

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 7th, 2012. District Staff received 8 additional comments on the final version, which are attached to this document.¹ 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:

Comments of the California Council for Environmental and Economic Balance	p. 2
Comments of the California Energy Commission.....	p. 6
Comments of Calpine Corporation.....	p. 7
Comments of Communities for a Better Environment.....	p. 12
Comments of EPA Region IX.....	p. 15
Comments of Pacific Gas & Electric Company.....	p. 16
Comments of Valero Refining Company – California.....	p. 21
Comments of the Western States Petroleum Association.....	p. 24
Verbal Comments Regarding the Potential For Future Removal of PM _{2.5} Requirements under SB 288.....	p. 30

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 7th Board of Directors meeting.

¹ 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. 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).² 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.³

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.

² 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.

³ 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. 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.⁴ 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

⁴ 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 2-2-234.2.⁵ 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.⁶ 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

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

⁶ 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%2010-10-12.pdf.

discussed in the Staff Report, such as where new PM_{2.5} 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.⁷ 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.

⁷ 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 2-2-308.⁸ Calpine stated that the District should not adopt this requirement with respect to PM_{2.5} because of “potential difficulties applicants would experience demonstrating compliance with the 24-hour PM_{2.5} NAAQS.” Calpine’s concerns about demonstrating compliance with the 24-hour PM_{2.5} 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_{2.5}, 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_{2.5}. 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.

⁸ 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_{2.5} 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_{2.5} NAAQS.” Calpine cited two factors that it claims could create such difficulty. First, Calpine stated that EPA is considering requiring PM_{2.5} 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_{2.5}, making such a modeling demonstration could be impossible without the necessary modeling tools. Second, Calpine stated that in certain areas background PM_{2.5} 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_{2.5} emissions will not cause an increase in pollution levels above the “Significant Impact Level”, or “SIL”. But Calpine stated that the PM_{2.5} SIL is set so low that most sources with significant PM_{2.5} emissions will result in at least one exceedance of the SIL. Calpine also noted that there is ongoing litigation regarding EPA’s established PM_{2.5} 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_{2.5} precursor modeling in order to demonstrate compliance with the NAAQS and (ii) the continued use of EPA’s PM_{2.5} 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.⁹

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

⁹ 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%20)

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_{2.5} (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_{2.5} is to ensure that new and modified sources do not push ambient PM_{2.5} 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_{2.5}. 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_{2.5} 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.¹⁰ Moreover, in the context of modeling PM_{2.5} impacts specifically, Calpine knows full well from its own experience that these Appendix W modeling requirements are appropriate for PM_{2.5} modeling, regardless of whether PM_{2.5} 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_{2.5} 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_{2.5} was designated as a non-attainment pollutant. Calpine's own experience in this regard therefore

¹⁰ 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_{2.5} impacts from the Russell City facility shows that these methodologies are appropriate for modeling PM_{2.5}, even though PM_{2.5} 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_{2.5} 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_{2.5} 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_{2.5} 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_{2.5} 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.¹¹

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_{2.5} is very low and may be difficult to comply with, and also (ii) that EPA’s PM_{2.5} SILs are currently in litigation. With respect to the 24-hour SIL for PM_{2.5}, 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

¹¹ 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_{2.5} 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_{2.5} 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,¹² 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_{2.5} SILs. And with respect to Calpine's concern about EPA potentially requiring PM_{2.5} 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.¹³ District Staff will continue to monitor EPA's consideration of PM_{2.5} 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_{2.5}.

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

¹³ If EPA requires PM_{2.5} precursors to be included in NAAQS compliance modeling, then this requirement will apply for PSD permitting in PM_{2.5} 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.¹⁴ 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_{2.5} 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 288.¹⁵ CBE further stated that “[t]he proposed amendments . . . are vague as to whether they will

¹⁴ 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.

¹⁵ 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_{2.5} 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_{2.5} emissions of 100 tons per year. The District’s proposed threshold of 10 pounds per day is far more stringent. With respect to PM_{2.5} precursors, the District’s BACT requirement under proposed Section 2-2-301 will apply equally to PM_{2.5} precursors as it does to direct PM_{2.5} emissions. District Staff agree with CBE that PM_{2.5} precursors are important to take into account in the District’s regulatory responses to Bay Area’s PM_{2.5} 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_{2.5} offsets requirements in proposed Section 2-2-303, which CBE’s comment also mentions in passing). They apply to PM_{2.5} precursor emissions just as they do to direct PM_{2.5} 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 2-2-308.¹⁶ 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_{2.5} 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.¹⁷ 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.¹⁸ 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

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

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

¹⁸ 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%20Document.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_{2.5} concentrations, and that if the existing PM_{2.5} 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.¹⁹ 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_{2.5} 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_{2.5} 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_{2.5} NAAQS and throw a region out of attainment, and the permitting agency nonetheless allows such a project to be built, that

¹⁹ 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.²⁰

- 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.

²⁰ 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_{2.5}, and not to any other criteria pollutants; (ii) lock in the current PM_{2.5} NAAQS as the applicable air quality standard that needs to be complied with, so that if EPA revises the PM_{2.5} 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/m³ instead of EPA's 1.2 µg/m³ for 24-hour-average PM_{2.5} impacts, and 0.5 µg/m³ instead of EPA's 0.3 µg/m³ for annual-average PM_{2.5} 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_{2.5} NAAQS should be addressed by the requirement. PM_{2.5} 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.²¹ 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_{2.5}, 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_{2.5} 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

²¹ 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_{2.5} 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.²² 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.²³

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_{2.5} 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_{2.5} levels (or other criteria pollutant levels) over the NAAQS.

²² 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_{2.5} 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%20-%20Feb%202010.pdf)

²³ 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.²⁴ 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,

²⁴ 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_{2.5} Source Test Methodology: Valero made two comments regarding PM_{2.5} testing methods. First, Valero stated that the EPA-approved test methods for PM_{2.5} 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_{2.5} 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_{2.5} 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_{2.5} 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_{2.5} 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_{2.5} 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_{2.5} 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.²⁵ 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

²⁵ 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”.²⁶ 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.²⁷ 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 2-2-308.²⁸ 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.

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

²⁷ 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.

²⁸ 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.²⁹ 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_{2.5} – 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_{2.5} 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_{2.5} – will “substantially increas[e] permitting burdens.” If anything, the permitting burdens will decrease compared with what they were before the PM_{2.5} re-designation in 2009, because background PM_{2.5} concentrations have come down since then, meaning that there is additional “headroom” to allow new PM_{2.5} 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

²⁹ 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_{2.5} 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_{2.5} and other new requirements for PM_{2.5}. 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_{2.5}, other new requirements for PM_{2.5} 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.³⁰

³⁰ 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_{2.5} against which any amendments addressing PM_{2.5} 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.