; therefore, the BAAQMD would not grant authority to construct this beneficial project. This project would be permitted under the standard nonattainment NSR process in other parts of the nation.

**PG&E Concerns:** If the nonattainment status worsens, then the potential for permit appeals and litigation would increase because of the number of projects subject to Section 2-2-308. PG&E also recommends focusing on PM<sub>2.5</sub> because of the uncertainty about potential changes to NAAQS attainment status for other pollutants. Existing PSD and CEQA processes should be adequate for maintaining good air quality and protecting the public health.

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<sup>1</sup> During technical work group meetings, several commenters pointed out that the Bay Area air basin is designated as nonattainment for ozone, that estimating the impact of an individual project using ozone modeling is extremely difficult, and that any project that emits a precursor of ozone would contribute to NAAQS exceedances and therefore would not be granted authority to construct. BAAQMD staff subsequently added an exception for ozone in 2-2-308 but retained these provisions for PM<sub>2.5</sub>.



When BAAQMD staff initially proposed Rule 2-2-308, they were under the impression that this provision was required in order to comply with 40 CFR § 51.160.<sup>2</sup> However, at a recent meeting with CCEEB and BAAQMD, EPA Region IX staff clarified that while modeling of individual projects was one method of demonstrating compliance with 40 CFR § 51.160, it was not required, and that compliance could be demonstrated by using a number of alternative methods (consistent with the rest of the nation). EPA's staff reiterated this in their July 26, 2012, comments regarding NAAQS compliance.

Because of proposed 2-2-308, beneficial modifications at existing Bay Area facilities in nonattainment areas could be denied, whereas, they would be permitted in other parts of the nation. Companies searching for options to mitigate GHGs may be forced to secure these reductions outside of the District, thereby denying Bay Area residents of the air quality co-benefits of such mitigation.

We recommend that the BAAQMD eliminate this restrictive permitting provision from the proposed rule revision and instead rely on the current nonattainment NSR process, the current PSD permitting process, and the recently enhanced CEQA process to provide adequate environmental protection and necessary discretion for policy makers to consider benefits of proposed projects that mitigate localized impacts. The APCO often recommends mitigation that is beneficial for local communities for projects undergoing CEQA review, and PG&E believes that allowing the APCO and county and city officials to propose mitigation during the evaluation of the merits of large projects is preferable to a bright line prohibition of new projects in certain areas of the Bay Area that are subject to change because of the many factors discussed above.

If BAAQMD nonetheless determines that a rule is needed to address potential PM<sub>2.5</sub> impacts, PG&E suggests the alternative language set forth in Appendix B, which will:

- focus on PM<sub>2.5</sub>, the pollutant of concern; adds specified and direct reference to standard of concern;
- retain the "headroom" approach if ambient levels remain less than NAAQS;
- explicitly allow the de minimis screening level approach (SIL concept) if ambient levels become greater than NAAQS; and
- allow the APCO to use existing rules which guarantee compliance with NAAQS.

---

<sup>2</sup> BAAQMD staff's position that individual project modeling is necessary to demonstrate compliance with the NAAQSs is not consistent with its own arguments presented to EPA's Environmental Appeals Board regarding Russell City Energy Company that modeling was not required because the district had been designated as nonattainment for PM<sub>2.5</sub> during the permit process. As Calpine had previously commented: both the EAB and the U.S. Court of Appeals for the Ninth Circuit affirmed during review of the RCEC case that no provision of the Clean Air Act requires demonstration of attainment with the NAAQS for a nonattainment pollutant as a prerequisite of granting a PSD permit (in this case, for 24-hour PM<sub>2.5</sub>). It would follow that it is also not a prerequisite for granting a non-PSD permit

**Appendix B: Alternative 2-2-308**

**2-2-308 PM<sub>2.5</sub> Nonattainment Requirements:** The APCO shall not issue an authority to construct for a project that will result in a net emissions increase of PM<sub>2.5</sub> greater than 10 tons per year from new and/or modified source(s) unless the APCO determines that the project's net emissions increase would result in one of the following:

1. The ambient air impact of the project's net emission increase is equal to or less than a screening level of 2.0 µg/m<sup>3</sup> [24-hour average] or 0.50 µg/m<sup>3</sup> [annual average];
2. The net emission increase is offset by emission reduction credits that provide a positive net air quality benefit; or
3. The project will not significantly contribute to an exceedance of a NAAQS (annual average or 24-hour average) for PM<sub>2.5</sub> that was in effect as of <date of adoption of proposed amendments>.

In making these determinations, the APCO may use the guidance and procedures set forth in subsections 2-2-305.1 through 2-2-305.3 regarding ambient air impacts and/or 40 CFR 51, Appendix S (Emission Offset Interpretative Ruling) regarding net air quality benefit. Alternative methods may be used at the APCO's discretion.

The APCO also has the permitting discretion to consider other environmental benefits of the project (e.g., significant GHG reductions) to make a determination of overriding considerations, consistent with the California Environmental Quality Act.

Emission reduction credits provided for a net air quality benefit determination exclusively for this section shall be subject to the offset ratios in the following table:

Table 2-2-308, Distance Offset Ratios for PM<sub>2.5</sub>

ORIGINAL LOCATION OF ERC	OFFSET RATIO
At the same facility as the new or modified source	1.0
Off-site & 15 miles or less from the centroid of the project	1.2
Greater than 15 miles from the centroid of the project	1.5

**CALIFORNIA ENERGY COMMISSION**

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October 19, 2012

RECEIVED  
2012 OCT 22 AM 6 41  
BAY AREA AIR QUALITY  
MANAGEMENT DISTRICT

Jack P. Broadbent  
Chief Executive Director/Air Pollution  
Control Officer  
Bay Area Air Quality Management District  
939 Ellis Street  
San Francisco, CA 94109

**SUBJECT: Proposed New Source Review Rule Amendments; Prevention  
of Significant Deterioration Rules**

Dear Mr. Jack Broadbent:

The California Energy Commission (Energy Commission) strongly supports the proposed Air District adoption of amendments to its New Source Review rules that will integrate Prevention of Significant Deterioration (PSD) requirements into state permits.

The Energy Commission is required to issue the state permit for all new thermal power plants with a generation capacity 50 MW or greater. The Energy Commission permit is "in lieu" of all other state and local permits (Pub. Resources Code, § 25500), and therefore includes all rules that would be required by the Air District to comply with New Source Review. The Energy Commission staff has worked cooperatively with the Air District for many years to make sure that the state permit includes all Air District requirements.

The federal PSD requirements have been a significant and unfortunate anomaly for the state permit process. PSD requirements have never been part of the Air District's rules that are incorporated into the State Implementation Plan. As a result, satisfaction of PSD requirements has required a separate federal permit, a separate and largely redundant analytic and permitting process, and a separate administrative and judicial review process. This has imposed unnecessary burdens on permit applicants, including applicants for new electric generating power plants, by imposing regulatory expenses, financial uncertainty, and sometimes years of delay to complete the federal review process.

Adoption of the proposed rules regarding PSD will result in an integrated state air permit, thereby avoiding the redundancy and inefficiency involved in the separate federal permit process. The proposed new rules thus promote government efficiency

Jack P. Broadbent  
October 19, 2012  
Page 2

and regulatory certainty for permit applicants. For these reasons, the proposed new rules should be adopted.

Yours truly,

A handwritten signature in black ink, appearing to read 'R. P. Oglesby', with a long horizontal flourish extending to the right.

Robert P. Oglesby  
Executive Director



**Benicia Refinery** • Valero Refining Company - California

3400 East Second Street • Benicia, California 94510-1097 • Telephone (707) 745-7011 • Facsimile (707) 745-7432

Certified Mail # 7011 1150 0001 2589 3361

October 26, 2012

Comments on Proposed Amendments to  
Regulations 2-1, 2-2, 2-4, and 2-6: Permits,  
New Source Review, Emissions Banking,  
Major Facility Review (Reg. 2's)

Ms. Carol Lee  
Senior Air Quality Engineer  
Bay Area Air Quality Management District  
939 Ellis Street  
San Francisco, CA 94109

Dear Ms. Lee:

Valero Refining Company – California (“Valero”) appreciates this opportunity to provide comments concerning the District’s proposed revisions to the provisions of Regulation 2 governing stationary source permits (the “Proposed Regulation 2 Revisions”). Valero owns and operates a petroleum refinery in Benicia, California, which is subject to the requirements of Regulation 2. Based upon our experience in addressing air permitting requirements under the current regulatory regime, we offer these comments in support of the revisions to Regulation 2 to promote environmental protection objectives, clear and efficient air permitting implementation, changing demand for consumer products, and reasonable opportunity to comply with the continued changes in local, state, and federal regulatory requirements.

We acknowledge the extensive work that District Staff have invested to incorporate the required and desired changes to the rule, namely inclusion of PM 2.5 and greenhouse gases into the regulations, and reorganization the rules to improve clarification. We are grateful for the District’s investment in dialogue with all interested parties to understand the issues and to alleviate unintended consequences that may arise due to the volume of changes in wording and reorganization associated with these amendments. It is important to the regulated community, to concerned citizens, and to the District to produce a permitting rule amendment that is clear. This provides permitting requirement certainty for both the regulated community and for the District Permit Engineers to implement.

Valero has been working with WSPA and supports the comments on the proposed rule presented in the WSPA letter to the District on October 26, 2012.



Valero is in receipt of the District's latest draft proposed amendments dated September 26, 2012. Valero offers the following comments to the District regarding the latest group of draft proposed amendments, reports, and comment letters.

1. Comment on BAAQMD Responses to Valero Comment letter dated October 2, 2012

Valero appreciates the District's interest to fully understand important issues related to NSR. In response to your comments on Valero comment letter, we want to provide the following to clarify your understanding of our recent comments.

- A. Some environmentally beneficial projects may not be undertaken if they were subject to PSD permitting requirements for certain emissions because of the additional burdens associated with these requirements (retrofitting for Best Available Control Technology and possible reduction in permit limits). It is important that projects to reduce emissions required by CARB's GHG legislation are allowed to be implemented and associated energy efficiency modernization projects are allowed to occur without unduly limiting the operational capability and flexibility of certain facility processes. Industry needs the flexibility to meet both the regulatory requirements to produce in California while meeting changing consumer demands. (Reference Page 13)
- B. Not undertaking the energy efficiency projects would not likely lead to higher emissions. However, it would likely hinder the implementation of beneficial facility improvement projects, thus slowing emissions reductions. This is an example where NSR Reform methodology *is* more stringent than non-NSR Reform methodology. (Reference Page 14)

2. NSR Reform Methodology

Exceeding a permit applicant's stated emissions increases using Baseline Actual Emissions to Future Projected Actual Emissions (BAE to PAE) based on EPA guidelines has real consequences if the PAE is exceeded. To verify that emissions increases above that stated in the permit have not occurred, annual emissions calculations and reporting are required for 5 or 10 years, depending on the project's potential emissions effect. This is detailed in EPA 40CFR52.21(r)(6). We are supportive of the District continuing to work with the State and the regulated community to utilize the EPA or similar requirement in the local rule to satisfy the District that the emissions estimates for the proposed changes are accurate.

According to the Staff Report, SB288 requires subsequent rule amendment language to be "no less stringent" than the rules that the California Air Districts had implemented as of 2002. We interpret that this was implemented to protect the environment from real emissions increases. SB288, however, does not directly define 'stringent'. Because NSR Reform methodology was at the time viewed as a less stringent permitting option at that time, its use was excluded from future rule amendments. However, if NSR Reform methodology reduces the burden for facilities to modernize and reduce emissions, then this is actually *more* stringent based on providing an environmental benefit. Providing less burdensome processes for facilities to modernize to reduce emissions and provide products that consumers demand and use in California and the flexibility to comply with new emissions regulations should be a primary component of any regulatory rule language.



As industry commenters continue to assert, components of the current rule amendment language have the potential to hinder some environmentally beneficial projects from being implemented by potentially requiring BACT and accepting lower permit limits for projects that are rationally beneficial to the environment. Providing straightforward rule language and guidance documentation that alleviates this concern is an extremely important component of this rule amendment.

We suggest utilizing NSR Reform methodology solely for projects whose primary purpose is emissions reduction, energy conservation, or state or federally mandated product reformulations, while requiring non-NSR Reform methodology for all other projects. This meets the intent of the stringency requirements demanded by SB288 by not relaxing potential for *real* emissions increases to the atmosphere, while allowing facilities cost-effective alternatives. In exchange for utilizing NSR Reform on these specific projects, the federal reporting requirements would apply.

### 3. Emissions Reduction Credit Calculation Procedures (2-2-605)

Pages 105 to 106 of the Staff Report clearly discuss the difference in the Emissions Reduction Credit (ERC) calculation dependent on whether or not the source is fully offset. The Staff Report discussion parallels the current practice. However, based on the definition of Potential to Emit (PTE) in Reg. 2-1-217 for a fully offset source, PTE for this situation could be misinterpreted as its physical or operational limitation, rather than its fully offset permitted limit. This would be an issue if its physical or operational limitation is lower than its permitted limit. This misinterpretation would reduce the amount of ERC available to be banked. If this issue arose, the Staff Report could perhaps be utilized. However, we believe that providing clarifying language to the calculation methodology in Reg. 2-2-605 is the preferred alternative. This will eliminate any future misinterpretation of the calculation procedure.

The methodology and language to calculate ERC's for fully offset sources utilized in the current version of the rule is as follows.

(2-2-605.4, 605.5) "For a source which has, contained in a permit condition, an emission cap or emission rate which has been fully offset by the facility, ... the baseline throughput and baseline emission rate shall be based on the levels allowed by the permit condition." ... " adjusting the baseline emission rate downward, if necessary, to comply with the most stringent of RACT, BARCT..."

Suggested changes to the currently proposed Reg. 2-2-605 language are below.

605.2 Fully-Offset Source: For a source that is fully offset as defined in Section 2-2-213, the amount of emission reduction credits is the difference between: (i) the source's potential to emit as stated its permit condition before the change, adjusted downward, if necessary, to reflect the most stringent of RACT, BARCT, and applicable federal and District rules and regulations in effect or contained in the most recently adopted Clean Air Plan; and (ii) the source's potential to emit as stated in its permit condition after the change.

4. Particulate Matter less than 2.5 Microns in diameter (PM 2.5)

We continue to be challenged with respect to the implementation and enforcement of PM 2.5 emissions limits. None of the current three EPA approved test methods speciate for PM 2.5 for wet stacks or for samples greater than 450F. There is also a low repeatability in test results for some of the EPA test methods for low concentration PM. This would apply to nearly all gaseous combustion devices. This means that PM currently measured is actually total PM based on EPA Method 5 and Method 202. Additionally, a majority of PM for gaseous combustion devices (furnaces and boilers) results from atmospheric PM, not from the products of combustion. It would be helpful if these issues are directly addressed in either the rule language, or supporting documentation, so that when new PM limits are set as part of a permit condition, available stack test methods are utilized to assist in developing the compliance limit.

We appreciate this opportunity to provide comments on the Proposed Regulation 2 revisions, and look forward to continued participation in the District's regulatory development process. Please contact feel free to contact me at 707-745-7203 should you have any questions about these comments.

Sincerely,



Susan K. Gustofson, P.E.  
Staff Environmental Engineer

SKG/tac

ecc: Alexander (Sandy) Crockett, Assistant Counsel, BAAQMD  
Jim Karas, Director of Engineering, BAAQMD  
Greg Stone, Manager, Air Quality Engineer, BAAQMD





Western States Petroleum Association  
Credible Solutions • Responsive Service • Since 1907

Guy Bjerke  
Manager, Bay Area Region & State Safety Issues

**VIA ELECTRONIC MAIL**

October 26, 2012

Ms. Carol Lee  
Bay Area Air Quality Management District  
939 Ellis Street  
San Francisco, California 94109

RE: Comments on Proposed Amendments to Regulation 2 – New Source Review and Title V Permitting Programs

Dear Ms. Lee:

The Western States Petroleum Association (WSPA) is a non-profit trade association representing twenty-six companies that explore for, produce, refine, transport and market petroleum, petroleum products, natural gas and other energy supplies in California, Arizona, Nevada, Oregon, Washington and Hawaii. Our members in the Bay Area have operations and facilities regulated by the Bay Area Air Quality Management District (BAAQMD or District). WSPA appreciates the opportunity to provide these comments on the proposed amendments to Regulation 2.

Over the past nine months we have submitted three comment letters addressing our concerns and questions about the District's effort to incorporate Particulate Matter (PM) 2.5 and Greenhouse Gases (GHG) into Regulation 2 rules regarding New Source Review (NSR) and Title V Permits. We appreciate the District's efforts to respond to those comments and the Technical Workgroup meetings your staff organized last summer to address our questions about intent and future implementation of the Regulation.

Unfortunately WSPA members continue to have several "policy" and "procedural" concerns about the proposed amendments, consistent with our previous letters and communications, and ask the District to carefully consider these prior to seeking final approval by your Board of Directors on November 7. These issues are the ones we raised in our meeting with you and the California Council for Environmental and Economic Balance (CCEEB) earlier this week.

**Regulation Re-organization**

1. The proposed amendments do more than incorporate PM 2.5 and GHG into Regulation 2. They re-organize the regulation while adding new requirements and that is making it difficult for

those in the regulated community to determine how the proposed changes would impact future projects. **The District should hold at least one additional Technical Workgroup meeting prior to final adoption of the amendments to demonstrate how projects would proceed through the revised regulatory process using sample permits/projects, flowcharts, etc.**

### **Federal Backstop**

2. The District is proposing two definitions of “modification” – the District’s and EPA’s (the Federal Backstop) – meaning almost all new projects will need to be analyzed twice, using different methods and keeping two sets of books going forward. We agree with the District’s earlier determination that your definition is at least as stringent as the EPA’s. **The District should adopt a single definition of modification and encourage EPA to find it in compliance with the Clean Air Act.**

### **Modeling Requirement**

3. The proposed air quality impact modeling requirement for nonattainment pollutants should be excluded from the proposed amendments. While the existing Prevention of Significant Deterioration (PSD) modeling requirement for attainment pollutants works satisfactorily in practice, it applies only to projects that are PSD major modifications. The new requirement would apply to many more projects, substantially increasing permitting burdens. **The District should not impose modeling requirements more stringent than required by federal regulations.**

We are also concerned about the District’s response to a number of questions about the interpretation of the proposed amendments - that the District will handle them on a “case by case” basis or the interpretation will be clarified by future workshops or revisions to the District’s Permit Handbook. **Regulations should provide a clear roadmap for permit applicants and leaving implementation details to discussions after the proposed amendments are adopted creates enormous uncertainty.**

The District has time to get this right. The end of year deadline to satisfy EPA is not hard and fast. Other air districts, including the SCAQMD, have already informed EPA they will be late in including PM 2.5 in their New Source Review.

We appreciate your consideration of these comments. If you have any questions, please contact me at (925) 826-5354 or (925) 681-8206 (mobile).

Sincerely,



Guy Bjerke  
Manager, Bay Area Region & State Safety Issues

c. Alexander “Sandy” Crockett, Assistant Counsel  
Jim Karas, Director of Engineering  
Greg Stone, Manager – Air Quality Engineer

**BAY AREA AIR QUALITY MANAGEMENT DISTRICT**

Memorandum

To: Chairperson Gioia and Members  
of the Board of Directors

From: Jack P. Broadbent  
Executive Officer/APCO

Date: October 25, 2012

Re: Public Hearing to Consider Adoption of Fine Particulate Matter Emissions  
Inventory

---

RECOMMENDED ACTION:

Recommend the Board of Directors adopt the attached emissions inventory for fine particulate matter and authorize staff to transmit the inventory to the California Air Resources Board (CARB).

BACKGROUND

As described in the staff report for Agenda Item #8, the District is required to prepare and submit an “abbreviated” State Implementation Plan (SIP) submittal to CARB and US Environmental Protection Agency for fine particulate matter (PM<sub>2.5</sub>).

DISCUSSION

One of the required elements for the abbreviated SIP submittal is a PM<sub>2.5</sub> emission inventory for the “attainment year”. The attainment year is the final year of the three-year period in which monitoring data shows that a region meets the standard (in this case, 2010). The inventory must include emissions of primary (directly-emitted) PM<sub>2.5</sub>, as well as precursors that contribute to secondary PM formation. The precursor pollutants are reactive organic gases (ROG), oxides of nitrogen (NO<sub>x</sub>), sulfur dioxide (SO<sub>2</sub>), and ammonia (NH<sub>3</sub>). The inventory presents estimated emissions by source category during the winter season, when the Bay Area typically experiences its highest PM levels. The PM<sub>2.5</sub> emissions inventory table is attached.

Upon approval by the Board of Directors, the PM<sub>2.5</sub> emissions inventory will be transmitted to CARB and EPA pursuant to federal air quality planning requirements for PM<sub>2.5</sub>. CARB will submit the emissions inventory to EPA as part of a package of revisions to the section of the California State Implementation Plan that addresses PM<sub>2.5</sub> to comply with requirements of the federal Clean Air Act, including sections 110 and 172, and Title 40 of the Code of Federal Regulations (CFR), Part 51.

BUDGET CONSIDERATION/FINANCIAL IMPACT:

None.

Respectfully submitted,

Jack P. Broadbent  
Executive Officer/APCO

Prepared by: David Burch  
Reviewed by: Henry Hilken

Attachment: Table 1: Bay Area Winter Emissions Inventory for Primary PM<sub>2.5</sub> and PM  
Precursors: Year 2010

## Attachment 1

### Table 1

## Bay Area Winter Emissions Inventory for Primary PM2.5 & PM Precursors: Year 2010

SOURCE CATEGORY	Winter Emissions tons/day				
	PM2.5	ROG	NOx	SO2	NH3*
<b>INDUSTRIAL/COMMERCIAL PROCESSES</b>					
<b>PETROLEUM REFINING FACILITIES</b>					
Basic Refining Processes	0.1	0.2	--	0.2	0.1
Wastewater (Oil-Water) Separators	--	1.2	--	--	--
Wastewater Treatment Facilities	--	0.5	--	--	--
Cooling Towers	--	0.9	--	--	--
Flares & Blowdown Systems	--	0.8	1.2	0.6	--
Other Refining Processes	--	0.3	--	--	--
Fugitives	--	0.5	--	--	--
<b>Subtotal</b>	<b>0.2</b>	<b>4.3</b>	<b>1.2</b>	<b>0.9</b>	<b>0.1</b>
<b>CHEMICAL MANUFACTURING FACILITIES</b>					
Coating, Inks, Resins & Other Facilities	--	0.1	0.1	2.7	0.2
Pharmaceuticals & Cosmetics	0.4	0.8	1.4	3.2	--
Fugitives - Valves & Flanges	--	0.6	--	--	--
<b>Subtotal</b>	<b>0.4</b>	<b>1.5</b>	<b>1.5</b>	<b>5.9</b>	<b>0.2</b>
<b>OTHER INDUSTRIAL/COMMERCIAL PROCESSES</b>					
Bakeries	--	0.8	--	--	--
Cooking(Charbroiling)	1.5	0.9	--	--	--
Cooking(Deep Fat Frying)	0.1	0.1	--	--	--
Cooking(Griddles)	0.2	0.1	--	--	--
Wineries & Other Food & Agr. Processes	0.3	1.1	--	--	--
Metallurgical & Minerals Manufacturing	1.8	0.2	0.2	0.2	0.3
Waste Management	0.6	3.1	--	--	5.5
Semiconductor Manufacturing	--	0.2	--	--	0.0
Fiberglass Products Manufacturing	--	0.1	--	--	--
Rubber & Plastic Products Manufacturing	--	0.3	--	--	--
Contaminated Soil Aeration	--	0.1	--	--	--
Other Industrial Commercial	0.4	0.9	--	--	0.0
<b>Subtotal</b>	<b>4.9</b>	<b>7.9</b>	<b>0.3</b>	<b>0.3</b>	<b>5.9</b>
<b>PETROLEUM PRODUCT/SOLVENT EVAPORATION</b>					
<b>PETROLEUM REFINERY EVAPORATION</b>					
Storage Tanks	--	3.3	--	--	--
Loading Operations	0.1	0.1	--	--	--
<b>Subtotal</b>	<b>0.1</b>	<b>3.4</b>	<b>--</b>	<b>--</b>	<b>--</b>
<b>FUELS DISTRIBUTION</b>					
Natural Gas Distribution	--	0.7	--	--	--
Bulk Plants & Terminals	--	0.7	--	--	--
Trucking	--	2.6	--	--	--
Gasoline Filling Stations	--	5.2	--	--	--
Aircraft Fueling	--	1.1	--	--	--
Recreational Boat Fueling	--	0.9	--	--	--
Portable Fuel Container Spillage	--	3.8	--	--	--
Other Fueling	--	0.4	--	--	--
<b>Subtotal</b>	<b>--</b>	<b>15.3</b>	<b>--</b>	<b>--</b>	<b>--</b>

\*Ammonia emission estimates were provided by the Air Resources Board. The ARB ammonia emissions data is reported in this table using the Air District's emissions inventory format.

Table 1					
Bay Area Winter Emissions Inventory for Primary PM2.5 & PM Precursors: Year 2010					
Winter Emissions tons/day					
SOURCE CATEGORY	PM2.5	ROG	NOx	SO2	NH3*
<b>OTHER ORGANIC COMPOUNDS EVAPORATION</b>					
Cold Cleaning	--	2.7	--	--	--
Vapor Degreasing	--	--	--	--	--
Handwiping	--	2.3	--	--	--
Dry Cleaners	--	0.6	--	--	--
Printing	--	4.1	--	--	--
Adhesives & Sealants	--	9.7	--	--	--
Structures Coating	--	21.2	--	--	--
Industrial/Commercial Coating	--	8.1	--	--	--
Storage Tanks	--	0.8	--	--	--
Lightering & Ballsting	--	--	--	--	--
Other Organics Evaporation	--	1.5	--	--	--
<b>Subtotal</b>	--	<b>51.0</b>	--	--	--
<b>COMBUSTION - STATIONARY SOURCES</b>					
<b>FUELS COMBUSTION</b>					
Natural Gas(Space/Water Heating/Cooking)	1.7	1.0	18.3	0.1	--
LPG and Liquid Fuel	--	--	0.5	0.3	--
Solid Fuel (Woodstoves)	3.7	2.8	0.5	0.1	0.5
Solid Fuel (Fireplaces)	13.1	5.3	1.1	0.2	1.2
Cogeneration	0.7	1.9	3.9	0.3	0.6
Power Plants	0.3	0.1	1.0	0.1	0.1
Oil Refineries External Combustion	2.4	1.0	10.5	14.0	0.5
Glass Melting Furnaces - Natural Gas	--	--	0.9	--	--
Reciprocating Engines	0.2	0.5	2.9	0.1	--
Turbines	0.1	--	0.8	--	--
Landfill/Cement Plant Combustion	1.6	1.4	15.4	3.0	--
<b>Subtotal</b>	<b>23.8</b>	<b>14.0</b>	<b>55.6</b>	<b>18.2</b>	<b>2.8</b>
<b>BURNING OF WASTE MATERIAL</b>					
Incineration	0.1	0.1	0.2	--	--
Planned Fires	0.4	0.4	0.2	--	--
<b>Subtotal</b>	<b>0.5</b>	<b>0.4</b>	<b>0.4</b>	--	--
Banked Emissions	--	--	--	--	--
Alternative Compliance Allowance	--	--	--	--	--
<b>Subtotal (All stationary source categories)</b>	<b>29.8</b>	<b>97.9</b>	<b>59.0</b>	<b>25.3</b>	<b>9.0</b>
<b>COMBUSTION - MOBILE SOURCES</b>					
<b>ON-ROAD MOTOR VEHICLES</b>					
Passenger Cars	2.3	42.1	35.5	0.4	3.7
Light Duty Trucks<6000lbs	1.0	23.4	27.1	0.2	2.3
Medium Duty Trucks 6001-8500 lbs	0.5	10.1	17.9	0.2	1.8
Light Heavy Duty Trucks 8501-14000lbs	0.4	6.2	23.1	0.1	0.6
Medium Heavy Duty Trucks 14001-33000lbs	0.8	2.4	21.6	--	0.1
Heavy Heavy Duty Trucks>33000 lbs	1.6	2.8	51.7	0.1	0.1
School/Urban Buses	0.6	1.4	16.9	--	0.0
Motor-Homes	--	1.4	1.4	--	0.0
Motorcycles	--	17.5	2.3	--	0.0
<b>Subtotal</b>	<b>7.3</b>	<b>107.4</b>	<b>197.6</b>	<b>0.9</b>	<b>8.7</b>

\*Ammonia emission estimates were provided by the Air Resources Board. The ARB ammonia emissions data is reported in this table using the Air District's emissions inventory format.

<b>Table 1</b>					
<b>Bay Area Winter Emissions Inventory for Primary PM2.5 &amp; PM Precursors: Year 2010</b>					
<b>Winter Emissions tons/day</b>					
<b>SOURCE CATEGORY</b>	<b>PM2.5</b>	<b>ROG</b>	<b>NOx</b>	<b>SO2</b>	<b>NH3*</b>
<b>OFF-HIGHWAY MOBILE SOURCES</b>					
Lawn and Garden Equipment	0.2	13.6	2.1	--	--
Transportation Refrigeration Units	0.6	1.9	7.7	--	--
Agricultural Equipment	0.3	1.0	5.9	--	--
Construction and Mining Equipment	0.6	1.6	11.7	--	0.0
Industrial Equipment	0.2	1.1	6.5	--	--
Light Duty Commercial Equipment	0.6	4.5	7.4	--	--
Trains	0.2	0.9	10.7	--	--
Off Road Recreational Vehicles	--	1.3	--	--	--
Ships	0.2	0.4	8.3	1.8	--
Commercial Harborcraft	0.6	1.2	16.1	--	--
Recreational Boats	0.5	8.5	2.3	--	--
<b>Subtotal</b>	<b>4.0</b>	<b>35.9</b>	<b>78.7</b>	<b>1.9</b>	<b>0.0</b>
<b>AIRCRAFT</b>					
Commercial Aircraft	0.1	2.4	9.1	0.8	--
General Aviation	0.1	0.5	0.1	--	--
Military Aircraft	0.1	0.7	1.7	0.1	--
Airport Ground Support Equipment	--	0.1	0.8	--	--
<b>Subtotal</b>	<b>0.3</b>	<b>3.7</b>	<b>11.7</b>	<b>0.9</b>	<b>0.0</b>
<b>Subtotal (All mobile source categories)</b>	<b>11.6</b>	<b>147.0</b>	<b>288.0</b>	<b>3.7</b>	<b>8.7</b>
<b>MISCELLANEOUS OTHER SOURCES</b>					
Construction Operations	1.0	--	--	--	--
Farming Operations	0.2	--	--	--	--
Entrained Road Dust-Paved Roads	3.5	--	--	--	--
Entrained Road Dust-Unpaved Roads	0.4	--	--	--	--
Wind Blown Dust	0.7	--	--	--	--
Animal Waste	0.9	3.9	--	--	10.9
Agricultural Pesticides	--	0.6	--	--	1.1
Non-Agricultural Pesticides	--	0.3	--	--	--
Consumer Products(Excluding Pesticides)	--	44.1	--	--	0.5
Accidental Fires and Cigarette Smoking	1.2	0.4	0.2	--	--
Human Perspiration/Waste	0.0	0.0	0.0	0.0	7.2
<b>Subtotal</b>	<b>7.9</b>	<b>49.2</b>	<b>0.2</b>	<b>--</b>	<b>19.6</b>
<b>Subtotal: All Stationary Source Categories</b>	<b>29.8</b>	<b>97.9</b>	<b>59.0</b>	<b>25.3</b>	<b>9.0</b>
<b>Subtotal: All Mobile Source Categories</b>	<b>11.6</b>	<b>147.0</b>	<b>288.0</b>	<b>3.7</b>	<b>8.7</b>
<b>Subtotal: All Miscellaneous Other Sources</b>	<b>7.9</b>	<b>49.2</b>	<b>0.2</b>	<b>--</b>	<b>19.6</b>
<b>GRAND TOTAL EMISSIONS</b>	<b>49</b>	<b>294</b>	<b>347</b>	<b>29</b>	<b>37</b>

\*Ammonia emission estimates were provided by the Air Resources Board. The ARB ammonia emissions data is reported in this table using the Air District's emissions inventory format.